



**ST. MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

**THE RELATIONSHIP BETWEEN TOTAL QUALITY MANAGEMENT AND  
PERFORMANCE: THE CASE OF ETHIOPIAN AIRLINES**

**BY**

**MAHLET MEKONNEN TADESSE**

**May, 2018**

**Addis Ababa, Ethiopia**

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## **LIST OF ABBREVIATION**

<b>TQM</b>	Total Quality management
<b>ET</b>	Ethiopian Airlines
<b>QC</b>	Quality Control
<b>HR</b>	Human Resource
<b>PSSQ</b>	Passenger Satisfaction and Service Quality
<b>CAPA</b>	Center for Pacific Aviation



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## **Abstract**

Airline industry by its nature is very vulnerable and sensitive industry, where anything can affect it. With the stiff competition happening in the current situation airlines has to do a lot than just giving service. In order for an airline to have best performance, it should first fulfill the TQM. In this study, TQM has been identified with four pillars, which are satisfying customer, System/ process, People and Improvement Tools. The findings revealed that there is strong correlation between TQM and performance with a correlation coefficient of  $r= 0.936$ , which is significant at  $p<0.01$ . Ethiopian airlines has successfully implemented TQM and benefited from the result through better performance. When customers are satisfied, the number of passenger will increase every year, which led to the acquiring of new aircrafts and latest technology, which led to expansion of the airline. It was seen that all this happened due to the beginning of implementation of TQM, starting from satisfying employee and customers. So it is recommended for the airline to focus more on the employees who are the base of the airlines, by creating belongingness.

**Keywords:** Total quality management, performance, Ethiopian Airlines, Ethiopia

# CHAPTER ONE

## 1 INTRODUCTION

These days the competition has gone extreme. Organization, companies and all entities are doing their best to get the market share and the competitive advantage. This has brought a global competition in addition to the fact the consumers increasingly demanding for a product that has an exceeding quality of product and service. This has make the global competition stiff and for the business to be more strategical and technical. Total Quality Management (TQM) in an organization is a long-term goal and involves continuous improvement of service and products that are being served and given to the global world. Among its objectives, is to enhance customer satisfaction and this involves a systematic method for ensuring continuous improvement of organizational process which results to the product and service of high quality (Waldman, 1994). This leads to service of a better quality and ultimate leads to organizational competitiveness (Cook, 2002).

The TQM movement was attractive to many organizations during the 1980s and the first half of the first half of the 1990s. To succeed, TQM had many long –term requirements. One of these was that the top management must have passion for the subject. Without this sustained passion, top management’s attention and energy towards TQM would be diverted to other pressing needs. While demanding insisted that there was no “instant pudding”, many consultants in establishing themselves with a client suggested short-term gains. Because of this search for short-term gains, process improvement and reductions in cycle time became very popular and in some cases final objective. Unfortunately, after they ran their short-term courses, many efforts collapsed and TQM was often declared a failure, (Peterson, 1990).

The concept of TQM developed as one of the most highly strategic response in the 1990s and it has been adopted extensively in the world (HUQ, 2005). However, in the service sector, TQM is still young and still in the stage of theory development, (Vouzas and sychogios, 2007). In the early years, TQM was adopted mostly in product manufacturing industries. Today, the service industry is slowly embracing the practice of TQM.

The evolution of the concept of and practice of TQM has taken several years of trial and contribution in many organizations all over the world. According to Feigenbaum (1990), in the increasingly competitive world the quality is no longer as optional extra, rather it is essentially a business strategy. Without quality, an organization cannot survive. The creation of quality product and service demand total commitment from the entire organization, and hence it requires TQM. Garvin (1989) outlines the shift from inspection to strategic quality management and the cause for it. He argued that this shift has taken place to meet the dynamic needs of the organization.

According to Zaire (1991), the evolution of quality has moved from two extremes:

- a. From control driven to culturally driven quality
- b. From controlling to managing quality

TQM can be used to determine the time spent by an employee on various quality related activities. The proportion of time spent multiplied by the individual's salary represents an estimate of quality cost for the activity. Consumer surveys and other means of customer feedback are also used to determine quality cost for services (Kesavan et al., 2011). According to the authors, there are four pillars of TQM as described below.

### **Pillar 1- Satisfying customer:**

TQM aims not just to meet customer requirements (express needs) but also to achieve customer satisfaction.

### **Pillar 2- System/ process:**

Establishing a system such as ISO 9000 is the initial building block. TQM relies on an effective quality management system which ensures that preventive measures are in place and the culture of continuous improvement exists to enable the process to deliver quality product service.

### **Pillar 3- People:**

Manager commitment, training, teamwork, leadership, motivation, empowerment etc. would have a vital complementary roles to play in establishing total quality environment.

## **Pillar 4- Improvement tools:**

TQM recognizes the need from continuous improvement and uses a set of Quality Control tools such as the four C of TQM (Commitment, Competence, Communication and Continuous improvement).

### **1.1. BACKGROUND OF THE ORGANIZATION**

Ethiopian Airlines (ET) is a flag carrier airlines based in Ethiopia, which was founded as international airlines in the year of 1964. It has been operated more than 70 years and a success was on its right by making it the first leading airlines in African continent. ET current vision 2025 was developed in 2009 as Ethiopian airlines will be the most competitive and leading aviation group in Africa by providing safe, market driven and customer focus passenger and cargo transport, aviation raining, flight catering. Maintenance, repair & overhaul and ground service by 2025 (ET, 2018). The most value of the Airlines is safety is our first priority, a high performance and learning organization with continuous improvements, innovation and knowledge sharing. We accept change for the growth opportunity it brings and always seek for and apply the best ideas regardless of their source. Employees are rewarded for their performance and demonstrate integrity, respect others and working in team, (ET, 2018).

The main business line of Ethiopian airlines are international passengers, Cargo, Catering and Ground handling. The airlines is generating its revenue with those main business lines which is briefly shown on figure 1.1.



Figure 1.1. Revenue by segment ET, (2015/16).

The dynamic nature of Airlines industry necessitates fast responsiveness to the market demand, particularly to the ever-changing customer needs and tastes (Foon and Eurn, 2011). Ethiopia airlines have a different of aircraft with a different average aircraft age as seen on table 1.1.

Addis Ababa-based Ethiopian Airlines is the national airline of Ethiopia. One of the leading airlines on the African continent, Ethiopian Airlines serves more than 60 international destinations across Africa, Asia, Europe, The Middle East, and North America, as well as operating an extensive domestic and international cargo network. Ethiopian Airlines became a member of Star Alliance in Dec-2011, CAPA, 2018.

Table 1.1 Average Aircraft Age (ET, 2015/16)

Average Aircraft Age (2015/16)	
Aircraft	Average
Type	Age
A350-900	0.23
B-787-800	2.51
B-737-800	3.60
B-737-700	11.43
B-777-300	2.05
B-777-200	5.17
B-777-F	2.33
B-767-300	14.62
B-757-200	17.10
B-757-200F	25.82
Q-400	4.93
Fleet Average	5.80

Ethiopian airlines continued to register profitable growth on all its operating parameters in the 2015-16 fiscal year as compared with the previous years, despite the challenging operating environment caused by slower global economic growth and weaker performance. The number of passenger carried has shown an increase in all of the year as seen on Table 1.1.



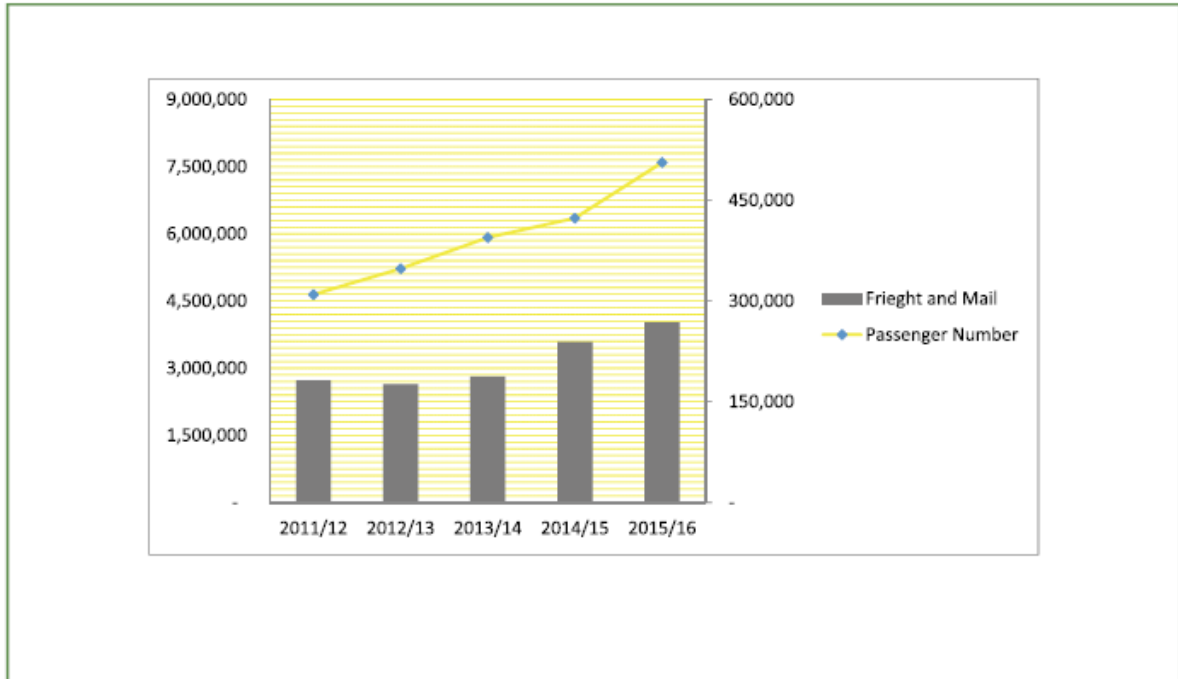


Figure 1.2. Trend of passenger and cargo carried ET, (2015/16).

## 1.2. STATEMENT OF THE PROBLEM

TQM can be defined as a holistic Management philosophy that strives for continuous improvement in all functions of an organization, and it can be achieved only if the total quality concept is utilized from the acquisition of resources to customer service after the sale. TQM practices have been documented extensively in measurement studies as well as in the studies that have investigated the relation of TQM practices to various dependent variables, (Saraph et al. 1989). Despite numerous stories about TQM failures, previous empirical studies on the relationship between TQM and organizational performance, and in particular, quality, have indicated strong and positive results (Ahire et al. 1996). The initiative in implementing TQM may originate at different levels of an organization. In companies that operate in highly global competitive environments and in quality-focused markets, the parent company may push divisions and strategic business units to adopt TQM practices (Handfield and Ghosh, 1994). In some instances, as expressed by some of this study's respondents, functional managers at local levels may recognize the need for TQM implementation to outperform the competing challenge. Indeed, empirical research addressing successful TQM implementation is "crying out" for a contingency theory approach: while most studies report a positive relationship between TQM and performance (Brah et al., 2002), some studies report a negative relationship between the two variables (McCabe, 1998). The identification of contextual factors effecting the successful

TQM implementation has thus recently emerged as an important research agenda (Douglas, 2001). Preliminary evidence seems to indicate that TQM-adopting firms shows better performance over firms that do not adopt TQM (Brah et al., 2002). Firms that focus on continuous improvement, involve and motivate employees to achieve quality output and focus on satisfying customers' needs are more likely to outperform firms that do not have this focus. Thus, we can expect that to the extent an organization implements TQM practices, performance should be enhanced. Several studies have been carried out on total quality Management. Ojo (2003) examined competitive strategy and TQM culture in organizations. He focused on elements of competitive strategy, total quality management culture and productivity improvement and their relationship in producing better outputs of goods and services and individual and organizational performance. A study by Haustein (2005) examined the pillars of TQM implementation in manufacturing organizations and revealed a comprehensive framework with eight pillars having carried out case studies in 31 manufacturing organizations in Bangladesh, India. Despite the fact that a number of studies have been conducted on TQM, only very few of these (Flynn, 1994; Gustafson and Hundt, 1995; McAdam et al. 1998) have been focused on testing the relationship between TQM and performance. A positive relationship exists between the extent to which companies implement TQM and firm performance. Some studies were also conducted on the relationship between total quality management and performance. The studies that has been conducted before is not sufficient. It has not been updated to the current situation of the airline.

Most of the researches conducted focused on the relationship between TQM and competitiveness and customer satisfaction therefore, the researcher would focus on performance. This research will cover the gap stated where not enough study was conducted in regards to the practice of TQM in Ethiopian Airlines Performance. By analysing current data, there will be an accurate and current flow of information. On this study, I believe this study will cover the areas that has not been covered before, in case of Ethiopia airline. This study will assess TQM practice that are being undertaken in the aviation industry in Ethiopia, in Ethiopia airlines. I believe this study will bring additional points of view that satisfy the gaps.

### **1.3. RESEARCH OBJECTIVE**

#### **1.3.1. GENERAL OBJECTIVE**

The overall aim of the study was to describe how Ethiopian Airlines positioned itself not only in the African aviation industry, but also in the world aviation industry through the implementation of TQM. It also examines how TQM practice is related to performance of the airlines.

#### **1.3.2. SPECIFIC OBJECTIVES**

Specifically, the study tries to address the following key research objectives:

- To describe the practices of TQM in the aviation industry in Ethiopia airline.
- To describe the relationship between TQM practice and Performance of the airlines

### **1.4. RESEARCH QUESTIONS**

- i. Has TQM been implemented in Ethiopian airlines accurately?
- ii. If yes, does the airlines has shown any performance change since the implementation of TQM? If yes, in what way and how?

### **1.5. RESEARCH HYPOTHESIS**

Null hypothesis ( $H_0$ ): There is no relationship between TQM and performance of Ethiopian airline

Alternative hypothesis ( $H_A$ ): There is positive relationship between TQM and performance of Ethiopian airline

### **1.6. SCOPE AND LIMITATION OF THE STUDY**

The main aim of this research is to examine the relationship between TQM practice and performance of Ethiopia Airlines, and the findings will not be the same for other companies across the country. The limitations of the study are related to the data acquisition process, which includes poor response rate and careless replies to questions by the respondents, which is a common problem in several studies. The researcher, however, would make maximum effort to improve the quality of data acquired by explaining the benefit of the study and by adding some allowance to the sample size to compensate for unresponsive respondents.

## **1.7. SIGNIFICANCE OF THE STUDY**

The main significance of this study is to know, what are being undertaken for a better quality for a better chance to stand and compete with the others. What is Ethiopian airlines doing to upgraded the airlines service given to the customers, how is it attracting more people to itself in spite the competitive from the other highly developed countries Airlines. It could be said that the research to see the relationship between TQM practice and the competitive advantage of the organization, so that another studies could initiate from this research finding. In addition, this research will pave the way for more studies to be done on the matter. This research will also help the policy maker to understand how TQM practice has a potential and great influence on the success of the aviation in Ethiopia. It also helps the airlines manager to know about the positive relation between TQM practice and performance of Ethiopian airlines.

## **1.8. ORGANIZATION OF THE RESEARCH REPORT**

This paper will have five chapters; the first chapter will cover the introduction parts like background of the study and the organization, statement of the problem, research objectives, and methodology, significance of the study and scope and limitation of the study. The second chapter will present related critical literature review. The third chapter will bring the analysis and interpretation of the data collected which will be summarized in chapter four in addition to recommendation and conclusion on chapter five.

## **CHAPTER TWO**

### **2 LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

The literature review comprises of theoretical and empirical reviews. The theoretical review focuses on the concepts of total quality management and performance. It also provides a glimpse on the concepts of the transport sector. The empirical review on the other hand depicts issues dealt by various researchers on the quality management & performance.

#### **2.2 THE CONCEPT OF TOTAL QUALITY MANAGEMENT**

Total quality management requires that the principles of quality management are applied in all aspects at every level in an organization. It encompasses entire organization from suppliers to customers' stresses a commitment by management to have a continuing companywide drive towards excellence in all aspects of products and services those are important to the customer. TQM in service sector is different from manufacturing because service quality is more difficult to measure than quality of products, and Service quality perception depends on Intangible differences between products and Intangible expectations that customers have on products (Gemechis, 2012).

The stakeholder theory examines the organization and those groups both internally and externally and the relationship between them all. Stakeholder theory looks at how the connection of these groups influence how an organization conducts its activities. Freeman (1999) gives the definition of a stakeholder as any group or individual who can affect or is affected by the achievement of the firm's objectives and this goes to generalize the understanding of a stakeholder as that group to whom management of an organization need to be responsive to. Friedman (2006) contributed to this theory to a great extent. According to him, organization involves grouping of those parties who have a stake in the organization with a common purpose to managing these groups/parties' needs and interests. This role of managing stakeholders is a role played by the managers of organizations. The role is two way meaning managers strive to manage organizations for the benefit of these stakeholders so as to ensure they participate in decision making process and on the other hand manage the company properly

so that it survives for the good of these stakeholders. According to Porter (1991), the strategy of any organization is to seek a position in the business environment that is seen to be competitive. To create a profitable and consistent position in the market by drawing on such factors that are deemed to be competitive in the industry. This therefore means that a competitive strategy involves taking advantage of the firm's competitor's weaknesses and using them for the good of the firm. Co-worker support refers to co-workers assisting one another in their tasks when needed by sharing knowledge and expertise as well as providing encouragement and support (Zhou and George, 2001). For example, colleagues may share their knowledge and expertise when an employee is faced with a difficult and novel task for which a solution is not readily available (Scott and Bruce, 1994). Employees may also acquire task-relevant knowledge and expertise from supportive co-workers, which may make new ways of doing things possible (Woodman et al., 1993). In this context, working with helpful, supportive colleagues promotes an environment where new ideas can be discussed more openly and freely. According to Hackman and Wageman (1995) and Beer (2003), implicit in the TQM philosophy are values of teamwork and collaboration in the pursuit of quality and continuous improvement. It appears evident that working with supportive co-workers who readily share task-relevant information and expertise is more likely to be associated with successful TQM implementation. That is, for firms implementing TQM practices, higher co-worker support is likely to be associated with enhanced organizational performance. Referring to the TQM literature, some studies have highlighted the importance of co-worker support without empirically testing their assertions (e.g. Montes et al., 2003). Perceived organization support refers to employees' perception of being valued and cared about by their organization (Eisenberger et al., 1986). This concept is theoretically based on reciprocity in the social exchange relationship. In situations of perceived support, employees' trust that their increased effort toward reaching organization goals will be noticed and rewarded (Allen and Brady, 1997; Eisenberger et al., 1986). Although an organization may encourage support in a number of areas, this study focuses specifically on organization support for creativity, which refers to the extent to which an employee perceives that the organization encourages, respects, rewards and recognizes employees who exhibit creativity (Zhou and George, 2001). Indeed, the organizational creativity literature has demonstrated that organizational contexts can play a significant role in encouraging or impeding employee creativity (Scott and Bruce, 1994). For example organization contexts may facilitate creative performance by directing employees' attention and cognitive energy toward the generation of new and useful ideas (Scott and Bruce, 1994; Zhou and George, 2001). As stated above, one of the central tenets of effective TQM implementation is employees'

commitment to continuous improvement of processes. Organizations implementing TQM practices that also acknowledge and reward employees' new and useful ideas are more likely to experience a favourable effect on performance. Turning to the TQM literature, in a comparative study of non-TQM and TQM organizations, Allen and Brady (1997) found that perceived organization support was higher in TQM organizations than non-TQM organizations. Further, another comparative TQM/non-TQM study focussing on firms in the motor vehicle parts and accessories industry, demonstrated that respondents (supervisors) in TQM firms were more satisfied with top management support, commitment and encouragement (important elements of overall organization support) compared to non-TQM firms (Golhar et al., 1997). Both these studies provide empirical evidence of the significant role of organization support in firms implementing TQM practices.

### **2.3 TQM IN SERVICE SECTOR WITH THE CONTEXT OF AIRLINE INDUSTRY**

Because services are intangible, they are different from physical products and cannot be stored. Their purpose however is to satisfy human needs and wants. Although services are part of our life, there is difference between services and commodities. Fisher (1935) was the first to identify the difference. He used the term "tertiary sector" to identify services and then Judd used it in 1965. Schneider and White (2004) highlighted that pure services cannot be seen, touched, held, or stored because they have no physical manifestation, but are considered part of a process or interaction. Berry (1980) distinguished between services and goods and argued that, services are acts, deeds, performances, or efforts, whereas, goods are articles, devices, materials, objects, or things. As opposed to acquiring title or ownership when buying a physical good, a service consumer receives only the rights to a service for a specified amount of time (Kandampully, 2002).

The service industry is increasingly competitive in its nature, especially the travel industry. Service professionals must be concerned themselves with a minimal increase in the market share in addition to maintaining their existing customer base (O'Neill, 2001). Customers are constantly presented with new opportunities to find a service provider that is capable of fulfilling their demands and meeting their expectations with the growing horizon of the service

industry. Lovelock (2001) believes that the pressure placed on service organizations to achieve service excellence is truly justified. In his research, he pointed out three issues

- i. Today customers are more demanding of the products and services they buy.
- ii. The development of sophisticated technology has made it convenient for all service organizations, large and small, to offer personalized services that are highly valued by the customer.
- iii. In an increasingly competitive and international marketplace, providing a quality service encounter is seen as having the advantage over the competition

In addition to the characteristics stated above Services have been defined as multidimensional; which includes intangibility, heterogeneity, and inseparability of production and consumption (Parasuraman et al, 1985). Although this is not a pre-determinate factor constituting service in some cases perishability is additional characteristic of services (Hartman and Lindgren, 1993).

Performance management is a continuous process of identifying, measuring and developing performance in organisations by linking each individual's performance and objectives to the organisation's overall mission and goals. Let's consider each of the definition's two main components: Continuous process. Performance management is ongoing. It involves a never-ending process of setting goals and objectives, observing performance, and giving and receiving ongoing coaching and feedback. Performance management requires that managers ensure that employees' activities and outputs are congruent with the organisation's goals and, consequently, help the organisation gain a competitive business advantage. Performance management therefore creates a direct link between employee performance and organisational goals, and makes the employees' contribution to the organisation explicit. Note that many organisations have what is labelled a 'performance management' system. A system that involves employee evaluations once a year, without an ongoing effort to provide feedback and coaching so that performance can be improved, is not a true performance management system. Instead, this is only a performance appraisal system, Tang, 1998.

The Performance Management Contribution There are many advantages associated with the implementation of a performance management system. A performance management system can make the following important contributions: 1. Motivation to perform is increased. Receiving feedback about one's performance increases the motivation for future performance. Knowledge about how one is doing and recognition of one's past successes provide the fuel for future accomplishments. 2. Self-esteem is increased. Receiving feedback about one's performance



fulfils a basic need to be appreciated and valued at work. This, in turn, is likely to increase employees' self-esteem. 3. Managers gain insight about subordinates. Direct supervisors and other managers in charge of the appraisal gain new insights into the person being appraised. The importance of knowing your employees is highlighted by the fact that the Management Standards Centre has recognised that developing productive relationships with colleagues is a key competency for managers Standard D1: Develop productive working relationships with colleagues). Gaining new insights into a person's performance and personality will help the manager build a relationship with that person. Also, supervisors gain a better understanding of each individual's contribution to the organisation. This can be useful for direct supervisors as well as for supervisors once removed. 4. The job definition and criteria are clarified. The job of the person being appraised may be clarified and defined more clearly. In other words, employees gain a better understanding of the behaviours and results required of their specific position. Employees also gain a better understanding of what it takes to be a successful performer. 5. Self-insight and development are enhanced. The participants in the system are likely to develop a better understanding of themselves and of the kind of development activities of value to them as they progress through the organisation. Participants in the system also gain a better understanding of their strengths and weaknesses, which can help them better define future career paths. 6. Personnel actions are more fair and appropriate. Performance management systems provide valid information about performance, which can be used for personnel actions such as merit increases, promotions and transfers, as well as terminations, Sally, 2007.

## **2.4 TQM, PERFORMANCE AND PERFORMANCE MANAGEMENT**

The core ideas of total quality management (TQM) were introduced in the mid-1980s by, most notably, W. Edwards Deming, Joseph Juran and Kaoru Ishikawa (Hackman and Wageman, 1995). Whilst it is acknowledged that TQM is not a clear-cut concept (Hackman and Wageman, 1995), TQM is generally understood as an integrated organization strategy for improving product and service quality (Waldman, 1994). Since the mid-eighties TQM has been (over) sold as a near-universal remedy for a range of organizational problems, including improved organization performance. This is remarkable considering academics have acknowledged for many years that universal principals cannot be successfully applied to organizations.

Contingency theory with its “no one best way” dictum, asserts that high performance is a function of the alignment between organization systems/processes and various context factors. Indeed, empirical research addressing successful TQM implementation is “crying out” for a contingency theory approach: while most studies report a positive relationship between TQM and performance (Brah et al., 2002), some studies report a negative relationship between the two variables (McCabe, 1998). The identification of contextual factors effecting the successful TQM implementation has thus recently emerged as an important research agenda (Douglas, 2001).

TQM can be used to determine the time spent by an employee on various quality related activities. The proportion of time spent multiplied by the individual’s salary represents an estimate of quality cost for the activity. Consumer surveys and other means of customer feedback are also used to determine quality cost for services (Kesavan et al., 2011). According to the authors, there are four pillars that are Satisfying customer, system/process, People/employee and improvement tools. TQM aims not just to meet customer requirements (express needs) but also to achieve customer satisfaction. Establishing a system such as ISO 9000 is the initial building block. TQM relies on an effective quality management system which ensures that preventive measures are in place and the culture of continues improvement exists to enable the process to deliver quality product service. Manager commitment, training, teamwork, leadership, motivation, empowerment etc. would have a vital complementary roles to play in establishing total quality environment. TQM recognizes the need from continuous improvement and uses a set of Quality Control tools such as the four C of TQM (Commitment, Competence, Communication and Continuous improvement).

Preliminary evidence seems to indicate that TQM-adopting firms shows beter performance over firms that do not adopt TQM (Brah et al., 2002). Firms that focus on continuous improvement, involve and motivate employees to achieve quality output and focus on satisfying customers’ needs are more likely to outperform firms that do not have this focus. Thus, we can expect that to the extent an organization implements TQM practices, performance should be enhanced relationship. According to Hackman and Wageman, (1995), implicit in the TQM philosophy are values of teamwork and collaboration in the pursuit of quality and continuous improvement. It appears evident that working with supportive co-workers who readily share task-relevant information and expertise is more likely to be associated with successful TQM implementation.

That is, for firms implementing TQM practices, higher co-worker support is likely to be associated with enhanced organizational performance.

Performance measurement is an integral part of all management processes and traditionally has involved management accountants through the use of budgetary control and the development of financial indicators such as return on investment. However, it has been claimed that conventional aggregate financial accounting indicators are inappropriate in TQM settings. Several authors have claimed that an important part of ensuring that TQM leads to sustained improvements in organizational profitability is that direct quantitative measures of manufacturing are used to assess the effectiveness of managers' efforts to manage the development and implementation of TQM programmes (Armitage et al., 1990). With the growing awareness that quality of final products and services is a strategic competitive variable, companies have recognized also that the concept of high quality must be applied to production processes to generate quality products and minimize costs. TQM has evolved as a philosophy that emphasizes the need to provide customers with highly valued products and to do so by improvements in efficiency by way of eliminating waste, reducing lead times at all stages of the production process, reducing costs, developing people, and improving continuously (Samson et al., 2000).

While TQM provides a potential for organizations to enhance their competitiveness there is evidence that many organizations have been disappointed in the extent to which TQM has been associated with sustained improvements in organizational profitability (Wilson et al., 1992). Performance management systems are a cornerstone of human resource (HR) management practices and are the basis for developing a systems approach to organization management. In theory, a performance management system links organizational and employee goals through a goal-setting process, and subsequently links employee goal achievements to a variety of HR management decisions through a performance measurement process. Shank et al., (1994) argued some time ago that quality practices had become so important that management accounting could no longer ignore TQM. Traditional accounting supports cost and production analysis, but not quality analysis (shank et al., 1994). The thrust of the TQM philosophy is that quality and its management have to be built in from the beginning and that the accomplishment of quality standards and improvement is the responsibility of everyone (Morgan, 1994). Waldman et al., (1996) claim that quality is, in fact, largely a customer perception based on how well the product or service meets the customers' needs and expectations. Poor quality occurs when these needs are not met. Satisfying the customer is an important aspect of the

manufacturing process and this requires the customer's input at all stages of manufacturing(Lubben et al.,1998).

## **2.5 EMPIRICAL REVIEW**

A study by Easton et al. (1998), provide evidence to show that effective TQM implementations improve long-term profitability and stock returns. Flynn et al., (1995) report that higher intensity of TQM practices results in improved quality performance. In a review of the literature covering the relationship between TQM and innovation. Prajogo et al. (2001) identified two competing arguments. The first argument suggests that TQM is positively related to innovation performance because it establishes a system and culture that will provide a fertile environment for organizations to innovate (Mahesh et al., 1993). The opposing argument holds that the implementation of TQM principles and practices could hinder organizations from being innovative (Harari et al., 1993). There is a growing body of empirical research supporting a direct relationship between the adoption of Total Quality Management (TQM) and improved firm performance (Easton et al., 1998). Reed et al. (1996) argue that the content of TQM can be distinguished based on the issue of two business orientations: customer orientation and process orientation. With customer orientation, organizations will focus on gaining a market advantage where they can outperform their competitors in terms of attracting more customers with distinguished products and charge a premium price.

Dean et al. (1994) argue that from a strategic management perspective, TQM is concerned more with strategy implementation, or deployment, rather than strategic choice, or intent. Another strong implication about the association between TQM and cost leadership is suggested by Gobeli et al. (1994). In their framework on strategic approaches to innovation, they label TQM as a value leader since it places more emphasis on process innovation than product innovation. By focusing on process innovation, TQM can be linked to Porter's cost leadership strategy. Some studies have found that the use of TQM practices reduces manufacturing process variance, eliminates reworks and scraps, and improves quality performance (Daniel et al., 1991). In addition, there is considerable anecdotal evidence Harmon et al., (1990) on the extent to which TQM initiatives enhance the potential for firms to improve their performance. Moreover, some studies have found that TQM firms do not outperform non-TQM firms (Fuchesberg et al., 1993). Prior studies (Ittner, 1996) suggest that TQM strategy that focuses on

increasing customer levels of satisfaction does have a significant and positive impact on performance.

Archana and Subha (2012) conducted a research study on service quality and passenger satisfaction on Indian airlines. The study covered a sample of 270 respondents and the survey was conducted at the Chennai international terminal of Tamil Nadu. Sampling was done by interviewing randomly selected passenger. Exploratory Factor Analysis issued for measuring airline service quality to determine the dimension of airline service quality on three variables Passenger Satisfaction and Service Quality (PSSQ) on In-flight Services, PSSQ on In-flight Digital Services and PSSQ on Airline Back Office Operations. The findings of the factor analysis showed that the overall cumulative percentage of variance is 53.686 to in-flight service, 62.239 to in-flight digital service and 72.793 to back-office operations. In this study, passengers are satisfied to the service provided and overall facilities delivered by the airline companies. The study revealed that the passengers are satisfied with the services quality delivered in in-flight service, in-flight digital service and back office operations.

In this study Archana and Subha (2012) concluded Failure to provide quality services to passengers may damage the formation of airline image and cause negative impact on passengers' behavioural intentions. These findings imply that airline companies' in-flight service quality depends upon the different delivery strategies deployed. Ali et al. (2013) conducted a research "an assessment of service quality and resulting customer satisfaction in Pakistan International Airlines". The target population for this study was defined as all passengers having flown with PIA in the last 12 months. 848 questionnaires were distributed, of which 498 questionnaires were handed back. The survey model that was used in this study is the AIRQUAL model. This scale has five distinct dimensions, namely airline tangibles, terminal tangibles, Personnel, empathy, and image. The findings of this study indicate that airline tangibles ( $\beta=0.608$ ;  $t\text{-value}=3.998$ ;  $p=0.03$ ) has as significant influence on customer satisfaction. Terminal tangibles ( $\beta=0.411$ ;  $t\text{-value}=2.366$ ;  $p=0.000$ ) has a significant influence. Personnel has a significant effect on customer satisfaction ( $\beta=0.500$ ;  $t\text{-value}=4.603$ ;  $p=0.000$ ), empathy as well has a significant influence on customer satisfaction ( $\beta=0.391$ ;  $t\text{-value}=2.137$ ;  $p=0.02$ ). Lastly, Image ( $\beta=0.558$ ;  $t\text{-value}=4.617$ ;  $p=0.000$ ) has a significant influence on Customer satisfaction. The result of the regression analysts show that airline tangible has the highest influence followed by image, Personnel, terminal tangible and empathy respectively. Ali et al. (2013) recommend the company should be able to create high perceptions using

tangible cues such as aircraft's exterior and interior appearance and terminal appearance, and should also recruit and train human resources to provide a personalized service and ensure empathy, which seem to be highly important to customers. Moreover, PIA should update their catering service facilities, as this is one of the major components of service quality in airlines.

Another study by Ekiz and Hussain (2006) "perception of service quality in North Cyprus airline industry: a path analysis application" also adopted the AIRQUAL model to overcome the psychometrical application problem of existing quality scale. Out of the 610 questionnaires, distributed only 583 questionnaires were found to be useful and used in the analysis and conclusion. The sampling that was used in this study non-probability judgmental techniques. The study used path analysis to test hypothesis and findings showed that airline tangibles have a significant positive effect on both customer satisfaction and repurchase intentions and the same is true for the four dimensions namely, Terminal tangible, personnel, empathy and image. The study depicts that service quality dimensions jointly explain 68% of the variance in customer satisfaction.

According to the results of the study, Ekiz and Hussain (2006) recommended that in order to better satisfy their customers National airline should give importance to physical equipment such as aircraft's exterior and interior appearance, efficient cargo handling procedures, technical maintenance of aircraft at regular intervals. Personnel should be trained and highly qualified in order to better understand and service the customers. Moreover, they should update their catering service facilities. Especially in the field of marketing, the company should recruit qualified personnel. However, most of the researches made on Ethiopian Airlines in contracting quality management merely with customer satisfaction, or not enough as the airlines is an abundant airline in the Africa and could grow internationally. Therefore, in the research I will cover the airlines total quality management practice and its effect on the performance of the airlines.

According to Joiner (2017); Total quality management and performance have a positive relationship specially focused on examining the moderating effects of co-worker support and organization support on the TQM/performance relationship. Turning to the TQM literature, in a comparative study of non-TQM and TQM organizations, Allen and Brady (1997) found that perceived organization support was higher in TQM organizations than non-TQM organizations. Further, another comparative TQM/non-TQM study focusing on firms in the motor vehicle parts TQM and performance and accessories industry, demonstrated that respondents in TQM

firms were more satisfied with top management support, commitment and encouragement (important elements of overall organization support) compared to non-TQM firms (Golhar et al., 1997). Both these studies provide empirical evidence of the significant role of organization support in firms implementing TQM practices for positive performance of the organization itself. In organizations characterized by greater focus on organization support, greater implementation of TQM practices will be positively associated with organization performance.

According to Joiner (1997) the degree of implementation of TQM practices was positively related to organization performance. The research reinforces Douglas and Judge's (2001) assertion that mere rhetoric about concern for quality will not guarantee success; it is the extent of implementation of TQM practices that is related to favourable outcomes. This study also found that an environment of support within the organization enhances the effectiveness of TQM implementation, confirming the appropriateness of a contingency theory approach to the successful implementation of TQM. More specifically, organization support that encourages a positive reciprocal relationship between employees and their organizations, and strong collegial support that promotes sharing knowledge in an encouraging, supportive manner produce a synergistic effect on the TQM/performance relationship. That is, although the result demonstrates that the implementation of TQM practices is associated with improved performance, an environment of support (derived from the organization and co-workers) provides a synergistic "boost" to organizational performance. This finding is novel to the TQM Conditional effects on the relationship between TQM practices and performance literature. It is consistent, however, with the more recent TQM literature that highlights the value of integrating human resources management into the TQM process (Fok et al., 2000; Lam, 1995; Montes et al., 2003). Human resource management practices (which include the provision of a supportive organization environment) can be used to reinforce employees' commitment and dedication to improving the quality of products and services. Future research could consider a number of other human resource related practices to explore the interactive effect of that practice on the TQM/performance relationship. Within this context, human resource practices of potential consideration could include: useful feedback from co-workers (Zhou, 2001), reward systems (particularly bonus reward systems related to new ideas) and employee training and development for creativity and lateral thinking.

### **2.5.1. MANAGERIAL IMPLICATIONS**

This study has important implications for managers. First, it motivates managers (and provides a justification) to invest in the time and resources to implement TQM programs. Based on the results of this study, the implementation of TQM practices is associated with enhanced organization performance. Second, this study signals the importance of ensuring a supportive organizational environment for the effective implementation of TQM. Evidence from this study suggests that organizations should develop an environment or “culture” of support, which includes fostering support among co-workers, for the effective implementation of TQM. If employees do not feel there is sufficient acknowledgement and support from the organization and from colleagues with whom they work, then firms may not reap the benefits of TQM programs and performance will decline.



## **CHAPTER THREE**

### **3 RESEARCH METHODOLOGY**

#### **3.1 RESEARCH APPROACH AND DESIGN**

In this study, both qualitative and quantitative data should be generated to address the research questions under focus. Therefore, a mixed research approach that allows to collect and analyse quantitative and qualitative data is adopted for the study.

The correlation study is frequently used as a means for looking for relations between variables when experiments cannot be done to collect and examine the data. The study design is appropriate to investigate associations among variables (Davis, Gamble, Humphries, Mitchell, & Pendergrass, 2011). The goal of the research was to explain or explore in-depth a unit of analysis in order to identify and determine if there is a relationship between two or more variables. In general, a correlation study is a quantitative method of research in which two or more quantitative variables are from the same group of subjects (Waters, 2011). The correlation design was well suited as preliminary research to determine the need for further studies that can be done to evaluate cause and effect relationships between variables and inferential methods of analyses (Lappe, 2000).

This research will have a mixed research approach with descriptive and correlation design, which will involve collecting data from a given sample. In this research, old and new ideas will be discussed. This research will consist a survey while collecting data, which is descriptive. A survey will describe an event by questioning the sample group regarding their perception about a specific mater, their behaviour or their value.

#### **3.2 DATA TYPE AND SOURCE**

This research collected primary data and secondary data. The researcher used primary data due to the fact it is more reliable, accurate and current as the researcher herself collected the data. In order to acquire the primary data, the researcher herself used the following methods,

Structured and unstructured questionnaire was distributed, interview was made, and direct observation and group discussion will take place for the sake of having an accurate response.

The questionnaire was distributed in a yes or no and an open-ended format, so that some of the question could be easy for the respondent. These questionnaires are considered the fastest and easy work for the researcher compared to the interviews and observations. In addition to that, to have enough response the questionnaires was translated in two different languages, English and Amharic, which are the local language in Ethiopia. These two alternatives languages were given for the respondent as the researcher had a previous problem on the questionnaires and some peoples have many ideas but did not know how to put it in writing in English or some could not understand the question quite enough for being able to give the accurate answers. The questionnaire was distributed to the employee of Ethiopian airlines from bottom to top that has been chosen as a sample. With some of those people, the researcher will make an interview and a group discussion with some.

### **3.3 TARGET POPULATION AND SAMPLING**

Sampling is defined as the selection of a small group of people from a larger population to represent that population on the basis of a judgment or inference made about the aggregate or totality (Kothari, 2007). The total permanent employee of the airlines is 13,942 and the total employee works at the office are near to 3000 the rest of them are an employee working out of Addis Ababa and some are field workers, then 130 employees satisfied the criteria that is, professional employees which are an office worker who has an educational background of degree and above with a minimum of 5 years of work experience. Using Kothri (2007), sampling size determined formula the sample population become 131. The six sampling units for this study are heterogeneous, therefore this heterogeneous groups are divided into different homogeneous groups (strata) based on the departments that are, Operating officer, Commercial officer, Financial officer, corporate and HRM, Aviation Academy, Alliance and Corporate strategy planning. This study used a stratified random sampling to give equal chance for each stratum.

For this study, sampling size is determined using Kothari (2007) formula.

$$n = \frac{Z^2 * N * P * q}{e^2(N-1) + Z^2 * P * q}$$

Where;

N= target population size

n= required sample size

Z= confidence level 95% (standard value of 1.96)

e= margin of error at 5%

p= population proportion at which the sample size is maximum at (p=0.5, q=0.5 and p\*q=0.25) where q=1-p

$$n = \frac{3.8416 * 130 * 0.5(1-0.5)}{0.0025(130-1) + 3.8416 * 0.5(1-0.5)} = \underline{96}$$

### **3.4 DATA ANALYSIS**

From the response given to the questionnaires, descriptive and correlation method were used to analyse the situation of TQM practice and quality management In Ethiopian airlines. The Statistical Package of Social Sciences (SPSS) software was used.

### **3.5 ETHICAL CONSIDERATION**

The questionnaires and the interview were conducted up on the willingness of the respondent. All information given by the respondent were 100% kept confidential and the names of the interviewees were kept anonymous. The data generated and the results of the study are also promised to be kept confidential to keep the business secret of the company.

## CHAPTER FOUR

### 4 RESULT AND DISCUSSION

#### 4.1 INTRODUCTION

This study aims to find the relationship between TQM and Performance. On this chapter the findings that was acquired by the researcher will be presented. This finding were acquired with the questionnaires, Interview and other secondary data. The response was systematically reviewed and analyzed using descriptive and correlation design with the statistical package. From the total 96 questionnaires distributed, 70 (73%) are returned and the remaining 26 (27%) was not returned and incomplete.

Table 4.1 Position, educational level and experience of the respondents

Variables	Responses	Frequency	Percentage(%)
Educational level	Diploma	2	3
	First Degree	43	61
	Masters	22	32
	PHD	3	4
	Total	70	100.0
Position	Management	9	13
	Supervisor	22	31
	Professional	39	56
	Total	70	100.0
Experience	5-10 years	34	49
	11-15 years	15	22
	16-20 years	13	18
	20 years and above	8	11
	Total	70	100.0

Source: Own Survey Data (2018)

## 4.2. TQM AND ITS PILLARS

On this section, the researcher will discuss the main part of TQM and its pillars, which are Satisfying customer, system/process, people and improvement tools, which are the mentioned on the beginning of the first chapter. These pillars will help the reader to classify the point of views. ON the beginning for satisfying customer, we have classified five specific questions that has addressed the first Pillar .Those are, the customer is satisfied with the service they get, our company strives to delight our customer, service improvement is done with the customer in mind and the company has provided an avenue for customer to provide feedback on service quality.

Table 4.2 Satisfying customer

Variables		Responses	Frequency	Percentage(%)
Satisfying customer	The customers are satisfied with the service they get	Strongly disagree	1	1.4
		Disagree	4	5.7
		Neutral	6	8.6
		Agree	39	55.7
		Strongly agree	20	28.6
		TOTAL	70	100.0
	Our company strives to delight our customers	Strongly disagree	1	1.4
		Disagree	4	5.7
		Neutral	6	8.6
		Agree	40	57.1
		Strongly agree	19	27.1
TOTAL		70	100.0	
		Strongly disagree	3	4.3

	Service improvement is done with the customer in mind	Disagree	4	5.7
		Neutral	2	2.9
		Agree	34	48.6
		Strongly agree	27	38.6
		TOTAL	70	100.0
	The company has provided an avenue for customers to provide feedback on service quality	Strongly disagree	0	0
		Disagree	0	0
		Neutral	4	5.7
		Agree	45	64.3
		Strongly agree	21	30.0
TOATL		70	100.0	

Source, own survey (2018)

From the above table 4.3.1, out of the 70 respondent 39(57%) and 20(27%) has agreed and strongly agreed respectively that the customers are satisfied with the service they get. The rest 6(9%), 4(6%) and 1(1%) had neutral, disagree and strongly disagree respectively that the customers are satisfied. In addition to that 40(57), agree, 19(28) strongly agree that the company is working hard to delight the customer, while the same respondent who disagree for the customer satisfaction has again disagreed that the company strives to delight the customer. From the respondent 34(48.6%) agree, 27(38.6) strongly agree that the service is done with the customer in mind. Whereas the rest 3(4.3%),4(5.7%), disagree and strongly disagree respectively, whereas the rest 2(2.95) don't want to comment on the case. From the respondent no one disagree that the company has provided an avenue for feedback on service quality rather 4(5.7%) are neutral. 45(64.3%) and 21(30%) of the respondent has agreed and strongly agreed

respectively. Based on the statements on the first and second chapter, it was seen that customer satisfaction control is one way of quality management, where a company could benefit from through the performance. In addition to that, Failure to provide quality services to passengers may damage the formation of airline image and cause negative impact on passengers' behavioural intentions, which was recommended by archan, 2012. Therefore, we see here that most of the employee has agreed that the airline is satisfying its customer, which will lead to better performance and better image of the airline.

Table 4.3 System. Process

Variables		Responses	Frequency	Percentage(%)
System Process	There are well established quality standards in the company	Strongly disagree	0	0
		Disagree	4	5.7
		Neutral	6	8.6
		Agree	33	47.1
		Strongly agree	27	38.6
		TOTAL	70	100.0
	Hiring qualified employees in their areas of specialty	Strongly disagree	2	2.9
		Disagree	5	7.1
		Neutral	9	12.9
		Agree	18	25.7
		Strongly agree	36	51.4
		TOTAL	70	100.0
	Strongly disagree	1	1.4	

	Cooperation wisely with the aircraft and other suppliers	Disagree	4	5.7
		Neutral	8	11.4
		Agree	35	50.0
		Strongly agree	22	31.4
		TOTAL	70	100.0
	Adopting latest information technology in operations(aircraft, systems at the offices and operations)	Strongly disagree	1	1.4
		Disagree	4	5.7
		Neutral	6	8.6
		Agree	41	58.6
		Strongly agree	18	25.7
TOATL		70	100.0	

Source, own survey (2018)

From the respondent 33(47.1%) has agreed that there are well established quality standards in the company, 27(38.6%) has strongly agreed. Even though no respondent has strongly disagreed to the matter, but 4(5.7%) has disagreed while the rest 6(8.6%) has chosen neutral. 36(51.4%) of the respondent strongly agree that employees are hired in their area of speciality, 18(25.7%) agreed while the 9(12.9%), 5(7.1%) and 2(2.9%) has chosen to be neutral, disagree and strongly disagree respectively. 35(50%) of the respondent has agreed to the company strategy to keep good relation with the aircraft supplier. At the same time 22(31.4%) has strongly agreed. 8(11.4%) chosen to be neutral while 4(5.7) and 1(1.4%) have disagree and strongly disagree respectively. Out of the total 70 respondents, 41(58.6%) and 18(25.7%) has agreed and strongly agreed that the airlines have adopted latest information technology. The rest 6(8.65) are neutral, 4(5.7%) have disagreed and 1(1.4%) has strongly disagreed. According



to the statement on the second chapter, to satisfy customers, airlines should equip with latest technology and maintained aircrafts.

Table 4.4 People

Variables		Responses	Frequency	Percentage(%)
People	Training employees in their areas of specialty	Strongly disagree	0	0
		Disagree	4	5.7
		Neutral	6	8.6
		Agree	32	45.7
		Strongly agree	28	40.0
		TOTAL	70	100.0
	Our management readily delegates duties to all staff	Strongly disagree	2	2.9
		Disagree	15	21.4
		Neutral	4	5.7
		Agree	20	28.6
		Strongly agree	29	41.4
		TOTAL	70	100.0
	The Company arranges team building activities from time to time	Strongly disagree	1	1.4
		Disagree	9	12.8
		Neutral	6	8.6
		Agree	36	51.5
		Strongly agree	18	25.7
		TOTAL	70	100.0

The Company allows employee some time off duty to go for further studies	Strongly disagree	1	1.4
	Disagree	6	8.6
	Neutral	6	8.6
	Agree	38	54.3
	Strongly agree	19	27.1
	TOATL	70	100.0

Source, own survey (2018)

From the total 70 respondents, 32(45.7%), 28(40%), has agreed and strongly agreed that the company is training the employee while the rest 6(8.6) and 4(5.7%) has chosen to be neutral and disagree respectively. 29(41.4%) and 20(28.6%) strongly agree and agree that the top management readily delegate duties to all staff whereas the rest 15(31.4%) Disagree, 2(2.9%) strongly disagree and the rest 4 choose neutral. From the total respondent, 36(51.5%), 18(25.7%) has agree and strongly agree that the company arranges team building activities from time to time. 9(12.8%) has disagreed while 1(1.4%) has totally strongly disagree and the rest 6(8.6%) are neutral. In addition to that the company allows employee off duty point has 1(1.4%) respondent has strongly disagreed, 6(8.6%) respondent has disagreed and the same rate of respondent choose neutral whereas the large population, 38(54.3 and 19(27.1%)) has agree and strongly agreed respectively. Most of the employees have agreed that they are getting what they want, which is an input for effective and efficient employees.

Table 4.5 Aviation academy performance

	Year to Date			
	Admission		Graduation	
	Actual	Target	Actual	Target
Pilots	94	116	99	122
Technicians	301	400	335*	174
Cabin crew	234**	300	195	250
Marketing + Finance	623***	350	400	350
<b>Total</b>	<b>1,252</b>	<b>942</b>	<b>1,126</b>	<b>896</b>

Source, ET, 2013/2014 annual report

Table 4.6 Improvement Tools

Variables		Responses	Frequency	Percentage(%)
Improvement Tools	Different departments in the Company work as a team to deliver on organizational goals	Strongly disagree	1	1.4
		Disagree	9	12.9
		Neutral	6	8.6
		Agree	36	51.4
		Strongly agree	18	25.7
		TOTAL	70	100.0
	Creating an easy way for customers to reach what they want, might be through website or tele phone or a call	Strongly disagree	1	1.4
		Disagree	3	4.3
		Neutral	5	7.1
		Agree	42	60.0
		Strongly agree	19	27.1
		TOTAL	70	100.0
	The company sponsors employees for seminars and conferences in areas of specialty for continuous improvement	Strongly disagree	4	5.7
		Disagree	20	28.6
		Neutral	9	12.9
		Agree	25	35.7
		Strongly agree	12	17.1
		TOTAL	70	100.0
		Strongly disagree	4	5.7

Senior management in the Company take active roles in issues concerning quality management	Disagree	20	28.6
	Neutral	9	12.9
	Agree	25	35.7
	Strongly agree	12	17.1
	TOATL	70	100.0

Source, own survey (2018)

From the total respondent, 36(51.5%), 18(25.7%) has agree and strongly agree that different department in the company work as a team to deliver on organizational goal. 9(12.8%) has disagreed while 1(1.4%) has totally strongly disagree and the rest 6(8.6%) are neutral to the case. Almost more than half of the respondent, 42(60%) agree that the company has created an easy way for customers to reach what they want, with the 19(27.1%) strongly agreed respondents whereas 5(7.1%) chose neutral, 3(4.3%) and 1(1.4%) disagree and strongly disagree respectively. 20(28.6%) of the total respondent has disagreed that the senior management in the company take active roles in issues concerning quality management, with 4(5.7%) strongly disagreeing. On the other side 25(35.7%) agree, 12(17.1%) strongly agree to the case while the rest 9(12.9%) are neutral. The airline is using a lot of strategy to improve its service which includes by giving seminar to the employee, providing easy way for customers to communicate and so on. In addition, Ethiopian airlines was named the 2015 Airlines of the year at the CAPA aviation award of excellence. The greatest impact on the development of the airlines industry, established itself as a leader and provided benchmark for others to follow (CAPA, 2016). This shows that the airlines is showing continuous improvement which led to good performance.

### 4.3. PERFORMANCE

Out of the total 70 respondents, 39(55% ) agrees that after the implementation of TQM, the company has shown a positive change, with the 18 (26% )strongly agreeing to the matter while the rest5( 7%) and 8(12%) choose not to agree and be neutral respectively.

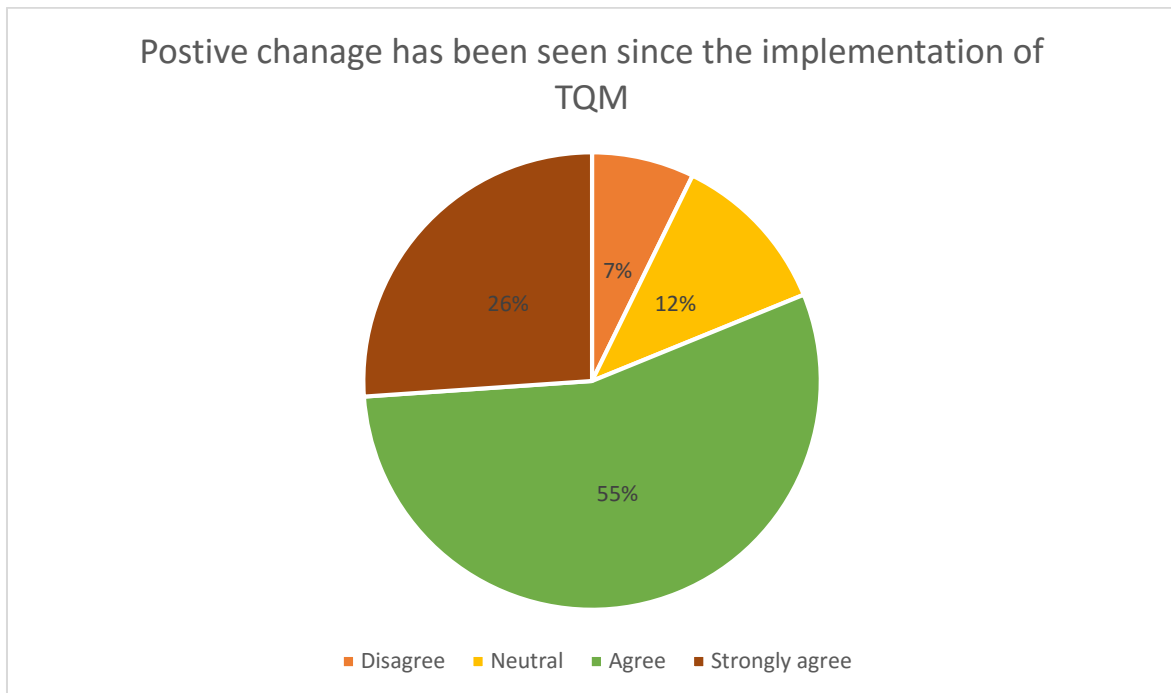


Figure 4.1 Positive change observed by employee

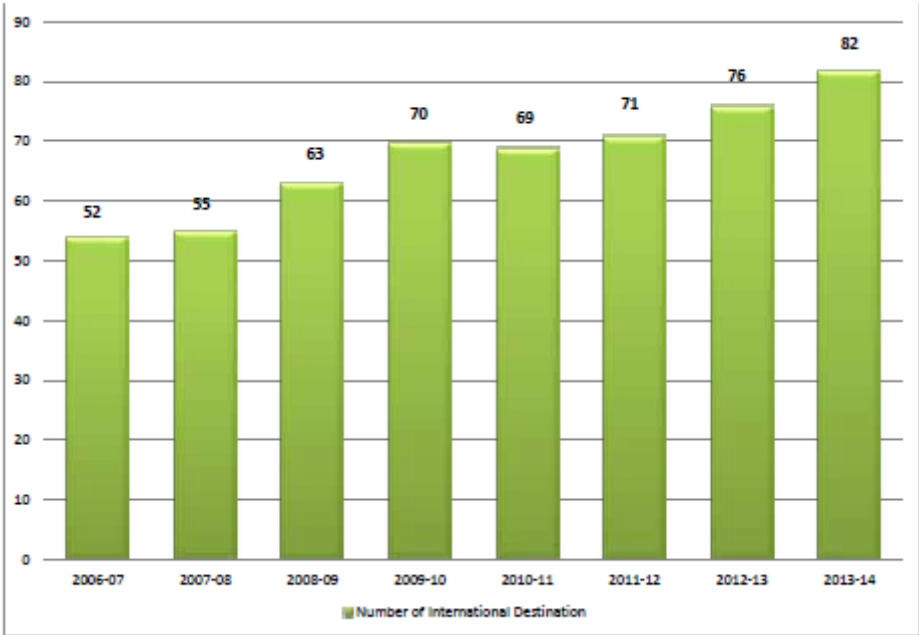
Source, Own survey (2018)

Table 4.7. New destination and an increase of passenger annually

Variable	Response	Frequency	Percentage(%)
New local and international destination has been opened	Strongly Disagree	1	1.4
	Disagree	4	5.7
	Neutral	8	11.4
	agree	40	57.1
	Strongly agree	17	24.3
	<b>Total</b>	<b>70</b>	<b>100.0</b>
The annual passenger with the company has increased	Strongly Disagree	0	0
	Disagree	0	0
	Neutral	4	5.7
	agree	45	64.3
	Strongly agree	21	30.0
	<b>Total</b>	<b>70</b>	<b>100.0</b>

Source, Own survey (2018)

New destinations are being opened, only in the 2016, four new destination was opened, which are Hawasa, Goma, yaounde and durban. This show that the airlines is attaining its goal which was mentioned on the beginning of this study. Refereing Table 4.6 the new destination has increased yearly.



Figures4.2 New destinations since 2007/2014

Source, Et annual report 2013/14

#### 4.4. CONTINUOUS IMPROVEMENT

39(55.7%) has agreed the company is showing continuous improvement with the 18(25.7%) strongly agreeing to the matter. In opposite 1(1.4%) and 4(5.7%) strongly disagree and disagree while the rest 8(11.4%) are neutral.

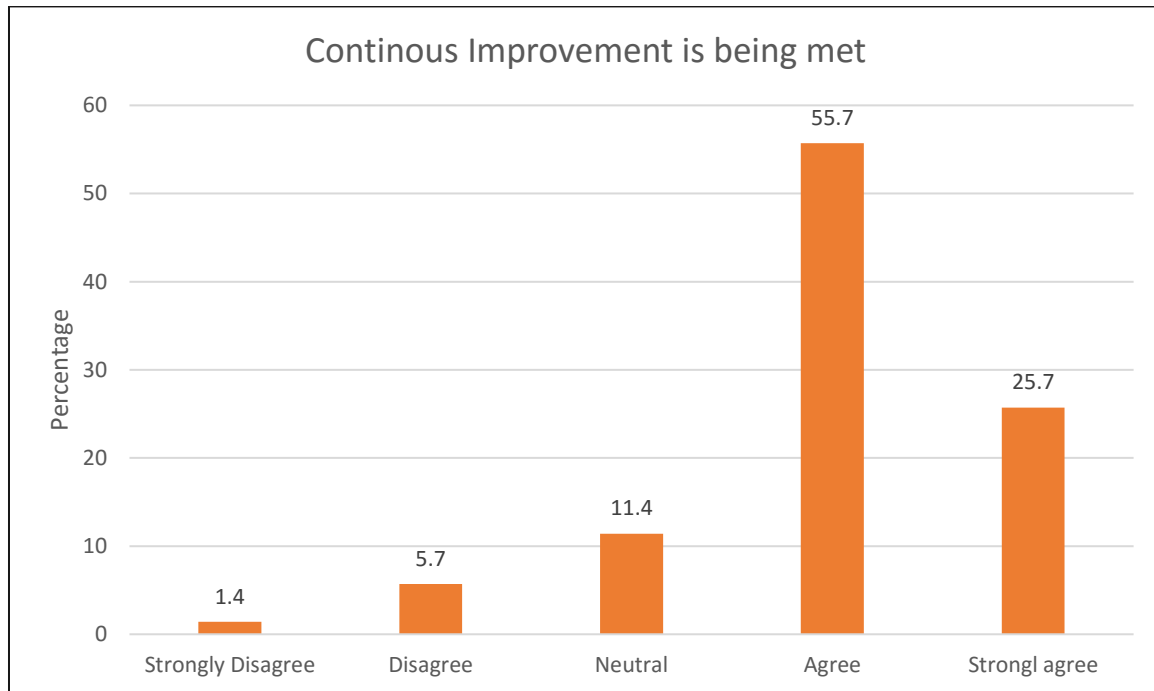


Figure 4.3 Continuous improvement of Ethiopian Airlines

#### 4.5. CORRELATION OF TOTAL QUALITY MANAGEMENT AND PERFORMANCE

Correlation is another way of assessing the relationship between variables. To be more precise, it measures the extent of correspondence between the ordering of two random variables. There is a large amount of resemblance between regression and correlation but for their methods of interpretation of the relationship. For example, a scatter diagram is of tremendous help when trying to describe the type of relationship existing between two variables. It measures the “strength” or the “extent” of an association between the variables and its direction. The result of a correlation analysis is a Correlation coefficient whose values range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a

positive[linear ] manner, a correlation coefficient of -1 indicates that two variables are perfectly related in a negative [linear ] manner, while a correlation coefficient of zero indicates that there is no linear relationship between the two variables being studied (Gogtay, 2016).

The researcher has interpreted the response acquired from the respondent by analyzing the correlation of the four major pillars of TQM as stated on the beginning of the first chapter in comparison with the performance of the airlines. From the table 9, it is seen that the five pillars of TQM are inter correlated with each other and correlated with the performance as well. From the whole correlation, the correlation between people and performance is the highest with the correlation.

Table 4.8. Pearson Correlation between TQM (Satisfying customer, people, system, improvement tools) and performance

<b>Variables</b>	<b>Satisfying Customer</b>	<b>People</b>	<b>System/ Process</b>	<b>Improvement tools</b>	<b>Performance</b>
Satisfying Customer	1	0.831*	0.895*	0.911	0.916*
People		1	0.810*	0.813*	0.936*
System/ Process			1	0.911*	0.903*
Improvement tools				1	.923*
Performance					1

\* Correlation is significant at  $p < 0.01$  level (2-tailed).

**Source:** Own survey result (2018)



## **CHAPTER FIVE**

### **5 CONCLUSION AND RECOMMENDATION**

#### **5.1 CONCLUSION**

The main objective of this study was to assess the relationship between the four pillars of TQM such as Satisfying customer, System. Process, people and improvement tools with Performance in case of Ethiopian Airlines. Based on the finding that were explained on the chapter four, the below conclusion was drawn. To achieve this purpose, basic research question was raised at the beginning of the study, Whether TQM has been implemented or not and how did it affect the company. The researcher incorporated respondents from different education qualification, work experience, and department then asses the relationship between TQM and performance. It has been discussed in other researches that quality service has a positive effect on performance.

Based on the overall findings the researcher concluded that the application of TQM practice can lead to improvements in overall performance. The researched concluded, there is high correlation between TQM and performance and this analysis was made by dividing the TQM n to the four pillars as stated on the beginning of the first chapter. The researcher has concluded that customer satisfaction, well established quality standards and systems, happy and satisfied employee of the company and tools and techniques that assure the continuous improvement all has a big positive effect on the performance of the company. As long as there are satisfied and happy employee, there will always be delighted and satisfied customers, which will contribute to the increment of number of passenger annually. As the passenger increases, the company will provide additional inputs to allocate the new demand that was created. This might be buying new aircraft, adding more employees and training the employees for higher capability, adding more destination and more flights per week. So most of the variables were highly correlated, means they have huge influence on each other. Ethiopian airlines is generating its revenue mostly from international passenger and cargo. This show that the airlines is more dependent on few business lines and it can easily be affected by external and internal factors,

## 5.2 RECOMMENDATION

Basing on the findings, in order to have delighted customers and excellent performance, the following recommendation are to be considered.

There is high relationship between happy employee and happy customer, so the company should focus from the base of It's soul, which are the employees of the company. As seen on the findings and conclusion happy employee, happy customer, So the company should give priority to its employee. Employees tend to be more effective, when they are working in good environment, with motivational incentives, like increasing annual leave, by training the employee for a better ability and making them part of the decision making in a limited boundary. Making the employee be part of the ownership, by giving 10%-15% of the company's equity. By making the employee feel the ownership of the company, save any waste that could come from negligence or by avoiding non- belongingness.

Creating an equal chance of discussing, with no fear between the professionals and top managements. Let no manager can make any decision by himself or herself, rather it should be by percentage (25%-30% decision come from Labor union or the representatives of the employees). Get feedback from each and every passenger, it could be on the aircraft, at check in, at boarding, at ticket office and everywhere, so that the complaint and suggestion that comes from the passengers could be changed in to an asset for a better quality service for other and for next time.

In order to keep the brand all over the world, the airlines should bring new and latest technology and working closely with other developed airlines, which Ethiopian Airlines will be benefited. Especially by focusing in to more codeshare agreements that will allow the airlines to fly to more destinations that the airlines is not currently flying.

The fact that Ethiopia is one of the place to be visited by tourists, many tourists will in flow to the country. This is one big opportunity for the Airline to expand its lines of business by collaborating with hotels, tours and car rentals. If the airlines partner with the above listed service supplier, many passengers will prioritize Ethiopian airlines due to the direct connection to other domestic destination. This way the airlines can arrange a tour package with hotel and car rentals.

In addition to that, the airlines is highly depending on one specific business line, which is international passengers. The airlines should increase the percentage of other revenue sources like catering, cargo and hotels. This way the airline is guarantee for its strength at the time of storm on the aviation industry. Working with the airport and aviation authority of Ethiopia would positively benefit the airlines, considering it is national flag carrier.

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# APPENDIX I Ethiopian Airlines customer satisfaction survey

Ethiopian Airlines Customer Satisfaction Survey using On-Board Questionnaire.																										
<p>Dear Customer,</p> <p>Welcome aboard Ethiopia Airlines.</p> <p>Ethiopian airlines is committed to provide its customers with high standard products &amp; services.</p> <p>Realizing that there is always room for improvement and placing high value on your comments &amp; feedbacks, we are kindly asking you to take a moment to fill out this form, seal and return it to one of the cabin crew.</p> <p>If you have additional comments, you may visit our website at <a href="http://WWW.ETHIOPIANAIRLINES.COM">WWW.ETHIOPIANAIRLINES.COM</a></p> <p>Thank you</p>  <p><b>Ethiopian</b> የኢትዮጵያ THE NEW SPIRIT OF AFRICA</p> <p>A STAR ALLIANCE MEMBER </p>	<p>Dear valued customer,</p> <p>In our continuous effort to ensure the service we offer meets your requirement, we kindly request you to take a few minutes of your time and give us your opinion by completing this questionnaire.</p> <p><b>Flight Information</b></p> <p>Flight No: ..... Date: .....</p> <p>Seat Number: .....</p> <p>Origin (City): .....</p> <p><b>Personal Detail (Optional):</b></p> <p>Name: (First) .....</p> <p>(Last): .....</p> <p>Nationality: .....</p> <p>Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>E-mail: .....</p> <p>Sheba Miles membership No.: .....</p> <p><b>How did you book your flight?</b></p> <p><input type="checkbox"/> Online</p> <p><input type="checkbox"/> Through Travel Agency</p> <p><input type="checkbox"/> Through Ethiopian Ticketing Office</p> <p>If you buy your ticket from Ethiopian Ticketing Office, please indicate the City Location: .....</p> <p><b>What was your reason to choose Ethiopian?</b> (a maximum of three reasons)</p> <p><input type="checkbox"/> Suitable flight schedule <input type="checkbox"/> The only flight choice</p> <p><input type="checkbox"/> Good reputation <input type="checkbox"/> Use of frequent flyer program</p> <p><input type="checkbox"/> Low Price <input type="checkbox"/> Corporate Travel Program</p> <p><input type="checkbox"/> Safety <input type="checkbox"/> Other reason .....</p> <p><input type="checkbox"/> Good Service .....</p>	<p>Which class of service are you travelling today? Cloud Nine Economy</p> <p>What is the purpose of your trip? Business Leisure Visiting friends/ relatives Others (specify) .....</p> <p><b>Flight Schedule</b></p> <table border="1"> <thead> <tr> <th></th> <th>strongly agree</th> <th>Agree</th> <th>Neutral</th> <th>Disagree</th> <th>strongly Disagree</th> </tr> </thead> <tbody> <tr> <td>1. The departure/arrival of this flight is convenient</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>2. The frequency (number of flights per week) to this destination meets my travel requirements</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>3. Ethiopian Airlines route network meets my travel requirements</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p><b>Punctuality of Your Flight</b></p> <p>Was the flight on-time (within 15 minutes of displayed departure time?) <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If the flight departed late, How long was the delay (in minutes) .....</p> <p>Was sufficient delay information communicated at Airport (boarding gate)? <input type="checkbox"/> Yes <input type="checkbox"/> No On-board? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Sheba Miles (only for Sheba Miles members)</p> <p>Are you satisfied with our frequent flyer program? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If you are not satisfied what improvements would you suggest? ..... .....</p>		strongly agree	Agree	Neutral	Disagree	strongly Disagree	1. The departure/arrival of this flight is convenient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. The frequency (number of flights per week) to this destination meets my travel requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Ethiopian Airlines route network meets my travel requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	strongly agree	Agree	Neutral	Disagree	strongly Disagree																					
1. The departure/arrival of this flight is convenient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																					
2. The frequency (number of flights per week) to this destination meets my travel requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																					
3. Ethiopian Airlines route network meets my travel requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																					

**GROUND SERVICES**

**Telephone handling**  
If you called Ethiopian Office for flight booking, what is your rating on the following services?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
* The telephone was answered promptly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* The staff answering the telephone was courteous and helpful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* My inquiry was handled efficiently and quickly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Ticketing Office & Reservation**  
If you have visited Ethiopian ticketing office, what is your rating on the following

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
* Office was clean and tidy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Queue management was efficient-first come first served	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Waiting time was reasonable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Excellent	Highly Satisfactory	Satisfactory	Fairly Satisfactory	Unsatisfactory
* Courtesy and helpfulness of staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Competency of ticketing office staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Attire/grooming of ticketing office staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Information given on flight departure time, meal preference, baggage allowance, safety & security etc. was complete and adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**AIRPORT SERVICES**

At which airport did you check-in for this flight (where did you board this flight?)  
Name of airport/city .....

Did you have to wait in line at the check-in  Yes  No  
Approximate Minutes .....

If yes, was the waiting time acceptable?  Yes  No

What is your rating on the following airport services?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
* The check-in process was quick and efficient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* The check-in area was tidy and had a pleasant environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Excellent	Highly Satisfactory	Satisfactory	Fairly Satisfactory	Unsatisfactory
* Courtesy and helpfulness of airport staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Competence of airport staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Attire/Grooming of airport staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Information given at check-in/boarding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Boarding process efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Clarity of boarding announcement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Airport facilities (Wash rooms/toilets, information, signage, display)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Service by immigration, customs, securities, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Service at transit point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Baggage handling service at departure/arrival	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Delay care management (if any)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Overall rating on airport services and customer handling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Lounge**

Did you have lounge in the course of your trip today?  
Yes  No

What is your rating on the following services at the lounge?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
* The lounge is easy to locate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Sufficient seats were available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* The drinks/snacks offered were to my satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* The staff at the reception desk including other service staff were friendly and helpful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* The room temperature, ventilation & lighting were conducive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* E-mail facilities were up and running	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Adequate reading materials were available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**ON BOARD PRODUCTS & SERVICES**

Flight Attendants (Cabin Crew)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
* Friendly and helpful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Attentive & within reach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Efficient & competent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Satisfied with the performance of the flight attendants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Excellent	Highly Satisfactory	Satisfactory	Fairly Satisfactory	Unsatisfactory
* Attitude and professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Personality and Grooming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Attentiveness/efficiency in answering calls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Language Proficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cabin Environment					
	Excellent	Highly Satisfactory	Satisfactory	Fairly Satisfactory	Unsatisfactory
* Cleanliness & orderliness of cabin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* seat Comfort/leg space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Hand luggage storage space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Working conditions of aircraft facilities utilities and equipment (light, toilet, toilet amenities, air conditioning, seat adjustment facilities', etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meal, Drink, Duty free services					
	Excellent	Highly Satisfactory	Satisfactory	Fairly Satisfactory	Unsatisfactory
* Choice of meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Quality of meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Quantity of meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Choice of beverages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Availability of special meal requested (If you have ordered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Availability & variety of duty free items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertainment					
	Excellent	Highly Satisfactory	Satisfactory	Fairly Satisfactory	Unsatisfactory
* Availability & Quality of in-flight magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Availability & quality of reading materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Timing, selection, variety of movie/ video show	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Condition & functionality of entertainment systems (video, audio, head set, entertainment controlling unit, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Information given by cabin crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Information given by cockpit crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Clarity & adequacy of in-flight announcement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your experience with Ethiopian Airlines					
* What is your overall assessment of Ethiopian Airlines service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* What is the probability that you will fly Ethiopian again?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* Will you recommend Ethiopian airlines to friends, colleagues, relatives and acquaintances?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What aspect of our service do you like most?	.....				
What was it that you were not happy about and that you want us to improve?	.....				
Any other comment on your experience on this trip?	.....				
Thank you, for taking your time.	.....				



## **Appendix II Questionnaires, English Version**

### **TOTAL QUALITY MANAGEMENT PRACTICES AND THE COMPETITIVE ADVANTAGE IN THE AVIATION INDUSTRY IN ETHIOPIA, IN CASE OF ETHIOPIAN AIRLINES.**

Please take a few minutes to complete this questionnaire. This research is completely for academic purpose and it is fully confidential (the information you give and your identity as well). Your honest response will be helpful for this research and for the airlines itself, as the research can change and solve our problems.

#### **SECTION I: GENERAL INFORMATION**

1. Name of the Department of job in the Organization (Optional) \_\_\_\_\_
2. Your position in the organization \_\_\_\_\_
3. Number of years you have worked with the current employer \_\_\_\_\_years.

## SECTION II: TOTAL QUALITY MANAGEMENT PRACTICES APPLIED

4. Below are some of the total quality management practices applied by organizations in gaining competitive advantage and the output of the practice. Please indicate your level of agreement on each in as far as its application in your organization is concerned using the following scale and tick right on the area of scale you agree.

**1= strongly disagree 2=Disagree 3=Neutral 4= Agree and 5= Strongly agree.**

Quality practice and its effect	1	2	3	4	5
The customers are satisfied with the service they get					
Our company strives to delight our customers					
Service improvement is done with the customer in mind					
The company has provided an avenue for customers to provide feedback on service quality					
There are well established quality standards in the company					
Hiring qualified employees in their areas of specialty					
Cooperation wisely with the aircraft and other suppliers					
Adopting latest information technology in operations(aircraft, systems at the offices and operations)					
Training employees in their areas of specialty					
Our management readily delegates duties to all staff					
The Company arranges team building activities from time to time					
The Company allows employee some time off duty to go for further studies					
Senior management in the Company take active roles in issues concerning quality management					
Creating an easy was for customers to reach what they want, might be through website or tele phone or a call					
The company has shown differences in a good way since practicing TQM					

The top management are very friendly to share any ideas with the staff					
TQM practice idea has gone into the mind of all staff and its advantage to the company and its employee as well					

### SECTION III: PERFORMANCE

5. Below are some of the competitive strategies applied by organizations in gaining competitive advantage. Please indicate your level of agreement on each in as far as its application in your organization is concerned using the following scale;

**1= strongly disagree 2=Disagree 3=Neutral 4= Agree and 5= strongly agree.**

<b>Performance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Senior management in the company take active roles in issuing concerning quality management					
The company has shown a positive change since the implementation of TQM					
The company is showing continuous improvement					
The annual passenger has increased					
New local and international					
Weekly number of flights has increased					

6. To what extent have these strategies adopted affected the level of performance of your organization?

- Very great extent     [ ]
- Great extent         [ ]
- Moderate extent     [ ]
- Little extent         [ ]
- No extent             [ ]

7. Is there any tools and techniques applied to ensure continuous improvement and quality control? If yes, please list and explain. ace is one of the tools to improve our quality control.
  
8. Is there any established international standards on quality management and quality assurance developed to increase the performance of the airline? If yes. Does the airline has shown change on performance since the application of the program?
  
9. Does our organization applied the quality control such as the four Cs of TQM (Commitment, Competence, Communication and Continuous improvement).

### Appendix III Questionnaires Amharic Version

እባክዎን ይህንን መጠይቅ ለማጠናቀቅ ጥቂት ደቂቃዎችን ይውሰዱ. ይህ ጥናት ሙሉ በሙሉ ለአካዳሚክ ዓላማ እና ሙሉ በሙሉ ሚስጥራዊ ነው (በተጨማሪም የሚሰጡት መረጃ እና ማንነትዎ). ምርምሩን መለወጥ እና ችግሩን ለመፍታት መሞከር ለምላሽ እና ለጥሩ አዩር መንገዶች ራሱ መልስ በመስጠት የታመነ ምላሽ መስጠት ይረዳል.

**ክፍል I: አጠቃላይ መረጃ**

1. በድርጅቱ ውስጥ የሚሰሩት የሥራ ክፍል ስም (አማራጭ) \_\_\_\_\_
2. በድርጅቱ ውስጥ ያለዎት ቦታ \_\_\_\_\_
3. ከአሁኑ አሠሪ ጋር የሰሩባቸው ዓመታት ብዛት \_\_\_\_\_

0-5 ዓመታት [ ] 6-10 ዓመታት [ ] ከ11-15 ዓመታት [ ]

ከ15-20 ዓመት [ ] ከ21-25 ዓመት. [ ] ከ 25 ዓመት በላይ [ ]

**ክፍል II: አጠቃላይ የጥራት ቁጥጥር አያያዝ ተግባራት ተተግብረዋል**

4. ከዚህ በታች የተዘረዘሩት በተወዳዳሪ ጠቀሜታ እና በተግባራዊ ምርቶች ላይ በድርጅቶች የሚሰሩ አጠቃላይ የጥራት ቁጥጥር ልምዶች ናቸው. በደረጃዎ ውስጥ ያቀረቡት ማመልከቻ በርስዎ ድርጅት ውስጥ ያቀረቡት ማመልከቻ በሚከተለው መጠን መጠንና ጉዳይ በሚስማሙበት ቦታ ላይ ምልክት ለማድረግ እባክዎ የእርሶን የስምምነት ደረጃ ያመልክቱ.

**1 = እጅግ አልስማማም 2 = አለመስማማት 3 = ገለልተኛ 4 = እስማማለሁ እና 5 = ጠንካራነት.**

የጥራት ልምድ እና ውጤቱ	1	2	3	4	5
ደንበኞች በሚያገኙት አገልግሎት ይደሰታሉ					
ኩባንያዎችን ደንበኞቻችንን ለማስደሰት ይጥራል					
የአገልግሎት ማሻሻያ ደንበኛው ከግምት ውስጥ ይገባል					

ኩባንያው ደንበኞች በአገልግሎት ጥራት ላይ ግብረመልስ እንዲሰጡ መንገዶችን አቅርቧል					
በኩባንያው ውስጥ በደንብ የተረጋገጡ የጥራት ደረጃዎች አሉ					
በየትኛውም የችሎታ መስፈርቶች ውስጥ የሰለጠኑ ሰራተኞችን መቅጠር					
ከአውሮፕላኑ እና ከሌሎች አቅራቢዎች ጋር በጥሩ ትብብር					
በቀዶ ጥገና (በአውሮፕላኖች, በቢሮ ውስጥ ያሉ ስርዓቶች እና ቀዶ ጥገና ስርዓቶች)					
በየትኛውም የችሎታ መስክ ሰራተኞችን ማሰልጠን					
የአስተዳደር ስራዎቻችን ሁሉንም ሰራተኞች ግዴታዎችን ለሁሉም ሰራተኞች ያቀርባል					
ኩባንያው ከጊዜ በኋላ የቡድን የግንባታ ስራዎችን ያካሂዳል					
ኩባንያው ለቀጣይ ተጨማሪ ትምህርት ለመከታተል ከሥራ ተዘግቶ ቀጠረ					
በኩባንያው ውስጥ የከፍተኛ አስተዳደር ሥራ የጥራት ቁጥጥርን በሚመለከቱ ጉዳዮች ላይ ንቁ ሚና ይጫወታል					
ደንበኞቻቸው የሚፈልጉትን ነገር ማግኘት እንዲችሉ ቀላል መንገድ በመፍጠር በድር ጣቢያ ወይም በስልክ ወይም በመደወል ሊሆኑ ይችላሉ					
ኩባንያው የቲ.ሲ.ግን ከተለማመዱበት ጊዜ ጀምሮ ጥሩ መግባባት አሳይቷል					
ዋናው አስተዳዳሪ ማንኛውንም ሃሳብ ለሠራተኞቹ ለማካፈል በጣም ምቹ ነው					
የቲ.ሲ.ሲ ትውውጥ ሃሳቡ ለሁሉም ሰራተኞችን እና ለኩባንያው እና ለሱ ሰራተኞችም ጠቃሚ ነው					

**ክፍል ሶስት አፈጻጸም**

5. ከዚህ በታች የተዘረዘሩት የሽምግልና ተወዳዳሪነት በድርጅቶች ተግባራዊ ካደረጓቸው የፍክክር ዘዴዎች ውስጥ ጥቂቶቹ ናቸው። እባክዎን በሚከተሉት ደረጃዎች በመጠቀም በድርጅትዎ ውስጥ ያቀረቡት ማመልከቻ ለጉዳዩ አስፈላጊ መሆኑን ያመልክቱ።

1 = እጅግ አልስማማም 2 = አለመስማማት 3 = ገለልተኛ 4 = እስማማለሁ እና 5 = በጥብቅ ይስማማሉ

<b>አፈጻጸም</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
በኩባንያው ውስጥ የከፍተኛ አስተዳደር ሥራ ጥራት ያለው አስተዳደርን በተመለከተ በአርአያነት የሚጨውቱ ሚናዎች አሉት					
ኩባንያው ከ TQM አፈፃፀም ጀምሮ አዎንታዊ ለውጥ አሳይቷል					
ኩባንያው ቀጣይነት ያለው መሻሻል እያሳየ ነው					
ዓመታዊ ተሳፋሪው ጨምሯል					
አዲስ አካባቢ እና ዓለም አቀፋዊ					
ሳምንታዊ ቁጥር በረራዎች ተጨምሩ					

6. እነዚህ ስትራቴጂዎች ያደረጓቸው የአቅርቦት ደረጃዎች ላይ ምን ያህል ተጽዕኖ አሳድሯል?

- እጅግ በጣም ከፍተኛ የሆነ
- ታላቅ ደረጃ
- መጠነኛ ገደብ
- አነስተኛ ደረጃ
- ወሰን የለውም

7. ቀጣይነት ያለው ማሻሻያ እና ጥራት ቁጥጥርን ለማረጋገጥ የሚረዱ መሳሪያዎች እና ቴክኒኮች አሉን? አዎ ከሆነ እባክዎን ይዘርዝሩ እና ያብራሩ። ንቃት ለማሻሻል ከሚረዱ መሳሪያዎች አንዱ ነው።

የጥራት ቁጥጥር.

8. የአየር መንገዱን አፈፃፀም ለመጨመር የተጠናከረ ጥራት ያለው አያያዝ እና የጥራት ማረጋገጫ ዓለም አቀፍ ደረጃዎች አሉን? እሺ ከሆነ. አየር መንገዱ ከፕሮግራሙ አተገባበር ጀምሮ በአፈፃፀም ላይ ለውጥ አሳይቷልን?

9. ድርጅታችን የአራት ሴሲስ (የቃል ኪዳን, የክህሎት, የመገናኛ እና ቀጣይ መሻሻል) የአራት ሴዎችን ጥራት ቁጥጥርን ተግባራዊ አድርጓል።

