



ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

**The Effect of E-Service Quality on Customer Satisfaction: The Case of
Ethiopian Airlines, Addis Ababa.**

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Airlines, Addis Ababa.**

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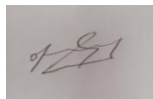
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Declaration

I, the undersigned graduate student, hereby declare that the work which is being presented in this thesis entitle “the effect of e-service quality on customer satisfaction: the case of Ethiopian airlines, Addis Ababa.” is original work of my own, has not been presented for a degree of any other university and all the resources of materials used for the thesis have been properly acknowledged.

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TABLE OF CONTENTS

Acknowledgement.....	III
Acronyms.....	VIII
Abstract.....	IV
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the study	1
1.2 Statement of the problem	4
1.3 Research questions	5
1.4 Objectives of the study.....	6
1.4.1 General objective.....	6
1.4.2 Specific objective	6
1.5 Significance of the study	6
1.6 Scope of the study	6
1.7 Limitation of the study	7
1.8 Organization of the study	7
1.9 Definition of terms	8
CHAPTER TWO: REVIEW OF RELATED LITERATURE.....	9
2.1 Theoretical review.....	9
2.1.1 Service quality.....	10
2.1.2 Service quality in the Airline industry	11
2.1.3 Service process in Airline industry	11
2.1.4 Managing customer satisfaction	13
2.1.5 Models for measuring service quality	13
2.1.5.1 SERVQUAL model.....	13
2.1.5.2 SERVPERF model	16
2.1.5.3 AIRQUAL model.....	17
2.1.5.4 WEBQUAL measurement model.....	18
2.1.6 E-service quality	19
2.1.6.1 E-service quality and E-customer satisfaction.....	20
2.1.6.2 E-service quality and E-customer loyalty.....	20
2.2 Empirical review	21
2.2.1 Website design.....	21
2.2.2 Customer security/privacy	21
2.2.3 Customer service	22

2.2.4 Fulfillment	22
2.2.5 Customer satisfaction	23
2.3 Conceptual framework.....	24
CHAPTER THREE: RESEARCH METHODOLOGY	25
3.1 Research Approach	25
3.2 Research design.....	25
3.3 Data type and source	26
3.3.1 Primary Source	26
3.3.2 Secondary sources	26
3.4 Population of the study.....	26
3.5 Sampling procedure.....	27
3.5.1 Sampling technique	27
3.5.2 Sample size.....	27
3.5.3 Sampling Criteria	27
3.6 Data collection tools and procedure	28
3.7 Data analysis techniques	28
3.8 Reliability and Validity analysis	29
3.9 Ethical consideration.....	29
CHAPTER FOUR: RESULTS AND DISCUSSIONS.....	30
4.1 General Characteristics of Respondent.....	30
4.1.1 Gender of respondents	30
4.1.2 Age of respondents.....	31
4.1.3 Education level of respondents.....	32
4.1.4 Frequency of travel with Ethiopian airline per year.....	32
4.2 Descriptive statistics	33
4.3 Measurements of Reliability.....	34
4.3.1 Internal reliability through Cronbach’s Alpha test.....	34
4.3.2 Multicollinearity of assumption.....	36
4.3.3 Heteroscedasticity of assumption.....	36
4.3.4 Linearity of assumption.....	37
4.4 Correlation analysis.....	39
4.5 Normality probability (p-p plot) test.....	40
4.6 Histograms.....	42

4.7 Regression analysis.....	43
4.8 Discussion.....	46
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS	47
5.1 Conclusions.....	47
5.2 Recommendations.....	48
5.3 Future research direction.....	49
References.....	50
Appendix.....	58

List of Tables

Table 3.1: Sampling criteria for the study.....	27
Table 4.1: Gender of respondents.....	30
Table 4.2: Age of respondents.....	31
Table 4.3: Education level of respondents.....	31
Table 4.4: Frequency of travel with Ethiopian airline per year.....	32
Table 4.5: Descriptive statistics of E-service quality dimensions.....	33
Table 4.6: Cronbach's Alpha test result.....	34
Table 4.7: Multicollinearity test result.....	35
Table 4.8: Website design ANOVA regression result.....	37
Table 4.9: Customer support system ANOVA regression result.....	37
Table 4.10: Customer privacy/security system ANOVA regression result.....	38
Table 4.11: Fulfillment ANOVA regression result.....	38
Table 4.12: Correlation between E- service quality dimensions and customer satisfaction.....	39
Table 4.13: Website design regression analysis.....	43
Table 4.14: Customer privacy/security system regression analysis.....	44
Table 4.15: Customer support system regression analysis.....	44
Table 4.16: Fulfillment regression analysis.....	45
Table 4.17: Hypothesis testing summary.....	45

List of Figures

Fig2.1: Service process model.....	12
Fig2.2: Airline passenger life cycle.....	12
Fig2.3: Conceptual framework of the study.....	24
Fig4.1: Scatter plot regression.....	36
Fig4.2: Normal point plot of standardized residual.....	40
Fig4.3: Histogram regression of standardized residual.....	41
Fig4.4: Histogram regression of quantile plot.....	42

ACRONYMS

AIRQUAL.....	Airlines Quality Model
ANOVA.....	Analysis of Variance
B2C.....	Business-to-Consumer
EAL.....	Ethiopian Airlines
E-S-QUAL.....	Electronic Service Quality
SERVQUAL.....	Service Quality Model
SPSS.....	Statistical Package for Social Science
PEOU.....	Perceived Ease of Use
PU.....	Perceived Usefulness
WEBQUAL.....	Website Quality Model
WOM.....	Word Of Mouth

ABSTRACT

The aim of this study was to offer important insight into how Ethiopian Airlines' E-service quality affects customer satisfactions. The website design, customer privacy/security, customer support, and fulfillment are the main topics of this study. The convenience sampling technique, a non-probability sampling methodology, was employed in the study to select a sample from an infinite population. In order to gather primary data, self-administered questionnaires were prepared and given to 384 customers as part of the research's quantitative research approach. The questionnaire was developed based on four dimensions of e-service quality. In the methodology part the collected data are analyzed using descriptive statistical tools like mean and correlation and also to analyze the effect relationship regression analysis, normality test and multi-collinearity test was implemented using SPSS version 26 statistical tool. The following are some of the study's primary conclusions: Customer satisfaction has a positive association with all facets of E-service quality. According to the process regression analysis, customer satisfaction is positively and significantly correlated with website design ($B= 0.893$, $P.01$), security systems are positively and significantly correlated with customer satisfaction ($B= 1.010$, $P0.01$), customer support is positively and significantly correlated with customer satisfaction ($B= 0.947$, $P.01$), and fulfillment is positively and significantly correlated with customer satisfaction. The results of the study showed that customer satisfaction is positively and significantly influenced or affected by website design, customer service, customer privacy/security, and fulfillment.

Key words: E-service quality, customer satisfaction, fulfillment, customer support and customer privacy

CHAPTER ONE

Introduction

In this chapter, the background of electronic service quality and customer satisfaction are presented. The problem statement, the main objective of the research, significance of the research, research questions and scope of the study also propose.

1.1 Background of the study

For more than a decade, the Internet has fostered consumer empowerment (Pires et al., 2006). Brick-and-mortar stores are gradually but steadily closing due to the advent of e-commerce (Glueck, J., 2017). Online businesses provide clients with greater convenience than conventional establishments (Business.com, 2017). Customers may simply sit at home, place their orders, pay with their credit cards, and wait for the goods to be brought to their door.

Because of the rapid advancement of technology via the internet, culture has shifted. Customers began to shop online rather than in physical stores. Physical firms have attempted to gain a competitive advantage by communicating with customers online (Lee and Lin, 2005). Due to the low entry barriers in internet firms, competitors can readily enter the industry (Wang et al., 2016). Switching from one online retailer to another is affordable from the customer's standpoint (Mutum et al., 2014). Consumer shopping experiences influence future consumer behavior in both physical and online retailers, including intent to repurchase, intent to revisit, and word-of-mouth (WOM) (Chang and Wang, 2011).

The most pressing issue currently is keeping customers happy as they make online transactions. The most crucial success criterion for prospering in a highly competitive e-environment is a service-centric strategy. To keep customers coming back and staying with the organization, a company must provide outstanding service experiences (Gounaris et al., 2010). Customer pleasure necessitates great service quality, which typically leads to beneficial behavioral intentions (Brady and Robertson, 2001). E-commerce success requires a website with good system, information, and electronic service quality (Sharma and Lijuan, 2015).

When customers make online purchases, their reactions and perceptions differ from those of traditional business transactions, and because there is no face-to-face interaction in any business, especially online commerce, there is more uncertainty. Furthermore, their view may change depending on the service quality of any given product in every dimension. A previous study reports that there are various challenges faced by e-commerce firms (Hoffmen & Novek, 2000 in Eid, 2011) and that most customers have unclear expectations for e-commerce and inferior perceptions of e-commerce (Yang et al., 2004).

While businesses have experienced phenomenal growth and a variety of advantages thanks to Internet marketing, they continue to face significant difficulties in meeting customer needs and achieving a high level of customer satisfaction. One of the main causes is that the website in question, which serves as a vital communication channel between the business company and its clients, does not accurately describe the items and offers, nor does it deliver the goods as claimed and announced there. Second, the company may fail to provide adequate service if it does not endeavor to tailor its offerings to the needs of its clients (Wu, 2006 in Canarslan, 2013).

Zeithaml et al. (2002) collated the most recent data on the five key features of service quality delivery via websites: information availability and content, usability, customer privacy/security, graphic method, and fulfillment/reliability. The e-service quality scale (E-S-QUAL) and the quality of electronic service recovery scale (E-RecS-QUAL) are two independent scales used by Parasuraman et al. (2005) to categorize the quality of e-services. The dimensions of E-S-QUAL are responsiveness, payment, and interaction, whereas the dimensions of E-RecS-QUAL are customer privacy/security, accuracy, achievement, effectiveness, and tailored care. The research result highlight the importance of privacy in customers' higher-order judgements of websites.

The future growth of a nation's economy now depends primarily on the aviation sector. In particular, when the geographical distances involved are too vast, it has an ever-changing role in moving people or goods from one site to another, whether locally or globally. One of the most significant sectors of the national economy is air transportation. Aviation is essential for international trade and tourism as it offers the only global transportation network. It actively contributes to economic progress, primarily in underdeveloped nations (ATAG, 2014).

One of the key factors that have a big impact on global development in the modern period is air travel. The aviation market typically falls within the category of services. Airlines must adjust to quickly shifting circumstances in order to keep up with changes in the economy, high-tech industry, markets, deregulation of the aviation business, and the universal trend concerning privatization of the industry. International connectedness, which improves overall productivity and the growth of the economy, is ultimately to blame, according to Perovic (2013). According to Chikwendu (2012), aviation operations are those that are especially related to moving people and products by using airplanes from one location to another.

Every country's economy has been significantly impacted by the travel industry, which also helps to expand the market to foreign as well as domestic investors (Abeyratner, 1998). Additionally, the airline

industry contributes to job creation. Due to the spread of globalization, air travel has become essential for all individuals to be present everywhere at all times.

The goal of this research was to examine the quality of e-services provided by online businesses and to provide new data to better understand its vital components. So the study's main goal is to investigate the effect of electronic service quality on customer fulfillment in Ethiopian Airlines, as well as to identify the relationship between the independent and dependent variables, which are airline website design, customer privacy/security, customer support, and fulfillment related to customer satisfaction.

Background of Ethiopian Airlines

Ethiopian Airlines was established in Addis Ababa, the nation's capital (Ethiopian Fact Sheet 2018). Bole International Airport serves as the company's headquarters.

Ethiopian Airlines has consistently developed from a small beginning to a leading African aviation group over the last 70 years. Ethiopia has aged gracefully, without a doubt. Over the past seven decades, the airline has gained a reputation for being well-educated in all aspects of the aviation sector, including technological innovation, expanding its network, and educational opportunities in aviation (Ethiopian Airlines, 2018).

According to Megersa (2007), Ethiopian Airlines is a well-known African airline. Ethiopian Airlines, formerly known as Ethiopian Air Lines (EAL), is Ethiopia's national airline and is wholly owned by the Ethiopian government. EAL became a legal entity on December 21, 1945, and on April 8, 1946, it started operations. In 1951 the company expanded to include international flights. In 1965, the firm went public and changed its name from Ethiopia Air Lines to Ethiopia Airlines. Since 1959, the airline has been a member of the International Air Transport Association (IATA) and the African Airlines Association (AFRAA). Ethiopia has become a Star Alliance member since December 2011(www.ethiopianairlines.com).

Ethiopian Airlines faces fierce competition from global alliances, regional African and Middle Eastern alliances, and individual airlines. Without a strategic plan, the airline could face dangerous consequences. Over seventy years, Ethiopia has become a leading African airline, generating revenues annually (Gashaw, 2011).

1.2 Statement of the problem

Today, there is a vast array of areas and activities that make up the service industry. Companies must understand the importance of service quality and customer satisfaction if they want to continue to be successful and competitive (Biljana and Jusuf, 2011). Providing excellent services is essential for achieving sustained and competitive benefits in today's extremely competitive world. According to Biljana and Jusuf (2011), a company's efficiency is positively impacted by customer happiness. Customer satisfaction promotes customer loyalty, ongoing business, and favorable publicity, all of which are essential components of any successful firm.

For example, efficacy, system accessibility, fulfillment, secrecy, adaptable design, payment, and engagement (Parasuraman et al. 2005) are factors in website design and e-information in (Zang and Thang, 2006). According to many other factors, such as ease of use, adaptability, information accuracy, overall quality, outcome quality, utilitarian value, hedonistic value, and others, e-service quality is a significant component and the most significant determinant for retailers' business (Turk et al., 2012; Shaikh and Khan; Anderson and Srinivasan; Mohd Kassim, N., and Ismail, 2009).

In order to fully cover the issue (e-service Quality), the researchers have designated the four variables regarded as being appropriate for the present research considering the recommendations and the facts as established in the aforementioned studies, such as website design, security, customer support system, and fulfillment in addition to Customer satisfaction.

In order to please and keep customers, a business should make an effort to comprehend their wants and expectations. In 2009, Buttle. A disgruntled customer damages the company's reputation. It thus became a crucial aspect in the success or failure of company objectives in today's cutthroat business environment. Because of this, businesses that satisfy their customers' requirements and desires benefit from client loyalty and receive favorable reviews for their services.

There are problems in the current approach to evaluating electronic service quality in the context of Internet commerce. According to Blut (2016), the E-S-Qual and eTailQ metrics lack requirements for evaluating online stores, making it difficult to account for consumer discontent and the decision to buy from other online retailers. Another problem is the inability to predict client behavior. Despite incorporating 13 up to 16 e-service quality components, eTailQ performs badly when it comes to measuring customer contact and security, ranking ninth in its prediction ability (Blut et al., 2015). WebQual may be the greatest at anticipating client behavior, but its breadth is limited.

On both local and international flights, there are a number of protests from customers about Ethiopian Airlines' service supply system. This dissatisfaction among customers is caused by a variety of factors, and it would be difficult to regain the trust of a dissatisfied customer. In this regard, studies should be carried out to advocate for significant change, discover the root causes of the problem, and find a solution. (Gashaw 2011). Additionally, internet reviews of the airline's customer service quality by customers show that the company has issues with irregularity handling, onboard food quality, and the cleanliness of the aircraft interior. The majority of Ethiopian Airlines customers also have complaints about the check-in process and the website for purchasing tickets. The SERVQUAL model has also been used in the majority of studies looking at how customer satisfaction and service quality relate to one another in the airline industry. In order to ascertain the connection between client satisfaction and e-service quality, research on the airline business is carried out.

This study made an effort to quantify the effects of Ethiopian Airlines' Electronic services quality. It has also attempted to explore how the grade of online services has compressed the degree of happiness among clients in a currently extremely competitive economy. It also makes an effort to recommend various techniques for boosting customer retention and creating a competitive advantage through the quality of electronic services delivered to clients. Those services are online ticket booking, online check-in and online enrollment systems for Sheba miles membership, and other available websites for the customers.

1.3 Research questions

- I. How does website design affects customer satisfaction in Ethiopian airlines?
- II. To what extent does the customer security/privacy have effect on customer satisfaction in Ethiopian airlines?
- III. How does customer support system influence customer satisfaction in Ethiopian airlines?
- IV. What is the effect of fulfillment on customer satisfaction in Ethiopian airlines?

1.4 Objectives of the study

1.4.1 General objective

To identify the effect of E-service quality on customer satisfaction in Ethiopian airlines, Addis Ababa.

1.4.2 Specific objective

- ✚ To investigate the ease of use website design on customer satisfaction in Ethiopian airlines.
- ✚ To investigate the relationship between customers security/privacy and customer satisfaction in Ethiopian airlines.
- ✚ To examine the influence of customer support system on customer satisfaction in Ethiopian airlines.
- ✚ To identify the effect of fulfillment of on customer satisfaction in Ethiopian airlines.

1.5 Significance of the study

The quality of online service delivery is becoming increasingly important to achieve a competitive edge as the hospitality industry expands periodically. From this study there are several benefits and beneficiaries, some of the important areas, like adding understanding in the area of e-service quality on customer satisfaction, point out the things that make Ethiopian companies difficult to implement customer satisfaction. And also for the researchers who need to study this area and topic, it will be as a starting point to get enough information about the company or the topic.

Finally, it would help Ethiopian airlines to improve their quality of electronic services on increasing customer gratification and identify the problems to retain their customers. And also they can assess whether customers are satisfied on E- services or not and in identifying the major problems with respect to the service.

1.6 Scope of the study

The researcher wanted to analyze the level of consumer satisfaction with Ethiopian Airlines' electronic service quality.

The aim of this article is to identify/examine the effect of electronic service quality on customer satisfaction and to test the relationship between electronic service quality and customer satisfaction using Ethiopian Airlines. In addition, the relationship between electronic service quality scopes and customer happiness, including website design, customer privacy, customer assistance, and fulfillment, will be investigated. This study will also look at related research on how electronic service quality affects website design, customer privacy/security, customer support, and fulfillment depending on customer happiness.

Geographically, this research was conducted in Addis Ababa, specifically Bole international airport, Ethiopian Airlines. This was done through the non-probability method which a convenience sampling scheme, as most of the target populations with visible reality for anyone are located in these areas. This paper also used quantitative research approaches to collect the data from the target company.

This research was limited to Addis Ababa, Ethiopia only. The reason behind this was to focus on the time, money, and experience shortage from the side of the novice student researcher to make worldwide research.

1.7 Limitation of the study

The study's primary target is Ethiopian Airlines customers because Ethiopian Airlines is the only international airline currently operating to and from the study's primary target destinations. Additionally, this subject affects both staff and clients, and it focuses on client satisfaction levels in order to understand how clients view the services they receive. Even though, there are several service quality variables the researcher choose only customer satisfaction and it was broad and tedious to include all variables those can be related with service quality outputs. Moreover, because of the short duration the researcher have, trying to focus on a limited number of variables and also simple analysis software, and it was difficult to explain every interview opinion but the researcher includes appropriate responses of the study.

1.8 Organization of the study

This paper is divided into five chapters, each with a sub-section. The first chapter offers the study's introduction. It gives a quick overview of E-service quality and customer satisfaction in the context of Ethiopian Airlines. The chapter also includes the study's background, problem statements, study objectives, basic research questions, and the study's importance.

The second chapter explores the review of related literature, which includes theoretical and empirical reviews as well as conceptual frameworks. The third chapter discussed research methods such as research design, data-gathering techniques and processes, ethical considerations, and data analysis.

The fourth chapter contains the final result and discussion of the research. Finally, recommendations suggests after the summary of findings and conclusion in the last chapter.

1.9 Definition of terms

E-service quality

The discrepancy between the service that a client or user of a certain website expects and the service that the website actually offers is defined as e-service quality. (Musiime and Malinga, 2011).

Service

A service is defined as any action or performance provided by one party to another that is inherently intangible and does not result in the acquisition of any tangible assets. Its creation may or may not be linked to a concrete good. (Keller and Kotler, 2006).

Customer satisfaction

Customer satisfaction refers to buyers' feelings after experiencing a brand product or service that meets or exceeds their expectations. If it meets or exceeds his or her expectations, he or she will be pleased and will prefer that brand over competitors. (Top and Ali, 2021).

Website design

Web links' visual appeal organized configurable search functions, quick access, and simplicity of error rectification. Websites are an important tool for people all over the world to communicate with one another. (Liu C and Arnett 2000)

Fulfillment

Service promise accuracy, and product delivery on schedule, providing service as promised (Zeithaml, Parasuraman, and Malhotra 2002).

Customer privacy and security

The security of credit card payment information and personal information is referred to as customer security/privacy. (Zeithaml, Parasuraman and Malhotra 2002)

CHAPTER TWO

RELATED LITERATURE REVIEW

The chapter has three sections theoretical reviews, empirical review which is discuss about the four dimensions of e-service qualities, such as website design, privacy/security, customer support and fulfillment. The third part discussed about conceptual frameworks, which is focused on the dependent and independent variable.

2.1 Theoretical review

Chang and Wang (2008) investigated the existing understanding of online purchasing behaviors in two approaches, as well as the influence of antecedents' perceived worth to customers on customer pleasure and loyalty. According to the findings, electronic service quality, such as website layout, stability, safety, and customer support, has only an indirect impact on the online consumer through customer satisfaction and perceived worth. Even though the topic of electronic services and their quality did not begin until the introduction of the information society in Europe (Mekovec and Kero 2007), there are various ways for evaluating the quality of electronic services.

Zeithaml, Parasuraman, & Malhotra created the electronic service quality measurement to investigate how customers rate service quality. To measure consumer perception of service quality in online environments, the seven criteria of electronic service quality are stated as efficiency, dependability, fulfillment, privacy, responsiveness, recuperation, and contact.

Sheikh and Basti (2015) gave e-retailers the concept that electronic commerce websites should invest more in social media advertising and that only a small number of people can learn about electronic commerce through media outlets like radio, TV, and magazines. The author advocated for businesses to investigate their options in order to serve more clients. It is also noted that people's hesitation to acquire things online was largely due to their lack of self-confidence in the after-sales support. The company has a responsibility to dispel customers' fears, and creative marketing strategies should be used to draw people in. In the research they conducted on how service quality is perceived in online high-end product retention, Turk et al. (2012) highlighted the positive effects of factors like effectiveness, fulfillment, design, information, contact with one another, and responsiveness on the quality of e-services and made it obvious that changes in the elements have no direct impact on the quality of the services; rather, changes in the quality of the services have a direct impact on the factors taken into account.

In his study, Canarslan (2013) found that the issues with online buying were typically caused by service interruptions. Because the reaction could not be fixed in online purchasing, service failures have a significant influence on consumers from traditional market (Shankar 2003). Sheikh and Basti (2015) identified variations in levels of client satisfaction between purchases made via the Internet and offline and concluded that there is no difference in consumer contentment levels between the two purchasing methods; however, customer loyalty was found to be higher in online purchases compared to offline purchases, and it was also discovered that customer loyalty has a positive relationship with customer satisfaction.

According to Tang and Huang's (2015) researches on the associations between customer trust, electronic satisfaction, electronic loyalty, and customer internet usage in Taiwan, the perceived ease of use (PEOU) as well as perceived usefulness (PU) play a less significant part in customer satisfaction and online purchasing decisions, respectively. Additionally, it is discovered that Confidence and Perceived Usefulness are the key indicators of purchasing via the internet mindsets and e-Satisfaction. The authors also recommend that managers should make a concerted effort to increase the appeal of online transactions for the purpose to enhance customer satisfaction regarding the buying process. Raffaele and Orlando (2014) discovered that e-consumer trust is largely dependent on website brands in their study of an Italian electronic commerce website and that an appealing safe online setting promotes customer pleasure, develops strong customer loyalty, and stimulates repeat business.

2.1.1 Service quality

Due to its unique role in enhancing corporate competitiveness, service quality has received more attention in recent years. Because of the difficulties in defining and judging service quality, the topic has received a great deal of attention and discussion in the academic literature. (Wisniewski, 2001). Service quality, as defined as M. Rahaman, Abdullah, and A. Rahman (2011), is a technique for controlling business operations in order to ensure complete client happiness, and this will contribute to the industry's efficacy and competitiveness. Thus, the gap between what customers expect from a service and how that service is actually viewed can be referred to as service quality. According to Mostafa (2005), the relevance of the relationship between quality of service and expense, profitability, client pleasure, retention of customers, service assurance, and economic achievement has rendered it an increasingly relevant field of study. According to Martin (2013), service quality is the extent to which a scenario or contact meets a person's requirements or expectations. Whatever definition of quality is established, company executives must grasp how their clients perceive it (Parasuraman, 1988).

2.1.2 Service quality in the Airline Industry

In today's travel sector, service quality and customer satisfactions are two essential components for the majority of organizations. Businesses are continuously looking for novel and creative ways to make promises that are more ambitious than those of the opposition while still delivering on them. According to O'Neill and Palmer (2004), the single most crucial differentiating feature in practically every travel scenario is now service quality and the level of happiness that results from it. Travelers are constantly looking for a competitive edge due to the growing competition in the travel industry and the rise of specialty products and services. Customers presently have a variety of options to travel by using airplanes. Customers today are well-educated, experienced travelers who are renowned for doing considerable research before choosing the ideal airline, hotel, tour, or cruise line. When trying to develop pleased clients who would hopefully show their allegiance to one exclusive brand, tour, and travel companies have a great deal of difficulty in their service delivery (Chilembwe, J.M., 2014).

Any organization's effort to establish a "quality culture" must include a commitment to "continuous improvement" (Witt and Muhlemann, 1995). A firm must remain to use a variety of official and unstructured measurements to remain competitive in the market and be regarded as a leader in service quality (Chilembwe, J.M., 2014). In the airline sector, service quality is defined as the sum of several customer-airline interactions, with staff members attempting to shape customers' impressions and the airline's reputation (Gursoy et al., 2005).

2.1.3 Airline Industry Service process

A service means, as defined by Gliatis & Minis (2007), it has its own series of procedures, each of which produces a unique value for the service in concern. Each service process has a different value depending on the qualities of the service and how the process takes these aspects into consideration. In a similar vein, Chen & Chang (2005) claimed that the experience of using an airline has its own sequences regarding to the service, each of which is composed of a number of procedures. In the aviation industry, service processes are broken down into ground operation and onboard services sub-processes, and while Chen and Chang (2005) argue that both ground service and onboard services must be evaluated independently, a client is unlikely to notice the difference. In this study, a service process is described as a process that converts inputs into outputs via the service phases that each client goes through while using air travel. Each of the sub-processes that comprise the service's operating process contributes to the overall service under consideration.



Fig 2.1 Airlines service process (Kelley, 2012)

As noted by Parasuraman et al. (1985), the client in this situation enters a service process with particular expectations that have been shaped by, among other things, word-of-mouth, prior experiences, advertising strategies, etc. Expectations of the customers have a significant effect on both the service process itself and the process's result or perceived service. Perceived service quality in this instance is the distinction between what is expected and what is received, similar to Parasuram's (1985) gap model. Examining the potential for value creation is the goal of the lifecycle of airline passengers. According to the author, there is a chance for an airline to provide value for the client at each point of this lifecycle. The cycle appears to be relatively broad, missing value-creating elements like interacting with airline workers (Carlzon, 1989). Kelley, unlike Chen and Chang (2005), does not discriminate between services provided by an airline and services provided by an airport/third party. The service process phases are based on Kelley's predicted airline passenger lifetime, which is separated into five segments.

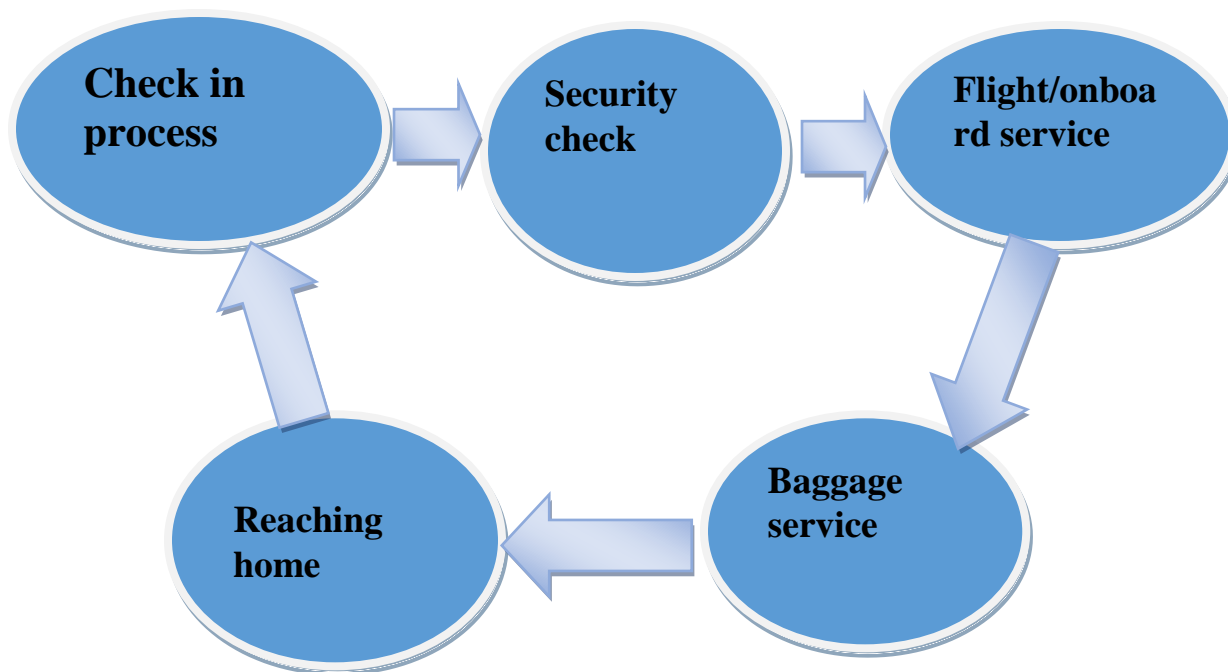


Fig 2.2 Lifecycle of passengers (Kelley, 2012)

2.1.4 Managing customer Satisfaction

Quality drives improved rivalry, client fulfillment, and profitability. As a result, monitoring service quality is critical for determining client happiness. Customer service expectations were classified by Parasuraman et al. (1991) into five service dimensions: dependability, things that are tangible, responsiveness, assurance, and compassion. These metrics, which are frequently used in service quality evaluation and customer satisfaction measurement, can be utilized to quantify consumer contentment. According to Chen and Chang (2005), a service process is a comprehensive service process from the point of view of the consumer, encompassing sources to outcomes throughout the service steps that each customer undertakes when using airline services. Airlines should track their customer satisfaction at each step of the procedure for service to ensure that they are providing the best possible service. As a result, it will assist them in measuring consumer satisfaction and improving service processes. Keep in mind that when it comes to traveling by airplane, the services are given not only by the carrier but also by a number of other service providers, such as ticket offices and travel agencies. An airline offers both genuine transportation and (in certain cases) ticket sales and onboard offerings, whereas an airport provides duty-free shopping, check-in services, and luggage processing services. Baggage handling, in-flight catering, and technical support are frequently provided by an airport subcontractor. In this context, it is typically difficult for an airline to maintain service quality when so many services are outsourced.

2.1.5 Models for Measuring Service quality

The SERVQUAL model (Parasuraman et al., 1985) is the most widely used method for assessing service quality. This approach is still being utilized in studies of the SERVQUAL model (Alrubaiee & Alkaa'ida, 2011; Kansra & Jha, 2016). SERVQUAL has been developed by many academics for use in a number of online business platforms. WebQual, produced by Barnes and Vidgen (2002) and Loiacono et al. (2002), e-TailQ, developed by Wolfinbarger and Gilly (2003), E-S-Qual, established by Parasuraman et al. (2005), and Blut (2015)'s most recent hierarchical model of the quality of electronic services are the most recognized modified versions.

2.1.5.1 SERVQUAL model

SERVQUAL model is the most commonly used method to evaluating service quality. This model is still popular and is used in many investigations today. There are five key characteristics used to evaluate service quality, according to Parasuraman, Zethaml, and Berry (1985). Dimensions' relative importance the method (SERVQUAL) developed by Parasuraman et al. (1988) can be used to assess the relative value of quality

elements in influencing customers' overall service impressions. The SERVQUAL scale has been widely used to assess service quality by academics and practitioners from a wide range of businesses and nations. (Wu and Ko, 2013).

According to Zeithaml (2006), Service quality is a targeted evaluation that reflects the customer's opinion of dependability, assurance, responsiveness, empathy, and tangibles. They stated that reliability has been repeatedly proven to be the primary factor in service quality, researchers developed a procedure for quantifying what consumers perceive to be the most significant element in the quality of service.

Parasuraman et al. (1988) developed a new SERVQUAL instrument with five aspects: tangibles, reliability, responsiveness, assurance, and empathy.

Tangibles: The physical appearance of buildings, equipment, staff, and materials used for communication. All physical components of the service, according to the consumer, are appropriate for the work at hand and pleasant to the customer.

Reliability: is the ability to continuously and exactly deliver the promised service.

Customer responsiveness: refers to a readiness to assist clients and deliver fast service. According to the customer, the service provider answers swiftly and accurately to his or her individual needs and desires.

Assurance: The ability of employees to show trust and confidence, as well as their competence and etiquette, so that the customer feels in courteous, accomplished, and capable hands.

Empathy: Giving customers caring and personalized attention to make them feel as if they are receiving caring services and personalized attention. It is putting ourselves in the other's shoes.

While the business creates each service standard to ensure excellence in service, there should be customer-specific guidance, quantitative and achievable objectives, useful for consumers, timely, and corporation-supported.

Gourdin (1988) conducted one of the first studies on the quality of airline service. SERVQUAL was not used by Gourdin (1988). Researchers used the conceptual gaps model developed by Parasuraman et al. (1985) to identify gaps in customer expectations and management interpretations of these gaps, which could contribute to consumer displeasure in the airline business. Many additional researchers in various service industries have used the SERVQUAL scale and the service gap assessment technique to measure perceived service quality (Fick & Ritchie, 1991).

SERVQUAL (Parasuraman et al., 1988) was modified to replace interpersonal interaction, trustworthiness, safety, capability, and courteousness with one core factor of assurance. This is made up of several dimensions, including:

Buyers need to be able to put their trust in these companies' staff.

Customers must be free to feel secure when dealing with workers of these companies.

Employees of a firm need to be courteous, and these firms should provide appropriate support for their employees to execute their tasks well.

Furthermore, empathy has taken the position of understanding/knowing the clients and access. They utilized the following elements for empathy (expectation and perception):

Customers shouldn't have to be expected to receive personalized service from businesses.

These companies' employees cannot be expected to provide personalized service to their consumers.

It is unreasonable to expect these companies to act in the best possible way for those they serve.

The global perceive quality concept is the sum of the variances in thoughts and expectations across the five categories. Customers' expectations were satisfied in the outcome dimension (reliability), but exceeded in the process dimension (tangibility, assurance, responsiveness, and empathy), according to Laroche and colleagues (2004).

Some researchers have used SERVQUAL exclusively to evaluate various services, whilst others have chosen to use a smaller collection of qualities to reflect each of the five dimensions. Parasuraman's (1985) pilot study was a significant driving force in developing a deeper grasp of and knowledge about service quality. They defined service quality as the difference between a customer's expectation of service and their perception of service delivery. The following gaps are depicted in the gap model:

Gap 1: Disagreement between consumer expectations and management's appraisal of such expectations, i.e. no idea what consumers expect.

Gap 2: Management disagreement on consumer expectations and service quality needs, resulting in insufficient service-quality standards.

Gap 3: There is a difference between the service quality criterion and the service provided. It also mentioned the service performance gap.

Gap 4: Distinction between service execution and client communications on service delivery, i.e. whether promises are kept within actual performance.

The fifth gap is the mismatch between consumer expectations and perceived service.

Criticism of SERVQUAL

The SERVQUAL model has been used as a framework for measuring service quality in many research, and it has also been the subject of theoretical and practical analyses in the literature on services marketing. These exams have largely centered on everything from the instrument's interpretation and execution to its dimensional structure. (Buttle, 1996; Babakus and Boller, 1992).

Buttle(1996) outlined a number of enterprises about SERVQUAL. One of SERVQUAL's most notable features is that it emphasizes the service delivery process rather than the problems with the service hassle. As a system for evaluating "quality," it places more emphasis on the process of providing services than on how well they are received by customers, which might vary based on culture, geography, and individual perspective. Similarly, not all people share the SERVQUAL five principles of tangibles, responsibility, responsiveness, assurance, and empathy.

A number of experimenters have reported different confines for prospects, comprehensions, and gap scores. Therefore, the universality of SERVQUAL's five confines has been questioned (Buttle, 1996; Carman, 1990; Cronin and Taylor, 1994). Failings concerning coincident and discriminant validity have also been noted (Buttle, 1996). Even Nevertheless, SERVQUAL has been widely applied in vibrant settings across additional studies, despite the review. Due to the SERVQUAL instrument's ability to act as an introduction, it has been widely employed. It can be modified or added to fit the traits or particular exploratory needs of a certain association (Parasuraman, Zeithaml, and Berry, 1988).

2.1.5.2 SERVPERF model

In their empirical work, Cronin and Taylor(1992) challenged the frame of Parasuraman, Zeithaml, and Berry(1985, 1988) in terms of the conceptualization and dimension of service quality, and proposed a performance-grounded measure of service quality called SERVPERF, demonstrating that service quality is a type of consumer station. They claimed that SERVPERF was a better way to measure the service quality construct. Their work was later reproduced, and the findings indicate that there is little, if any, theoretical or empirical basis for the use of the E-P = quality gap as the foundation for gauging service quality.

The SERVPERF model is a tool for assessing service quality and customer satisfaction. It has the same categories as the SERVQUAL model. This model was designed by Cronin and Taylor (1992) to investigate four service sectors: banking, pest treatment, dry cleaning, and quick-service food. It is a variant of the SERVQUAL model that is based on performance theory. The main distinction between SERVQUAL and SERVPERF is that SERVPERF disregards client expectations. It merely considers how customers perceive

the quality of the services they receive. As a result, this model's disconfirmation scale, which assesses the discrepancy between expectations and actual service delivery, is absent. The perception of service excellence is its lone element. Customers evaluate the performance of the same attributes listed in the SERVQUAL model using this instrument. The SERVPERF model incorporates the five qualities of dependability, responsiveness, assurance, and empathy from the SERVQUAL paradigm.

SERVPERF can give managers a brief overview of the overall service quality result, which can be displayed against time and specific customer segmentations based on consumer criteria such as demographic subcategories and individual constituencies (Cronin and Taylor 1994). As a result, the SERVPERF scale is an effective tool for assessing service managers' attitudes toward overall service quality. For strategic decision-making, they encourage service organization managers to use great caution when seeking to derive more accurate information from SERVPERF scale data (Cronin & Taylor 1994). Compared to SERVQUAL, SERVPERF is less confusing, shorter, more accurate, and simpler to use. However, because it is more thorough, the SERVQUAL approach is more alluring.

2.1.5.3 AIRQUAL model

Bari et al. (2001) developed a new measurement scale called AIRQUAL in response to SERVQUAL's many detractors who criticized it for being a process-based evaluation of service quality. The importance of AIRQUAL cannot be overstated because numerous studies (Ekiz et al., 2006; Nadiri et al, 2005; Nadiri et al, 2008; Babakus & Mangold, 1992) suggested that the SERVQUAL construct's dimensions and nature may be industry-specific. However, the numerous AIRQUAL elements have substantial validity and dependability in assessing the caliber of airline services, making it possible for service providers to use them to better understand the expectations and views of customers. As a result, they will be able to improve the standard of their service.

According to Bari et al. (2001), a method that measures service quality in the aviation sector was developed and referred to as AIRQUAL. The AIRQUAL measure developed by Bari et al. (2001) contains five unique dimensions: airline tangibles, terminal tangibles, staff, empathy, and branding. These five parameters in the AIRQUAL instrument ask about various aspects of the airline product.

Airline tangibles: include questions on the inside of airline aircraft, the quality of catering on board, the cleanliness of the plane's restrooms and seats, the level of comfort of the plane seats, and the quality of air conditioning on board.

Terminal tangibles: include inquiries about airports. In this dimension, respondents are asked about the cleanliness of the airport toilets, the availability of shops, the availability of parking spaces in the airport,

the air-conditioning of the airport, designated smoking areas, the effectiveness of signage, the availability of trolleys, the efficiency of the airport's security control system, and the comfort of the airport's waiting hall.

Staff intended to evaluate airline employees. Employee attitudes, understanding, expertise, and degree of education are all questions, as are the individual approach of staff to everyone and airlines' error-free reservations and ticketing operations.

Empathy: raises issues such as being on time for departures and arrivals, transportation across the city and airport, compensation programs in the event of any inconvenience, attention paid to passengers' luggage, availability of medical personnel during flights, locations of airline company offices, and number of flights to meet passengers' demands.

The fifth AIRQUAL component, branding/image, is concerned with the accessibility of low-cost ticket options and the alignment of ticket costs with the quality of the service offered. (Ekiz, 2006; Nadiri, 2008; Bari, 2001)

2.1.5.4 WEBQUAL measurement model

Many academics modified SERVQUAL into numerous models in the area of online commerce. WebQual, created by Barnes and Vidgen (2002), e-TailQ, created by Wolfinbarger and Gilly (2003), and E-S-Qual, created by Parasuraman et al. (2005) are the most well-known adapted models. The WebQual™ scale was created by Loiacono. (2002) to examine websites that sell books, music, airline tickets, and hotel reservations. However, its main goal is to produce statistics for website designers rather than measuring service quality as perceived by customers. Additionally, rather than actual user reviews of web experiences, their research concentrated on learner visits to websites.

Due to this, while some WebQual characteristics may affect how services are viewed, others have only a tenuous connection. The attributes of WebQual™ include task-specific information, interaction, trust, and reaction time, as well as ease of understanding, intuitive operations, aesthetic appeal, creative thinking, flow (emotional attraction), consistency in appearance, and superiority over alternatives. Researchers now have a strict and reliable set of standards for evaluating the quality of websites according to the study. To evaluate site quality in four areas, Yoo and Donthu (2001) created the nine-item SITEQUAL measure. Like WebQual, SITEQUAL is unable to fully capture the buying process and, as a result, cannot provide a thorough evaluation of the level of service provided by a website.

Barnes and Vidgen (2002) developed WebQual, a new e-service measurement technique that placed greater emphasis on the usefulness of user-friendly websites. The five criteria used by WebQual for evaluation are: accessibility, layout, information, confidence, and empathy. The assessment underwent a number of revisions before becoming WebQual.

2.1.6 E-service quality

There is an expanding body of research being done on the definition, evaluation, and management of e-service quality. Online travel clients' overall evaluation of the excellence and outstanding quality of e-service offerings in the electronic market is how Santos (2003) defines e-service quality. Shopping on the Internet involves a long procedure with several steps. Customers are more inclined to judge the perceived quality of a website's service based on the overall process and result than on the specifics of each sub-process (Van Riel, Semeijn, & Janssen, 2003). Fresh perspectives on the differences between assessments of service offerings on the web and those in the traditional marketplace, as well as a new measurement approach, are therefore required. Furthermore, for online clients, an unusually high level of e-service quality is the means of fulfilling the Internet's potential benefits. (Yang, 2001). In a similar way, Santos asserted that e-service quality provides e-businesses with a long-term competitive edge by directly benefiting customers' buying decisions and improving customer relationships. Customer's value e-service quality since it is much easier to compare technical specifications and costs of products online than through traditional channels.

A website's ability to offer resources for making decisions and distributing purchases in an effective and efficient manner is evaluated using the E-Service Quality (E-S-QUAL) indicator. Bitner, Gremler, and Zeithaml (2018). The success or failure of electronic commerce depends heavily on the quality of the electronic service or online-based service because an e-commerce site can always assist and speed up online booking, shopping, and delivery. Puriwat and Tripopsakul (2017) state that enabling users to complete tasks quickly and effectively is one of the objectives of this e-service quality.

The success or failure of electronic merchants is greatly influenced by the caliber of internet-based electronic services (e-service quality), where e-service quality describes how an e-commerce site supports and facilitates online ordering, shopping, and delivery. Ineffective and efficient work is intended to occur (Ahmad 2018). Customers will be satisfied with businesses that offer better e-services, and in the long run, this will undoubtedly result in client loyalty.

E-service quality is defined by Parasuraman, Zeithaml, and Malhotra (2005) as the website's capacity to facilitate purchasing goods, and transactions, and delivered them with efficiency and effectiveness. This

knowledge defines e-service quality, from the advance purchases process (ease of use, details about the product, ordering information, and personal data protection) to the after-the-purchase process (delivering and return policy).

Ladhari (2010) summarizes the indicators used to assess the quality of e-services as follows:

The primary characteristics in traditional service quality instruments is reliability/fulfillment, which refers to service performance that follows commitments precisely and on schedule.

The willingness: to assist consumers or users, reply rapidly to consumer concerns and problems, and the provision of different communication methods provided by the website are all examples of responsiveness.

Ease of use/ability: This results in simple access to existing data. This is a major reason why customers make virtual purchases. Because the e-business environment might make it difficult for consumers to use, the website's ease of use is critical in e-service quality.

Privacy/security: Personal information and customer funds are kept private and secure. The website's ability to make customers feel safe determines the level of security in question. Because the risk of financial loss and fraud in virtual transactions is rather high, this warning is especially pertinent. The likelihood of returning to the website and conducting a transaction is significantly influenced by security.

Website design: refers the visual characteristics, content, and structure of the online catalogue are referred to as web design. Web design is vital in attracting and retaining visitors, but content is equally important.

Information quality: refers to the availability and correctness of information obtained by website visitors.

2.1.6.1 E-Service Quality and E-Customer Satisfaction

Customer satisfaction and service quality are correlated, indicating a one-sided or linear relationship because raising service quality would boost customer contentment. As a result, the level of e-customer satisfaction attained will be significantly impacted by the availability of high-quality e-services from service providers (Tobagus, 2018). Since providing excellent online facilities promotes customer happiness, the quality of e-services needs to be thoroughly examined (Pudjarti & Putranti, 2019).

2.1.6.2 E-Service Quality and E-Customer Loyalty

The development and growth of customer loyalty are fundamentally connected to the quality of e-services. Since it can encourage loyal behavior, electronic service quality is viewed as crucial or essential for customer loyalty (Purnamasari, 2018). The customer's level of loyalty increases as soon as they begin to have a positive transaction history as a result of the website's or service's quality (Pudjarti & Putranti, 2019). According to Budiman (2020), customer loyalty would increase when businesses improved the

quality of their (service) e-services. E-customer loyalty is directly and significantly impacted by the quality of the e-service (Suprapti & Suparmi, 2020).

2.2 Empirical review

2.2.1 Website design

Website design, customer service, security/privacy, and fulfillment are some of the e-service quality metrics. According to Blut (2016), website design includes information quality, aesthetics, the buying process, practicality, product selection, pricing offers, customization, and system accessibility. Information-oriented, transaction-oriented, and customer-oriented content types should all be present on an effective website. Usability should be emphasized, as well as brand reflection and customer attraction (Cox and Koelzer, 2004). In addition to prioritizing usability, a well-designed website should also deliver aesthetics, present a strong and associated picture of the business, and draw visitors (Daz and Koutra, 2013). Based on their website experience, customers evaluate the general level of service quality of an online retailer.

H1: Website design has a positive effect on customer satisfaction

2.2.2 Customer security/privacy

Regarding the secrecy of disclosed information and the security of credit card transactions, see security/privacy (Blut, 2016). Assurance and security must be prioritized in order to increase the website's credibility and service quality (Wang et al., 2015).

In general, the concept of transaction security refers to the ability to protect against potential threats. Security is defined as how much the level of security felt by the user when doing a decision to shop through the internet site. Security in the online world is the most important factor, because currently there are many online shopping platforms that still pay less attention to the safety of their consumers, such as consumer data leaks. This is the most important factor for consumers to consider their decision when making transactions (Dian, 2021).

The security factor in e-commerce is no less important. Security is an absolute thing that is given by business people, products, services, and both. Security makes it easy for users and increases consumer confidence, which leads to increased sales. This safeguard aims to create a buying and selling transaction process that is safe and comfortable so that it is profitable for both buyers and sellers. When the level of security assurance is acceptable and satisfies customer expectations, consumers are willing to buy the goods with a sense of security. Security is the ability of the online store to control and preserve secure

transaction data. The success or failure of commerce via the internet is heavily influenced by consumer trust in online marketplaces. Online shoppers consider security when making their purchases, including payment methods, customer privacy, and exploitation of personal data. The major consideration while performing transactions is what is required to ensure transaction security guarantees and the strategies utilized to achieve security in an e-commerce transaction. The possibility of criminality exists if the system's e-commerce infrastructure security is still lacking (Diko, 2021).

A private and secure website is crucial, claim Schmidt et al. (2008). Consumers must provide sensitive information, including their name, address, and phone number while making an online transaction (Holloway and Beatty, 2008). Customers are constantly concerned about the website's ability to safeguard them from fraud after completing a purchase. Website privacy and security are critical when evaluating the level of service provided by online shops.

H2: Customer privacy/security system has a positive effect on customer satisfaction

2.2.3 Customer service

The degree of service and return handling/return policies offered both during and after the transaction are referred to as customer service (Blut, 2016). For the duration of the purchasing process, service personnel are always on-site at offline businesses to help customers. Customers at online businesses are often able to finish the entire purchasing process without the aid of customer service (McLean and Wilson, 2016). Customers can ask for more detailed information on the goods they want to buy from some online businesses' customer service departments. Businesses frequently use web-based synchronous media, including social network websites, online help desks, and live chat features (Turel and Connelly, 2013). According to Blut (2016), customer service may impact how well an e-service is received.

H3: Customer support has a positive effect on customer satisfaction

2.2.4 Fulfillment

According to Blut (2016), fulfillment refers to actions taken to ensure that clients receive exactly what they ordered, including timely service delivery, order veracity, and proper packaging and shipping conditions. Only after the payment has been received can this property be assessed. Liao and Keng (2013) assert that because buyers cannot physically see the product before making a purchase, customer post-payment contradiction is more likely to occur online than in physical businesses. Businesses must guarantee delivery timeliness, accurate order information, and delivery circumstances in order to provide customers with good service quality.

According to Shergill and Chen (2005), fulfillment is one of the factors that could result in highest satisfactory among the customers in online and this was proven by Kandulapati and Bellamkonda (2014) that the fulfillment has positive influence and significant effect on the customer satisfaction. Jain (2017) also stated that the fulfillment is the crucial interaction between the online retailers and customer, and it is an essential process in online retailing. Customer order fulfillment is one of the metrics for measuring the quality of an e-service.

H4: Fulfillment has a positive effect on customer satisfaction

2.2.5 Customer satisfaction

According to Udo et al. (2010), customer satisfaction refers to the belief that a service would make the client feel good. Customer satisfaction, according to Kotler and Keller (2006), is the outcome of the customer's experiences during the purchasing process, and it has a significant impact on influencing consumers' future behavior, including loyalty and online repurchasing (Pereira et al., 2016). In the business-to-consumer, (B2C) online world, satisfaction is one of the most crucial success criteria (Shin et al., 2013). According to Pereira et al. (2017), an online consumer who is happy with their purchase is more likely to do business with the same retailer again and refer others to them. On the other hand, an unhappy customer is more likely to abandon their online shop, whether or not they have a complaint.

Customer perceptions and intents, both of which are components of customer behavior and have a direct impact on consumers' good intentions regarding behavior, are strongly related to satisfaction (Holloway et al., 2005). Previous study has found a link between the quality of e-services and the satisfaction of consumers (Blut et al., 2015; Gounaris et al., 2010; Kitapci et al., 2014; Udo et al., 2010). According to Gounaris et al. (2010), the quality of e-services has a positive influence on satisfaction. The quality of e-services influences three behavior intentions—repurchase intention, word-of-mouth (WOM), and site revisit as well as satisfaction, both directly and indirectly.

According to Anderson & Srinivasan (2003), online satisfaction is defined as consumers' happiness with their prior online purchasing experience and is therefore regarded as a global, unidimensional measure. A customer's "contentment with respect to his or her prior purchasing experience with a certain electronic commerce organization" is another definition of "E-Satisfaction." Anderson & Srinivasan (2003) stated that online satisfaction is seen as a global, unidimensional metric and is defined as consumers' pleasure with their prior online buying experience. Additionally, the definition of E-Satisfaction states that it refers to "a customer's satisfaction with respect to his or her prior purchase experience with a certain electronic

commerce organization." The marketing literature, which focuses on the connection between satisfaction and buyer intent, has demonstrated that greater contentment with a company or provider reinforces the consumer's intention to purchase goods or services from the source in the future. The association between satisfaction and purchase intention in the context of online purchases has received substantial empirical support (Pereira, Salgueiro, & Rita, 2016).

2.3 Conceptual framework

The four pillars of e-service quality are website design, customer service/support, security/privacy, and fulfillment. The following conceptual framework is projected based on the empirical review; those are the dependent and independent variables.

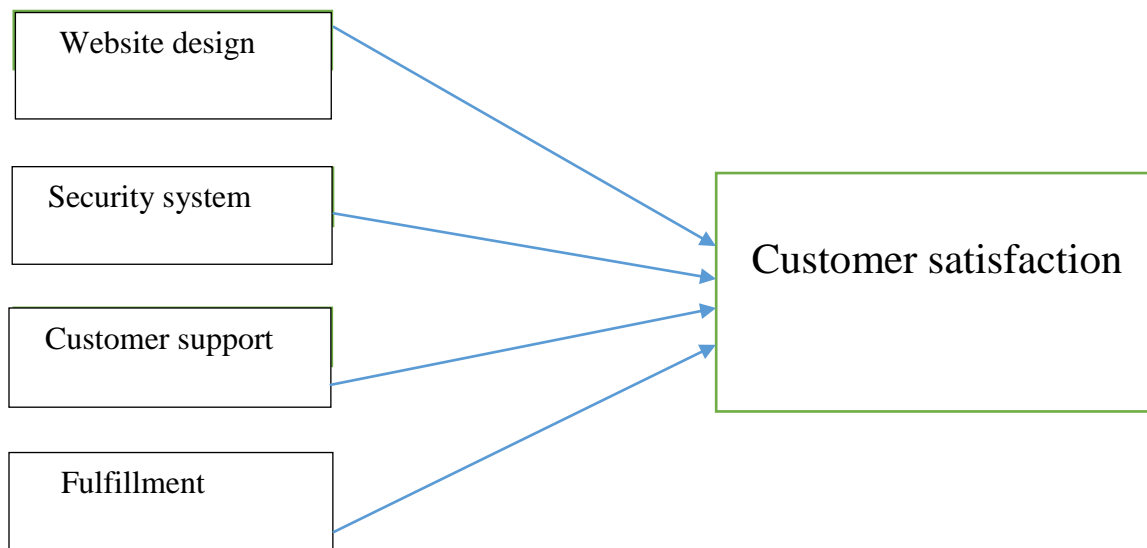


Fig 2.3 Framework of the study

Source: Blut (2015, 2016); Holloway and Beatty (2008) e-service quality dimensions

CHAPTER THREE

RESEARCH METHODOLOGY

A reliable and legitimate inquiry requires an application of research techniques. This chapter included research approach, research design, data collection methods, sampling design, population of the study, data analysis technique and reliability and validity analysis.

3.1 Research Approach

This research adopted a quantitative research approach, focusing on e-service quality for the airline industry based on customer satisfaction, by distributing questionnaires' for the respondents across the study area which is represented by the company customers.

The hypothesis is tested and the research between variables is examined in quantitative research design. To arrive at a conclusion that can be applied generally, it places more emphasis on numerical data and statistical tests. (Saunders, 2012).

3.2 Research design

A research design is a template for the research project that outlines the steps to be taken by the researcher to accomplish the study's goal and test its hypotheses.

There are several approaches to study design, including exploratory, descriptive, and causal (Malhotra, 2008), each with its own set of goals. Exploratory research, for example, seeks initial insights into an ambiguously characterized research problem, with the goal of laying the groundwork and providing direction for a constructive research endeavor. Descriptive research is mainly concerned with describing an existing and well-defined process (Parasuraman, 1991).

A descriptive research method was employed for the investigation. When describing what is present in a scenario, descriptive research is performed to gather data on the phenomenon's current status in relation to various conditions or variables. By distributing questionnaires to the chosen sample, the researcher can quickly and easily gather data using a descriptive study design. Since the researcher wanted to describe how the quality of e-services affects consumer satisfaction, a descriptive research approach was chosen for this study.

3.3 Data type and source

3.3.1 Primary Source

Primary data was collected by using a survey. In light of the evaluated empirical investigations, questions regarding the effect of electronic service quality were distributed directly to the respondents chosen as a study sample (customers and staffs of Ethiopian Airlines who use both international and domestic flights), which can indicate the relationship between e-service quality dimension on customer satisfaction.

Additionally, inquiries centered on Ethiopian Airlines' website design, privacy and security measures, customer service infrastructure, and fulfillment of customer satisfaction requirements.

3.3.2 Secondary sources

Secondary data were collected, compiled or written by other researchers any acknowledged references were included. And also collected from Ethiopian airlines portal, journals, websites, and annual reports.

3.4 Population of the study

Suki (2005) defines a population as a group of individuals, variables, concepts, or additional characteristics that are comparable. Therefore, from a research perspective, the definition is more nuanced than may be initially apparent and necessitates a thorough examination of numerous factors. It comprised significant components from which the study may draw conclusions, and this might compromise the study's and the data it produces' reliability (Churchill & Iacobucci, 2005).

The major goal of this study is to determine how E-service quality has an impact on customer satisfaction in Ethiopian Airlines, Addis Ababa. The Ethiopian Airlines customers who fly on both local and international routes, as well as government agencies and employees that learn about the airline's services from the website, make up the most pertinent demographic for the current study. It is significant to highlight that Bole International Airport was chosen as the appropriate location for data collection. The target demographic of the study was unknown based on information gleaned from the ticket offices because there is no precise statistic that reflects the total number of passengers.

3.5 Sampling procedure

3.5.1 Sampling technique

There are two types of sampling designs: probability and non-probability sampling. Probability sampling ensures that elements in the population are selected by some known chance, whereas non-probability sampling evidence that elements of the population have zero chance of being selected as a subject (Malhotra, 2008; Sekaran, 2003).

Non- probability sampling techniques were used in this research namely, convenience sampling technique. At the time of data collection, questionnaires were given out to Ethiopian Airlines passengers flying through Bole International Airport. The data were gathered using the approach known as convenience sampling, which requires gathering units that are straightforward to obtain.

3.5.2 Sample size

Passengers of Ethiopian Airlines and company employees are the target population of the research, those who uses international and domestic flights. According to information obtained from the ticket offices, there is no precise figure that indicates the total number of passengers, as once the passengers have used the service they might not show up again.

The sample size for this study must be carefully chosen because the researcher cannot interview every member of the population. As a result, the researcher made the decision to calculate the sample size for the intended population using Cochran's (1963, 1975) calculation. The sample size of this study has 384 respondents which are selected from Ethiopian Airlines customers and employees.

3.5.3 Sampling Criteria

Government offices	Case Company	Customers
Internet service provider(ethio Telecom)	Administration	New customers
IT professionals	Middle and lower level employees	Loyal customers

Table 3.1: Sampling criteria for the study

The sample size comprises based on the equation developed by Cochran's (1963, 1975) used a large sample size to create a representative sample.

$$N = z^2 t^2 (1-t) / e^2$$

N- Sample size

z- Standardization value indicating a confidence level

e- Error margin / margin of error Confidence level of 95 percent (which will give us margin of error of 0.05)

t- Sample standard deviation or an estimate of the population

$$N = 1.96^2 \times 0.5 \times (1-0.5) / 0.05^2$$

$$N = 384$$

3.6 Data collection tools and procedure

Questionnaires that were self-administered were sent to a selected sample of travelers at Bole International Airport in Ethiopia in order to obtain primary data. In-person questionnaires were given to travelers going through Addis Ababa airport who were chosen from the target group.

A tool used to gather information for a research endeavor is known as a data collecting instrument (Agbor, 2011). In this instance, information was gathered from primary sources utilizing a questionnaire that was given to Ethiopian Airlines passengers.

Customers, staff members, and firm management provided the primary sources of information. Secondary data is also gathered through publications, websites, annual reports, magazines, articles; prior research studies, and written papers from companies that assist the researcher in increasing knowledge of e-service quality on customer satisfaction.

3.7 Data analysis techniques

Data from various respondents were gathered to perform this study. The gathered information was cleaned up, coded, and error-checked before being used in the statistical analysis using the SPSS26 software, which is a social science analysis tool. In order to evaluate the data, SPSS version 26 was used, taking into account the desired outcomes and research goals.

The method of data analysis utilizing SPSS26 software used coefficient of correlation and regression analysis to test hypotheses and quantify the relationship and effect between e-service quality aspects and customer satisfaction. SPSS software package used to generate tabulated reports, histograms, skewness and plots of distributed and trends, descriptive statistical analyses of the collected questionnaire.

Using descriptive statistics, the researcher can characterize the data and examine the relationships between each of the dependent and independent variables of the study question.

3.8 Reliability and Validity analysis

The term "validity" in research relates to how well an instrument measures the thing it is intended to measure. Before research may be deemed valid, reliability is a prerequisite. The most important criterion, validity, describes how closely an instrument measures what it is intended to assess. To ensure the research's quality, the content and construct validity of the research design were assessed. In order to evaluate the hypotheses, regression analysis was performed using SPSS software for each independent and dependent variable, and the results were compared to the standardized significant level.

Cronbach's alpha coefficient was examined in order to evaluate the reliability of the research instrument (Sekaran, 2003). Using the reliability technique in SPSS version 26, reliability analysis was also performed to determine whether the scale employed in the study is internally consistent and accurately measures the criterion variable.

3.9 Ethical consideration

This study safeguards all participants because it causes no direct or indirect harm to the participants or researchers. Participation was entirely voluntary and requires consent. Because all information is anonymized, participants' privacy was protected. Participants can come from a variety of cultural backgrounds and have complete control over their behavior. There are no concerns regarding confidentiality because the surveys are anonymous and confidential. Respondents are not obligated to finish the survey, and it is acceptable if they choose not to participate after reading the information leaflet. Finally, avoid personal inquiries or facts about the individuals.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This section discusses the data collection from both customers and Ethiopian Airlines management, as well as its presentation, analysis, and interpretation. By handing out questionnaires, the data were collected. The questionnaires were distributed to customers and management of Ethiopian airlines at bole international airport.

384 respondents were chosen as samples from among the company's customers who are located within the designated zone. This led to the distribution of 384 questionnaires to Ethiopian Airlines' management and passengers. And of the 384 questionnaires that were distributed in total, 384 were completed and returned by customers.

Descriptive statistics, where raw data is computed in percentages, are used to summarize this information acquired from firm managers, employees, and customers. The compiled data is next examined through a descriptive analysis technique employing tables, followed by thorough justifications, and finally, interpretation is provided to highlight the significance of the key findings.

4.1 General Characteristics of Respondent (demographic analysis)

The below justifications are indicates the general characteristics of respondents, which include gender, age, education level and frequency of travel. According to item 1 of table 4.1 in the following page, this indicates gender composition or classification of passengers and employees,

4.1.1 Gender of respondents

Table 4.1: Gender of respondents

Gender of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	200	52.1	52.1	52.1
	Female	184	47.9	47.9	100.0
	Total	384	100.0	100.0	

According to the table above, 200 respondents (52.1%) are male and 184 respondents (47.9%) are female. Male respondents make up the majority of the respondent population. The majority of the responses were from male customers and employees, as the researcher can deduct from the data presented above. Consequently, it can be said that men make up the majority of the study's participants.

4.1.2 Age of respondents

Table 4.2: Ages of respondents

Age of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	28	7.3	7.3	7.3
	26-34	169	44.0	44.0	51.3
	35-42	108	28.1	28.1	79.4
	43-52	28	7.3	7.3	86.7
	53 and above	51	13.3	13.3	100.0
	Total	384	100.0	100.0	

Concerning item 2 of table 4.2, 28(7.3%) of the respondents are between the age range of 18-25; 169(44%) of them “between” 26-34; 108(28.1%) of them “between” 35-42; 28(7.3%) of them are between 43-52 and 51(13.3%) of the respondents are above the age of 53. Based on the summary data from the respondents' ages, the researcher may conclude that the majority of respondents, including both consumers and staff, were considered to be mature enough to respond to the questions.

4.1.3 Education level of respondents

Table 4.3: Education level of respondents

Education level of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary school and below	44	11.5	11.5	11.5
	Diploma	42	10.9	10.9	22.4
	BSC/BA Degree	168	43.8	43.8	66.1
	Master's Degree	117	30.5	30.5	96.6
	Doctorate Degree	13	3.4	3.4	100.0
	Total	384	100.0	100.0	

With respect to item 3 of table4.3, 44(11.5%) of the respondents are Secondary school and below; 42(10.9) of them are Diploma 168(43.8) of them are BSC/BA Degree; 117(30.5) of the respondents had Master's Degree and 13(3.4) respondents had PhD owners.

4.1.4 Frequency of travel with Ethiopian airline per year

Table 4.4: Frequency of travel with Ethiopian airline per year

frequency of travel with Ethiopian airline per year					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	219	57.0	57.0	57.0
	6-10	90	23.4	23.4	80.5
	11-15	27	7.0	7.0	87.5
	16-20	27	7.0	7.0	94.5
	more than 21	21	5.5	5.5	100.0
	Total	384	100.0	100.0	

With respect to item 4 of table 4.4, 219(57%) of the respondents are traveled 1-5 times per year, 90(24.4%) of the respondents are traveled 6-10 times per year, 27(7%) of the respondents are traveled 11-15 times per year, 27(7%) of the respondents are traveled 16-20 times per year and 21(5.5%) of the respondents are traveled more than 21 times per year.

4.2 Descriptive statistics

The data was analyzed using frequency distribution, Pearson correlations, and regression analysis by the researchers. The sample characteristics of the respondents were shown using frequency distribution. The researchers employed Pearson correlation and multiple regression analysis approaches to investigate the hypothesized correlations.

The researcher demonstrate quantitative research design. A report with the information compiled is created for airline customers. Statistical Package for Social Sciences (SPSS 26 version), a statistical software program, is used to examine this data. The goal of the current study was accomplished by combining a number of statistical techniques. First, descriptive statistics were used to assess the respondent profile, the mean value of customer satisfaction, and Electronic services quality dimensions, which were required for the analysis. Second, the relationship between Ethiopian Airlines' e-service quality parameters and customer satisfaction was evaluated using Pearson's correlation coefficient. The cause-and-effect link between the variables of the E-services quality parameters and customer satisfaction was then assessed using the regression analysis technique.

The table below depicts the mean value of overall customer satisfaction. Customers' satisfaction with Ethiopian Airlines' E-service quality is above satisfactory (with a mean value of 3.29 on a 5-point Likert scale), according to this descriptive data. Furthermore, the mean of the SERVQUAL dimensions is above the acceptable level.

Table 4.5: Descriptive statistics of E-service quality dimensions

		Statistics				
		website design	customer support system	security system	fulfillment	customer satisfaction
N	Valid	384	384	384	384	384
	Missing	1	1	1	1	1
Mean		3.39	3.29	3.58	3.36	3.37
Median		4.00	3.00	4.00	4.00	3.00
Std. Deviation		.935	.989	1.114	1.193	1.006
Skewness		-.518	-.362	-.734	-.431	-.406
Std. Error of Skewness		.125	.125	.125	.125	.125
Kurtosis		-.003	-.304	-.083	-.742	-.226
Std. Error of Kurtosis		.248	.248	.248	.248	.248

Source: Own survey, SPSS output (2023)

4.3 Measurements of Reliability

Hair et al. (2010), p.125, define reliability as "the consistency of items when using multiple measurements of a variable." This aids in determining the data's stability. Separate variables that measure the same construct and are highly associated should be used (Hair et al., 2010, p.125). If the individual variables are not contributing to the broader construct, they could be measuring something else, rendering the data untrustworthy (Bryman & Bell, 2010, p.163).

4.3.1 Internal reliability through Cronbach's Alpha test

Cronbach's Alpha is used to assess the consistency and validity of the statements in the questionnaire survey. It's crucial to gauge internal reliability when utilizing several indication measurements, such as Likert scales. A multiple-item measure encapsulates a particular aspect of a notion by using a number of statements to create an overall score. Internal reliability, which is measured using Cronbach's alpha, refers to the consistency of the claims in the various elements (Bryman & Bell, 2011). The minimally acceptable level for a Cronbach's alpha test is 0.5 (Pérez & Rodríguez del Bosque, 2013).

The results of the Cronbach’s Alpha test are presented in the table. In this research, website design, customer support system, security system, fulfillment, and customer satisfaction were tested separately to find out if the statements are coherent. Five statements from each dimension were combined to create an overall score that reflected the particular characteristics of each dimension. According to the findings, the ethical and sustainability dimensions have values that are higher than the suggested level of 0.5. The coherence of the website design's statements was also examined. The website design, which was composed of five statements capturing the distinct elements (rapid loading, website response, price, easy to comprehend, and reservation), yielded a value of 0.978, demonstrating the reliability of the questions as a measurement tool. Internal dependability of the questions was demonstrated by Cronbach's alpha testing. Measurements were made of the coherence of the customer support system's statements. The customer support system also consisted of five statements that captured the specific components (company contact, online service representatives, data exchange, convenience, and customer support) of the customer support system results from a value of 0.978 which shows consistency of the questions as a measurement instrument. The consistency of the security system's assertions was measured. The security system consisted of five statements that captured the specific components (safe transaction, security features, personal information, website administrator, and platform) of the security system resulting from a value of 0.980, which shows the uniformity of the questions as a measurement instrument, while the fulfillment consisted of five statements that captured the specific components (delivery, willingness, booking Vs on hand, truthful, and delivery) of the fulfillment result. Finally, the coherence of customer satisfaction claims was assessed. Customer satisfaction consisted of five statements that captured the specific components (level of satisfaction, my decision, meet my need, user friendly, exceed expectation) of customer satisfaction resulting in a value of 0.976. This shows the consistency of the questions as a measurement instrument. To conclude, website design, customer support system, security system, fulfillment, and customer satisfaction dimensions, are coherent which means that the statements measure the same thing.

Table 4.6: Cronbach’s Alpha test result

	Cronbach's Alpha	Number of question
Website design	.978	5
Customer support system	.978	5
Security system	.980	5
Fulfillment	.980	5
Customer satisfaction	.976	5

Source: SPSS output (2023)

4.3.2 Multicollinearity of assumption

The multicollinearity test is the next stage to see if there is a similarity between the independent variables in a model after the normality of the data in the regression model has been established; the similarity between the independent variables will provide a very strong correlation. In order to eliminate biases in judgments about the partial impact of the independent variable on the dependent variable, a multicollinearity test is also conducted. Any correlation between the independent variables or multicollinearity test should not occur in a suitable regression model. The VIF value of the results of the multicollinearity test using SPSS is based on multicollinearity. If the VIF value lies between 1 to 10, then there is no multicollinearity, if the VIF less than 1 or greater than 10, then there is multicollinearity.

Table 4.7: Multicollinearity test result

Model		Coefficients						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.020	.045		1.441	.659		
	website design	.393	.042	.365	2.377	.000	.082	1.259
	customer support system	.455	.038	.447	3.962	.000	.088	1.314
	security system	.077	.031	.085	2.486	.013	.106	1.422
	Fulfillment	.086	.032	.102	2.733	.007	.088	1.301

a. Dependent Variable: customer satisfaction

Source: SPSS output (2023)

Based on the coefficients output-collinearity statistics, obtained the VIF values between 1 and 10 it can be conclude that there is no multicollinearity symptoms.

4.3.3 Heteroscedasticity of assumption

The heteroscedasticity test, which is a component of the traditional assumption test in the regression model, can be used in a number of ways, one of which is by looking at the scatter graph on the output from SPSS, to determine whether or not heteroscedasticities exist in the data. The scatter plot graph between the predictive values of the independent variable, ZPRED, and the residue of ZRESID, is how this method's heteroscedasticity test functions. The presence of a specific pattern in the SPSS scatter plot graph indicates the presence of a heteroscedasticity issue. In contrast, if there is no distinct pattern and no spreading of the dots, then there is no heteroscedasticity issue.

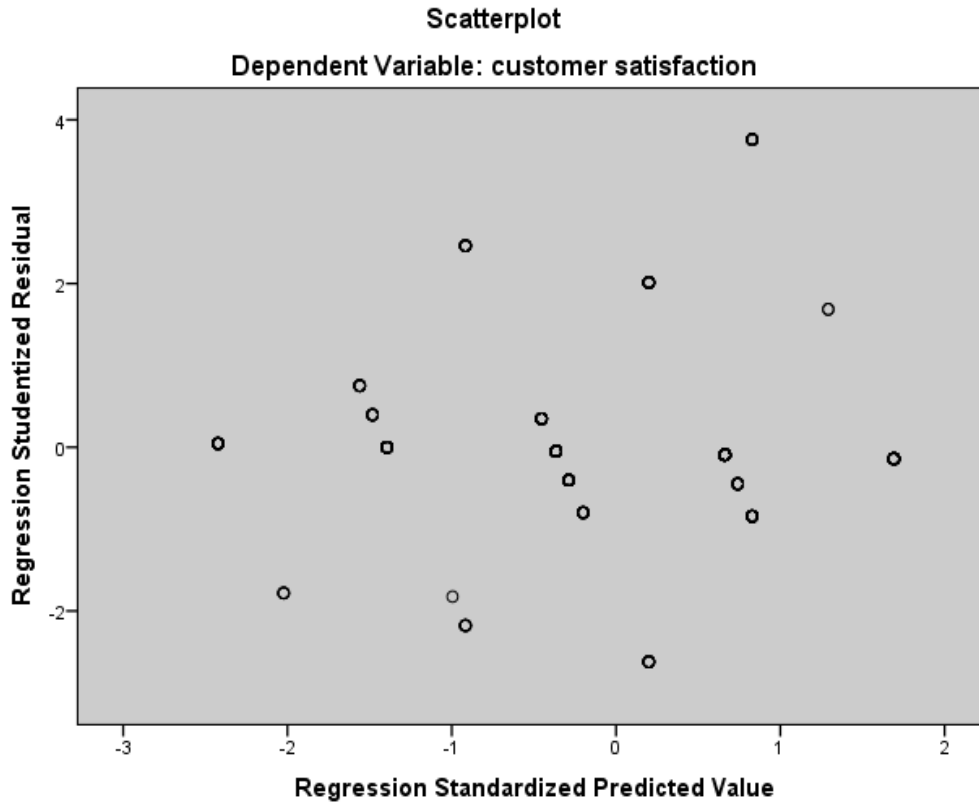


Fig4.1: Scatter plot regression

Source: Own survey, SPSS output (2023)

Based on the scatter plot, it appears that the spots are diffused and do not form a clear specific pattern. So it can be concluded that the regression model does not occur heteroscedasticities problem.

4.3.4 Linearity of assumption

The purpose of the linearity test is to assess whether or not there is a linear relationship between the dependent and independent variables. Both the correlation analysis and the linear regression analysis call for the linearity test. The free variable and the dependent variable in the regression model must have a linear relationship. When the sig. deviation from linearity is greater than 0.05, and the relationship between the dependent variables is dependent on linearity; when it is less than 0.05, the link between the independent variables and the dependent is nonlinear.

Table 4.8: website design ANOVA regression result

			Sum of Squares	df	Mean Square	F	Sig.
customer satisfaction * website design	Between Groups	(Combined)	357.303	4	89.326	1121.489	.000
		Linearity	356.960	1	356.960	4481.653	.000
		Deviation from Linearity	.343	3	.114	1.435	.232
	Within Groups		30.187	379	.080		
	Total		387.490	383			

Source: Own survey, SPSS output (2023)

Based on the ANOVA output table, with a significant divergence from linearity of $0.232 > 0.05$, it can be determined that the variables have a linear relationship.

Table 4.9: Customer support system ANOVA regression result

			Sum of Squares	df	Mean Square	F	Sig.
customer satisfaction * customer support system	Between Groups	(Combined)	359.629	4	89.907	1223.066	.000
		Linearity	359.161	1	359.161	4885.896	.000
		Deviation from Linearity	.468	3	.156	2.123	.097
Within Groups		27.860	379	.074			
Total		387.490	383				

Source: Own survey, SPSS output (2023)

Based on the table containing the ANOVA output, a significant divergence from linearity of $0.097 > 0.05$ indicates that the variables have a linear relationship.

Table 4.10: Customer privacy/security system ANOVA regression result

			Sum of Squares	df	Mean Square	F	Sig.
customer satisfaction *security system	Between Groups	(Combined)	323.001	4	80.750	474.566	.000
		Linearity	322.401	1	322.401	1894.740	.000
		Deviation from Linearity	.600	3	.200	1.175	.319
	Within Groups		64.489	379	.170		
	Total		387.490	383			

Source: Own survey, SPSS output (2023)

Based on the table displaying the ANOVA results, a significant divergence from linearity of 0.319 > 0.05 indicates that the variables have a linear relationship.

Table 4.11: Fulfillment ANOVA regression result

			Sum of Squares	Df	Mean Square	F	Sig.
customer satisfaction *fulfillment	Between Groups	(Combined)	334.224	4	83.556	594.521	.000
		Linearity	332.549	1	332.549	2366.169	.000
		Deviation from Linearity	1.675	3	.558	3.972	.830
	Within Groups		53.266	379	.141		
	Total		387.490	383			

Source: Own survey, SPSS output (2023)

Based on the ANOVA table output, sig. value deviation from linearity of 0.830 > 0.05, it can be concluded that there is a linear relationship between the variables.

4.4 Correlation analysis

Correlation analysis is used to examine the regulation and correlation between random variables. If the Pearson coefficient is greater than 0.1, we use it to determine whether two variables are associated. The statistics below (see table) demonstrate that the total Pearson coefficient is greater than 0.1. The significance threshold for the correlation test is 0.000 (0.01). For instance, the Pearson coefficients of website design and fulfillment (0.918), security systems (0.908), customer support systems (0.948), and customer satisfaction (0.960) all show a significant positive correlation between these variables. This

relationship indicates that when the dimensions of e-service quality increase customer satisfaction also increase at the same time.

The SPSS26 program was used to find a Pearson correlation coefficient between a number of E-service quality factors and customer satisfaction and is shown in the below table. The final outcome of the correlation analysis demonstrates a favorable correlation between customer satisfaction at Ethiopian Airlines and all E-service quality dimensions.

Table 4.12: Correlation between E- service quality dimensions and customer satisfaction

		website design	customer support system	security system	fulfillment	customer satisfaction
website design	Pearson Correlation	1	.948**	.908**	.918**	.960**
	Sig. (2-tailed)		.000	.000	.000	.000
customer support system	Pearson Correlation	.948**	1	.894**	.916**	.963**
	Sig. (2-tailed)	.000		.000	.000	.000
security system	Pearson Correlation	.908**	.894**	1	.938**	.912**
	Sig. (2-tailed)	.000	.000		.000	.000
Fulfillment	Pearson Correlation	.918**	.916**	.938**	1	.926**
	Sig. (2-tailed)	.000	.000	.000		.000
customer satisfaction	Pearson Correlation	.960**	.963**	.912**	.926**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

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

N=384

Source: Own survey, SPSS output (2023)

4.5 Normality probability (p-p plot) test

The Normality P-P Plot to determine whether the distribution of variables is compatible with a given distribution, utilize the cumulative probability plots of residuals (P-P plot). A residual plot is a graph where the independent variable is on the horizontal axis and the residuals are displayed on the vertical axis. A linear regression model is adequate for the data if the dots in a residual plot are randomly distributed across the horizontal axis; otherwise, a non-linear model is preferable. We can see from the normal chart

probability plot below that the current points always approach and follow the diagonal line. Since the residual values are therefore regularly distributed, the regression analysis technique has been successful.

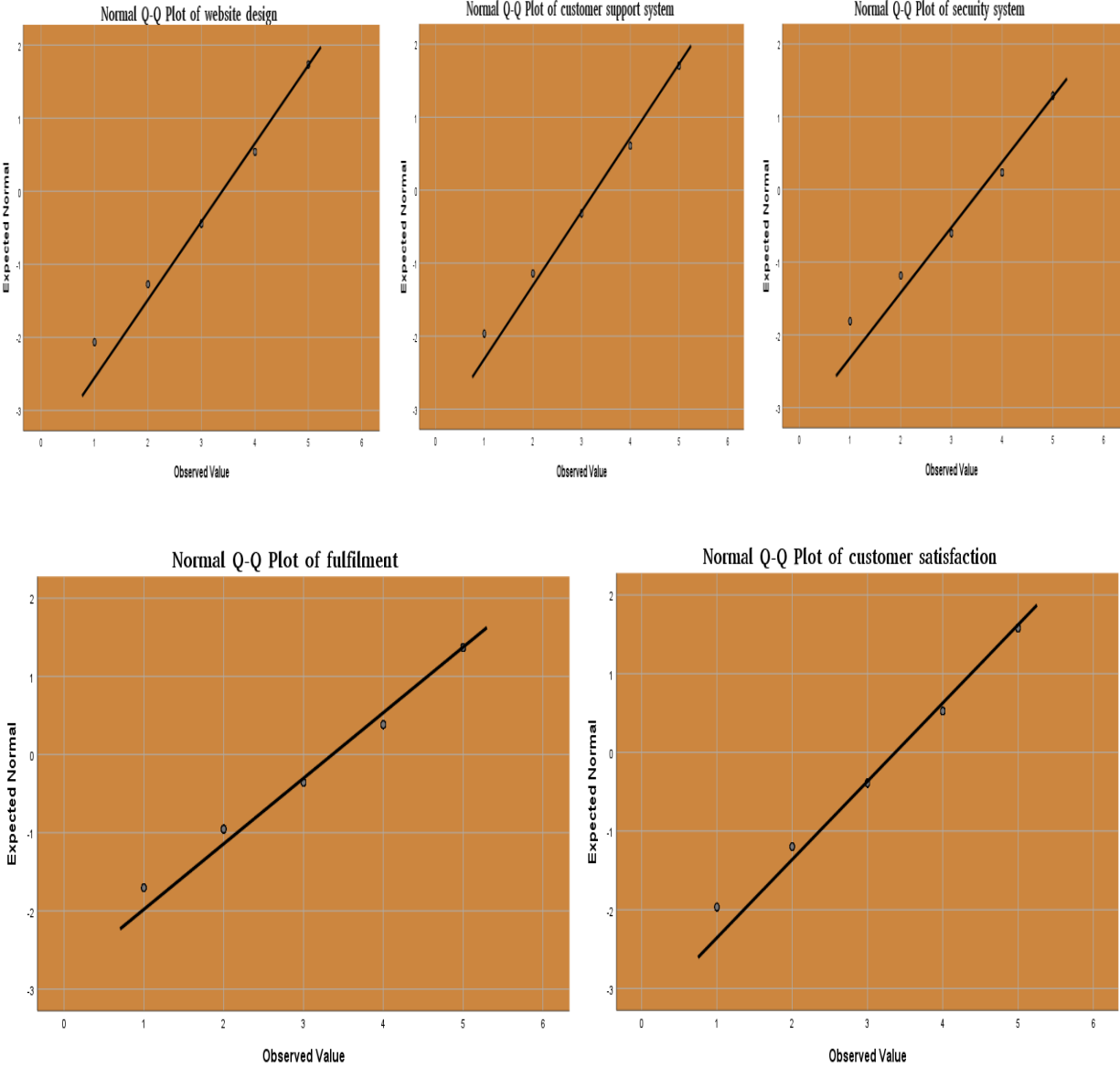
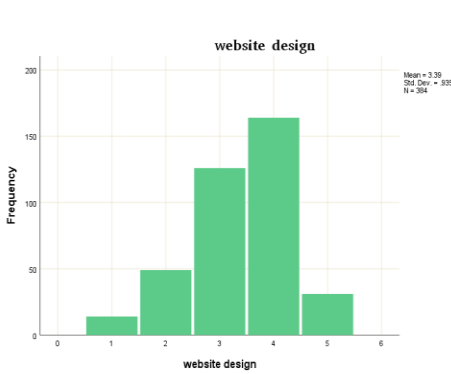


Fig4.2: Normal point plot of standardized residual

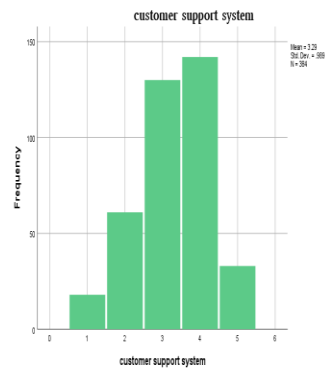
4.6 Histograms

Researchers summarize the data in histogram (by lumping a lot of individual observations together in a cell), so researchers lose some information. But this loss is usually small compared to the information gained in the visual, and the ease of interpretation gained in the graph.

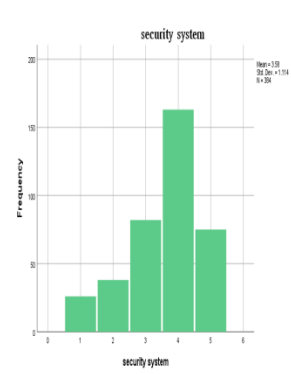
Symmetric	Right-skewed	Left-skewed
The mean = median.	Mean > median.	Mean < median.
Symmetric distribution	distribution is right-skewed	distribution is left-skewed



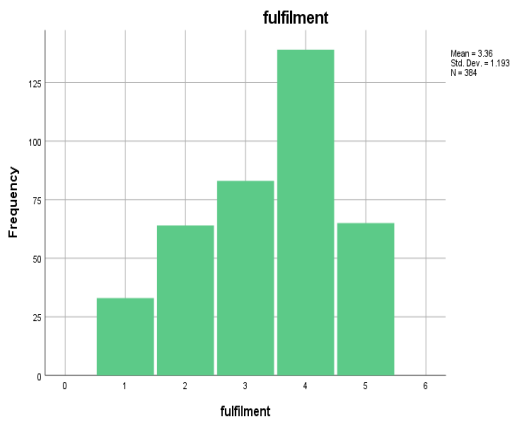
Left skewed



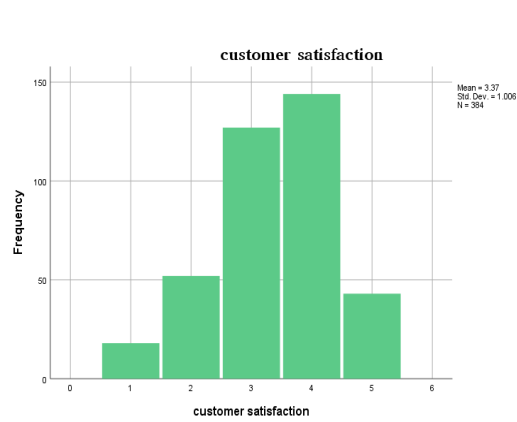
Left skewed



Left skewed



Left skewed



Left skewed

Fig4.3: Histogram regression of standardized residual

Source: Own survey, SPSS output (2023)

Quantile-quantile plots, often known as Q-Q plots, are a graphical tool that can be used to determine if a collection of data might reasonably have come from a normal or exponential distribution. We should observe the points forming a relatively straight line if both sets of quantiles originated from the same distribution.

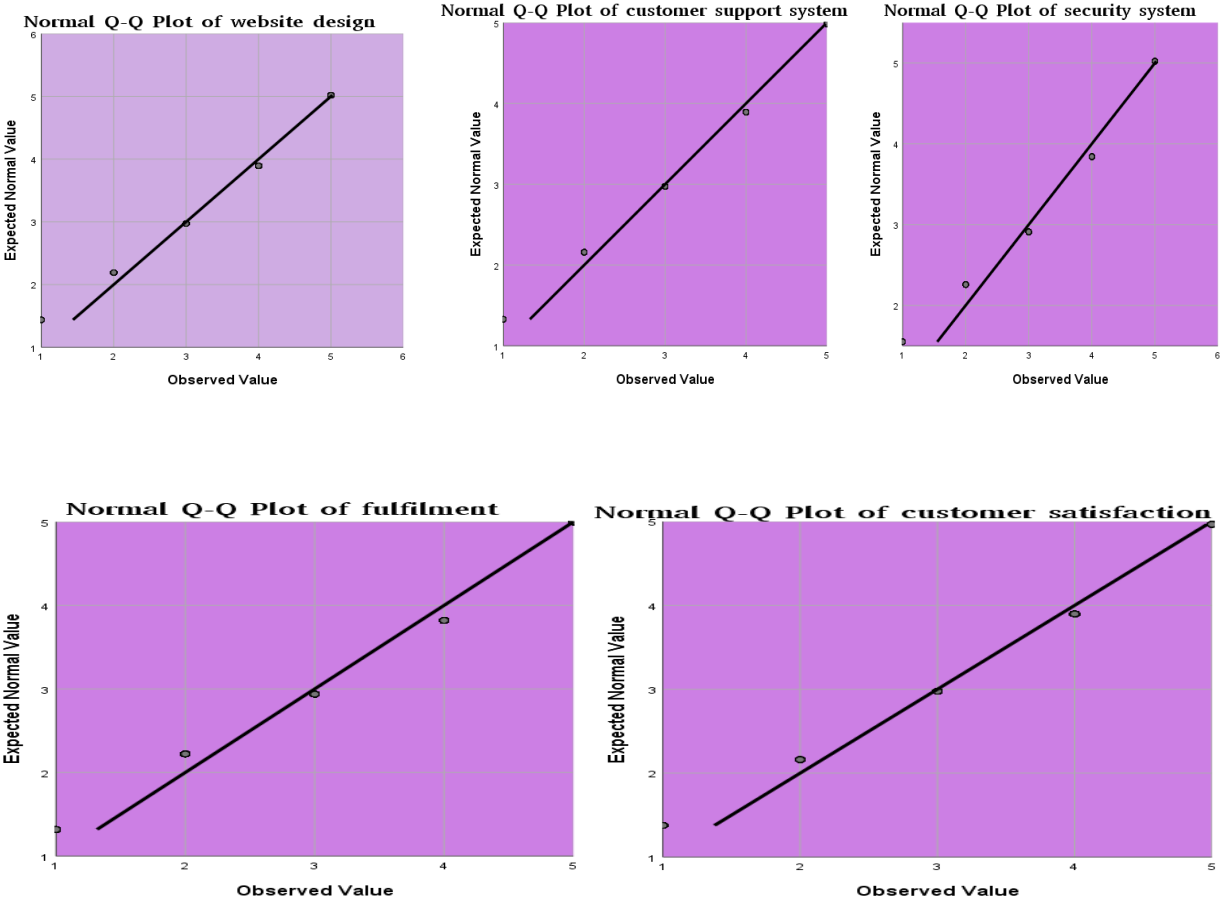


Fig4.4: Histogram regression of quantile plot
 Source: Own survey, SPSS output (2023)

4.7 Regression analysis

The significance level for both independent factors is less than the desired 0.05 level, indicating that the confidence level is more than 95%. The t-value is more than +1.96, indicating that it has a significant effect on the dependent variable. The t-test is used to determine whether the beta coefficient differs significantly from zero. If the beta coefficient is not statistically significant (i.e., the t-value is not significant), the variable does not significantly predict the outcome. Check the sign of the beta coefficient to see if it is significant. If the beta coefficient is positive, the outcome variable will increase by the beta coefficient value for each unit increase in the predictor variable. If the beta coefficient is unsuccessful, the outcome

variable will decrease by the beta coefficient for every unit increase in the predictor variable (Cavana et al., 2007, p.435). Thus, both dependent variables representing customer satisfaction are appropriate for predicting variance in the independent variables of website design, customer support system, security system, and fulfillment. The tables below clearly show that all of the regressions approach the significant level (sig. =0.000<0.05).

Hypothesis 1: Website design has a positive and significant effect on customer satisfaction

To test these hypothesis the process regression analysis was used. For testing hypothesis H1 the independent variable is the Website design and the dependent variable is customer satisfaction. The results of the regression of the process macro show that Website design is positively and significantly related to customer satisfaction (B= 0.893, p < .05). Therefore, hypothesis H1 is accepted.

Table 4.13: Website design regression analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.380	.047		8.089	.000
	Website design	.893	.013	.960	66.831	.000

a. Dependent Variable: Customer satisfaction

Source: Own survey, SPSS output (2023)

Hypothesis 2: Customer privacy/security system has a positive and significant effect on customer satisfaction

In this model, the independent variable is the Security system, and customer satisfaction is the dependent variable. The results from the regression analysis, to test hypothesis H2, Results suggest that customer satisfaction is related to the Security system, and this relationship is found to be positive and significant (B= 1.010, P<0.05). This leads to support for hypothesis H2 so when there is a safe security system in the online market the satisfaction of the customers will increase. Hence hypothesis H2 is accepted.

Table 4.14: Customer privacy/security system regression analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.176	.082		2.152	.032
	Privacy/security system	1.010	.023	.912	43.499	.000

a. Dependent Variable: Customer satisfaction

Source: Own survey, SPSS output (2023)

Hypothesis 3: Customer support has a positive and significant effect on customer satisfaction

To test hypothesis H3 customer satisfaction is the dependent variable and Customer support independent variable. The results in Table illustrate that the total effect of Customer support is positively and significantly related to Customer satisfaction (B= 0.947, $p < .05$). Hence hypothesis H3 is accepted.

Table 4.15: Customer support system regression analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.098	.048		2.045	.042
	Customer support system	.947	.014	.963	69.593	.000

a. Dependent Variable: Customer satisfaction

Source: Own survey, SPSS output (2023)

Hypothesis 4: Fulfillment has a positive and significant effect on customer satisfaction

To test this hypothesis the process regression analysis was used. The independent variable for testing hypothesis H4 is fulfillment, while the dependent variable is customer satisfaction. According to the process regression results, fulfillment is positively and significantly related to customer satisfaction (B= 1.098, $p < .05$). Therefore, hypothesis H4 is accepted.

Table 4.16: Fulfillment regression analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.339	.080		-4.224	.000
	Fulfillment	1.098	.023	.926	48.085	.000

a. Dependent Variable: Customer satisfaction

Source: Own survey, SPSS output (2023)

Table 4.17: Hypothesis testing summary

Hypothesis	Tools	Results
Hypothesis 1: Website design has a positive effect on customer satisfaction in Ethiopian airlines.	Regression	Accepted
Hypothesis 2: Security system has a positive effect on customer satisfaction in Ethiopian airlines.	Regression	Accepted
Hypothesis 3: Customer support has a positive effect on customer satisfaction in Ethiopian airlines.	Regression	Accepted
Hypothesis 4: Fulfillment has a positive effect on customer satisfaction in Ethiopian airlines.	Regression	Accepted

Source: Own survey, SPSS output (2023)

4.8 SUMMARY OF FINDINGS

Using the data from the previous chapter's obtained results, the empirical findings are reviewed and examined in this section. The literature review is connected to the empirical findings, and conclusions are made.

The primary objective of this study was to assess the effect of e-service quality on customer satisfaction in Ethiopian airlines, Addis Ababa. The study proposes that there are four dimensions of e-service quality which are Website design, Customer support, Customer privacy/security and Fulfillment.

A total of 384 questionnaires were given out to Ethiopian Airlines customers who were determined to be using the company's E-services during the data collection period. According to the demographic data, the majority of respondents 52.1% of men and 47.9% of women were young adults (between the ages of 26 and 34), making up 44% of the total. This demonstrates that the older millennial generation uses Ethiopian airlines service.

The researcher was attempting to employ a 5-point Likert scale in this study. With a mean value of 3.29 on a 5-point Likert scale, this indicates that, in terms of this descriptive statistic, customers' satisfaction with E-service is above a satisfactory level. Additionally, the SERVQUAL dimensions' mean score is higher than acceptable.

While some studies suggested that a Cronbach's Alpha value of above 0.8 is preferable to be regarded as reliable, a Cronbach's Alpha value of more than 0.7 is acceptable and ensures the trustworthiness of items. All of the statistics show greater than 0.8, as suggested by Cronbach's alpha's suggested consistency score of 0.976. Thus, consumer satisfaction with Ethiopian Airlines' E-service is dependable and consistent.

The Person coefficient reveals four independent and dependent variables that were all positively and significantly correlated with customer satisfaction of Ethiopian airlines e-service quality, including website design ($B=0.893$, $p < .05$), customer support system($B=0.947$, $p < .05$), customer privacy/security system($B=1.010$, $P < 0.05$), and fulfillment($B= 1.098$, $p < .05$). This indicates that these four factors have a favorable impact on consumer satisfaction.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

On the last chapter, the study's conclusions, suggestions, and ramifications for more research are all included in this chapter.

5.1 Conclusions

Due to the dynamic nature of expectations, evaluations change throughout time from one person to another and from one culture to another. What is regarded as providing exceptional service or satisfying clients today might not do so tomorrow. Customers evaluate services based on the level of the service's quality and their overall level of satisfaction. The goal of this study was to examine customer satisfaction in all of its forms and how Ethiopian Airlines' website design affected it in order to improve the quality of its e-services as a marketing tool. Research questions were developed to reach the final conclusion the following research questions are raised by extensive literature reviews: “the effect of website design on customer satisfaction? Does customer security have an effect on customer satisfaction? Do support services influence customer satisfaction? And what is the effect of fulfillment on customer satisfaction? To reach appropriate conclusions, correlation tests and regression analyses were led to see if there was any significant relationships between E-service quality dimensions and customer satisfaction.

All electronic service quality dimensions and customer satisfaction had strong positive relationships, performed by spearman's correlation Test. The study found a significant correlation between website design, customer service, and customer privacy/security systems and customer satisfaction. Additionally, there was a significant link between fulfillment and customer satisfaction. According to the survey, using Ethiopian Airlines' online services gives customers a considerable comparative advantage over using the airline's physical locations since they give them more freedom and choice over how they spend their time. Based on the findings of the study, it is very important that Ethiopian Airlines should understand the E-service quality dimensions (website design, customer support system, customer privacy/security, and fulfillment) are very important to build satisfied customers. Hence, all E-service quality dimensions have a positive effect on customer satisfaction.

5.2 Recommendations

Future studies can add additional parameters to measure the quality of E-services in order to have a broader perspective on the quality of E-services offered and to come up with a more inclusive plan to improve overall E-service quality. This study concentrated on passengers' ratings on the dimensions of E-service quality.

Based on the research findings, For Ethiopian Airlines, which is currently providing or plans to introduce E-services in Ethiopia, the following recommendations are made in order to increase client adoption of those services.

- ✚ The airline industry should keep coming up with new ideas and investing in E-services that give customers greater choices and value from their online experiences so that customers of Ethiopian Airlines can easily access the online page.
- ✚ For all clients, an easy-to-use E-service is crucial, so Ethiopian Airlines should work to make its E-service as straightforward and user-friendly as possible to avoid giving the impression that it is difficult to use. Developers of user interfaces can use these insights to create user-friendly solutions.
- ✚ The airline should place an emphasis on designing various E-services while taking into account customers' lives, lifestyles, traditions, and languages because prospective consumers want to know how much a new idea is superior to current practice. The adoption rate should be increased by concentrating on e-services non-users.
- ✚ When offering E-services, it is crucial for the airline to project stronger security features and inform its clients of any security flaws in order to increase customer acceptance. If the electronic service has strong security features the airline can easily get customer's trust.

5.3 Future research direction

This study may not have exhausted to all the factors of “E-service quality and customer satisfaction in Ethiopian Airlines”. Therefore, it is advised that more research be conducted in order to identify the other components. Given that the current objective for the airline is to transition to paperless service, additional research might be conducted to assess how E-service contributes to paperless financial services, whether it has any impact on digital service, and how it can be connected or linked with the internet service. This will enable the business to assess if it is using the latest technology in the best way possible to realize its objectives and aspirations for paperless services.

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APPENDIX

Addis Ababa University School of Commerce

Department of marketing management

Post graduate program

Dear respondents,

This questionnaire is prepared to collect information on the “effect of E-service quality on customer satisfaction: the case of Ethiopian airlines” for educational purposes. The information is solicited for the partial fulfillment of a Master of Arts Degree in Marketing Management, Department of Marketing Management at Addis Ababa University School of Commerce.

The information that you provide will be kept confidential, used only for academic purpose and will not be disclosed for the third party.

Therefore, I kindly request you to complete the following questions to reflect your opinions as accurately as possible and give factual information to the best of your knowledge. Your cooperation is highly appreciated.

I would like to thank you, in advance, for sharing your precious time to fill this questionnaire. If there is any doubt please contact: +251910189200, email: rmekuriaw@gmail.com

Part I: General information about the respondents

Instruction: Please give your response by putting a tick mark (√) in one of the box provided against for fixed alternative questions.

Gender

Male Female

Age group

18-25 26-34 35-43 44-52 53 and above

Education level

Secondary school and below Master's Degree

Diploma

Doctorate Degree

BSC/BA Degree

Others Specify _____

How frequently travel with Ethiopian airline per year?

1-5

6-10

11-15

16-20

More than 21

Part II: Determinants of E-service quality dimensions and customer satisfaction

Instruction: You are required to choose the appropriate response category by putting a tick mark (√) against each statement given on a 5-point Likert scale where (1 -Strongly disagree; 2 -Disagree; 3 - Neutral; 4 -Agree and 5 -Strongly Agree).

No	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
WD1	The website loads quickly.					
WD2	When I use the website, there is very little waiting time between my actions and the website's response.					
WD3	The website has lower prices than offline stores.					
WD4	The website labels are easy to understand.					
WD5	Website is easy to make or cancel reservations.					

No	Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
CS1	The online page provides a telephone number to reach the company.					
CS2	The online page has customer service representatives available.					
CS3	Airline page develop a platform for users to exchange travel experiences.					
CS4	The online page provides me with convenient					

	options for returning ticket.					
CS5	The online page has help desk to support the customer					

No		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
SP1	I feel safe in my transactions with Ethiopian airlines online page.					
SP2	Ethiopian airlines online page has adequate security features.					
SP3	I trust Ethiopian airlines online page to keep my personal information safe.					
SP4	I trust the website administrators will not misuse my personal information.					
SP5	Safe platform					

No		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
F1	The service is delivered by the time promised by Ethiopian airlines.					
F2	Ethiopian airlines online page employees are ready and willing to respond to customer needs.					
F3	I get what I booked from Ethiopian airlines online page.					
F4	The website is truthful about its offerings.					
F5	The service was damaged during delivery.					

No		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
CS1	I am satisfied with Ethiopian airlines website.					
CS2	I did the right decision when I choose travel with Ethiopian.					
CS3	Ethiopian airlines website always meets my needs.					
CS4	Ethiopian airlines website is use friendly					
CS5	My experience with Ethiopian airlines website is more than my expectation.					

Thank you for your time!!!

Sources: Blut (2016); Holloway and Beatty (2008); Fornell (1992)