Addis Ababa University School of Commerce

Department of Marketing Management

ASSESSMENT OF SERVICE QUALITY AND CUSTOMER SATISFACTION: THE CASE OF ETHIOPIAN AIRLINES

Prepared By: - Million Legesse

This thesis submitted to the school of graduate studies of Addis Ababa university school of commerce in partial fulfillment of the requirement for the degree of MA in marketing management

Advisor: - Ato Mesfin Workineh

June, 2016

Addis Ababa
ASSESSMENT OF SERVICE QUALITY AND CUSTOMER SATISFACTION: THE CASE OF ETHIOPIAN AIRLINES

Prepared by: Million Legesse

<table>
<thead>
<tr>
<th>Position</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman, Department</td>
<td></td>
</tr>
<tr>
<td>Advisor</td>
<td></td>
</tr>
<tr>
<td>Examiner</td>
<td></td>
</tr>
</tbody>
</table>
Addis Ababa University School of Commerce
Department of Marketing Management

Statement of Certification
This is to certify that Million Legesse has carried out his research work on the topic entitled “Assessment of service quality and customer satisfaction: the case of Ethiopian airlines” is his original work and is suitable for submission for the award of MA Degree in Marketing Management.

Advisor: Mesfin Workineh June, 2016
Declaration

I certify that this research paper entitled “Assessment of service quality and customer satisfaction: the case of Ethiopian airlines” has not been previously submitted for a degree nor has it been submitted as part of requirements for a degree.

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

Declared by:

Name: ______________________________________________

Date: _______________________________________________

Signature: ________________________________
Acknowledgment

First of all, all praise be to the almighty God for giving me the strength, patience to endure and complete this project. I would also like to express my appreciation to Ato Mesfin Workineh, for his invaluable comments, encouragement, and expert guidance during the whole process of research writing. I also wish to thank all my instructors who have been incredibly supportive and collaborative over the last three years.

My special thanks goes to cap. Legesse Teka, Meseret Mulugetra and family for the encouragement and expectation. To the dearest Jalene tefera for her patience. The support from my Collogues Wondmagnehu Samuel, Asenafi Asegede, Biruck Tesfaye, Marry, Sebele w/Mariam, tewodros Hungnaw and Daniel Niggusse has contributed a lot for this accomplishment.

Last but not the least, my special thanks goes to Ethiopian Airlines staff at all levels who assisted me in doing the research. Especial thanks goes to Ethiopian Airport staffs at Addis Ababa Bole international airport terminal two Yohannes Yingerutal, Kbra Hailu, Teubesta mesfin and Nahom alemu, for their cooperation during questionnaire distribution and collection.
Abstract

The purpose of this paper is to assess the relationship among perceived service quality and passenger satisfaction through a case analysis of Ethiopian Airlines. A structured questionnaire was developed. A sample of 215 customers response collected out of 250 distributed, giving a valid response rate of 86%. Different analytical techniques were used to assess the relationships among the variables under investigation such simple, and multiple linear regressions, structural equation modeling and importance performance analysis and regression was used to assess the variables. The applications used to analyze are the Statistical Package for Social Sciences V.21. The findings of this study have shown a significant effect of perceived service quality on the passenger satisfaction.

Passengers perceived in-flight entertainment to the poorest service of the airline and out the attributes under it the availability of internet and live channels is rated lower and Passengers’ major need not met by the airline during flight. The in-flight entertainment is the least rated service of the airline, but it’s impact on passengers satisfaction is not high as the service is the least expected service and very vital, which being replaced with hand carry device for personal entertainment. The eight service attributes assessed by customers and their perception service quality is ranked top to least as Ticket office /call center service, flight schedule, cabin environment, information particular, airport service, flight meal service, frequent flyer program, in-flight entrainment.

The attributes has different level of contribution on the customer satisfaction and based on the analysis the highest contribution on customer satisfaction is from the Information particulars attribute and in-flight entertainment has the least contribution on customer satisfaction.

The eight attributes ranked based on their contribution on passenger satisfaction Information particulars, airport service, cabin environment, flight meal service, ticket office /call center service, flight schedule, frequent flyer program and in-flight entrainment.

Key words: service quality, customer satisfaction, customer expectation, structural equation modeling.
ASSESSMENT OF SERVICE QUALITY AND CUSTOMER SATISFACTION: THE CASE OF ETHIOPIAN AIRLINES

Prepared By: - Million Legesse

Advisor: - Ato Mesfin Workineh

June, 2016
Addis Ababa
# Table of Contents

List of Tables ............................................................................................................. 5
List of Figures .............................................................................................................. 6
Introduction ................................................................................................................ 7
1.1 Background of the study .................................................................................... 7
1.2 Background of the company ............................................................................. 9
1.3 Statement of the Problem .................................................................................. 10
1.4 Research Questions ............................................................................................ 12
1.5 Objectives of the Study ..................................................................................... 12
1.6 Significance of the Study ................................................................................... 12
1.7 Scope of the study ............................................................................................... 13
1.8 Limitation of the Study ...................................................................................... 13
1.9 Definition of Terms ............................................................................................ 14
1.10 Organization of the study ................................................................................ 14

Chapter Two .............................................................................................................. 15
Review of Related Literature and Studies ................................................................. 15
2.1 Introduction ......................................................................................................... 15
2.2 Theoretical Framework ...................................................................................... 15
  2.2.1 SERVQUAL ................................................................................................. 15
  2.2.2 SERVPERF ................................................................................................. 18
2.2 Empirical review ................................................................................................. 20
  2.2.1 SERVICE QUALITY ................................................................................... 22
  2.2.2 Criticisms of SERVQUAL .......................................................................... 24
  2.2.3 Service Quality in Airline Industry .............................................................. 25
    2.2.3.1 Industry Standards ................................................................................. 25
    2.2.3.2 Ethiopian Airlines’ Ranking ................................................................. 26
    2.2.3.3 Customers Perspectives ...................................................................... 26
    2.2.3.4 Other dimensions ................................................................................. 26
  2.2.4 Passenger Value and Satisfaction ................................................................ 29
  2.2.5 Passenger Satisfaction measurement ......................................................... 30
  2.2.6 The Unique Nature of Service ................................................................... 31
  2.2.7 Service quality and customer satisfaction .................................................. 33
  2.2.8 Flight schedule ........................................................................................... 35
List of Tables

Table 2.1: RATER model .................................................................................................. 16
Table 2.2: key service quality attributes ........................................................................ 28
Table 2.3: the service attributes categorized In the RATER .......................................... 43
Table 4.1: the Cronbach’s Alpha for variables ............................................................... 52
Table 4.2: the age distribution ....................................................................................... 54
Table 4.3: the mean for service quality dimensions ....................................................... 56
Table 4.4: the mean for Ticket Office/call center quality dimensions ......................... 57
Table 4.5: the mean for in-flight entertainment ............................................................. 57
Table 4.6: the mean for flight Schedule quality dimensions ........................................ 58
Table 4.7: the mean for cabin environment quality dimensions ................................... 58
Table 4.8: the mean for frequent flyer program quality dimensions ......................... 59
Table 4.9: the mean for airport service quality dimensions ........................................ 59
Table 4.10: the mean for Flight meal service quality dimensions ............................... 60
Table 4.11: the mean for information particular quality dimensions ........................... 60
Table 4.12: the passengers’ satisfaction measurement ................................................ 61
Table 4.13: the regression coefficient table .................................................................. 63
Table 4.14: the regression ANOVA table ..................................................................... 64
Table 4.15: the regression model summery table ......................................................... 64
Table 4.16: the multivariable correlation table ............................................................. 65
List of Figures

Fig 2.1: Parasuraman et al. GAP model ................................................................. 17
Fig 2.2: Grönroos' Perceived Service Quality model .............................................. 18
Fig 2.3: Performance Only Model (SERVPERF) .................................................. 20
Fig 2.4: Airline Service Attribute Model .............................................................. 42
Fig 4.1: Gender Distribution .................................................................................. 53
Fig 4.2: Travelers' Class Distribution ..................................................................... 53
Fig 4.3: purpose of trip ........................................................................................... 54
Fig 4.4: Nationality by continent ............................................................................ 55
Chapter One

Introduction

1.1 Background of the study

The existence of any service firm depends on the willingness of customers to use the service and pay the required monitory price in exchange. The provision of high quality service gives customers a satisfaction as Shemwell, (1998) have stated, the key to sustainable competitive advantage lies in delivering high-quality service that result in satisfied customers. The link between service quality and customer satisfaction is now firmly established, and it has been shown that this link subsequently produces higher revenues, increased cross-sell ratios, higher customer retention, repeat purchasing behavior, and expanded market share.

This research explores the key determinants of customer satisfaction for passengers at Ethiopian airlines. The purpose of the study is to measure the service quality and its subsequent effect on customer satisfaction at Ethiopian airlines using a model that describes various dimensions of service quality. To this purpose the research will study the service quality of the airline using SERVPERF model.

Service quality measure is based on modified version of SERVQUAL, which involve five dimensions of Service quality namely Reliability, Responsiveness, Empathy, Assurance, and Tangibles.

The dimensions specific criteria on the airline context includes flight schedule and accuracy of departure and arrival time, the cabin service, the service provided at the call center, ticket office service, baggage delivery time, consistency of front line staff service, accuracy of information given to the passenger, safety during flight, the
Assessment of service quality and customer satisfaction: the case of Ethiopian airlines

airport/ticket office /aircraft facility, inflight entertainment and technology, adoption of change in travel plan will be addressed on the research.

There have been a number of studies in this area addressed different business sector. The need for periodic research in the same area is very essential in the airline industry as the industry has a dynamic nature with a number of change in business model like low cost airline model, technological innovation like composite aircraft body like Boeing 787-800 reduced the fuel consumption 20%, the sales outlet approach like GSSA (general sales and service agent). Air travel industry has been in the news frequently for a number of reasons. The future of major airlines worldwide is seen in danger by a number of analysts, researchers, media personnel, and so on. With all this, customer satisfaction and changing attitudes is yet another area that catches the common eye for solid reasons (Mansoor, 2010).

Understanding the factors that drive passengers’ selection of an airline and their ultimate satisfaction is fundamental in achieving growth and compete in the stiff market. The business model followed by gulf carriers make the airlines competition as challenging as a war front.

Zeithaml and Bitner study (as cited in Safak et. Al., 2003) discussed that in service industries such as the airline industries, the distinctive features of services require that managers understand customers need and expectations, and keep promises. Pereira, Almeida, & Menezes (2007) explained the growing interest in eliciting consumer preferences through stated preferences methods. Eliciting consumer preferences is quite important in a vast number of situations: marketing managers care to know what consumers are willing to pay for products and services; public officials must know what their constituents value.

The intention of this research is, therefore to assess the service delivery system of Ethiopian. The impact of service quality delivery on customer satisfaction. Keeping in
mind the significance of service quality and customer satisfaction, a study is designed to examine the impact of service quality as an independent variable on dependent variable that is customer satisfaction.

1.2 Background of the company

Ethiopian Airlines is the flag carrier of Ethiopia. The airline joined the world biggest alliance Star alliance, which has 28 member airlines. The airline celebrated its seventy years of service on April 8 this year in an event that inaugurated state of an art aviation academy in the same date, Ethiopian has become one of the continent’s leading carriers, unrivalled in Africa for efficiency and operational success, turning profits for almost all the years of its existence. Operating at the forefront of technology, the airline has also become one of Ethiopia’s major industries and a veritable institution in Africa. It commands a lion’s share of the pan African network including the daily and double daily east-west flight across the continent. Ethiopian currently serves 91 international destinations, a number other destination including New York, Singapore, Jakarta and Hanoi in the pipeline. Ethiopian currently serve 21 domestic destinations, Awassa joined the network recently. The airline operates newest and youngest fleets of Boeing new generation as well as Altera modern composite aircrafts. The fleet composition of the airline is divided in to two namely Narrow body and wide body.

The narrow body fleet composition includes DHC8-Q400 78 seats, Boeing 737-700 118 seats, Boeing 737-800 154 seats and Boeing 757-200 160 seats. The wide body fleet composition includes Boeing 767-300ER 214 seats, Boeing 777-200LR 321 seats, Boeing 777-300ER 399 seats and Boeing 787-800 270 seats. With a calculated business move the airline will receive its first time in history European made Airbus 350 aircraft.

The airline has a number of competitor in the region and the major ones are Emirates Airlines, which has a daily flight from Addis Ababa and a number of flight originating from Middle East and Asia to western Africa. The other Major competitor is Qatar
airways which has three flights a week from Addis Ababa and a number of flight originating from United States of America to Africa and the coverage of the Middle East and Asia. The competitors are providing a five star service that Ethiopian also follow a market strategy of being “A four star airline with a five star service”.

1.3 Statement of the Problem
Providing excellent service quality and high customer satisfaction is the important issue and challenge facing the contemporary service industry. High customer satisfaction and loyalty have long been key concerns for operational management in service industries like airlines. (John Tschohol, 2011)

Customer orientation, namely, understanding customer requirements and expectations, is the first step service providers should take to enhance service quality. Service quality plays a critical role in a firm’s competitive advantage. Studies investigating service quality have extensively examined service quality measurement to assist practitioners in effectively managing quality service. Service quality remains a critical measure of organizational performance for airline business and will continue to be at the forefront of services marketing literature and practice. The enthusiasm is mostly kept high by the fact that a high service quality offered often leads to customer satisfaction, loyalty, and other positive behavioral outcomes such as greater willingness to recommend the service providers to others, lesser complaints, and improved customer retention. (Mario Kossmann 2006)

What constitutes service quality attracted my attention for this researcher. Even as researchers continue to debate the determinants of service quality a few important issues remain unanswered. Is there a universal set of determinants that determine the service quality across a section of services? Does the service characteristic gets reflected in what customers expect out of delivery of a particular service? Is there an inherent difference in services because they must be delivered in a particular way and does that
have a bearing on what becomes important for the customer? Practitioners continue to look for advice and suggestion as to what constitute service quality for their offers and furthermore, if they tend to reposition their offers by varying some characteristics of their offers, for example, by increasing or reducing tangibility or customer contact could this be practical on the airline business?

In a service business customer and front line service employee interact to create the service. Thus, a service provider must interact effectively with customers to create superior value during service encounters. As such, most airlines now have developed a way to address consumer problems. There are also employee related problems. To provide quality service, employee needs ongoing training in the necessary technical skills and knowledge to provide quality service. Employees also need training in interactive skills that allow them to provide courteous and responsive service.

Because customer satisfaction and customer focus are so critical to competitiveness of firms, any company interested in delivering quality service must begin with a clear understanding of its customers (Valarie A. Zeithaml and Mary Jo Bitner, 2003).

Providing excellent service quality and high customer satisfaction is the important issue and challenge facing the airline. High customer satisfaction and loyalty have long been key concerns for operational management in Ethiopian airlines. The airline is receiving a number of compliant from customer through a general feedback channel and the star alliance rating for customer satisfaction survey is below the alliance average.

Keeping in mind the significance of service quality and customer satisfaction, this study is designed to make an assessment on the impact of service quality as an independent variable on a dependent variable that is passengers’ satisfaction.
1.4 Research Questions

1. What are the various elements of service quality that affects customer satisfaction?
2. Which of the service quality elements are major factors on customer satisfaction?
3. What are the main determinants and influencers of customer satisfaction in the airline’s service chain?
4. What is the difference and importance of the service quality factors?

1.5 Objectives of the Study
The general objective of this study is to measure the level of customer satisfaction in relation to service quality of Ethiopian airlines.

The Specific Objectives are to identify the major service quality elements and the relative importance on the customer satisfaction.

1.6 Significance of the Study
The outcome of this study will be an input for service encounter evaluation. The survey will provide figurative relation between service quality on different areas of service and the customer perception on the service. The research will provide the following benefits:

- It will help the airline to understand the strength and weakness of its service quality and this can be used to satisfy and retain passengers.
- To identify weak links in the service chain for improvement
- It will be used as a base for other researchers who will study on the same or related topic in the airline industry service perspective.
- The research will broaden the researcher’s knowledge.
1.7 Scope of the study
This research intends to identify the various service quality factors and the consequence on the overall service implication and customer satisfaction. When doing so the researcher is restricting oneself in Addis Ababa airport but include passengers originating from Addis Ababa and traveling to other destination, passengers transiting via Addis Ababa originating from another destination commencing to other destination and passengers arriving in to Addis Ababa.

The study is focused only on international travelers at terminal two in order to reduce a possible repercussion following the capacity and convenience of the two terminal facilities.

All type of customer including business, family visitors and leisure travelers are addressed on this study. On the study more emphases being given on business travelers because of the nature Ethiopian flight rooting. Most passengers traveling between Middle East, Far East and western Africa are baggage traders.

From informal discussion with the management and crews of Ethiopian airlines, the researcher found that the contemporary most critical and less insightful customer-oriented travel-stage is the service perspective of the business.

Passenger insight is fairly acknowledged studied in pre-flight activities such as the reservation, ticketing, check-in activity, boarding, baggage handling service and inflight service was explored in the research. Further, the research identifies important service stage in a customer perspective, as a result of the relative lengthy service exposure and the variety of influencing service quality elements.

1.8 Limitation of the Study
This study is mainly limited on passengers, arriving to Addis and transferring with long connection time in Addis Ababa airport station. In addition to this limitation the researcher faced problem in getting information from passengers with quick transfer via Addis Ababa.
1.9 Definition of Terms

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

**Servqual**: is an instrument for measuring service quality, in terms of the discrepancy between customers’ expectation regarding service offered and the perception of the service.

**Servperf** :- is a performance-based measure that service quality is a form of consumer attitude.

**Customer expectation**: means uncontrollable factors including past experience, personal needs, word of mouth, and external communication.

**Customer perception**: means customer’s feelings of pleasure / displeasure or the reaction of the customers in relation to the performance of the staff in satisfying / dissatisfying the customer.

**Service delivery**- refers to how well the service is provided to customers. It includes speed, accuracy, and care attending the delivery process.

Zeithamal ,parasuraman & Berry (1990)

1.10 Organization of the study

The structure of this research is comprised by five chapters. The first chapter presented the introduction, following by second chapter - Literature Review, which presented the existing literature and Conceptual framework based on service quality and customer satisfaction. The third chapter assigned for methodology where the research design and research methods is presented; and the fourth chapter is comprise of data analysis at which the finding is explained .The last chapter present the conclusions of this research, and also, implication, limitation, and suggestions for future research.
Chapter Two

Review of Related Literature and Studies

2.1 Introduction

The purpose of this chapter is to overview related literatures in the area of customer service and customer satisfaction. The area of study is assessed by a number of researchers as the topic is very vital.

2.2 Theoretical Framework

2.2.1 SERVQUAL

Service quality is Customers thinking they’re getting better service than expected. This is often referred to as the perception gap. That is the gap between what the customer expects and what they think they got. It’s worth noting that both sides of the gap are in the customers mind. You may actually deliver better service than your competitors, but if the customer thinks that your service is worse than that’s all that matters. Because the perception gap is based on the difference between what a customer expects to receive from a service and what they think they received both sides of the gap are "soft" – they are based on customer impressions rather than a "hard" definable quality. This means the perception gap is difficult to measure, difficult to manage and is likely to change with time and experience. Nevertheless it’s vital to business success. (Parasuraman et al. (Zithaml & Bitner 1996))

Before considering quick wins and strategic improvements there are a number of key questions which contribute to our understanding of the perception gap. These models are the result of significant research:
A complementary analysis of the perception gap is the RATER model also produced by Zeithaml (1990). RATER identifies the 5 key areas which together form the qualities of a service offering from a customer perspective. Where the Gap model describes the how the provider can minimize the perception gap RATER focuses on the dimensions of customers’ expectations. The research also suggests the relative importance of each of the factors.

Table 2.1 RATER model

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Relative importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>Ability to perform the promised service dependably and accurately</td>
<td>32%</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Willingness to help customers and provide prompt service</td>
<td>22%</td>
</tr>
<tr>
<td>Assurance</td>
<td>Knowledge and courtesy of employees and their ability to convey trust and confidence</td>
<td>19%</td>
</tr>
<tr>
<td>Empathy</td>
<td>Caring individualized attention the firm provides its customers</td>
<td>16%</td>
</tr>
<tr>
<td>Tangibles</td>
<td>Appearance of physical facilities, equipment, personnel and communication materials</td>
<td>11%</td>
</tr>
</tbody>
</table>

The "GAP" model of service quality from Parasuraman et al. (Zithaml & Bitner 1996). This model offers an integrated view of the consumer-company relationship. It is based on substantial research amongst a number of service providers. In common with the Grönroos model it shows the perception gap (Gap 5) and outlines contributory factors. In this case expected service is a function of word of mouth communication, personal need and past experience, and perceived service is a product of service delivery and external communications to consumers.
• **Gap 1** is the distance between what customers expect and what managers think they expect.

• **Gap 2** is between management perception and the actual specification of the customer experience

• **Gap 3** is from the experience specification to the delivery of the experience

• **Gap 4** is the gap between the delivery of the customer experience and what is communicated to customers

• **Finally**, **Gap 5** is the gap between a customer’s perception of the experience and the customer’s expectation of the service - Customers' expectations have been shaped by word of mouth, their personal needs and their own past experiences. Routine
transactional surveys after delivering the customer experience are important for an organization to measure customer perceptions of service.

In Grönroos' Perceived Service Quality model, expectations are a function of market communications, image, word of mouth, and consumer needs and learning, whereas experience is a product of a technical and functional quality, which is filtered through the image.

Grönroos more clearly shows the existence of a perception gap, although there is no suggestion of “delighting” only of narrowing the gap. However the model has more practical application as it shows factors that contribute to each side of the gap. It demonstrates that the supplier can affect both sides of the gap – most notably by managing customer expectations. In addition it illustrates that the customer experience is a product of the image of supplier quality, not just the actuality. Clearly marketing as well as process and technical quality has an effect on the perception gap.

2.2.2 SERVPERF
Cronin and Taylor (1992) in their empirical work controverted the framework of Parasuraman, Zeithaml and Berry (1985, 1988) with respect to conceptualization and
measurement of service quality, and propounded a performance-based measure of service quality called ‘SERVPERF’ illustrating that service quality is a form of consumer attitude. They argued that SERVPERF was an enhanced means of measuring the service quality construct. Their study was later replicated and findings suggest that little if any theoretical or empirical evidence supports the relevance of the E-P= quality gap as the basis for measuring service quality. (Martínez (2010).

Levelling maximum criticism against SERVQUAL scale, Cronin and Taylor (1992) provided empirical evidences across four industries viz. fast food, pest control, dry cleaning and banking to support the superiority of their ‘performance only’ scale over SERVQUAL scale retaining the same items as had been proposed by the Parasuraman, Zeithaml and Berry (1988). In equation form, SERVPERF service quality can be expressed as:

\[ SQ_i = \sum_{j=1}^{k} P_{ij} \]

Where :-

SQ\(_i\) = perceived service quality of individual “I”

K = number of attribute

P=perception of individual “i” with respect of the service firm on attribute “j”
This research used the SERVPERF model for a reason that the collection of expectation at one point and perception on the other end is not practical. Studies on same topic on Kenyan airways by Tirmba O Manani(2013) used the same model in the measurement of customer satisfaction.

### 2.2 Empirical review

According to Gashaw Girma (2011) on a descriptive study “Assessment of Service Quality and Customer Satisfaction: A case study of Ethiopian airlines “focused his study to measure the service quality and its subsequent effect on customer satisfaction at Ethiopian airlines using a model that describes various dimensions of service quality using SERVQUAL model. Convenience sampling technique was used in the study to take a sample from the infinite population. Total samples of 150 respondents who have made a flight with Ethiopian airlines were taken as a respondent. A questionnaire was
designed based on the model in order to examine all the five factors of service Quality in the model for airline industry.

The study concluded that passengers are not satisfied with the perceived services of three dimensions of the model and it warns the airline to focus on passengers expectations. Tangibles, assurance, responsiveness, reliability and empathy are five features of the model and in tangibles and reliability the passengers are satisfied, but in the remaining three passengers feel dissatisfied. The study recommended improving visually attractive facilities and coordinating all people, departments and organizations involved with the services and measure passengers’ satisfaction and service quality seasonally to keep the services corresponded with customers’ opinions.

Tirimba O. Manani, (2013) on his study titled “Service Quality and Customer Satisfaction at Kenya Airways Ltd” This study explored the key determinants of customer satisfaction for passengers at Kenya Airways. The study used a descriptive survey design to obtain information on key determinants of customer satisfaction for passengers at Kenya Airways. The study mainly took respondents constituted Passengers who had used Kenya airways. The sample of this study consisted of one hundred (100) passengers. Both primary and secondary data sources were used to answer the research questions.

The study findings indicate that among the key determinants of customer satisfaction with passengers were baggage handling, proper communication with customers to update them on status of their flights, provision of food variety and ability of the airline to communicate to passengers about the weather on arrival destinations. Weather conditions prevailing at the destination, compassion by airline crew toward any disabled persons onboard were particularly noted to increase significantly the level of customer satisfaction. The study contributes to existing theories of service quality and customer satisfaction by confirming or adding value to the relationships that are involved in customer satisfaction and service quality in the Air Transport and other related sectors. It
provides results that are useful to managers in business organizations for strategic planning. The arguments of this study are based on the resource based view theory and review of relevant literature.

The research study revealed that there were three main parameters that passengers were most satisfied with as passenger with Kenya airways. These parameters were the aged and disabled were well attended, the passengers were well informed about such services such as food in good time and during boarding process passengers were promptly attended. These parameters had mean score of 4.33, 4.0, and 4.05 respectively. The scores obtained showed that the level of satisfaction with these parameters was high.

Study on “Determinants of customer satisfaction for passenger airline: the case of Ethiopian international passenger airlines” by Wondwosen Tadesse (2012). The study attempts to identify the determinants of customer satisfaction and service dimensions that matters most to airline passengers. The research measures and compares the dimensions that determine customer satisfaction. Data was collected from passengers at Addis Ababa Bole international Airport. The analysis shows that passengers gives highest priority to safety, nonstop service, convenient schedule, frequencies and price whereas lowest priority to travel related partners, internet and fax services, and friendliness at counters towards their satisfaction of service experience. The results also indicate there is a significant difference of determinants of satisfaction among passengers of different purpose of trip, continent of nationality and age group of passengers. However there is no statistically significant difference between sexes of passengers and class of service on responsiveness, facilities and customization dimensions.

2.2.1 SERVICE QUALITY
In current economic environment, providing quality service is not a choice but rather a necessity companies must struggle to achieve. Particular to the services sector where
consumers of the product ultimately get no ownership of the acquired product, the feelings that customers are left with is what makes one service provider preferred over similar others.

According to Tschol (2011), the most important characteristics of Quality Service are:

**Reliability:** Customers want companies to perform desired service dependably, accurately and consistently.

**Responsiveness:** companies should be helpful and provide prompt service.

**Assurance:** employees should be knowledgeable and courteous; they should convey confidence in the service they provide.

**Tangibles:** physical facilities and equipment should be attractive and clean, and employees should be well groomed.

**Empathy:** customers want companies to provide individualized attention and to listen to them. People want to be treated as individuals and they want to be noticed.

According to Parasuraman (1991), companies can get their competitive advantage by using the technology for the purpose of enhancing service quality and gathering market demand. Different authors have attempted to define quality in different ways. Some prominent definitions include ‘conformance to requirements’ (Crosby, 1984), Juran (1988) defined quality as ‘fitness for use which results in customer satisfaction freedom from product deficiencies, which avoids customer dissatisfaction. Eiglier and Langeard (1987) defined quality as ‘One that satisfies the customer’. Gitlow et al. (1989) defined Quality as the extent to which the customers or users believe the product or service surpasses their needs and expectations.” Deming (1986) defined quality as a predictable degree of uniformity and dependability, at low cost and suited to the market. The International Organization for Standardization (ISO) defined quality as the totality of
features and characteristics that bears on the ability of a product or service to satisfy stated or implied needs. Johns, (1999) contends that the word ‘service’ has many meanings which lead to some confusion in the way the concept is defined in management literature, where service could mean an industry, a performance, an output or offering or a process. He further argues that services are mostly described as ‘intangible’ and their output viewed as an activity rather than a tangible object which is not clear because some service outputs have some substantial tangible components like physical facilities, equipment and personnel. Oliver (1997) argues that service quality can be described as the result from customer comparisons between their expectations about the service they will use and their perceptions about the service company. That means that if the perceptions would be higher than the expectations then the service will be considered excellent, if the expectations are equal to the perceptions the service is considered good and if the expectations are not met the service will be considered bad. Service quality is an assessment of how well a delivered service conforms to the client’s expectations. Service business operators often assess the service quality provided to their customers in order to improve their service, to quickly identify problems, and to better assess client satisfaction.

2.2.2 Criticisms of SERVQUAL
Notwithstanding its growing popularity and widespread application, SERVQUAL has been subjected to a number of theoretical and operational criticisms which are detailed below: Theoretical Paradigmatic objections SERVQUAL is based on a disconfirmation paradigm rather than an attitudinal paradigm and SERVQUAL fails to draw on established economic, statistical and psychological theory. In the Gaps model there is little evidence that customers assess service quality in terms of P – E gaps. Regarding Process orientation the SERVQUAL focuses on the process of service delivery, not the outcomes of the service encounter.
Dimensionality of the SERVQUAL’s five dimensions are not universals; the number of dimensions comprising Service Quality is contextualized; items do not always load on to the factors which one would a priori expect; and there is a high degree of inter correlation between the five RATER dimensions.

From Operational point of view the term expectation is polysemy that consumers use standards other than expectations to evaluate Service Quality and SERVQUAL fails to measure absolute Service Quality expectations. In Item composition four or five items cannot capture the variability within each Service Quality dimension. Moments of truth (MOT) of customers’ assessments of Service Quality may vary from MOT to MOT.

Parasuraman et al. (1988) have claimed that SERVQUAL: Provides a basic skeleton through its expectations/perceptions format encompassing statements for each of the five service quality dimensions. The skeleton, when necessary, can be adapted or supplemented to fit the characteristics or specific research needs of a particular organization. Belay Adamu (2012)

Based on this the study uses the modern SERVPERF model as a base for this study.

### 2.2.3 Service Quality in Airline Industry

#### 2.2.3.1 Industry Standards

In the aviation context, there are many national and international rankings and reports that cover almost all aspects of airline and airport performance. SKYTRAX is one of such bodies that perform international airline and airport rankings. It is an independent research organization based in London (UK). Kossmann (2006)

The International Air Transport Association is a trade association of the world’s airlines. Consisting of around 260 airlines, primarily major carriers, representing 117 countries, the IATA’s member airlines account for carrying approximately 83% of total Available
Seat Kilometers air traffic. IATA is one of the major industry player on setting standards and industry parameters.

2.2.3.2 Ethiopian Airlines’ Ranking
According to the SKYTRAK ranking Ethiopian Airlines is ranked as a Three-Star Airline. This grading is awarded to airlines supplying a fair quality performance about industry average. This ranking signifies a satisfactory standard of product across most travel categories but may reflect less consistent standards of staff service either onboard and/or in the airport environment. Kossman (2006). Current business strategy aims on being four star airline with a five star service.

2.2.3.3 Customers Perspectives
Most literatures suggest that airline passengers look at service quality as a multidimensional variable, which is consistent with the Parasurman’s (1988) conception of service quality popularly known as SERVQUAL. SERVQUAL measures service quality based on five dimensions namely reliability, assurance, tangibles, empathy, and responsiveness. The instrument is based on the premise that customers’ assessments of overall service quality are determined by the “gap” between their level of expectations and their perceptions of actual performance. The instrument has been used by researchers to measure airline service quality. Gashaw (2011)

According to Topla (2012), Jon Carlzon former CEO of SAS(Scandinavian Air Services), who led the company from near bankruptcy to profitable and successful customer-oriented carrier within two years, states that the quality of service depend on the first encounter greatly and highlights the power of the employees in creating and shaping customer experience and perception.

2.2.3.4 Other dimensions
According to Gaddene et al. (2009), Flight safety, good appearance of flight crew and offering highest possible quality services to customers 24 hours a day are the most
important airline service quality factors in the eyes of customers. Gustafsson (1999) noted that many airline companies had lost track of the true needs of their passengers and were trapped in outdated views of what airline services were all about. In a highly competitive environment, where all airlines have comparable fares and matching frequent flyer programs, airline’s competitive advantages lie in the service quality perceived by customers (Chan and Yeh, 2002).

Perceived quality is a prerequisite for customer satisfaction (Parasuraman, 1988). Therefore, the delivery of high quality service becomes a marketing requirement as competitive pressures increase on air carriers. Continuing to provide high quality service would help airlines acquire and retain customer loyalty (Ostrowski 1993).

Currently majority of quality ratings (customers’ perceptions of quality of services) available rely on subjective surveys of customer opinions that are infrequently done (Gursoy et al., 2005). Traditionally, customer service analysis has been carried out by dividing the overall service into various service elements, conducting a survey among the customers, and measuring the importance of the service elements to the customers as well as the performance of the company (Huiskonen and Pirttila, 1998). It is a commonly used measure of customers’ preference. Based on its analysis, customer service strategies are designed. With no exception in the airline industry, to deliver better passenger service, airlines need to understand passengers’ needs and expectations (Aksoy et al, 2003).

Different researchers define a number of key service quality attributes in airline industry that affect customer’s perception of a service delivered and thus create the image of a carrier. The attributes are summarized in Table below (Ekaterina Tolp, 2012)
### Table 2.2 Key Service Quality Attributes

<table>
<thead>
<tr>
<th>Service Quality Aspects</th>
<th>Researcher(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price, safety, timelines, baggage transportation, food quality, seat comfort, check-in process and on-board services</td>
<td>Gourdin (1998); Elliot and Roach (1993)</td>
</tr>
<tr>
<td>Seat comfort, safety, courtesy of staff</td>
<td>Tsaur, Chang &amp; Yen (2002)</td>
</tr>
<tr>
<td>Airlines reliability (safety)</td>
<td>Fick &amp; Ritchie (1991)</td>
</tr>
<tr>
<td>Aircraft type</td>
<td>Truitt &amp; Haynes (1994)</td>
</tr>
<tr>
<td>First customer contact / interaction with contact employees</td>
<td>Carlzon (1987); Bitner, Booms &amp; Tetreault (1990)</td>
</tr>
<tr>
<td>Airline brand, price, sleep comfort</td>
<td>Boetsch et al. (2011)</td>
</tr>
<tr>
<td>Frequency and timings, punctuality, airport location and access, seat accessibility/ticket flexibility, frequent flyer benefits, airport services, in-flight services</td>
<td>Shaw (2007)</td>
</tr>
<tr>
<td>Employee's service, safety &amp; reliability, on board service, schedule, on time performance, frequent flyer program</td>
<td>Liou &amp; Tzeng (2007)</td>
</tr>
<tr>
<td>Flight schedule, total fare, flexibility, frequent flyer program, punctuality, catering, ground services</td>
<td>Teichert et al. (2008)</td>
</tr>
<tr>
<td>Level of concern and civility, listening and understanding, individual attention, cheerfulness, friendliness,</td>
<td>Babbar &amp; Koufteros (2008)</td>
</tr>
<tr>
<td>courtesy</td>
<td>Willingness to correct errors, task proficiency, courtesy, friendliness, tolerance</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>On-time performance, overbooking, mishandled baggage, customer complaints</td>
<td></td>
</tr>
</tbody>
</table>

2.2.4 Passenger Value and Satisfaction

The key to building lasting customer relationships is to create superior customer value and satisfaction. Satisfied customers are more likely to be loyal customers and give the company a larger share of their business. Attracting and retaining customers can be a difficult task. Customers often face a bewildering array of products and services from which to choose. A customer buys from the firm that offers the highest customer-perceived value—the customer’s evaluation of the difference between all the benefits and all the costs of a market offering relative to those of competing offers. Importantly, customers often do not judge values and costs “accurately” or “objectively.” They act on perceived value. (Kotler & Armstrong 2012)

Customer satisfaction depends on the product’s perceived performance relative to a buyer’s expectations. If the product’s performance falls short of expectations, the customer is dissatisfied. If performance matches expectations, the customer is satisfied. If performance exceeds expectations, the customer is highly satisfied or delighted. Outstanding marketing companies go out of their way to keep important customers satisfied. Most studies show that higher levels of customer satisfaction lead to greater customer loyalty, which in turn results in better company performance. Smart companies
aim to delight customers by promising only what they can deliver and then delivering more than they promise. Delighted customers not only make repeat purchases but also become willing marketing partners and “customer evangelists” who spread the word about their good experiences to others. (Kotler & Armstrong 2012)

2.2.5 Passenger Satisfaction measurement
Satisfaction is a psychological constructs that form the basis upon which evaluation of the quality of a product or service is done. Customer satisfaction is defined as a function of the customer’s expectations and perceptions of performance according to the expectancy - disconfirmation paradigm (Tse & Wilton, 1988) and it is a construct closely related to perceived service quality (Magi & Julander, 1996). Today, customer focus and satisfaction is a driving force for many companies and organizations. Measuring customer satisfaction provides an indication on how an organization is performing or providing products or services. Customer satisfaction is generally understood as the satisfaction that a customer feels when comparing his/her preliminary expectations with the actual quality of the service or product acquired. In other words, customers are typically concerned with the value and quality of the product or service they receive. In addition, customers generally want the best possible product or service at a low cost. The perception of the best product or service and lowest price can, however, vary significantly by customer segment or industry. In order to obtain an overall picture of customer perception, a company or organization needs to measure the customer satisfaction level (Czarnecki, 1998).

Organizations mostly employ external agencies to listen to their customers and provide dedicated feedback to them. These feedback needs to be sophisticated and in structured format so that conclusive results could be fetched out. Face to face meetings and complaint or appreciation letter engages immediate issues. The feedback received
in this is not uniform as different types of customers are addressed with different domains of questions.

This hinders the analysis process to be performed accurately and consistently. Hence the best way is to implement a proper survey which consists of uniformed questionnaire to get customer feedback from well segmented customers. The design of the prepared questionnaire is an important aspect and should enclose all the essential factors of business. The questions asked should encourage customers to respond in an obvious way. These feedback received by the organizations can be treated as one of the best way to measure customer satisfaction (Czepiel and Gilmore, 1987). Saravanan & Rao, (2007), argued that the need for survival and growth in ever increasing competitive markets are main critical factors in the search for providing superior service quality and achieving customer satisfaction.

Customer satisfaction is conceptualized as based on the customer’s experience on a particular service encounter, (Cronin & Taylor, 1992) and also some think customer satisfaction is cumulative based on the overall evaluation of service experience (Jones & Suh, 2000). These highlight the fact that customer satisfaction is based on experience with service provider and also the outcome of service. According to Wicks & Roethlein, (2009), Bailey (1983) identified 38 factors that affected the satisfaction of consumers of computers which were customized for computer users some of which were quality of the product, flexibility, reliability, priorities determination, security and expectations.

2.2.6 The Unique Nature of Service
The importance of service quality monitoring is further expressed based on the unique nature of service. This could be clearly seen from each of the characteristics of service as below:-
a) **Intangibility** refers to the lack of tangible assets which can be seen, touched, smelled, heard, or tasted prior to purchase. Although services often include tangible elements like a hotel bed, an airplane seat or a drink ordered at a café, the output of a service is intangible. The actual service outcome cannot be seen until the service is performed or the event has taken place. In other words, service firms produce performances rather than physical objects. Thus, the benefits for services are created by actions or performances of people.

b) **Perishability of service**: since services are often performed in real time, it cannot be stored or inventoried. Period of peak demand cannot be prepared for in advance by producing and storing services. A service opportunity occurs at a point in time and when it is gone, it cannot be retrieved back.

c) **Inseparability** refers to the simultaneous production and consumption of services. Meaning that, a service possesses simultaneity where both the employee and the customer are at the same location and time in order to experience the service. Due to this characteristic, the quality of people who serve the customers often make the difference between one service and another. Inseparability makes the quality of service highly dependent on the ability of the service provider and the quality of interaction between the service provider and the customer. This is especially so in a high contact services like air travel for example. Although seats could be booked earlier without the presence of any individual, but when the date of travel arrives, the passenger would have to be present and interact with the front-line employee for check-in process of the travel. The customer-employee contact goes on with the boarding-agent who would check documents and board the passenger, and with the flight stewardesses who serve on board
the flight and the baggage handling agents who will deliver the bags on departure and arrival.

d) **Variability:** finally, because of the performance of people, services can vary greatly. As noted, services are performances which often involve the cooperation and skill of several individuals, and are therefore unlikely to be the same every time. This variability of service again occurs especially in services with high labor content. Different service employees have different abilities and might perform the same service differently. Even the same employee might provide varying levels of service from one time to another. It is difficult to ensure the consistency of behavior from service employees because the service that the customer receives might totally differ from what the service firm or employee intended to deliver in the first place. Consequently, much of the characteristics of a service discussed above highlights the importance of the employee’s role in delivering the service to the customers. Thus, managing the human element is critical for success in the service industry.

### 2.2.7 Service quality and customer satisfaction

Various studies that have focused on a link between satisfaction and quality argued for different views in terms of relationship. Some think that quality leads to satisfaction, McDougall & Levesque, (2000); Negi, (2009) and others support that satisfaction leads to quality (Cronin & Taylor, 1992). Some researchers propose that quality and satisfaction are determined by the same attributes; like Parasurman et al., (1988) tried to relate customer satisfaction to service quality. Negi, (2009) clearly points out that overall service quality is significantly associated with and contributes to the overall satisfaction of customers.
Customer satisfaction is based on the level of service quality delivered by the service providers (Saravanan & Rao, 2007). Parasuraman (1985) contends that when perceived service quality is high, then it will lead to increase in customer satisfaction. They argue that service quality leads to customer satisfaction and this agree with Lee, (2000) who acknowledge that customer satisfaction is based upon the level of service quality provided by the service provider. Organizations that consistently satisfy their customers enjoy higher retention levels and greater profitability due to increased customers’ loyalty (Wicks & Roethlein, 2009). It is vital to keep consumers satisfied by trying to know their expectations and perceptions of services offered by service providers. In this way, service quality could be assessed and thereby evaluating customer satisfaction. Service quality and customer satisfaction have been proven from past researches to be positively related (Gera, 2011).

According to the customer satisfaction model developed by Oliver (1980) when customers compare their perceptions of actual products/services performance with the expectations, the feelings of satisfaction arise which may lead to repeat purchase. Satisfaction from service quality. Some of Studies on the service quality come up with the set of findings as below

According to Gashaw (2011) in the three dimensions: responsiveness with a group mean difference of -2.699, assurance with a value of -1.612 and empathy with a mean difference value of -0.158 the passengers’ perceived services were lower than what passengers’ expected and in the other two dimensions: tangibles with a group mean difference of 1.592 and reliability with a positive value of 0.043 their experiences were better than expectations.

(Tirimba O. Manan 2013) The least factor extracted had a communality score of 0.446. This communality represented the safety of luggage. The highest factor score was 0.934 (B12) the factor under consideration in this construct relates to how the elderly, the
aged and the disabled were treated through boarding and in flight. This factor B12 shared the highest variance with the rest of the factors and was therefore most responsible for the variability in the major study variable/construct “what are important service quality parameters to airline passengers”.

2.2.8 Flight schedule

Much attention has been paid to the effects of delays on customers. There is general consensus in the literature that delays have a detrimental effect on customers’ service. The negative impact of delays on passenger satisfaction is well-documented (Parasuraman et al., 1988). The authors found that punctuality is a key factor in the attraction of new customers and the retention of current ones.

According to Hansman (2005), there are very few problems associated with the weather or even the excessive traffic demand that will cause the flight schedule to be delayed. Sometimes, flight delay is mostly due to the overall flight system in a non-linear fashion. The flight can still be measured to be on time if the schedule contains sufficient slack.

Based on Andrews (1999), the airspace overcrowding should be taken into consideration as the terminal and airport capacity affect the overall flight system. Therefore, a proper flight system should be implemented to ensure that everything is within good control. There is a need to focus on the process besides making any improvement of the technique parts such as investment in infrastructure and aircraft equipment. Wambsganss (1999) stated that higher system efficiency gains better airlines interest. Meanwhile, a good system will increase the predictability of the flight arrival and departure sequences.

Furthermore, the airlines industry needs to develop a logic model to make a proper analysis between the service variables such as the arrival time, departures time, one way
fare, number of connection and displacement of the flight schedule. Hansman (2005) stated flight schedule should segment the passengers into two categories, for business and nonbusiness passengers where mainly due to the different preferences towards the flight schedule.

Long-haul flights can be a tiring experience regardless of the quality of the service; therefore, many passengers like to choose airlines that can take them to their destination fast (Shaw, 1999). At the moment, it is difficult drastically to decrease the flight duration due to technological reasons; however, too many transfer points and regular delays will be a disadvantage. Long-haul flights certainly are not an experience they enjoyed, especially those who travelled often. Nearly all of those who travelled often tried to share a story about their painful encounters with delays and flight cancellations. So a long-haul flight is a negative purchase, like new car tire- consumers would not but if they didn’t have to. Consequently, airlines and passengers have to come up with solutions that are acceptable to both sides. (Brueckner et al., 2010)

Airlines cooperate with other airlines; from accepting interline passengers to joint ventures, for strong economic and legal reasons. Many customers want a ‘from anywhere to anywhere’ service which a single airline cannot offer because of limited economies of scale in operations and legal barriers to market entry and cross-border merger. Point-to-point services requiring no cooperation between airlines can be operated on dense city-pairs. But the majority of city-pairs would not support a viable regular service on local point-to-point traffic alone. Network airlines can provide services to these city-pairs by creating sufficiently dense flows through channeling connecting or flow passengers on their way to final destinations. However, given the tens of thousands of city-pairs consumers wish to fly between, the legal barriers, limited economies of scale in operations but significant economies of density, airlines have to
seek commercial partnerships with other airlines to link their networks. (Brueckner et al., 2010)

2.2.9 Cabin environment
The Skytrax magazine (2013) describes how the in-flight environment is an essential issue for long-haul flight passengers. The environment of the aircraft involves the comfort of the seats and the entertainment system. This once again suggested that price is not the only indicator for passengers but can be affected by multiple issues; therefore, airlines should make efforts to improve their offer since this is an effective way of building long-term relationships (Reichheld and Sasser, 1990).

Passenger’s seat is one of the main comfortableness components; especially when it is considered that it is the place where the passenger spends most of his travel time (Aki et al., 2012). From one side, a poorly designed seat can causes discomfort, which can be extended to a musculoskeletal disorders regardless of the presence of any entertainment or stress reduction techniques; imagine the stay on such a seat for three or two hours, you will think in nothing except the time when the flight ends.

2.2.10 In-flight entertainment (IFE)
Passengers’ expectations from airline IFE are benchmarked against their experience with consumer electronic devices and technologies that they have grown accustomed to. A great IFE system must engage the passenger with a variety of infotainment options: audio, video, games, moving maps, flight info, terminal / connecting flights, chat, phone, shopping, destination info, attendant call, lavatory status, food menu... the possible options are endless. (Amit Bansal, 2013)

However, today’s discerning traveler wants still more. They want an entertainment experience in the air that mirrors and seamlessly extends their experience on ground: high quality displays, content anywhere, social networking, and Bring-Your-Own IFE
(BYOIFE). Of course, the best IFE system is of no use if it does not work. Passengers dread being stuck with a non-working IFE, and so robustness of the IFE system is another must have criteria! (Amit, 2013)

2.2.11 Flight meal service
According to Lovelock et al. (2001) framework, food is the core attribute to determine quality. Susskind and Chan (2000) claimed that food, physical environment and service are significant determinants that can boost the guest check averages apart from competitors in the consumer’s estimation.

Besides, the fundamental factors that influence customer satisfaction in flights include the hygiene and healthiness of food, physical prevision such as furnishing, cleanliness and the speed, friendliness and care services received during the meal experiences (Johns & Pine, 2002). Moreover, high quality service, furniture and ornament as well as various choices of food and beverage should be provided to fulfill different customer expectations and requirements (Schall, 2003).

In Chinese and perhaps some other Asian-Pacific cultures, dining has other social meanings apart from basic physical needs (Li, 2002). In the Chinese saying, dining, clothing, living and travelling are four vital parts in people’s lives. Hence, the quality of the food served during the flight can also be a unique selling proposition.

2.2.12 Ticket office service
Enhanced ticketing using self-service and reusable cards reduced costs without harming queue time and in fact, it reduced it. The inclusion of the first-to-come-first-to-serve system to get the plane seats produced a discipline effect in clients who got accustomed to arrive early to their flights, reinforcing fast passenger boarding process. This practice added to interlining (exchange of passengers between flights to the same destiny) and use of secondary non-saturated airports, produced minimum embarking times.
2.2.13 Ticket office service

Ambient is one of important determinants that can provide attraction and satisfaction to customer especially among those using whatever services rendered at the airport. Service environment can be defined as the style and appearance of the physical surroundings and other experiential elements encountered by customers at service delivery sites (Zeithaml et al., 2009). In services industry, ambient is one of important factor that could not be seeing, touch, smell or even taste. The physical environment is particularly relevant in highly intangible services and in services where the consumer experiences the product or services offered by the firm (Bitner and Booms, 1994).

Service environment comprise the physical environments of service organizations where service transactions occur. Hence, it is hard for the service provider to visualize the service without having any aid supported by physical elements like chair, rice cooker, table, and other related materials. Also the perception of ambient itself such as sign, scent, symbol, music, and color, which are highly subjective to the customers provide an input for measuring service environment.

It is necessary for service provider to design or provide a good service environment so that the customer can experience the service happily and have intention to use the service in future or maybe spread it positively to their relatives or friends about the services. Pleasant music, compared with less pleasant music, is associated with longer consumption times, shorter time perceptions, less negative emotional reactions to waiting more favorable attitudes toward the service scape, an increased desire to affiliate, more positive attitudes toward the provider, and more favorable service outcomes like evaluation, patronage intentions and behaviors (Caldwell and Hibbert, 2002).

Referring to the work of Ajzen, I. (1991), environment-behavioral theory suggests that individuals interact with the environment, resulting in certain responses and behaviors. The comfortable environment for the passengers is important in order to attract the
passenger to use the airport service next time. He has indicated that each dimension may affect the overall perception of the environment either directly or through the interaction with others dimensions and that customers and employees may respond cognitively, emotionally and psychologically to the environment. Besides that, the sound such as announcement must be very clear and not too loud until it can annoy the passengers. Same goes with the temperature in the airport which is hot and uncomfortable to the passenger. So, ambient is one of the important determinants of service quality especially in service industry because it will help the passenger to experience the service happily and feel comfortable whenever they are in the airport.

2.2.14 Customer Dissatisfaction and Service Recovery

The services industry is very prone to service failure which is a common phenomenon in the airline industry. According to Kotler and Kevin (2006), customers form service expectations from many sources, such as past experiences, word of mouth and advertising. In general, customers compare the perceived service with the expected service. If the perceived service falls below the expected service, customers are disappointed. If the perceived service meets or exceeds their expectations, they are apt to use the provider again.

When airline fail to perform to expectation (Service Failure), it will result in a number of reactions from customers like customer dissatisfaction, loss of loyalty, spreading negative word of mouth, denial of repeat purchases and customer complaints. During such times, in order to make-up for the lost service opportunity, companies employ Service Recovery strategies. Even the performance during the service recovery process is evaluated by customers from different perspectives. Again non-performance during the service recovery process can lead to potential customer dissatisfaction and another service failure phenomenon.

According to Wong, Shiang and Liu (2011), customers evaluate service recovery based on three dimensions: distributive justice, procedural justice, and interactional justice.
Distributive justice is customer's perception of fairness in how a company should respond when customers complain. For example, refunds, credits, charge corrections, replacements, and apologies are all elements associated with distributive justice which a customer aims for in company service recovery efforts. In the airline industry, the commonly used compensations are: free upgrades, voucher, and a free one night hotel stay.

Wong, Shiang and Liu (2011), suggested that customer satisfaction is impacted by perceiving fairness of service recovery. Procedural justice is the fairness of the procedures used by a company in allocating and distributing rewards and the voice given to employees in the distribution process. A standard approach to service policies and practices can create customer satisfaction through employee knowledge and empowerment for decision making to solve customer complaints. For instance, when a passenger lost his/her luggage, some airlines refund customers with only a claim form. Others might request a lengthy process to get the compensation for the lost luggage. Interactional justice focuses on how employees or managers of an organization handle customers when service recovery is delivered.

Numerous studies indicate that interactional justice refers to communication between sender and receiver and how the message is delivered. For example, during flight delays, if crew members were courteous, polite, empathetic, and willing to provide an explanation to the passengers, passengers will perceive higher level of interactional justice. Each passenger determines an overall judgment of the service based on perceptions regarding the people (interactional justice), the product (distributive justice), and the process (procedural justice), which interactions determine a service measurement or a customer satisfaction judgment based on overall justice.
2.3 Conceptual Framework

Based on the literature review, two level analyses will be employed to draw causal inferences regarding the relationship among the studied variables. The investigated whether customer satisfaction has been mediating the relationship between customers’ perceived service quality. The conceptual framework is based on the SERVPERF model. The model is the researcher’s mirroring the major service areas.

At the second level, the research will investigate the degree of impact of the service encounter on the customer satisfaction. The exact framework has not been use on other studies.

![Diagram of Airline Service Attribute Model](source: Own model 2016)
Table 2.3 the service attributes categorized In the RATER Source Own model 2016

<table>
<thead>
<tr>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight schedule departure/arrival</td>
</tr>
<tr>
<td>Service at the airport</td>
</tr>
<tr>
<td>Safety during flight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service at the Ticket office and the call center</td>
</tr>
<tr>
<td>Service at the airport</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabin Environment</td>
</tr>
<tr>
<td>Service at the airport</td>
</tr>
<tr>
<td>Frequent Flyer program service</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Empathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service at the Ticket office and the call center</td>
</tr>
<tr>
<td>Cabin Environment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tangibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight Meal service</td>
</tr>
<tr>
<td>In-flight Entertainment</td>
</tr>
</tbody>
</table>

2.3.1 Gap-bridged by the Study
The researcher’s review of Related Literature and Studies has been made, it was observed that the current studies were focused on the relation of service quality and customer satisfaction only. The study will further identify the most critical service encounter and this will be an input for the airline to consider corrective actions on the weak link of the airline service chain.

The customer response for service quality parameters are so dynamic and the study will contribute by reflecting the current customer satisfaction level with the ever changing and fast growing service of the airline.
The research will contribute by filling a gap created due to the current significant changes on the industry service including:

- The introduction of ultra-modern composite aircrafts like B787
- The introduction of flat bed on the premium class of the new aircrafts
- The availability of self-check in facilities
- The entrance of major competitors like China Airways and Etihad in the home market
Chapter Three

Methodology

The aim of this section is to highlight the overall methodological considerations of the research. Hill et al. (2003) refer to two types of research: pure and applied research. Pure research is that which has no obvious practical implications beyond contributing to a particular area of intellectual enquiry. Applied research on the other hand, is problem focused and is directed towards solving some particular intellectual question that has practical implications for a client outside the academic world. This study attempt to develop a model to solve a problem and its focus is thus application of findings of the study to solve problems.

3.1 Research Approach

The knowledge to be obtained in the research is mainly based on primary research data. This is a result of the dynamic nature and variability of service quality and its subsequent effect on customer satisfaction with regard to the airline. Hence, in order to solve the research problem at hand, the research will mainly rely on primary data sources using Questionnaires. The research is somewhat quantitative research in the sense that we compare factors of service quality together and find top priorities.

The study is mainly descriptive since it assess service quality and describe customer satisfaction among Ethiopian airline passengers and the research is also explanatory to draw a relationship between the variables. The emphasis here is on studying a situation or a problem in order to explain the relationship between variables. The objective with this research is to analyze cause-effect relationship, explaining what cause produces what effect.
3.2 Research Design
To answer the problem statement and relating research objectives prudently, the Research design is reflected on and discussed in each step. In answering the research objectives, this paper will propose an integrated conceptual framework for measuring passengers’ service quality perception and derived satisfaction as a point of departure and arrival. The SERVQUAL framework models and analyzes the passenger gap between expected and perceived service with respective to airline service attributes as indicator of the perceived service quality and satisfaction. In this paper the five dimensions and their respective attributes of the model are expressed using a five point Likert scale in the form very much less than expectation up to very much more than expectation.

3.3 Sampling Method and Sample Size
Passengers traveled on Ethiopian airlines on any international route was selected as a respondent. The respondents selected at Bole international airport was Waiting for their flight to travel, transit or arrived from other destinations.

The study involved a convenience sample of passenger at bole international airport, who had already used the airline services were chosen as research respondents. To confirm the recommendation of Hair et al. (1998), i.e. be six times as large as the number of items in the questionnaire (6 X 39) so the minimum sample size had to be 234 respondents. From the minimum 234 additional 16 included as a couching and a total of 250 questionnaires were distributed only 215 are responded and 215 are found to be usable. This makes the response rate 86%. Convenience sampling technique chosen among the sampling techniques due to quick movement of passengers and a usual travel stress that passenger sustain, should allow data collectors to select passenger, who take some time and complete.
3.4 Data Collection Method
Questionnaire and reports on customer satisfaction was collected during the research, a list of critical variables that influenced travelers’ evaluation of airline services was applied. The five-dimensional construct of service quality consisting of tangibles, reliability, responsiveness, assurance, and empathy was segregated into eight different service attributes, which has been further broken down into particular service encounter.

3.5 Data Analysis Method
The data received from the respondents was analyzed with help of statistical software program: statistical package for social sciences (SPSS). For the analysis of the eight dimensions of the service quality and each respective attribute, a descriptive statistics was be applied.

In order to meet the research objective of the study, all valid responses were assessed using a variety of statistical techniques. Data analysis consists of examining, categorizing, tabulating, or otherwise recombine the evidence to address the initial preposition of the study (Malhotra et al, 2007). The data collected was edited. Coded, tabulated and presented for analysis.

Summated scale was used to combine several variables that measure the same concept into a single variable in an attempt to increase the reliability of the measurement through multivariate measurement.

Descriptive statistics was used to interpret data in general. According to Kothari C.R, (2007) descriptive research sets out to describe and to interpret what is it aims to depict the state of affairs as it exists and to describe some aspects of a phenomenon that is status of a given phenomenon.
3.6 Research Instrument
The questioner is a common instrument for observing data beyond the physical reach of the observer (Albaum, 1997). Structured questionnaire (fixed response type) is used to collect primary data from respondent. According to Malhotra et al. (2007), this survey approach is the most common method of primary data collection in marketing research and the advantages are simple administration and data consistency. The review of the literature presented in chapter two and a refinement of Ethiopian Airlines service quality comment card identified the proposed dimensions of service quality as well as the important factors related to customers’ satisfaction.

Sekaran (2003) noted that the main advantage of conducting a self-administered questionnaire was that researchers could collect all of the completed responses within a short time. Through the questionnaire conducted in this way, any doubts that respondents may have on any question can be immediately clarified (Sekaran, 2003). In addition, researchers could be provided with an opportunity to introduce the research topic and motivate the respondents to offer their true responses (Sekaran, 2003). Self-administering questionnaires to large numbers of individuals at the same time could be less expensive and save more time compared with an interview. In consideration of these advantages a self-administered questionnaire for this study.

The questionnaire comprised 39 items and was divided into two sections (part 1 and part 2). (See Appendix 1). Part 1 comprised nine items of service attribute and satisfaction measure and part comprised five items on demographic question.

3.7 Reliability and Validity
Kazi (2010) suggest two major criteria which applied to evaluate the quality of the study. These are validity and reliability.
3.7.1. Reliability
Extents to which a variable or set of variables is consistent in what it is intended to measure (Hair et al., 1998). It differs from validity in that it relates not to what should be measured, but instead to how it is measured. Several measures have been used to establish the reliability of the instrument, for example, split-halves, test-retest, equivalent forms and internal consistency method. The current study used multiple items in all constructs. So the internal consistency method is appropriate for the current study. Hair et al. (1998) mentioned that the rationale for internal consistency is that the individual items or indicators of the scale should all be measuring the same construct and thus be highly inter-correlated. Internal consistency reliability of all questions was assessed by the Cronbach’s alpha coefficients of measurement items for each construct. Zikmund (2003), suggest that a Cronbach’s alpha value of > 0.7 indicates a considerably high reliability.

3.7.2. Validity
Validity represents how well a variable measures what it is supposed to measure. Validity is concerned with whether the findings are really about what they appear to be about. Kazi (2010) defined the validity as “the degree to which a measure accurately represents what it is supposed to”. Validity is concerned with how well the concept is defined by the measure(s). He also mentioned about three types of validity: content validity, Predictive validity, and Construct validity. Kazi (2010) defined the content validity as the assessment of the correspondence between the individual items and concept. In this study all variables (items) were inspected by the researcher and three passenger customer service experts, who are currently working as team leaders at Addis Ababa airport, to ensure that they were an adequate and a thorough representation of the construct under investigation. To test the questionnaire for clarity and to provide a coherent research questionnaire, a macro review was accurately performed. Some items were added, based on their valuable recommendations. Some others were reformulated.
to become more accurate and clear, and this was required for the purpose of enhancing the research instrument.

### 3.8 Methods of Presentation
The data from the study were presented in the form of tables, graphs and charts as desired so as to make all the data readable and understandable by all concerned parties.

### 3.9 Ethical Considerations
All information that was collected is treated with confidentiality without disclosure of the respondents’ identity. Moreover, no information was modified or changed, hence the information was presented as collected and all the literatures collected for the purpose of this study was acknowledged in the reference list.

In order to keep the confidentiality of the information given by respondents, it was not required to write their name and assured that their responses were treated in strict confidentiality. The purpose of the study was disclosed in the introductory part of the questionnaire. Furthermore, the researcher tried to avoid misleading or deceptive statements in the questionnaire. Lastly, the questionnaires were distributed only to voluntary participants.
Chapter Four

Data Analysis and Interpretation

4.1 Introduction

Chapter four of this research paper is dedicated to presents the results of the data analysis according to the research methodology discussed in previous chapter.

4.2 Results

4.2.1 Sample Response Rates and missing data

250 questionnaires were distributed for passengers departed, arrived or transferred at terminal 2 from May 01 up to May 04, 2016. The questionnaires are collected in 24 hours interval and no more than five questionnaires was collected per a given flight in order to reduce possible repercussion due to a single irregularity on a flight. Total of 215 answered questionnaires were retrieved, which is 86% of the total distributed questionnaires. After checking the retrieved questionnaires, all of 215 questionnaires were valid for statistical analysis. Eventually, 100 % of the total questionnaires distributed entered on the system for the analysis.

Missing data frequently occurs in a situation in which a respondent cannot respond to one or more questions of a survey (Hair et al., 1998). In this study, missing value above 1%, on a single item was considered as incomplete and the response was rejected from further analysis.

Because of low percentages of missing values considered, the primary procedure used in this study was to replace missing values with mean substitution. According to Hair et
al. (1998), mean substitution is a widely used method for replacing missing data, whereby missing values for a variable are replaced with the mean value based on all valid responses.

4.2.2 Reliability
Reliability is used to test the internal consistency among the variables or items through a summated scale (Hair et al., 1996). Cronbach’s Alpha is used to measure how well a set of items (or variables) measure a single uni-dimensional latent construct. (Malhotra, 2007). Cronbach’s Alpha is low when data have a multi-dimensional structure. Malhotra, (2007) suggests that an alpha of 0.60 or greater should be considered adequate to develop a new questionnaire. Therefore, a low coefficient alpha indicates the sample of items perform poorly in capturing the construct motivating the measure. Conversely, a large coefficient alpha implies that the k-items test correlates with the true scores closely Malhotra, (2007).

Perceived service quality measured using the eight dimensions as per on the questionnaire, which were combined into a single scale Cronbach’s alpha = 0.994. The cronbach’s alpha for the eight attributes is greater than 0.60 instrument is considered to be reliable.

Table 4.1 the Cronbach’s Alpha for variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>NO. of attributes</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived service quality</td>
<td>30</td>
<td>0.944</td>
</tr>
<tr>
<td>Flight schedule</td>
<td>3</td>
<td>0.82</td>
</tr>
<tr>
<td>Cabin Environment</td>
<td>4</td>
<td>0.879</td>
</tr>
<tr>
<td>In-flight entertainment</td>
<td>3</td>
<td>0.736</td>
</tr>
<tr>
<td>Frequent flyer program</td>
<td>3</td>
<td>0.867</td>
</tr>
<tr>
<td>Ticket office/Call center service</td>
<td>3</td>
<td>0.883</td>
</tr>
<tr>
<td>Airport service</td>
<td>8</td>
<td>0.865</td>
</tr>
<tr>
<td>Flight meal service</td>
<td>3</td>
<td>0.872</td>
</tr>
<tr>
<td>Information particular</td>
<td>3</td>
<td>0.902</td>
</tr>
<tr>
<td>Satisfaction measurement</td>
<td>4</td>
<td>0.925</td>
</tr>
</tbody>
</table>

Source: - Survey finding of 2016
4.2.3 Descriptive Statistics

The questioner is composed of two parts. Part one is designed to capture items on service quality and customer satisfaction and part two us to capture demographic date about the respondents.

4.2.3.1 Demographic Analysis

The survey was carried out at Addis Ababa bole International Airport terminal 2. Out of 215 respondents 154 or 71.6% respondents are male and 47 or 21.9%.

![Fig 4.1 Gender Distribution](source: survey finding (2016))

The class of travel mix was 23 for business, 182 economy and 10 has missing data. This figure given in percentage is 84.7%, 10.7% and 4.7% respectively.

![Fig 4.2 Travelers' Class Distribution](source: survey finding (2016))
Based on the purpose of travel passengers exhibited the distribution Business 48.4%, leisure travel 14.4%, visiting friends and families 21.9%, and 7.9% others purpose. This implies that during the non-holiday the number of business travelers is higher.

![Purpose of the trip](image1)

**Fig 4.3 purpose of trip**

Source: - survey finding (2016)

The respondents’ age distribution is as below:

**Table 4.2 the age distribution**

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-35</td>
<td>93</td>
<td>43.3%</td>
</tr>
<tr>
<td>36-50</td>
<td>87</td>
<td>40.5%</td>
</tr>
<tr>
<td>50-65</td>
<td>24</td>
<td>11.2%</td>
</tr>
<tr>
<td>65-90</td>
<td>3</td>
<td>1.4%</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
<td>3.7%</td>
</tr>
<tr>
<td>Total</td>
<td>251</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: - Survey finding 2016
The respondents’ nationality by continent is summarized as below: 130 African, 14 Mideast, 26 Asian, 17 European and 19 North American.

4.2.3.2 Descriptive Analysis of Variables

The mean scores are computed for the eight perceived service quality dimensions that are, flight schedule, cabin environment, inflight entertainment, frequent flyer program, ticket office/cell center service, Airport Service, flight meals service and information particulars. Respondents were asked to rate their perception on a five-point Likert scale ranging from 1 being unsatisfactory to 5 excellent for perceived service quality dimensions. The result is presented in Table 4.3 below.
Table 4.3 the mean for service quality dimensions

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight Schedule</td>
<td>207</td>
<td>3.8374</td>
<td>.92832</td>
</tr>
<tr>
<td>Cabin Environment</td>
<td>208</td>
<td>3.7668</td>
<td>.87142</td>
</tr>
<tr>
<td>In-flight Entertainment</td>
<td>209</td>
<td>2.9446</td>
<td>1.02932</td>
</tr>
<tr>
<td>Frequent Flyer Program</td>
<td>192</td>
<td>3.3368</td>
<td>.91969</td>
</tr>
<tr>
<td>Ticket Office/Call Center Service</td>
<td>200</td>
<td>3.8475</td>
<td>.88898</td>
</tr>
<tr>
<td>Airport Service</td>
<td>210</td>
<td>3.5498</td>
<td>.76056</td>
</tr>
<tr>
<td>Flight Meals Services</td>
<td>213</td>
<td>3.3380</td>
<td>1.02087</td>
</tr>
<tr>
<td>Information Particulars</td>
<td>208</td>
<td>3.6611</td>
<td>.99965</td>
</tr>
</tbody>
</table>

Source: - Survey finding (2016)

Based on the eight dimensions the mean scores of international passengers’ perceived service quality of Ethiopian Airlines range from 2.9446 to 3.8475 indicating that passengers feel that quality of service being offered by Ethiopian Airlines is more than average for the seven dimensions and less than average for one of the dimension, which is in-flight entertainment. Evaluation of means of the dimensions indicates that Ticket office/call center service has got the highest mean score which is 3.8475 with a standard deviation of 0.88898; and yet in-flight entertainment has got the least mean score value of 2.9446 with a standard deviation of 1.02932.

Ticket office/Call center service is further divided into three attributes. The mean scores have been computed for all the three attributes of Ticket office/Call center service. The result is presented in below Table 4.3. The mean scores of Ticket office/Call center service for all the three attributes range from 3.83 to 3.87. The attribute competency of ticket office staff got 3.87 and the attribute tidiness and cleanliness of ticket office has a
mean score of 3.83. The three attributes has a mean, which is very close to each other which indicates the customer satisfaction is not affected by a single attribute in this case. If the service has to be further enhanced all the attributes must be revisited.

**Descriptive Statistics of Ticket office /call center Service**

*Table 4.4 the mean for Ticket Office/call center quality dimensions*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courtesy and helpfulness of ticket office staff</td>
<td>199</td>
<td>3.84</td>
<td>0.985</td>
</tr>
<tr>
<td>Competency of ticket office staff</td>
<td>199</td>
<td>3.87</td>
<td>1.007</td>
</tr>
<tr>
<td>Tidiness and cleanliness of ticket office</td>
<td>195</td>
<td>3.83</td>
<td>0.974</td>
</tr>
</tbody>
</table>

*Source:* - *Survey finding (2016)*

In-flight entertainment is further divided into three attributes. The mean scores have been computed for all the three attributes of in-flight entertainment. The result is presented in below Table 4.4. The mean scores of in-flight entertainment for all the three attributes range from 2.41 to 3.20. The attribute Availability of Internet, live channels got 2.41, which is below average and the attribute Quality of in-flight reading materials, movie, games & technology has a mean score of 3.20. The two attributes has a mean slightly above average and one attribute has a mean below average.

**Descriptive Statistics of in-flight entertainment**

*Table 4.5 the mean in-flight entertainment*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of in-flight reading materials, movie, games &amp; technology</td>
<td>207</td>
<td>3.20</td>
<td>1.205</td>
</tr>
<tr>
<td>Entertainment availability while onboard</td>
<td>207</td>
<td>3.18</td>
<td>1.268</td>
</tr>
<tr>
<td>Availability of Internet, live channels</td>
<td>197</td>
<td>2.41</td>
<td>1.285</td>
</tr>
</tbody>
</table>

*Source:* - *Survey finding (2016)*
The attribute flight schedule is further divided into three attributes. The result is presented in Table 4.5 below. The mean scores of flight schedule for the three attributes range from 3.7 to 3.85. The attribute departure time accuracy scored a mean of 3.7 and that of Flight schedule convenience has a mean score of 3.85. All the three attributes have a mean above.

**Descriptive Statistics of flight Schedule**

*Table 4.6 the mean for flight Schedule quality dimensions*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight schedule convenience</td>
<td>212</td>
<td>3.85</td>
<td>1.125</td>
</tr>
<tr>
<td>Departure time accuracy</td>
<td>215</td>
<td>3.70</td>
<td>1.151</td>
</tr>
<tr>
<td>Arrival time accuracy</td>
<td>210</td>
<td>3.90</td>
<td>1.057</td>
</tr>
</tbody>
</table>

*Source: - Survey finding (2016)*

The other attribute addressed in this research is cabin environment and it is constituted of four attributes. The mean for the four runs between 3.91 and 3.57 the highest mean is for Courtesy and helpfulness of flight attendants and the lowest is for Tidiness and cleanliness of in-flight lavatories this summarized below on table 4.6

**Descriptive Statistics of Cabin environment**

*Table 4.7 the mean for cabin environment quality dimensions*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort and operation of cabin equipment</td>
<td>212</td>
<td>3.76</td>
<td>1.026</td>
</tr>
<tr>
<td>Courtesy and helpfulness of flight attendants</td>
<td>212</td>
<td>3.91</td>
<td>.972</td>
</tr>
<tr>
<td>The condition and cleanliness of cabin interior</td>
<td>213</td>
<td>3.77</td>
<td>1.024</td>
</tr>
<tr>
<td>Tidiness and cleanliness of in-flight lavatories</td>
<td>213</td>
<td>3.57</td>
<td>1.065</td>
</tr>
</tbody>
</table>

*Source: - Survey finding (2016)*

The frequent flyer program is further divided into three attributes. The result is presented in below Table 4.7. The mean scores of frequent flyer program for the three
attributes range from 3.37 to 3.29. The attribute frequent flyer program incentives scored a mean of 3.29 and that of Simplicity of using frequent flyer benefits has a mean score of 3.37. All the three attributes has a mean slightly above average and this implies that most passengers are neutral or not aware of the program.

Descriptive Statistics of frequent flyer program

Table 4.8 the mean for frequent flyer program quality dimensions

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent flyer program incentives</td>
<td>188</td>
<td>3.29</td>
<td>1.052</td>
</tr>
<tr>
<td>Simplicity of using frequent flyer benefits</td>
<td>189</td>
<td>3.37</td>
<td>.999</td>
</tr>
<tr>
<td>Recognition of frequent flyers at service points</td>
<td>187</td>
<td>3.34</td>
<td>1.088</td>
</tr>
</tbody>
</table>

Source: - Survey finding (2016)

Airport service is divided into eight attributes. The result is presented in Table 4.8 below. The mean scores of Airport service for the eight attributes range from 3.94 to 3.07. The attribute Airport facilities scored a mean of 3.07, which is about average and that of Safety and security has a mean score of 3.94. All the seven attributes has a mean above average and one of the attribute has a mean of about average.

Descriptive Statistics of frequent flyer program

Table 4.9 the mean for airport service quality dimensions

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courtesy and helpfulness of airport staff</td>
<td>206</td>
<td>3.85</td>
<td>1.072</td>
</tr>
<tr>
<td>Waiting time at the airport for check in</td>
<td>208</td>
<td>3.56</td>
<td>1.043</td>
</tr>
<tr>
<td>Check-in and Boarding process efficiency</td>
<td>206</td>
<td>3.59</td>
<td>1.007</td>
</tr>
<tr>
<td>Airport facilities</td>
<td>207</td>
<td>3.07</td>
<td>1.207</td>
</tr>
<tr>
<td>Availability of comfortable waiting lounges</td>
<td>206</td>
<td>3.31</td>
<td>1.144</td>
</tr>
<tr>
<td>Baggage handling service at departure</td>
<td>203</td>
<td>3.65</td>
<td>.991</td>
</tr>
<tr>
<td>Baggage delivery on arrival</td>
<td>200</td>
<td>3.51</td>
<td>1.070</td>
</tr>
<tr>
<td>Safety and security</td>
<td>205</td>
<td>3.94</td>
<td>.986</td>
</tr>
</tbody>
</table>

Source: - Survey finding
Flight meal service is divided into three attributes. The result is presented in Table 4.9 below. The mean scores of Flight meal service for the three attributes range from 3.20 to 3.43. The attribute Variety of Food and beverage served while onboard scored a mean of 3.20, which is about average and that of Test of Food and beverage served while onboard has a mean score of 3.43. All the three attributes has a mean above average and one of the attribute has a mean of closer average.

**Descriptive Statistics of Flight meal service**

*Table 4.10 the mean for Flight meal service quality dimensions*

<table>
<thead>
<tr>
<th>Service Attribute</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test of Food and beverage served while onboard.</td>
<td>208</td>
<td>3.43</td>
<td>1.106</td>
</tr>
<tr>
<td>Quantity of meals/food and drinks served onboard</td>
<td>208</td>
<td>3.38</td>
<td>1.145</td>
</tr>
<tr>
<td>Variety of Food and beverage served while onboard</td>
<td>210</td>
<td>3.20</td>
<td>1.161</td>
</tr>
</tbody>
</table>

*Source:* - *Survey finding (2016)*

The information particular dimension with three attributes has the mean ranging between 3.64 and 3.7 for the three attributes. Employee understanding of your specific needs and individual attention has a mean of 3.64 and that of Completeness & adequacy of information given by the airline staff has a mean of 3.7. Table 4.10 below is summery of the mean.

**Descriptive Statistics of Information particulars**

*Table 4.11 the mean for information particular quality dimensions*

<table>
<thead>
<tr>
<th>Service Attribute</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness &amp; adequacy of information given by the airline staff</td>
<td>206</td>
<td>3.70</td>
<td>1.075</td>
</tr>
<tr>
<td>Employee understanding of your specific needs and individual attention</td>
<td>202</td>
<td>3.64</td>
<td>1.084</td>
</tr>
<tr>
<td>Responsiveness of the airline staff to your inquiry</td>
<td>197</td>
<td>3.65</td>
<td>1.075</td>
</tr>
</tbody>
</table>

*Source:* - *Survey finding (2016)*
4.2.3.3 Passengers’ Satisfaction Analysis

The passengers’ satisfaction measurements result is shown in Table 4.11 below. The mean scores for the four items range from 3.82 (for the item: I think that I did the right thing when I decided to use this airline and my choice to use this airline was wise one) to 3.66 (I feel satisfied with the airline service quality and Overall satisfaction). The overall mean for passengers’ satisfaction measurements is 3.96, which is above average.

Descriptive Statistics of passengers’ satisfaction Measurement

Table 4.12 the passengers’ satisfaction measurement

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think that I did the right thing when I decided to use this airline.</td>
<td>206</td>
<td>3.82</td>
<td>.989</td>
</tr>
<tr>
<td>My choice to use this airline was wise one</td>
<td>206</td>
<td>3.82</td>
<td>1.005</td>
</tr>
<tr>
<td>I feel satisfied with the airline service quality</td>
<td>204</td>
<td>3.66</td>
<td>1.054</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>202</td>
<td>3.66</td>
<td>.965</td>
</tr>
</tbody>
</table>

Source: - Survey finding 2016

4.2.4 Content Validity

Content validity, is the assessment of the correspondence of the variables to be included into a summated scale and its conceptual definition (Hair et al., 1998). The questioner for this research is mirrored from Ethiopian airlines customer comment card. Variables items are inspected by the researcher and two experienced customer service supervisors were involved from Addis Ababa Airport Hub. The supervisors checked that questions representation of study under this research. To test the questionnaire for clarity and to provide a coherent research questionnaire review was performed as a pilot the questioner was distributed for ten passengers and feedback was taken on the clarity after the complete the questioner and some items were added, based on their valuable recommendations. Some others were reformulated to become more accurate and clear.
4.2.5 Inferential Analysis of Variables

4.2.5.1 Regression Analysis.
A simultaneous linear regression was carried out to determine the most important dimensions and this is to know which variables will create the best prediction equation. Flight schedule, cabin environment, airport service, flight meal service, In-flight entertainment, frequent flyer program, Ticket office/call center service, Airport service and information are the independent variables and the respondent’s general level of satisfaction with the airline services is the dependent variable. The main purpose here is to see whether the dependent variable can be predicted better from a combination of the above dimensions in the airline context. First of all, it is a good idea to check the correlations among the predictor variables prior to running the multiple regressions, to determine if the predictors are sufficiently correlated such that multicollinearity is highly likely to be a problem. This is especially important to do when one is using a relatively large set of predictors, and/or if, for empirical or conceptual reasons, one believes that some or all of the predictors might be highly correlated.

In checking the assumptions of Multicollinearity it must be checked that the correlation between each of the independent variables is not too high. Tabachnick and Fidell (2001) Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula 1\(^{-}R^2\) for each variable. If this value is very small (less than .10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance). VIF values above 10 would be a concern here, indicating multicollinearity since the lowest tolerance is .354 (i.e. >.1) and the highest VIF is 2.882 (i.e. <10) there no problem of multicollinearity. The regression B coefficient indicate the impact of each dependent variable on the independent variable.
Here the largest beta coefficient is .269 which is for Information particularity. This means that this variable makes the strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model is controlled for with a sig. of 0.000(<0.05).

**Coefficients**

*Table 4.13 the regression coefficient table*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>Collinearly statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.379</td>
<td>.237</td>
<td>-.1598</td>
<td>.112</td>
<td></td>
</tr>
<tr>
<td>Flight schedule</td>
<td>.171</td>
<td>.055</td>
<td>.167</td>
<td>3.097</td>
<td>.002</td>
</tr>
<tr>
<td>Cabin environment</td>
<td>.248</td>
<td>.069</td>
<td>.225</td>
<td>3.581</td>
<td>.000</td>
</tr>
<tr>
<td>In-flight entertainment</td>
<td>.003</td>
<td>.030</td>
<td>.004</td>
<td>.084</td>
<td>.933</td>
</tr>
<tr>
<td>Frequent flyer program</td>
<td>.056</td>
<td>.057</td>
<td>.054</td>
<td>.990</td>
<td>.324</td>
</tr>
<tr>
<td>Ticket office/call center service</td>
<td>.080</td>
<td>.066</td>
<td>.075</td>
<td>1.215</td>
<td>.226</td>
</tr>
<tr>
<td>Airport service</td>
<td>.151</td>
<td>.089</td>
<td>.123</td>
<td>1.702</td>
<td>.091</td>
</tr>
<tr>
<td>Flight meal service</td>
<td>.162</td>
<td>.053</td>
<td>.170</td>
<td>3.085</td>
<td>.002</td>
</tr>
<tr>
<td>Information particularity</td>
<td>.253</td>
<td>.066</td>
<td>.269</td>
<td>3.850</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on the above coefficients the customer satisfaction can be expressed in the below equation:

\[ Y = -0.379 + 0.171X + 0.248Z + 0.003A + 0.56B + 0.08C + 0.151D + 0.162E + 0.253F \]

Where:

- Flight schedule: \( X \)
- Cabin environment: \( Z \)
- In-flight entertainment: \( A \)
- Frequent flyer program: \( B \)
- Ticket office/call center service: \( C \)
- Airport service: \( D \)
- Flight meal service: \( E \)
- Information particularity: \( F \)
ANOVA

Table 4.14 the regression ANOVA table

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>108.036</td>
<td>8</td>
<td>13.505</td>
<td>47.728</td>
<td>.000</td>
</tr>
<tr>
<td>1 Residual</td>
<td>46.121</td>
<td>163</td>
<td>.283</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154.157</td>
<td>171</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Dependent Variable: Satisfaction Measurement
- Predictors: (Constant), Information particularity, In-flight entertainment, flight schedule, flight meal service, frequent flyer program, ticket office/call center service, cabin environment and airport services

Source: - Survey finding 2016

The model summary on the below table 4.15 is an indication of the extent at which the dependent variable is explained by the independent variable based on the summary 68.6% of the dependent variable is explained by the independent variables and the remaining 31.4% is not explained in this study.

Model Summary

Table 4.15 the regression model summary table

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.837a</td>
<td>.701</td>
<td>.686</td>
<td>.532</td>
</tr>
</tbody>
</table>

Predictors: (Constant), information particularity, inflight entertainment, flight schedule, flight meal service, frequent flyer program, ticket office/call center service, cabin environment, airport service

Source: - Survey finding 2016

4.2.5.2 Correlation Analysis

All of the independent variable have a positive relation with the dependent variable. Out of the eight attributes seven attributes have a correlation coefficient of more 0.5 and yet only one variable has a coefficient less than 0.5. Information particulars has the strongest positive relationship with customer satisfaction.
Table 4.16 the multivariable correlation table

<table>
<thead>
<tr>
<th>Correlations</th>
<th>satisfaction</th>
<th>flightschedule</th>
<th>cabinenvironment</th>
<th>inflightentertainment</th>
<th>frequentflyerprogram</th>
<th>onboardservice</th>
<th>information</th>
<th>lightnesservice</th>
</tr>
</thead>
<tbody>
<tr>
<td>satisfaction</td>
<td>1</td>
<td>.522**</td>
<td>.496**</td>
<td>.329**</td>
<td>.591**</td>
<td>.684**</td>
<td>.652*</td>
<td>.727*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>207</td>
<td>201</td>
<td>201</td>
<td>203</td>
<td>195</td>
<td>194</td>
<td>204</td>
<td>207</td>
</tr>
<tr>
<td>flightschedule</td>
<td>.529</td>
<td>1</td>
<td>.495**</td>
<td>.224**</td>
<td>.477**</td>
<td>.390*</td>
<td>.386*</td>
<td>.282**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>201</td>
<td>202</td>
<td>202</td>
<td>195</td>
<td>194</td>
<td>204</td>
<td>207</td>
<td>202</td>
</tr>
<tr>
<td>cabinenvironment</td>
<td>.459*</td>
<td>.495**</td>
<td>1</td>
<td>.384**</td>
<td>.424**</td>
<td>.591*</td>
<td>.572*</td>
<td>.546**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.009</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>201</td>
<td>202</td>
<td>200</td>
<td>196</td>
<td>196</td>
<td>203</td>
<td>206</td>
<td>202</td>
</tr>
<tr>
<td>inflightentertainment</td>
<td>.329**</td>
<td>.224**</td>
<td>.395**</td>
<td>1</td>
<td>.322**</td>
<td>.201**</td>
<td>.361*</td>
<td>.261**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>203</td>
<td>204</td>
<td>209</td>
<td>191</td>
<td>199</td>
<td>208</td>
<td>206</td>
<td>203</td>
</tr>
<tr>
<td>frequentflyerprogram</td>
<td>.500**</td>
<td>.617**</td>
<td>.424**</td>
<td>.321**</td>
<td>1</td>
<td>.477*</td>
<td>.523**</td>
<td>.499**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>185</td>
<td>185</td>
<td>187</td>
<td>191</td>
<td>192</td>
<td>187</td>
<td>191</td>
<td>187</td>
</tr>
<tr>
<td>onboardservice</td>
<td>.594**</td>
<td>.530**</td>
<td>.502**</td>
<td>.261**</td>
<td>.477**</td>
<td>1</td>
<td>.620**</td>
<td>.561**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.004</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>194</td>
<td>196</td>
<td>196</td>
<td>196</td>
<td>197</td>
<td>196</td>
<td>200</td>
<td>196</td>
</tr>
<tr>
<td>information</td>
<td>.662**</td>
<td>.368**</td>
<td>.512**</td>
<td>.365**</td>
<td>.526**</td>
<td>.839*</td>
<td>1</td>
<td>.511*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>204</td>
<td>205</td>
<td>209</td>
<td>190</td>
<td>209</td>
<td>207</td>
<td>210</td>
<td>205</td>
</tr>
<tr>
<td>lightnesservice</td>
<td>.602**</td>
<td>.262**</td>
<td>.554**</td>
<td>.362**</td>
<td>.351**</td>
<td>.361*</td>
<td>1</td>
<td>.506**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>205</td>
<td>207</td>
<td>208</td>
<td>190</td>
<td>208</td>
<td>209</td>
<td>212</td>
<td>208</td>
</tr>
</tbody>
</table>

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

Conclusion and Recommendation

5.1 Introduction

This chapter is designed present the conclusions, summary and recommendations. At the end of the chapter, limitations and suggestions for future research are discussed.

5.2 Summary finding, conclusion and recommendation

The purpose of this study was to assess service quality and customer satisfaction. This study entails that airline marketing and operational managers has to develop and implement various policies to provide guaranteed quality services to passengers. The analysis of results revealed that there is a significant disparity between passenger expectation and their perceptions of service quality offered by Ethiopian Airlines. The study clearly indicates that the Airline service quality do have significant and positive influences on airline passengers’ satisfaction. Failure to provide quality services to passengers may cause negative impact on passengers’ satisfaction.

Importance-performance analysis can help airline managers to understand perceived service quality dimensions’ relative importance and propose improvement plans where the sufficient resources are not focus enough. The model developed could be accurately considered as a useful tool for selecting the most efficient improvement items to reach passenger satisfaction. The resources of organizations can then be boosted to maximize efficiency.

Passengers perceived in-flight entertainment to the poorest service of the airline and out the attributes under it the availability of internet and live channels is rated lower. Passengers a measure need not met by the airline during flight. The in-flight
entertainment is the least rated service of the airline, but its impact on passenger satisfaction is not high as the service is the least expected service and very vital, which being replaced with hand carry device for personal entertainment.

On the other hand the service rendered at the ticket office/call center has been rated to be better than all the other service attributes. Out of the different attribute under this service competency of ticket office staff has been rated to be the highest.

The eight service attributes assessed by customers and their perception service quality is ranked as Ticket office /call center service, flight schedule, cabin environment, information particular, airport service, flight meal service, frequent flyer program, in-flight entertainment.

The attributes has different level of contribution on the customer satisfaction and based on the analysis the highest contribution on customer satisfaction is from the Information particulars attribute and in-flight entertainment has the least contribution on customer satisfaction.

The eight attributes ranked based on their contribution on passenger satisfaction Information particulars, airport service, cabin environment, flight meal service, ticket office /call center service, flight schedule, frequent flyer program and in-flight entertainment.

5.3 Recommendation

Based on the analysis of this study, the following recommendations have been forwarded to Ethiopian Airlines marketing and operational managers, staffs and decision makers in the order of importance to passengers.

The airlines should keep up providing good quality ticket office /call center service given by its customer service agents.
The in-flight entertainment of the airline should be reviewed and customize to meet the customer expectation. Customers are not happy with the airline in-flight entertainment. The non-availability of internet and live TV channel is a measure cause of the dissatisfaction. As major competitors of the airline are providing internet connections the airline should consider the service enhancement. The airlines should improve its inflight entertainment system to cop up with the increasing future demand of passengers regarding to in-flight entertainment systems and technologies.

The customers’ response on the frequent flyer program indicates that dissatisfaction, demotivation or lack of awareness on the program. The airline should create awareness about the frequent flyer program and build confidence on the current and potential frequent flyers.

On this study customers indicated their sensitiveness for information particulars and deviations on this particular should be proactively addressed by the airline. Based on this staff should be equipped with complete and adequate information for this more infrastructure and communication device should be applied.

The airlines should give much attention to improve its airport environment particularly the airport facility, the baggage handling service at departure/ arrival and its check-in and Boarding process efficiency so as to avoid dissatisfaction of passengers.

5.4 Limitation and suggestion for future research

This section is intended to address some of the limitations surrounding this study so that the limitation may be eliminated in future studies. One of the primary limitations for this study is the amount of time between the actual service quality perception experience and the administration of the scale for evaluation. The sample population consist of customers who used the airlines at least once in the past. The limitation of the study is certainly the customer's ability to recall the details surrounding the service
provider's efforts. Some passenger, special passengers from western Africa travelers has a tendency to avoid writing and will go to their flight without returning questioners that the data collectors started to avoid such passengers and this may affect the representativeness of the response.

The outcome of the study is solely dependent on the individual responses of the respondents that participate in the study. Moreover, as the sample is small and selected using nonprobability sampling technique, the results might not be generalizable beyond the specific population from which the sample is drawn.

The topic was a good one but because of continuous a development in the industry and the dynamic need of customer, there is a need for further periodic research.

As evident from the finding section that the study was conducted in Ethiopia only, applicability of the results in other countries may result differently. Further, as the study is conducted in the airlines industry, application of the same in other industries, like; education, financial, and health may not come up with the same findings. Thus, the analysis and discussion based on the perceptions of the sample respondents may vary if the sample was collected at a different time of year and from a different geographic region. Moreover, different sampling methods (e.g. personal interviews, random sampling) may also add insight into the perceptions of passengers.

Because the study did not consider employees who provide the services to customers; further research could be to study relationship among, job satisfaction, service quality and customer satisfaction to see if satisfaction level of employees is related to their services and/or customer satisfaction. Another further study could be to test among the airlines service quality dimensions with the use of another statistical method to see which of them will be more important to service quality and/or customer satisfaction. Also future study could be to test these same variables in a manufacturing sector.
The limitation of sample size and the convenience sampling method implied that the finding cannot be generalized across all transit passengers in Addis Ababa airport. Therefore, the researchers propose to conduct a longitudinal research with more sample and improvement sampling method to generalize the research results. Finally, it suggested to involve other attributes such as airline seat pitch (the gap between seats), free baggage allowance, augmented products like on board shower and bar in the further research. Other variables may affect the passenger satisfaction, as demonstrated by study that was conducted in other transportation mode, such as commercial airline industry (Zins, 2001).
Bibliography

Aklilu Gudeta, the influence of service quality and customer satisfaction on the behavioral intention: case of Ethiopian airlines, 2014


Eiglier and Langeard. Service aspects in a service innovation strategy, 2009

Elias Kassa. Measurement of Service Quality In Commercial Bank of Ethiopia, 2103


Mario Kossma. *Delivering Excellent Service Quality in Aviation*, 2006, 115


Philip Kotler and Kevin Lane Keller. Marketing Management, 12th edition, 2006, 382

Philip Kotler. Marketing 3.0, 2010, 71, 77-78


Tigist Terefe. The role of the front-line staff in delivering quality passenger air service: the case of Ethiopian Airlines passenger air service, 2014


www.degromoboy.com/cs/models.htm

www.ethiopianairlines.com


Appendix

The below questionnaire used to collect data from passengers

Addis Ababa University School of Commerce  
Department of Marketing Management Post Graduate Program  
Questionnaire

Dear Respondents,

This questionnaire is designed to collect data on the satisfaction level of passengers of Ethiopian as an input for a research under the title “Assessment of service quality and customer satisfaction: the case of Ethiopian airlines”. The questioner is purely for academic purpose used for senior essay as partial fulfillment of MA in Marketing Management. Your input is highly important to the analysis, and will be treated with anonymity and confidentiality. Thank you very much for your co-operation.

Instruction:

1. Please complete all questions in the questionnaire.
2. For Multiple type questions please put (X) inside the box after each alternative you choose.

Part 1: service quality items /Dimensions
Please Put (X) on the number that indicates the level of satisfaction for each determinants/attributes of Service rendered by Ethiopian airlines on your travel experience.

Where :
5 =Excellent  
4 =Highly Satisfactory  
3 = Neutral  
2 = Fairly Satisfactory  
1 = Unsatisfactory

<table>
<thead>
<tr>
<th>No</th>
<th>Determinants/Attributes</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flight schedule convenience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Departure time accuracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Arrival time accuracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. FLIGHT SCHEDULE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Comfort and operation of cabin equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Courtesy and helpfulness of flight attendants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The condition and cleanliness of cabin interior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Tidiness and cleanliness of in-flight lavatories (washrooms)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. CABIN ENVIRONMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. IN-FLIGHT ENTERTAINMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Quality of in-flight reading materials, movie, games &amp; technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Entertainment availability while onboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Availability of Internet, live channels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Frequent flyer program incentives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Simplicity of using frequent flyer benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Recognition of frequent flyers at service points</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Courtesy and helpfulness of ticket office staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Competency of ticket office staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Tidiness and cleanness of ticket office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Courtesy and helpfulness of airport staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Waiting time at the airport for check in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Check-in and Boarding process efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Airport facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Availability of comfortable waiting lounges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Baggage handling service at departure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Baggage delivery on arrival</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Safety and security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Test of Food and beverage served while onboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Quantity of meals/food and drink served onboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Variety of Food and beverage served while onboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Completeness &amp; adequacy of information given by the airline staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Employee understanding of your specific needs and individual attention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Responsiveness of the airline staff to your inquiry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I think that I did the right thing when I decided to use this airline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>My choice to use this airline was wise one</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>I feel satisfied with the airline service quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Overall satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part 2: Please check (X) only on one of the options

35. Which class of service are you travelling today?  
   Economy □ □  Cloud Nine □ □

36. What is the purpose of your trip?  
   Business □ □  Leisure □ □
   Visiting friends/relatives □ □  others (Specify) .........................

37. In which continent your nationality belongs to:
   Africa □ □  Middle East □ □  Asia □ □  Europe □ □  North America □ □
   Others (Specify) .........................

38. Your Age group please?  
   18-35 □ □  36-50 □ □  50-65 □ □  65-90 □ □

39. You are:  
   Male □ □  Female □ □

Any other comments ____________________________________________________________
   _________________________________________________________________________

Thank you again!
Assessment of service quality and customer satisfaction: the case of Ethiopian Airlines