



INVESTIGATING IMPROVEMENTS IN EMPLOYEE SATISFACTION AND ATTITUDES
THROUGH TOTAL QUALITY MANAGEMENT IN UAE AVIATION INDUSTRY

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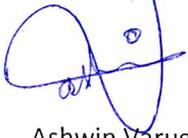
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Thanking You
Yours Sincerely,

Arun Balakrishnan



ABSTRACT

This research investigated the role of TQM practices in improving employee satisfaction in the UAE aviation industry. Quality improvement increases investment returns and market share which has a positive impact on tactical performance areas and reducing costs of manufacturing. TQM is an art that manages all the operations in order to achieve excellence and implementing TQM ensures further organizational changes of how they carry out activities to eliminate inefficiency, increase levels of customer satisfaction, and obtain the best practices. TQM not just focuses on product quality, but it also focuses on the employees' quality. Companies that have successfully implemented TQM are dependent highly on the changes in the activities and attitudes of employees. They also offer substantial gains in productivity to companies in the long-run, even though setting the related systems did not lead to substantial change in productivity before winning award. The method adopted for carrying out this research is quantitative in nature and a survey questionnaire consisting of 29 items was formulated to obtain responses from 100 respondents from the UAE aviation industry. These participants included management teams, supervisors, workers and technicians. The questionnaire consists of statements that are constructed on Likert scale so that it is easier for the participants to choose their responses. Moreover, close-ended questions do not deviate the participants from the topic of this research and do not provide irrelevant answers. Quantitative data gathered from the survey is assessed using statistical techniques using SPSS. The results show that education and training, employee empowerment, customer focused and teamwork have a positive effect on employees' job satisfaction level. All these aspects related to job attitudes enhanced as the practices of TQM increased in the company. The degree to which the teamwork involves top management or leadership, it is crucial that the leader or the top management is committed highly with the TQM practices. Additionally, it is important for the managers to train their employees to work as a team to achieve the shared organizational goals. Hence, it is clear that TQM practices do have a positive impact on the satisfaction levels of the employees working in the UAE aviation industry. Moreover, it is recommended that UAE aviation companies must focus on complete application of TQM practices to increase their employee satisfaction levels as well as increase their employee and customer retention.

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CHAPTER 1: INTRODUCTION

1.1 Background

In today's world organizations experience major changes in their operations with the changes taking place in competition both internationally and domestically. This increase has developed a turbulent and a hostile environment for various companies in the world. The pace with which the technological advancements are taking place is further adding pressure to competition, moreover, regulators and consumers are becoming demanding each day (Christina, 2005). There are a number of factors that a company can apply in order to overcome the environmental turbulence to obtain a sustainable competitive edge over the competition in its industry and to meet consumer demand. Good quality performance is of utmost importance for gaining organizational success. In order to be successful in competitive markets an organization must have good quality performance and systems of quality improvement in position (Eslamy et al., 2014; Oakland, 2015).

Organizations have started realizing the involving employees and their satisfaction also play an important role to their quality performance and quality improvement, which makes them essential to the strategy of TQM (Total Quality Management) (Zakuan & Norhayati, 2012). It means that the success of an organization in terms of quality performance and improvement is dependent on the performance of employees and continuous improvement in their performance based on a well-thought strategy of performance management as it ensures sustainable improvement in quality of an organization. Lyons (2013) stated that it is important to develop employee management process that provides understanding of what should be achieved at organizational level. This will help align the objectives of an organization with agreed measures, competency requirement, development procedure, results delivery and skills by employees.

Companies operating in a highly dynamic and a competitive environment require to improve continuously to enhance their capabilities and performance. An important determinant and success factor for a company's survival in such circumstances is the implementation of TQM (Total Quality Management). TQM, led by the senior management can develop an organization's culture that focuses on continuous improvements and customer satisfaction by complete involvement of employees (Bessen, 2002). TQM was first effectively applied by Japanese manufacturing and services industries, but not most industries have recognized the positive effect of TQM's implementation and how it improves corporate performance. It has significant benefits associated to it such as development of positive employee relations, improves customer satisfaction, operating processes and company performance (Singh & Ahuja, 2013). Organizations should use methods and concepts of improvement to achieve total quality in order yield these benefits (Talib & Rahman, 2015).

Increased liberalization and globalization in extremely tough conditions pose opportunities and challenges to the aviation industry and ensures they promote quality in services and products they offer. The competition is continuously increasing, therefore, business dynamics and pressure, changes in customer environment, and operational performance are considered to be the most important problems and they generate significant interest in researchers and managers. Performance based on quality is an efficient approach for a business in order to improve their competitive advantage (Allan, 2017).

Implementation of TQM requires a major transformation of culture in the organization for involving employees at each level (Sadikoglu & Olcay, 2014). Also, an environment must be developed for the organization to understand TQM concepts and employees must work together continuously to satisfy the needs of customers (Baker, 2013). Involvement of employees is an important element in assessing TQM culture. Demirbag et al., (2006) stated that to attain a highly motivated and an involved workforce the most important feature is to implement a successful TQM system. Therefore, companies should put in effort for involving their employees for improving quality, both as teams and individually.

Companies, in the recent years, are becoming more focused on TQM which leads them to achieve increased loyalty and performance of employees and increases customer satisfaction. With the increase in global competition, principles of quality management and active management of quality are given significant importance by management and leadership of the organization in order to meet customers' requirements and to achieve success (Faloudah et al., 2015). In management literature, attention is paid to loyalty and satisfaction of employees. Employees' loyalty and satisfaction is of utmost value to the organization as they work towards achieving service quality and continuous improvement. Samson & Terziovski, (1999) stated that relationship between implementation of TQM and employee performance is significant. Although, many researches in the past have identified the relationship among TQM techniques, employee performance and customer satisfaction (Al-Ettayem & Zu'bi, 2015; Feng et al., 2006), but no research has been carried out for organizational effectiveness of UAE's aviation industry. Therefore, this research fills a gap in literature.

1.2 UAE Aviation Industry

UAE's aviation industry is known as one of the best in safety compliance. It obtained a score of 98.86 percent, which is known to be the highest in the history as stated by the ICAO (International Civil Aviation Organization. Wang et al. (2015) stated that global recognition is a result of consistent efforts for many years for reaching the high position that a country is worthy of. UAE aviation industry experienced significant growth in the past decade. UAE Aviation industry is dependent heavily on the standards and quality (UAE Aviation industry, 2019). The Federal Decree No. 4 regulates it and offers better services with safety and security to support aerospace and aviation industry. Each airport of UAE has an aviation

department, while, the headquarters are in Abu Dhabi and a regional office located in Dubai which offers services to Umm al Quwain, Fujairah, RAK (Ras Al Khaimah), Sharjah and Ajman.

Aviation industry has gained success by providing good service quality with safety and affordability. For obtaining total effectiveness, a company must adopt global practices and deploy information system for maintenance of service quality. Principles of TQM are always helpful for bringing the company's processes under statistical control and a developing a sustainable infrastructure for TQM implementation (Al-Zoubi, 2012). A number of aviation industry have implement principles of TQM with the strategy of information system in order to achieve organizational goal (Ueno, 2012). This tool of TQM is known as a system capable to achieve a crucial gain in business performance field. Besides quality, TQM also focuses on quality and ability to bring process of an organization under statistical assessment. Most tools of TQM act well-structured and effective in making process improvements and product variations that is used further for increasing the operational performance (Harrington et al., 2012).

1.3 Problem Statement

Although, most companies across the globe adopt TQM for improving performance, enhancing product quality and to obtain success, but execution and effective implementation of TQM plays a crucial role in an organization (Zhang et al., 2000). Nonetheless, it is not necessary that TQM is implemented effectively and successfully by an organization. This might be due to the management that considers its implementation unbending, bureaucratic and tedious (Oakland, 1993). There are several companies that refrain from adopting TQM as they are skeptical about company's output after its implementation. With TQM, a company must stay committed to continuously meet and exceed its internal and external customers' needs. Management should develop and maintain an environment that promotes teamwork and open communication and encourages employees to provide feedback. Employee satisfaction should be a commitment for the management for successfully implementing TQM practices, as TQM practice change employees' perception and attitudes significantly.

1.4 Aim and Objectives

The aim of this research is to investigate how implementation of TQM will further improve employee attitudes and satisfaction in the aviation industry of UAE.

To fulfill the aim of this research the following objectives are formulated:

1. To explore the practices of TQM in UAE aviation organizations for improving employee attitudes and satisfaction.
2. To evaluate how employee job performance can be improved through TQM.

3. To make recommendations on how TQM can be implemented effectively in aviation companies of UAE.

1.5 Research Question

The following research question has been formulated to meet the aim of this research:

- How does aviation industry in the UAE implements TQM (Total Quality Management) systems to improve employee satisfaction and attitudes?

1.6 Importance of this Research

This research investigates implementation of TQM in aviation industry of UAE. This study is of utmost importance as it highlights the benefits to apply TQM practices in civil aviation department. Although, extensive research has been conducted in the past on TQM to investigate customer satisfaction and organizational performance (Hsu & Chen, 2005). There are not many researches that assess the impact of employee satisfaction and how their attitude should be in an organization where TQM is implemented. Moreover, this study adds to the literature as there are a number of studies written on TQM for decades, but not much literature is available on TQM implementation in UAE and specifically in the aviation industry. This study also helps the aviation department to reap benefits and cater issues that arise in effective TQM implementation.

1.7 Layout of the Dissertation

This dissertation is based on five chapters. The first chapter is *Introduction* which offers a background on how improvements can be made to the employee satisfaction levels through TQM. It provides a research question, aim and objectives, importance of the research, problem statement and layout of the dissertation. The second chapter is *literature review*. This chapter discusses relevant literature on employee satisfaction and TQM extracted from journals, articles, books and other online sources. The third chapter of this research study is *research methodology*. This chapter highlights and discusses that used research methods for obtaining results and states the ethical considerations, data reliability and validity concerns catered by the researcher. It also discusses the sample size, sampling technique and techniques used for data analysis. Fourth chapter of this dissertation is *discussion and analysis* and it offers and discusses all the results obtained with the use of the selected research method. Furthermore, this chapter offers graphical representations and tables for clear illustration of the results. It discusses the results with respect to the results obtained in the past researches. The final chapter of this

research study offers *conclusion* and makes *recommendations* for UAE aviation industry. It also provides a discussion on further researches that can be conducted in the same context.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter offers a detailed literature review on Total Quality Management and improvements in employee satisfaction. The literature review has been extracted from journal articles, books, online sources, and other relevant sources. This section discusses the impact of TQM on employee satisfaction in the aviation industry.

2.2 Total Quality Management

TQM is used to maintain competitive advantage and overall effectiveness of the company (Schein et al., 2018). Quality improvement increases investment returns and market share (Demirbag et al. 2006), which has a positive impact on tactical performance areas and reducing costs of manufacturing (Sharma & Kodali, 2008). Islam & Haque (2012) discussed six important elements of TQM including quality management generation, enhancement of teamwork, maintaining customer relationship, focusing on supplier relation, ensuring employee performance and practicing tools and techniques of quality control, and argued that an organization's senior management must ensure effective execution of TQM in its operations.

TQM is an art that manages all the operations in order to achieve excellence and implementing TQM ensures further organizational changes of how they carry out activities to eliminate inefficiency, increase levels of customer satisfaction, and obtain the best practices (Crosby, 2013). It is identified by Argote (2010) that TQM reduces the total production cost with a single source. It reduces the cost by limiting suppliers that a firm uses and offers them the required technology and training. Effective functioning of operations is dependent on whether its suppliers are able to meet the expectations of a company. This is one of the major reasons why TQM has an emphasis on totality of quality in every facet including suppliers of a company. The approach of total quality develops a cohesive method that assesses operations by focusing its production process on satisfying the customers. Therefore, it is required that quality must be built into all processes so that the operation becomes efficient (Dale & McAndrew, 2015). According to Fotopoulos & Psomas (2010) it is asserted that quality emergence has a major role and it has turned into a top priority for most of the companies across the globe for achieving their set objectives and obtaining a competitive advantage.

As per the TQM philosophy, most issues arise in companies due to its management's decision and the systems that it creates and implements. Although, employees might have informed and valid ideas regarding how the company must operate, the instilled managerial culture often curtails employee's

potential inputs. However, the TQM philosophy recognizes employees' contribution in respective areas of the organization and emphasis to obtain employees input through group meeting, planning and discussions. This exchange of concepts and ideas help increase employee satisfaction, morale and improves their attitudes towards work , which are linked to the positive output of an organization (Al-Ettayem & Zu'bi, 2015).

2.3 Employee Satisfaction

TQM not just focuses on product quality, but it also focuses on the employees' quality. Companies that have successfully implemented TQM are dependent highly on the changes in the activities and attitudes of employees (Singh & Ahuja, 2013). TQM includes improvements in various aspects of an organization including satisfaction of employees which is an important problem for social research since the past two decades (Rigby. & B. Bilodeau, 2015). (Talib & Z. Rahman, 2015)stated that employee satisfaction is of value to a firm as it improves the company's quality of service and increases productivity. TQM programs offer substantial gains in productivity to companies in the long-run, even though setting the related systems did not lead to substantial change in productivity before winning award (Faloudah, Qasim, & Bahumayd, 2015). Employee satisfaction is a crucial factor that enhances productivity and performance of the company (Beesen, 2002). Employee satisfaction is a promising stance that is result of an individual experience with the job (Allan, 2017). Schein et al., (2018) stated that leaders have real importance in an organization as they establish and manage culture for creating a suitable workplace culture, which leads to improve employee satisfaction and financial performance.

The principle of involving employees helps empowering teams and individuals in order to take decisions and resolve issues. It initiates with creation of awareness all through the organization about importance and responsibility of each employee to assure quality. It is crucial to educate employees regarding the principles of TQM and provided training for using quality tools. Organizations of TQM are required to develop procedures and policies of human resource management that complement the strategic objective of total quality management (Blackburn & Rosen, 1993). In TQM, employees are considered to be internal consumers whose expectations and needs should be met. According to Sashkin & Kiser (1993) it is direct experience of employees of management behavior and action patterns which defines beliefs and values which develops the culture. Therefore, practices of human resource management must be applied to respect the well-being and abilities of employees. Conducting regular surveys with employees is a common practice of human resource management. Employee surveys are a crucial tool for identifying the attitudes of employees towards different organizational factors including, work, company, work environment, policies of human resource, practices of TQM and others. Employee survey can be administered to offer a starting line where the company is with their program of quality. It

then can be periodically repeated for monitoring progression of TQM program and identify if changes required for lasting improvements in quality are shaping (Ludeman, 1992).

Employee survey communicates the message that the management is thoughtful regarding listening to their perceptions and opinions (Troy, 1991). This is an outstanding mechanism for developing upward communications and hearing the employees (Blackburn & Rosen, 1993). Areas which require corrective action are usually identified by conducting employee surveys (Chase, 1993a). The company's management removes disincentives and barriers which have an adverse effect the performance of employees (Blackburn & Rosen, 1993). In general, employee survey is a reputable way that management keeps its employees' needs and perceptions in line and monitors the TQM efforts progression (Hood, 1993).

Kim et al. (2012) stated that measuring employee satisfaction is not an easy task to assess as it is not clear what makes employees feel satisfied with their job and performance. Employee satisfaction can be measured using certain methods like surveys, opinion polls and interviews for gathering information on timely basis (Masheshwari & Vohra, 2015). Employee satisfaction is soiled by different opinion. Some researchers have described employee satisfaction from an emotional perspective that experience of employees, whereas, others have argued that satisfaction of employees can be obtained by applying techniques that motivates employees (Maheshwari & Vohra, 2015). Motivation theories struggle to explain effectively that why and how an employee is satisfied.

2.4 TQM and Employee Satisfaction

Chan & Lynn (1991) discussed that criteria for organizational performance must include productivity, marketing effectiveness, productivity, employee morale and customer satisfaction. Therefore, this perspective shows that employee performance is highly linked to the performance of the organization as a whole, as efficient and effective performance of an employee will influence organizational performance in a positive manner. Zhang (2012) suggested that managers and employees are required to understand the performance management and its systems are considered to be the key determinants of the company's long-term failure or success. If the employees are unhappy or dissatisfied or do not agree with their performance management system, they become unwilling to actively participate in the process because they do not obtain any value out of it. Hence, organization's productivity and performance reduces due to ineffective performance of employees.

A high performing workforce can be obtained by taking initiatives of quality improvement. With this aspect, the leading organizations have great emphasis on process of continuous improvement with the decision-making driven by data. Specifically, improvements have a focus on applying skills of management in order to eliminate and increase value with process optimization in the company. The

result will be improved performance, less errors and greater productivity and efficiency (Ziaul, 2006). There are certain initiatives that are used for quality improvement that focuses on development of a high performing workforce and greater productivity (Christina, 1999; Eslamy, et al., 2014).

2.5 TQM in Aviation Industry

The process of TQM improves aviation industry on a continuous basis and improves the quality by using the philosophy of management that accomplishes clients for obtaining satisfaction. Appropriate management principle increases and improves the quality of the aviation industry and decreases the extensible cost (Khan, 2010). An information system offers significant scalability and reliability to organizational services and products in terms of quality. It provides an improved structure to TQM's quality structure and assures that aviation maintenance is carried out properly in an airline industry (Arif et al., 2013). This requires identification of a better concept that determines problems to offer optimized results with application of a proper structure of aviation (Kahreh et al., 2014). A significant increase in interest for making use of TQM helps in improving the performance of different organizations in both service and manufacturing sector. An information system offers support the structure of TQM for delivering services in aviation industry which improves customer satisfaction. This can lead to a repetitive purchase of a quality system. Communicating appropriately and using quality standards in the process of communication for reducing the complication in systems. It identifies that the trainers with qualification tend to be a major issue in an aviation system (Benavides-Velasco et al., 2014). The purpose of UAE aviation industry is to improve quality and increase employee satisfaction.

2.7 Important Elements for TQM Implementation

Below the key factors are discussed that affect TQM implementation in an organization:

2.7.1 Leadership and Top Management Commitment

TQM implementation is profoundly impacted by organizational leadership. Managers must put in efforts to lead and motivate employees so that they are able to effectively implement TQM in the company. Managers must also understand the policies of TQM and implement them in correctly. The company's management should ensure goals, values and strategies of TQM are transmitted at all organizational levels. TQM has certain practices that differ from one to the other organization due to the difference in nature of work (Verma, 2014). Nonetheless, leadership is an important factor for TQM implementation as it offers a vision. Continuous improvement is required to achieve total quality and it also bring success for the organization. Leadership can achieve continuous improvement by motivated employees who work as a team and utilize all the productive resources for increasing the customer

satisfaction. Leaders must ensure that their employees are motivated. It is important that leaders have a focus on continuous learning and service-oriented attitude and have trust in peers as TQM is people-oriented. Motivated employees can lead a company to continuous improvement (Islam & Haque, 2012).

According to Pheny and Teo (2013) it is important that senior management communicate TQM to all levels of its organization, develop interest, awareness, action and desire. The top management must provide a quality vision and develop a change of culture in the company. They must organize trainings, empower people to help the grow, delegate authority and identify the best people for achieving quality. The top management should allot resources and become partners with the suppliers in order to share the information based on technology and new innovations in the market for gaining quality materials. The company's senior management's leadership and commitment requires a major change in the culture of the company and this is only possible if there is the top management is significantly involved in the strategy of the company for continuous improvement, cooperation and open communication all through the company. TQM's implementation helps improve performance of the company by having an impact on the other dimensions of TQM. It is stated by Garvin (2014) that a large number of issues related to quality are all attributed to the management. This provides an indication that successfully managing quality is based highly on the top management's commitment level. Top management's commitment is required towards quality shall convey that this philosophy that quality will receive significant priority over the cost and will help achieve operational goals in the long-run and will reduce the cost of operations. A number of studies have been carried out on the practices of quality improvement and performance of the employee and organization.

Miller & Hartwick (2012) carried out a study and found that training and commitment of the senior management has a significant role in the implementation of TQM in the aviation industry. It is important to understand that without consistent and clear quality leadership, a company's quality cannot be successful (Everett, 2012). Therefore, quality leadership is required to make a strategic objective, which means that the leader offers a suitable environment for offering major comfort to members who are able to improve the productivity and performance (Rao et al., 2006). The commitment of top management is a critical factor and determinant of successful implementation of TQM.

2.7.2 Training and Empowerment

Employee management and empowerment plays a crucial role in achieving organizational goals. Kathaara (2014), Fening et al., (2013) and Ngambi & Nkemkiafu (2015) stated that participation of employees in quality practices is important for achieving the improvement in quality. Empowered employees involve teamwork, with the necessary training for the employees and making sure that employees are totally involved in making good quality decisions (Ngambi & Nkemkiafu, 2015). It is

important understand that a TQM program's success is dependent highly on employees' participation in the entire process. It has been discussed by Mohanty & Lakhe (2012) that people who are aware about the right and wrong and the ones that carry out those processes. If the employees are trained well and handed over the responsibility for inspecting their work quality, it will no longer be inspection. Chandler & McEvoy (2000) highlighted that employees are the primary source of human capital, their skills, experience and education must be evaluated and matched with the job requirements to get their best performance. Involvement of employees is considered as psychological ownership feeling among the company's employees (Kanji, 2008). Unlike the ideology of TQM, conventional involvement of employees is a narrow-minded; it is not process-centered and is job-centered. The approach of TQM includes obtaining an employee interest in the broader perspective, contribution and participation in the quality management process.

TQM focuses on empowered and motivated employees and this can be achieved through training. There are certain steps that must be followed by employees for effective training. An important aspect of TQM training is that the employees must understand the company's mission and vision well. Even though, the governing boards and the CEO are responsible for ensuring the performance of the company, they are dependent on the employees and TQM helps in implementing corporate policies and procedures effectively.

Training is helpful in preparing the company's employees for management the ideology of TQM in the production process. Training equips the people with techniques and skills that are important for improving the quality. Zhang (2000) argued that in order to be a powerful block in a business to achieve the objectives and aims. With training, company's employees can recognize opportunities for improvement as it is focused at offering important knowledge and skills for all the employees to contribute towards the continuous process of quality improvement in production. Development and training programs must be considered as a single time event, but a process that last a life time (Dale et al., 1994).

Firms that adopt TQM must provide the training necessary for all the employees in order to improve their proficiencies to carry out their tasks. In management, effective training and quality improvement brings success for the organization. The effective learning and knowledge capability of employees will offer quality management sustainability in the organization. Moreover, learning companies adapt changes rapidly and develop distinctive behavior, that distinguishes them from the other companies and helps them to gain better output. Quality does not initiate in a single function or department; it is duty of the entire company. Employee training must be provided to all the employees depending on results of the training assessment needs (Criado & Calvo-Mora, 2009; Goetsch & Davis, 2010).

Employees are aware of the industry and firm's structure when they obtain training. Additionally, effective training improves the work performance, motivation and loyalty of employees towards the company. If training is provided to employees for producing high quality and reliable services or products, their complete participation in stage of production will be fruitful. Hence, satisfaction of the customers will be high and complaints of customers will reduce. Some of the researches have stated that training is related positive to the performance of operations (Kaynak, 2003; Phan et al., 2011), performance of inventory management (Phan et al., 2011), performance of employees (Fuentes et al., 2006; MacKelprang et al., 2012), innovative performance (Phan et al., 2011; Kim et al., 2012), customers output (Das et al., 2000; Phan et al., 2011), financial and market performance (Fuentes et al., 2006) and the aggregated performance of the company (MacKelprang et al., 2012; Tari et al., 2007), while, other reports have insignificant and negative results (Rungtusanatham et al., 1998).

2.7.3 Knowledge Management

Continuous improvement is also considered as knowledge management, but TQM is considered as a radical improvement and these two are compatible with one another (Hsu & Shen, 2005). Ju et al. (2006) conducted a research to assess TQM and KM's practical dimension. The research found that TQM and KM are highly interconnected to one another and KM has a positive contribution towards TQM. Knowledge management makes sure that employees gain reliable, accurate, timely, necessary and consistent information and data as they require to perform their job effectively and efficiently. This is the most important way through which the company will be able to yield expected benefits from the implementation of TQM. The company's process management has an emphasis on the activities, more than the results, that are obtained through a set of behavioral and methodological activities. This includes proactive and preventive techniques to management of quality which minimizes the process variations and improves the product quality (Sadikoglu & Zehir, 2010).

Sufficient knowledge and practices of process management monitors the data about quality in order to manage the processes effectively. Due to this, the rate of turnover of the inventory and purchased materials might be improved. Mistakes or errors in the procedures can be corrected and figured on time. Processes are enhanced by the means of controlling procedures in a periodical manner and monitoring continuously the quality of data. The effective process and knowledge management bother are designed for reducing the negative impact on environment. Moreover, as procedures become inhibition-oriented, the costs are declined and firm's profits increases.

In the past researches, it has been found that process management, knowledge and the statistical feedback for improving the operations performance (Lee et al., 2003; Phan et al., 2011; Forza & Filippini,

1998), performance management of inventory (Phan et al., 2011), performance based on innovation (Phan et al., 2011; Kim et al., 2012), corporate social responsibility (Parast & Adams, 2012), competitive edge (Easton & Jarrell, 1998), results from customers (Phan et al., 2011), overall performance of the organization (Macinati, 2008; Zu et al., 2008; Zehir & Sadikoglu, 2012) and financial performance (Wilson & Collier, 2000).

2.7.4 Collaboration and Teamwork

Collaboration and team work are crucial for meeting the organizational targets, and this makes groups and teams important for any kind of effort for TQM implementation (Rao et al., 1996). Stough et al. (2000) highlighted that group work is considerably more beneficial compared to individual work. A business will be able to achieve effective solutions for problems when working in a team. TQM has an aim to develop an environment that produces the best from its employees, TQM is expected to increase the employee and their job satisfaction. Bounds (1999) stated that employee empowerment with greater responsibility and authority allows them to be more innovative in taking decisions and applying solutions to the prevailing issues and foster a significant recognition of need for communication, teamwork and cooperation. Practices of TQM offer a favorable environment for managers that improves the motivation levels of employees and helps them in successfully accomplishing their goals. They also encourage their employees to achieve their set goals by using abilities and skills in order to improve their work quality. Employee satisfaction is very likely to offer high and improved service levels to the customers (Kerr, 1996; Butler, 1996) and are increases retention of employees while reducing their turnover (Guimareas, 1996).

2.7.5 Communication

Rigby & Bilodeau (2015) indicated that employees and senior management must overcome fear of accepting change. Efficient systems of providing feedbacks and communication are important for articulating ideas to management. Sharma & Kodali (2008) stated that the best way to communicate is to encourage direct or face-to-face communication between supervisors and employees. TQM needs implementation of an effective change in the culture of the organization and this will only be possible if their deep commitment and involvement of the management towards the continuous improvement strategy adopted by the organization, cooperation, open communication at all levels of the organization. Implementation of TQM improves performance of the organization by having an influence on the other dimensions of TQM (Kaynak, 2003). Oakland (1993) stated that in order to successfully promote a business with effectiveness and efficiency, TQM should be kept at the top with the CEO. It was identified by Cooper & Ellram (1993) that leadership has a critical impact on the change implemented in the

organization and it impacts areas that build effective relations with suppliers and people involved in the value delivery process. Leadership's commitment to the strategy of TQM is depicted in the daily disposition to work will keep employees motivated for delivery services with quality that meets and exceeds that customers' expectations.

2.7.6 Customer- Focused and Collaboration

The focus on customer is a crucial element for implementing TQM as a customer decrees the market in today's business environment. Fening et al., (2013) stated that TQM philosophy has a major focus on customer satisfaction (Fening et al., 2013; Khan 2010). Therefore, it is crucial for a company to keep its customers at top priority in each process of decision making. For instance, client should be involved actively in the design of product or service and process of development in order to offer necessary inputs that are important for impeding waste, issues of quality and flaws (Fening et al., 2013).

Deming (2006) suggested that the customers focus on quality as an ability to satisfy their wants and needs. Gilmore (2011) agreed with this concept who focused on quality as the means of extent to which a certain product is able to satisfy a specific consumer's wants. Generally, it has been agreed that the quality is a powerful weapon for meeting the satisfaction levels of the customer both globally and domestically. Quality improvement is the key to the demands of the customers and increase in organizational productivity with the greater return. Most of the researchers have agreed that the service and product quality is vital to open market competitiveness. It was noticed by Kondo (2009) that quality improvement in imaginative ways that reduces costs and increases the organizational productivity. It is important that a feasible base of customers is maintained and developed by properly implementing practices of quality that implicates the performance of company operations.

Garvin (2014) stated that quality is not just a strategic tool for being competitive in the market place, it is a means for pleasing the customers, not just protecting them from any aggravations. Hence, competitive advantage of a company is to seek and compete with other on one or more of quality's dimensions. Various empirical researches have confirmed that the companies that adopt a strategy oriented to quality are able to achieve greater productivity, increased levels of customer satisfaction, greater employee morale, better relationship between management and labor and increased overall performance of company's operations.

The degree to which companies put in efforts to satisfy the needs of customer is customer focus. The key to quality management is through maintaining a close relation with customers. Also, a successful firm has its customers in the first place. Sharma & Kodali (2008) stated that customers must always be involved closed in all the stages to identify the customer needs clearly.

2.7.7 Involvement and Participation of Employees

Dollard & Bakker (2010) stated that at work, participation of employees leads to positive outcomes like empowerment of employees, employees' motivation, and improved production. Hsu et al., (2005) suggested that it is empowering for the employees to be involved in the work process and related business procedures. According to Branham (2005) workforce research has identified certain links between the outcomes and participation of an organization. All these improve productivity (Gunningham, 2008), and improved employees' knowledge and skills utilization for the output of the company (Dundon & Gollan, 2007). Colyvas and Jonsson, (2011) suggested that involvement of employee is a crucial contributor towards firm performance because the employees obtain knowledge and understanding regarding the organizational operations. When processes are made, workers involvement is important because they hold crucial knowledge regarding certain operations, and the setting surrounding the operations. When employees feel they are involved in the procedure and feel they contribute towards it, this can develop a stronger ownership feeling towards the process, this will increase the compliance with such procedures. It is very likely that such an involvement will improve procedures' quality that will lead to a higher compliance level. Armstrong, (2009) stated that there is a positive relationship between the social identification and decision making participation in the organization. Kaynak (2001) defined social identification as the degree to which a group is self-involving and is valued. The theory of social identity states that individuals tend to assess the organizations' or groups that belong to status terms. Higher status suggests a high social identification or positive social identity. This social identity approach is developed in order to propose that the status can derive from the comparison between the in-group members on organizations' social identification (Colyvas and Jonsson, 2011). It is argued by Fuller and Vassie (2002) that participation of employees is connected to the organizational identification as it depicts inclusion and highlights that organization values opinions of the individuals.

Colyvas and Jonsson (2011) defined participation as the entirety of forms with which groups, individuals, collectives secure the interest or contributes to the process choice with the self-identified choices among the possible actions. Colyvas and Jonsson emphasized that varied participation forms might imply changing extent of influence, which is termed as the participation intensity, this participation might include work groups, single employee or all employees like a group, and the participative decisions can apprehend different problems. Power distribution is an important condition to enhance satisfaction and performance with participation of employees. Intensity can play a crucial role the process of identification for certain reasons such as: groups might use influence for securing their social value properties, and enhance the status of the group. The influence group may signal symbolical status of the group in the company (Heller et al., 1998).

Participation of employees might apply to the decisions regarding varied problems; there exists a distinction that discriminates between the organizational issues (Colyvas and Jonsson, 2011). The issues of work are linked to the immediate conditions of employees to perform the job, while, issues of the organizations are related to the distal organizational environment of employees.

TQM implementation can be a success if the workforce has the requisite skills and is dedicated. Therefore, all employees at all levels in the organization must effectively communicate, take responsibility and improve quality. Employees working in a company are known as internal customers and therefore, must be satisfied if the company wants to meet the needs of its external customers (Singh & Ahuja, 2013).

2.8 Barriers for Implementing TQM

Benefits of TQM cannot be achieved easily. Regardless of all the theoretical promises, current evidences have suggested that attempts for TQM implementation are usually not successful (Douglas & Judge, 2001; Caudron, 1993; Charles, 1993; and Korukonda et al., 1999). Hence, the current literature offers reports of certain cases where TQM implementation has failed to make improvements to performance of an organization. Some researchers have stated that implementation of TQM led to improvements in productivity, competitiveness and quality in almost 20-35% firms that implemented TQM (Gatchalian, 1997; Benson, 1993). Hubiak & O'Donnell (1996) supported this research and asserted that almost 2/3 of the US-based companies have either failed or delayed their attempt for TQM implementation. Most programs of TQM implemented have either been cancelled or in the process of getting cancelled due to their negative impact on the profits of the organization. A survey of TQM's success was conducted in Fortune 500 companies and it found most participants rated their implementation of TQM approximately 50% (Lackritz, 1997). A study by Burrows (1992) found a 95% rate of failure for the programs of TQM implementation. In another research Eskildson (1994) found that implementation of TQM might have negative effects or is uncertain for the company's performance.

Krumwiede et al., (1998) studied that more and more organizations have started to quit implementation of quality programs due to the lack of positive results obtained from them. Although, TQM can be applied widely in managing change, but the failure rates sometimes are usually above 70%, which can be a major concern. Since, most of the companies and organizations face difficulties in TQM implementation. TQM failure is associated to the lack of continuous support and commitment of the top management, managers' leadership style, high laissez faire, no detailed knowledge of implementing TQM, no formal strategic plan of change, ambiguous goals for improvement, conflicting priority and unclear strategies, no sustenance and development of a quality focused culture, less participation, team working and motivation of employees, high resistance to change, and lack of link between organizational

performance and remuneration. All this lack of technical knowledge, education and training, less recognition and experience regarding TQM, lack of coordination, lack of vertical communication and work discipline. Also, lack of support and resources, organizational approach, financial crisis, long-run failure and focus in understanding customer's voice will impact the organizational culture and creates problems in successfully implementing TQM (François et al., 2003; Mosadeghrad, 2005; Beer, 2003; Huang et al., 1998).

Sadikoglu & Olcay (2014) stated that organizational performance output is influenced due to TQM practices. The research revealed that the basic barrier that companies face is of having an inappropriate structure and less engagement of employees. According to Talib & Rahman (2015) differentiated and studied inhibitions of successfully implementation of TQM in service sector. The most important barriers were found to be managerial, organizational and people oriented issues. The findings have shown that the strongest barrier is of lack of communication. The least significant inhibition was the lack of coordination among departments. In a research by Singh & Ahuja (2013) discussed three major problems of TQM implementation that included lack of awareness and knowledge regarding TQM, poor relationship with customers, lesser control of survey and quality. Additionally, other barriers include limited employees in process of recruitment, problem of human capital, lack of continuous attitude, management culture, financial issues etc.

2.9 Theoretical Model

To assess the principles that might impact employee satisfaction in an organization a theoretical model has been developed that can be used for satisfying employees at UAE aviation industry. The model depicts the dependent (employee satisfaction) and independent (Training and Education, Leadership, Employee Empowerment, Teamwork and customer focus) variables.

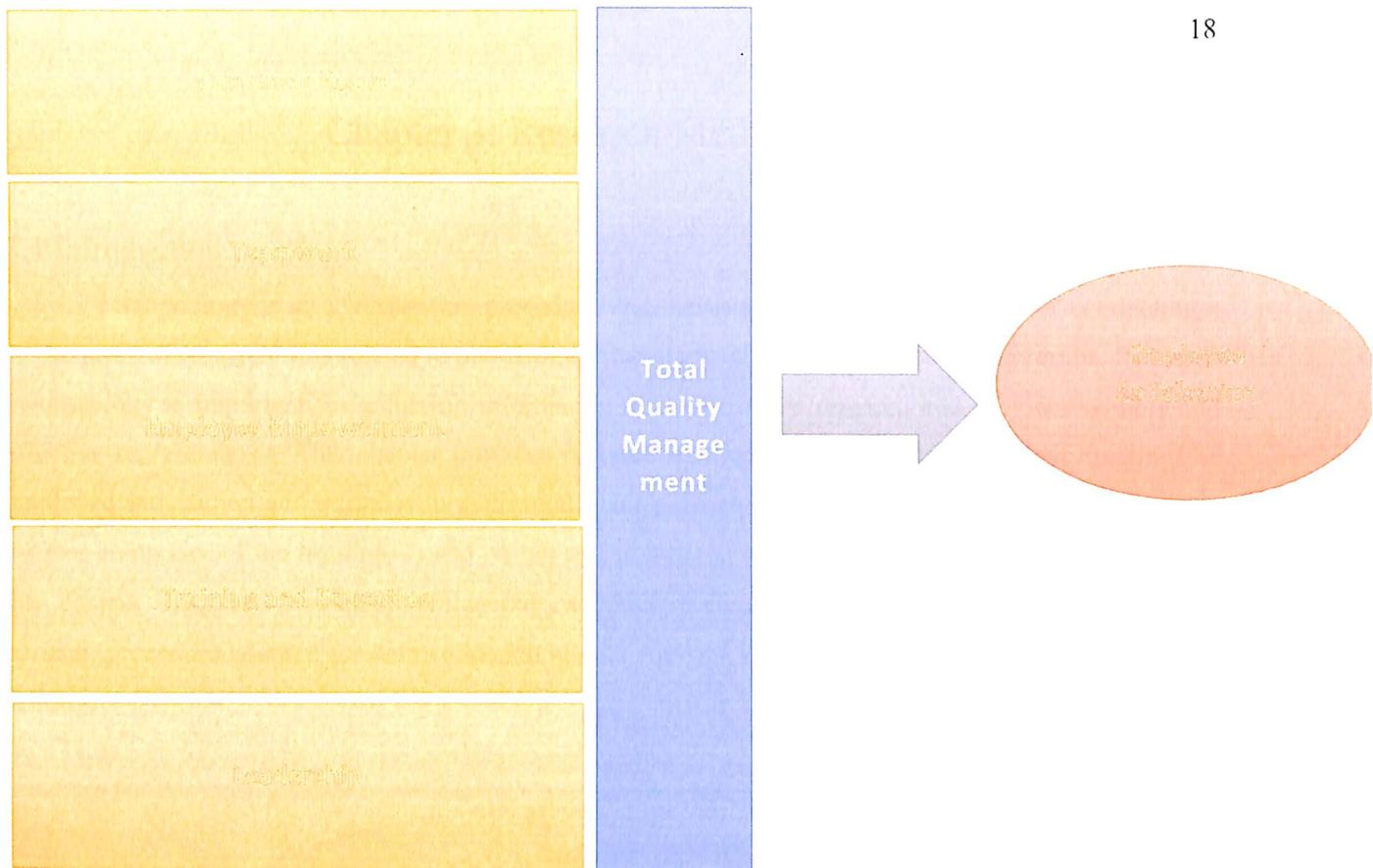


Figure 1: Theoretical Framework for studying impact of TQM on Employee Satisfaction

2.10 Hypotheses

The following hypotheses have been developed using the past literature:

H₁: TQM practices significantly increase employee satisfaction

H₂: Leadership has a positive impact on employee satisfaction

H₃: Training and education has a positive effect on employee satisfaction

H₄: Customer focus has a positive effect on employee satisfaction

H₅: Teamwork has a positive effect on employee satisfaction

H₆: Employee empowerment has a positive effect on employee satisfaction

Chapter 3: Research Methodology

3.1 Introduction

Methodology is an investigation procedure that consists of a set of techniques for conducting a single piece of research. It is related to the methods that are used the study for obtaining results. Research methodology is important for gathering information relevant for the research and provides reliable and effective representation. This chapter provides research methodology that is used for investigating the employee satisfaction and attitudes through total quality management in the UAE aviation sector. This chapter comprises of the headings based on the research onion as shown in the below figure. Therefore, this chapter discusses a research philosophy, adopted research approaches, strategies, choices, time horizon, procedure adopted for data collection and its analysis, ethical consideration, data reliability and validity.

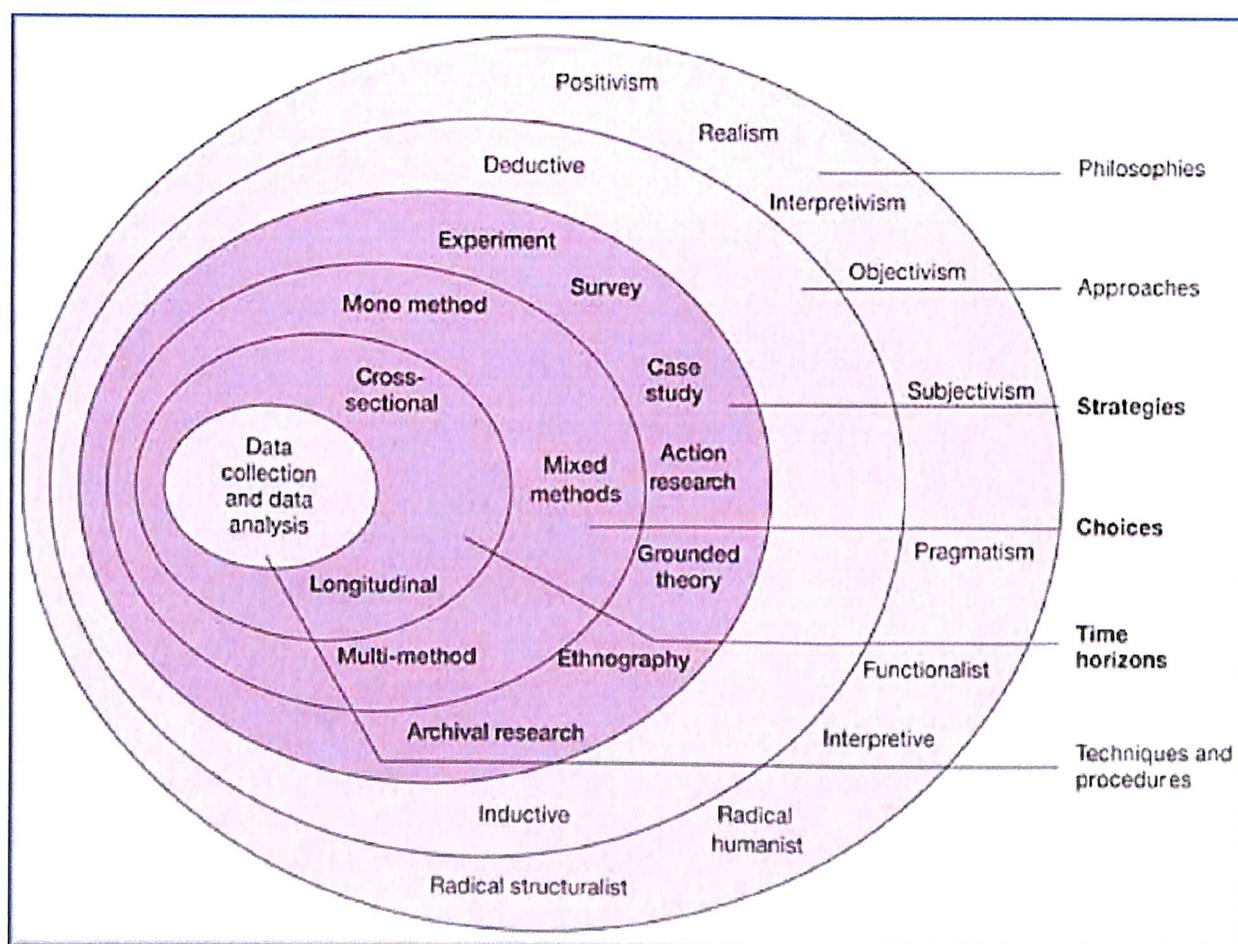


Figure 2: Research Onion (Saunders et al., 2012)

3.2 Research Philosophy

A research paradigm consists of basic beliefs set (Wiggins & McTighe, 2005). It shows the view of the world that defines world's nature for its holder, its individuals, and a variety of a possible relations with that world and its areas (Creswell, 2009). It is a framework based on values, techniques, orientations and beliefs which are all shared between members present in a professional community (Bryman, 2007). The business research conduct, like every scientific discipline is based on a paradigm. Opting for an appropriate paradigm is crucial and the researches must be clear about what a paradigm guides approach of a researcher (Guba & Lincoln, 1994). Various paradigms are summarized by Saunders et al., (2012) and they are categorized as positivism, critical theory, constructivism and realism. The table below shows features of these paradigms and considered suitability of each paradigm for this research.

Paradigm	Positivism	Constructivism	Critical Theory	Realism
Also known as	Quantitative Paradigm	The combination is also known as the qualitative or the interpretive paradigm		
Ontology	Naïve realism - "real reality" but apprehensible	Relativism - local and constructed realities	Virtual reality - shaped by political, economic, social, cultural, ethnic, and gender values	Critical realism- "real reality but only imperfectly and probabilistically apprehensible
Epistemology	Dualist/ objectivist; finding true	Transactional/ Subjectivist; Created findings	Transactional/ Subjectivist; value-mediated findings	Modified dualist/ objectivist; critical tradition/community findings probably true
Common Methodology	Chiefly quantitative methods; experiment/ surveys	"Passionate participant": consensus dialogues	"Transformative intellectual"; actual research/ focus groups	Modified experimental/ manipulative; critical multiplism

Figure 3: Research paradigms

Wiggins & McTighe (2005) stated that a positivist perspective states that the world must describe and measured. It is based on ontology that science has the ability to discover the nature's true reality. It also shows that there is a single reality that can be apprehended and it consists of discrete element and that have a nature which is characterized (Saunders et al., 2012). From epistemological perspective, observer is separated from the procedure of research. Hence, the research findings are both value and theory free (Stake, 2010).

Regardless of the positivist strengths there are two important limitations associated to this kind of research. (1) A research's quantitative method has an emphasis on the theory confirmation and not with

significant development and theory discovery (Patton, 2002). Although, there is significant literature available on the use and implementation of TQM as discussed in literature review of this research, but they are not applied to the UAE aviation industry specifically. Therefore, theory of inductive building and not testing the theory was needed for this research study. (2) This research is related to the environment. A method of quantitative research required a controlled environment, which cannot be possible if there are external factors that have an impact on the employee satisfaction levels, for instance, personal problems and worries that may have an impact on their performance and refrains the company to be successful. Moreover, a controlled environment might lead to results that are irrelevant for generalizing them to the practical life and might also lack rigor and offer poor findings (Onwuegbuzie & Leech, 2006).

The research philosophy used for this study is positivist perspective and it focuses on the factual knowledge gathered from both measurements and observations. Hence, the findings are trustworthy. Researches that are based on a positivist perspective, limits the researcher's role for interpreting and gathering data objectively. For such researches, findings are generally observable and quantifiable. Also, positivism is based on observations that are quantifiable and leads to a statistical evaluation. It is a research philosophy that is based on the empiricist view in which knowledge emerges from the people's experiences (Collins, 2010).

3.3 Research Approach

Inductive and deductive reasoning are two research approaches that are frequently used by researchers. Bryman & Bell (2008) defined deductive reasoning as a top to bottom approach as it narrows the focus of the research from being general to specific. Conclusions are obtained in a logical form based on the available facts. On the other hand, inductive reasoning approach is also known as the bottom up approach as it emphasizes on a number of observations that can broadly be generalized. According to Bryman & Bell (2008) inductive reasoning provides a possibility for generating the theories. Hence, for this research study, inductive reasoning approach is used as the results will be obtained from this research will be generalized for the entire UAE aviation industry.

3.4 Research Strategies

Saunders et al., (2012) stated that surveys needs clear and specified objectives which are dependent on data gathering procedures. The findings of this research study are gathering by using a survey as it enhances the results and interpretations turn in a reflective data pattern and are the basis for understanding the essential and what is being assessed through the survey.

As shown in the figure below, here are three kinds of research options: Exploratory, Explanatory and Descriptive (Saunders et al., 2012).

	Exploratory	Descriptive	Explanatory
Objective	Discover ideas and insights	Describe market Characteristics or functions.	Determine cause and Effect relationships.
Characteristics	Flexible Versatile Often the front end of Total research design.	Marked by the prior formulation of specific Hypotheses. Pre-planned and structured Design.	Manipulation of one or more independent Variables. Control of other Mediating variables.
Methods	Expert surveys Pilot surveys Secondary data Qualitative research	Secondary data Surveys Panels Observational and other data	Experiments
Research Problem Status	Unknown or little is Known.	Known	Clear definition.

Figure 4: Different Kinds of Researches

Descriptive research helps portray an actual profile of situations, events or people (Robson, 2002). Explanatory research, on the other hand, offers support to the exclusively needed evidence. Moreover, exploratory research focuses on understanding the base-line problem and it helps in clarifying and understanding the issues (Flick, 2011). Exploratory research serves the purpose for this research as it focuses on greater possibility of not achieving the actual evidence of the issue, but it forms the basis for the future researches (Saunders et al., 2012). Therefore, exploratory research is used for this study as it related to complexity of the aviation industry. Exploratory research is based on flexibility therefore, it is easier to obtain the results for a certain research topic (Creswell, 2009). For this research survey is used as a source for collecting data (Sekaran, 2003).

3.5 Research Choices

A mono-method is used for this research. Out of qualitative and quantitative methods, quantitative method has been chosen. Generally, in a quantitative method, data is collected in numeric form and the information assessed using the techniques for quantitative data analysis. Only a single

method is used for this research due to the time constraints and unavailability of the participants for interviews. Quantitative methods use empirical researches and deductive approach is used for testing the issue. Questionnaire and survey is considered as the most reliable method for collecting data. Quantitative method supports the system in quantifying the relationship between dependent and independent variable and its findings can be assessed and generalized for the population.

3.6 Time Horizons

The data collected for this research is cross-sectional as it will be used only for this research and is gathered.

3.7 Data Collection Methods

There is a possibility to categorize various approaches of research methods in two categories based on how they are carried out, qualitative and quantitative methods of research. According to Patton, (1990) numeric information is quantitative, while information based on words is qualitative. Creswell, (2009) stated that quantitative methods of research are for assessing the numeric information that is represented through statistical methods. Whereas, qualitative methods of research are the methods that are used for assessing other sort of information, for instance, text interpretations. Although, both these methods can be used for assessing information and data obtained from the study, but both of them are different. The major difference between these two methods of research is that quantitative transforms or converts information in to numerals, while, qualitative methods of research uses the information interpretations of the researcher that cannot or must not be converted in to numeric data. The selection of qualitative and quantitative research is based on the process that is involved in the investigation. A quantitative technique is an approach that focuses on inquiring an identified issue, depending on testing a theory measures through numeric data and assessing data with the use of the statistical methods. An important objective theory measure through numbers and evaluating the data with the use of the statistical techniques. An important objective of the quantitative method of research is to identify if a theory can be generalized.

Quantitative approach has been used as it is considered to be the most effective for large number of respondents, and helps in measuring the data effectively with quantitative techniques and applying statistical methods (May, 2011). Moreover, quantitative data allows better control for having greater objectivity and bias in terms of findings that it offers. As Feilzer (2010) discussed that quantitative method is used for determining quantitative or numeric data which is important as it is helpful for the research in obtaining desired results easily. Quantitative research method for this research uses primary data. Primary data is collected by developing a questionnaire. Saunders et al., (2012) stated that a survey

questions respondents and records responses that are used as data for research analysis. It is a technique that is very economical compared to other methods that are available for collecting data. Survey helps in collecting data efficiently and is less time consuming than conducting face-to-face interviews (Rao et al., 1999).

3.8 Data Collection Instruments

Survey is an instrument for collecting primary data as stated by Zikmund et al., (2010) from where information is gathered for an interest-based population and responses of the participants extracted from the population as mentioned by Cooper and Schindler (2003). A survey offers an inexpensive, quick, accurate and efficient data collection means (Zikmund et al., 2010). Survey questionnaire is a powerful and a useful tool for seeking answers to the questions of the research, but they can cause more harm if they are not targeted correctly (Zikmund et al., 2010). According to Neuman (2006) target population is specified correctly as a large group of most cases in which the researcher draws the sample and the results obtained from the sample are generalized for the population. A questionnaire survey can either be longitudinal or cross-sectional. In a cross-sectional survey the data is gathered from a specific point of time (Neuman, 2006) and in a longitudinal survey the data is gathered from more than one point at the same time. The survey questionnaire is used for a research when data is required to be extracted from larger samples that show broad target population (Denzin & Lincoln, 2003). A survey consists of a set of questions that are constructed to obtain information from the participants (Saunders et al., 2012). For this research study, questionnaire has been used to study if TQM practices in the UAE aviation industry are impacting the satisfaction levels of employees and how willing are the employees to adopt to it in their organization.

The secondary research is also used for this research and it is in the form of literature review. The most relevant and updated information has been obtained from the past researches on the use of TQM in organizations and how it impacts employee satisfaction. For this research literature review has been extracted from the online journals, text books, articles, and other online resource in order to include the best theoretical researches and information available.

3.9 Sample

For any research, Bazekly (2003) stated that sample should be greater than 30 and less than 500. Denzin & Lincoln (2003) stated that all the participants of the research are chosen on a random basis and they are the ones that suit best with the actual population view that are under consideration. The questionnaire for this research is distributed on a random basis to 100 employees in the aviation industry of UAE. The responses are selected from supervisors, management team, workers and technicians. The questionnaire consists of statements that are constructed on Likert scale so that it is easier for the

participants to choose their responses. Moreover, close-ended questions do not deviate the participants from the topic of this research and do not provide irrelevant answers.

3.10 Data Analysis

The data was collected using the survey questionnaire on a Likert scale that is used for attitude measurement. Quantitative data gathered from the survey is assessed using statistical techniques using SPSS. The data is analyzed by checking, editing, and handling the questionnaire, categorizing, cleaning the data, coding and transcribing it. The findings from this survey are generalized for all the employees working in the aviation industry of UAE. Creswell, (2009) assessed that data was *edited* (questionnaire responses were reviewed for identifying incomplete, eligible, ambiguous and inconsistent responses). *Coded* (Collective data was translated in to codes for assessing through the computer). *Transcribed* (the coded data was converted in to a form that it can be analyzed using SPSS). *Cleaned* (Checking for treatment and consistency of the data that's missing). Frequency distribution tables are used to assess the responses of the participants. s

3.11 Reliability and Validity

Reliability of the data indicates internal consistency measures as discussed by Zikmund et al., (2010). Reliability is related to the consistency and stability of measurement and it may still lead to an error due to the respondents' bias and error and researcher's bias and error (Robson, 2002). Cooper and Schindler (2003) discussed that a researcher can meet the reliability criteria using the following measures:

1. Selecting a panel of respondents that have similar socio-economic characteristics and demographics, including education, lifestyle, experience, responsibility level in their organisation and job classification.
2. The questionnaire is pre-tested by people with knowledge who ensure that the statements and words used in the questionnaire are coherent, easily understandable and consistent. This will improve the questionnaire's reliability (Kumar, 2005).
3. Kumar (2005) suggested that to maintain reliability it is important to ensure that all the statements in the survey covers the research issue range that is a matter of concern for the study. This satisfies the content validity criteria of the data.
4. By focusing on the strengths of quantitative methods, research design will offer more reliable and valid results (Bradley and Schaefer, 1998). The quantitative research design requires gathering data that controls bias, value-free data and permits objectivity (Stockton & Clark, 2009).
5. Using words that are simple and clear in order to avoid ambiguousness, misinterpretation and misunderstanding by the respondents.

6. Closed-ended statements are used in the questionnaire to encourage responses as it is a quick and an easy way for replying
7. Using Likert scale (5-point) in the survey for measuring variation more accurately in the responses obtained from the participants.

Both reliability and validity complement each other, but usually they might lead to a conflict one another (Neuman, 2006). Reliability of a measurement is evaluated mainly based on validity and integrity. Validity of the data is related to the correctness of the concept that is being investigated, whereas, reliability focuses on consistency and stability in the measurement. If there is a lack of validity in the data, it will lead to a systematic error, whereas, if there is a lack of reliability in the data it can lead to random errors (Davies, 2007).

3.12 Ethical Considerations

It is important for a researcher to address various ethical and moral issues (Churchill & Brown, 2004). Flick (2011) discussed the ethical obligations that are applicable on a researcher, including the way they behave personally. Academic research, generally involves three parties, university, respondents and the researcher. All the interactions among these parties depict a questions series which are ethical (Denizen & Lincoln, 2003). Ethical considerations for a research offers protection to the participants' human rights and ensures that their dignity is safe and they are protected while a research is carried out (Creswell, 2009). Informed consent forms were emailed to the respondents with the survey questionnaire and no personal details were obtained. The respondents name and personal details were not collected so that they can provide their responses without any bias regarding how their satisfaction levels have improved with the implementation of TQM in the organization. Furthermore, their confidentiality and anonymity is maintained and protected at all times. All information collected from the respondents will be stored, process and disposed so that it cannot be misused by any in future. Confidentiality of the respondents is maintained and their responses are not disclosed to anyone.

Chapter 4: Presentation of Results and Analysis

4.1 Introduction

This chapter of the research evaluates and discusses the results obtained by conducting the questionnaire survey with the selected participants. The survey obtained responses of employees including supervisors, management team, workers and technicians to understand if TQM practices implementation increases their satisfaction level in the UAE aviation industry. The findings are presented through frequency distribution tables, reliability analysis and correlation analysis.

4.2 Results of Quantitative Analysis

Questionnaire analysis discusses responses of participants that work in UAE aviation companies, including Emirates, Air Arabia, and Fly Dubai. Frequency distribution tables are formulated to identify which statements are the most or the least favored by the participants. These tables help in identifying patterns of data. The survey conducted with the participants consists of 30 statements. The questionnaire was distributed among 150 employees, out of which 100 responded which makes the response rate to 66.6 percent. The number of filled questionnaires received from the aviation companies were equal. The responses of the participants showed that almost 91 percent of the aviation companies operating in the UAE have implemented TQM which shows that the importance and benefits of TQM are well-known in this sector of the UAE. Moreover, at least 45 percent of the participants were of the opinion that their company has implemented TQM fully, while, 32 percent stated that their company has implemented TQM partially, whereas, only 13 percent of the respondents stated that their company has slightly implemented TQM. As discussed in the literature review, TQM cannot be implemented in a day, it is a process that requires time and continuous efforts to achieve all the benefits that TQM has to offer an organization. Hence, Table 4.1 shows that UAE aviation industry is applying TQM principles and is moving towards achieving zero waste and total quality in all divisions of the industry.

Table 4.1: Extent of Implementing TQM practices by Aviation firm in UAE

Variable	Category	Frequency	Percentage
Has your organization implemented TQM?	Yes	91	91.0
	No	9	9.0
If yes, to what extent?	Fully	45	55.0
	Partially	32	32.0
	Slightly	13	13.0

Table 4.2 shows the demographic profile of the participants. The male participants were 85 percent while, females were 15 percent of the sample. The educational background of the participants shows that almost 35 percent of them obtained their Master's degree. Almost 25 percent of the participants were graduates, while 15 percent were PhD and 25 percent were diploma holders. Majority of the participants have been working for the company in UAE aviation sector for more than 5 years, and almost 88 percent of the participants have an experience of more than 5 years of work.

Table 4.2: Demographic Profile of Participants***Demographic Information***

Variable	Category	Frequency	Percentage
Gender	Male	85	85.0
	Female	15	15.0
Education	Bachelor's Degree	25	25.0
	Master's Degree	35	35.0
	PhD	15	15.0
	Diploma	25	25.0
Experience with the UAE aviation company	Less than 5 years	12	12.0
	5-10 years	32	32.0
	10-15 years	34	34.0
	More than 15 years	22	22.0

4.3 Reliability Analysis

Table 4.3: Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.899	30

The reliability of the survey questionnaire has been assessed using the reliability analysis on SPSS. The summary of results obtained for the reliability analysis shows that Cronbach Alpha is found to be 0.899 and this shows that the reliability of the survey questionnaire is internally inconsistent and good. This also showed that the questionnaire has the ability to gather reliable data and provides results with significant reliability. It was a challenge to evade ethical dilemmas when conducting the questionnaire.

4.4 Frequency Distribution Analysis

The summary of frequency distribution analysis is provided in tables 4.4 - 4.28. All the items in the survey questionnaire were closed-ended, therefore, the participants chose the answers that were close to their opinions. Their choice of answer selected by most of the participants became the majority's opinion. All of the chosen answers of questionnaire items are expressed in terms of percentage.

4.4.1 Leadership

The items from 1 to 7 are focused on determining participants' opinions regarding the role that leadership of the UAE aviation companies play in the implementation of TQM practices.

Table 4.4: The leadership of the company offers significant resources for meeting new requirements due to implementation of quality management systems

Scale	Frequency	Percent
Strongly Disagree	9	9.0
Disagree	9	9.0
Neutral	15	15.0
Agree	26	26.0
Strongly Agree	41	41.0
Total	100	100.0

Table 4.4 shows the level of agreement or disagreement of UAE aviation company employees, supervisors and managers. It is clear that 41 percent of them strongly agreed that the leadership in their company provides substantial resources to them for meeting the new requirements of implementing of quality management systems, 26 percent agreed, 15 percent had a neutral perception that is they neither disagreed nor agreed, however, 9 percent disagreed with the statement and the remaining 9 percent disagreed with the statement. Hence, majority of the participants agreed that leadership plays a crucial role provides resources in order to meet new requirements due to implementation of quality management systems.

Table 4.5: Leadership provides a conducive working environment to involve employees in the process of quality management

Scale	Frequency	Percent
Strongly Disagree	11	11.0
Disagree	8	8.0
Neutral	10	10.0
Agree	35	35.0
Strongly Agree	36	36.0
Total	100	100.0

Table 4.5 shows the level of agreement or disagreement of UAE aviation company employees if their company's leadership provides them with a conducive working environment for involving them in the quality management process. It is evident that majority of the participants have agreed and strongly agreed to this statement. Furthermore, it shows that the UAE aviation companies are considerably focused on involving their employees in the quality management process and are facilitating them to achieve the set target of total quality management.

Table 4.6: Leadership play an effective role in developing plans, systems and strategies for obtaining superior quality in the company

Scale	Frequency	Percent
Strongly Disagree	11	11.0
Disagree	9	9.0

Neutral	11	11.0
Agree	21	21.0
Strongly Agree	48	48.0
Total	100	100.0

Table 4.6 shows the responses of the UAE aviation company employees that if their company's leadership play an effective role in developing plans, systems and strategies for obtaining superior quality in the company. It can clearly be seen from the table that 48 percent of the aviation industry employees strongly agreed that their company's leadership effectively develops plans, strategies and systems to maintain and gain superior quality. This is one reason due to which the aviation companies operating in the UAE are flourishing in terms of offering quality as they are working hard together internally to maintain and provide superior quality.

Table 4.7: Leadership inspires management and staff to make efficient use of resources

Scale	Frequency	Percent
Strongly Disagree	2	2.0
Disagree	5	5.0
Neutral	20	20.0
Agree	35	35.0
Strongly Agree	38	38.0
Total	100	100.0

Table 4.7 shows the level of agreement or disagreement of UAE aviation company employees on the statement that the leadership in the UAE aviation companies inspires the management as well as the staff to utilize resources in an efficient manner. Zero waste and making efficient use of resources plays a very crucial role in achieving total quality. Majority of the participants 38 percent and 35 percent strongly agreed and agreed to the statement. This shows that UAE aviation companies' leaders are effectively focusing on managing and utilizing the company's resources in order to achieve quality.

Table 4.8: Communication system is well-developed in my organization

Scale	Frequency	Percent
Strongly Disagree	5	5.0
Disagree	6	6.0
Neutral	10	10.0
Agree	39	39.0
Strongly Agree	40	40.0
Total	100	100.0

Table 4.8 shows the level of agreement or disagreement of UAE aviation company employees that if the communication system is developed well to which majority of the participants agreed. But, it is also clear from the results that there is always room for improvement as at least 11 percent disagreed and strongly disagreed to this statement. Hence, the UAE aviation companies must seek feedback from their employees in order upgrade their communication system further to satisfying each of the employees.

Table 4.9: Quality management information flows freely between your organization's departments

Scale	Frequency	Percent
Strongly Disagree	3	3.0
Disagree	7	7.0
Neutral	12	12.0
Agree	38	38.0
Strongly Agree	40	40.0
Total	100	100.0

Table 4.9 shows the level of agreement or disagreement of UAE aviation company employees on if the quality management information flows freely between the organization's departments. Majority of the respondents agreed to the statement, but 12 percent had a neutral perception, while 7 percent and 3 percent disagreed and strongly disagreed to the statement. Strong and effective flow of information between the organizational departments is the key to success as it brings everyone on the same page.

Hence, the aviation sector must continuously adopt practices that will further help in free flow of quality information by devising policies and practices.

Table 4.10: Quality management information flows freely between employees in the company

Scale	Frequency	Percent
Strongly Disagree	7	7.0
Disagree	13	13.0
Neutral	15	15.0
Agree	37	37.0
Strongly Agree	28	28.0
Total	100	100.0

Table 4.10 shows the level of agreement or disagreement of UAE aviation company employees that if the quality information flows freely between the employees. Majority of the participants although agreed to the statement, but at least 15 percent had a neutral perception, whereas, 13 percent and 7 percent disagreed and strongly disagreed to the statement. It is clear that TQM needs implementation of an effective change in the culture of the organization and this will only be possible if their deep commitment and involvement of the management towards the continuous improvement strategy adopted by the organization, cooperation, open communication at all levels of the organization. Efficient systems of providing feedbacks and communication are important for articulating ideas to management and between the employees to get the job done.

4.4.2 Customer Focused

Table 4.11: A crucial factor for a company's success is its customer

Scale	Frequency	Percent
Strongly Disagree	4	4.0
Disagree	6	6.0
Neutral	11	11.0
Agree	34	34.0
Strongly Agree	45	45.0

Scale	Frequency	Percent
Strongly Disagree	4	4.0
Disagree	6	6.0
Neutral	11	11.0
Agree	34	34.0
Strongly Agree	45	45.0
Total	100	100.0

Table 4.11 shows the level of agreement or disagreement of UAE aviation company employees on if customers are a crucial success factor for the company. It is evident that majority of participants have agreed that customers are crucial for a company's success.

Table 4.12: The result of a process has a direct impact on company's customers

Scale	Frequency	Percent
Strongly Disagree	3	3.0
Disagree	2	2.0
Neutral	24	24.0
Agree	35	35.0
Strongly Agree	36	36.0
Total	100	100.0

Table 4.12 shows the level of agreement or disagreement of UAE aviation company employees that if the result of a process impacts its customers directly. It is evident that majority agreed to the statement. Also, it is important to understand that all the initiatives and processes that a company devises eventually has an impact on the customers. Since, every company works for providing the best quality to their customers and they are the center of concern for the company. therefore, all the processes that the company uses will either impact the customer by offering the quality product or by charging a price a for the product or service.

Table 4.13: Satisfaction of customers increases organizational cash flow

Scale	Frequency	Percent
Strongly Disagree	10	10.0
Disagree	10	10.0
Neutral	5	5.0
Agree	35	35.0
Strongly Agree	40	40.0
Total	100	100.0

Table 4.13 shows the level of agreement or disagreement of UAE aviation company employees that customer satisfaction helps increase cash flows. Majority of the participants agreed to this statement.

4.4.3 Employee Empowerment

Table 4.14: The top management of the company manages employees' quality effectively due to the implementation of quality management

Scale	Frequency	Percent
Strongly Disagree	3	3.0
Disagree	3	3.0
Neutral	21	21.0
Agree	36	36.0
Strongly Agree	39	39.0
Total	100	100.0

Table 4.14 shows the level of agreement or disagreement of UAE aviation company employees that if the top management of the organization manages employees' quality effectively due to the implementation of quality management. Majority of the participants agreed that in their organizations employee quality is ensured after the implementation of TQM.

Table 4.15: Company spends a significant amount of its yearly budget on training and development of its employees to teach total quality management systems

Scale	Frequency	Percent
Strongly Disagree	5	5.0
Disagree	9	9.0
Neutral	10	10.0
Agree	32	32.0
Strongly Agree	44	44.0
Total	100	100.0

Table 4.15 shows the level of agreement or disagreement of UAE aviation company employees that their company spends a substantial amount of its yearly budget on development and training of its employees for teaching them TQM tools and systems. Majority of the participants agreed to this statement.

Table 4.16: Systems of quality management promotes employees' freedom to make use of their initiative related to customer delivery

Scale	Frequency	Percent
Strongly Disagree	4	4.0
Disagree	3	3.0
Neutral	15	15.0
Agree	41	41.0
Strongly Agree	37	37.0
Total	100	100.0

Table 4.16 shows the level of agreement or disagreement of UAE aviation company employees to the statement that systems of quality management promotes employees' freedom to make use of their initiative related to customer delivery. Majority of the participants agreed to this statement (37 percent, strongly agreed; 41 percent agreed), while 15 percent had a neutral perception, 3 percent disagreed and 4 percent strongly disagreed.

Table 4.17: Management of the company promotes to build an environment which encourages efforts of employees towards attaining institutional objectives

Scale	Frequency	Percent
Strongly Disagree	6	6.0
Disagree	4	4.0
Neutral	10	10.0
Agree	35	35.0
Strongly Agree	45	45.0
Total	100	100.0

Table 4.17 shows the level of agreement or disagreement of UAE aviation company employees that if management of the company promotes to build an environment which encourages efforts of employees towards attaining institutional objectives. Majority of the participants agreed to the statement.

Table 4.18: Employees possess authority at all levels to take decision which impact them and their teams

Scale	Frequency	Percent
Strongly Disagree	3	3.0
Disagree	13	13.0
Neutral	5	5.0
Agree	42	42.0
Strongly Agree	37	37.0
Total	100	100.0

Table 4.18 shows the level of agreement or disagreement of UAE aviation company employees if the employees are provided authority at all the levels to take decisions that have an impact on them and their teams. Majority of the participants agreed that they are given authority to make decisions. When employees feel they are involved in the procedure and are given authority, they contribute towards it, this develops a stronger ownership feeling towards the process, this will increase the compliance with such

procedures. It is very likely that such an involvement will improve procedures' quality that will lead to a higher compliance level.

4.4.4 Training and Education

Table 4.19: Assessment for training needs is carried out for junior ranked officers

Scale	Frequency	Percent
Strongly Disagree	5	5.0
Disagree	9	9.0
Neutral	7	7.0
Agree	37	37.0
Strongly Agree	42	42.0
Total	100	100.0

Table 4.19 shows the level of agreement or disagreement of UAE aviation company employees that if assessment for training needs is carried out for junior ranked officers. Majority of the participants agreed to the statement.

Table 4.20: Junior officers obtain career development at work

Scale	Frequency	Percent
Strongly Disagree	8	8.0
Disagree	17	17.0
Neutral	15	15.0
Agree	29	29.0
Strongly Agree	25	25.0
Total	100	100.0

Table 4.20 shows the level of agreement or disagreement of UAE aviation company employees that if Junior officers obtain career development at work. It is evident from the results that the UAE aviation companies offer their employees with career development at work as majority agreed to the statement.

Table 4.21: Junior officers are trained adequately on how they should execute their tasks

Scale	Frequency	Percent
Strongly Disagree	0	0.0
Disagree	6	6.0
Neutral	25	25.0
Agree	32	32.0
Strongly Agree	37	37.0
Total	100	100.0

Table 4.21 shows the level of agreement or disagreement of UAE aviation company employees that if Junior officers are trained adequately on how they should execute their tasks. Majority of the participants agreed to the statement.

Table 4.22: Junior officers experience personal improvement while at work

Scale	Frequency	Percent
Strongly Disagree	11	11.0
Disagree	10	10.0
Neutral	12	12.0
Agree	28	28.0
Strongly Agree	39	39.0
Total	100	100.0

Table 4.22 shows the level of agreement or disagreement of UAE aviation company employees that if Junior officers experience personal improvement while at work. It is evident from the above results that majority of the participants have agreed to the statement.

4.4.5 Teamwork

Table 4.23: TQM help create a bond between employees while working in a team

Scale	Frequency	Percent
Strongly Disagree	6	6.0
Disagree	8	8.0
Neutral	9	9.0
Agree	38	38.0
Strongly Agree	39	39.0
Total	100	100.0

Table 4.23 shows the level of agreement or disagreement of UAE aviation company employees that if TQM help create a bond between employees while working in a team. Majority of the participants have agreed to this statement.

Table 4.24: TQM encourages employees to achieve their goals by using skills for improving work quality

Scale	Frequency	Percent
Strongly Disagree	4	4.0
Disagree	3	3.0
Neutral	12	12.0
Agree	40	40.0
Strongly Agree	41	41.0
Total	100	100.0

Table 4.24 shows the level of agreement or disagreement of UAE aviation company employees that TQM encourages employees to achieve their goals by using skills for improving work quality. It is evident that majority agreed to this statement that TQM encourages the employees and helps them in achieving their goals and increase their satisfaction levels.

Table 4.25: TQM builds an environment that produces the best from its employees

Scale	Frequency	Percent
Strongly Disagree	1	1.0
Disagree	11	11.0
Neutral	11	11.0
Agree	38	38.0
Strongly Agree	39	39.0
Total	100	100.0

Table 4.25 shows the level of agreement or disagreement of UAE aviation company employees that if in their organisation TQM builds an environment that produces the best from its employees. Majority of the participants (39 percent strongly agreed, and 38 percent agreed) agreed to the statement.

4.4.6 Organizational Performance

Table 4.26: TQM ensures effective reduction of waste in the operations

Scale	Frequency	Percent
Strongly Disagree	3	3.0
Disagree	7	7.0
Neutral	7	7.0
Agree	41	41.0
Strongly Agree	40	40.0
Total	100	100.0

Table 4.26 shows the level of agreement or disagreement of UAE aviation company employees that if TQM ensures effective reduction of waste in the operations. Majority of the participants (40 percent strongly agreed, and 41 percent agreed) that TQM ensures effective reduction of waste in the operations.

Table 4.27: TQM has improved operational efficiency and reduced costs

Scale	Frequency	Percent
Strongly Disagree	2	2.0
Disagree	8	8.0
Neutral	9	9.0
Agree	39	39.0
Strongly Agree	42	42.0
Total	100	100.0

Table 4.27 shows the level of agreement or disagreement of UAE aviation company employees that if TQM has improved the company's operational efficiency and reduced its costs. Majority of the participants agreed that TQM has improved the operational efficiency and reduced the company's costs. It is important to understand that improvement is a continuous process and it must not stop so that the company is able to have a better financial position as well as meet its customers' demands effectively.

Table 4.28: TQM ensure customer and employee satisfaction and retention

Scale	Frequency	Percent
Strongly Disagree	2	2.0
Disagree	10	10.0
Neutral	11	11.0
Agree	32	32.0
Strongly Agree	45	45.0
Total	100	100.0

Table 4.28 shows the level of agreement or disagreement of UAE aviation company employees that if TQM ensures customers and employee satisfaction and retention. The responses showed that 45 percent strongly agreed, 32 percent agreed, 11 percent were neutral to the statement, while, 10 percent and 2 percent disagreed and strong disagreed respectively.

4.6 Correlation Analysis

Table 4.29: Summarised Results of Correlations

		TPMP
Employee Satisfaction	Pearson Correlation	.641
	Sig. (2-tailed)	.000
	N	100

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

The coefficients of correlation are depicted in Table 4.29. All these variables are all statistically significant. The results of the correlation analysis have indicated that the TQM practices are positively significantly correlated with the dependent variable. The data obtained to the identified important variables of this research is collected based on the 5-point Likert scale. Hence, it is important to convert data from categorical nature to a continuous format before the data can be utilized for carrying out the correlation analysis. The option tool of compute variable in SPSS is used for forming continuous format by combining the items that are related to same variable. Five continuous variables are created such as leadership, (from items 1 to 7), customer focused (from items 8 to 10), Employee Empowerment (from items 11 to 15), training and education (from items 16 to 19) and teamwork (from items 20 to 22).

Once these variables were calculated and assessed using the correlation analysis of SPSS for identifying the relationship between employee satisfaction and TQM practices. The results of this correlation analysis have shown that at 99 percent confidence level, the value of sig. (2-tailed) correlation between these variable is 0.000, while the value of Pearson Correlation is 0.641. Since, the significance value is less than 0.05 and value of Pearson Correlation is positive hence, the employee satisfaction is found to have a significant positive relationship with the TQM practices. Hence, it is clear that TQM practices increases the level of employee satisfaction.

4.3 Hypotheses Testing

Hypotheses were developed for this research based on the literature review. The hypotheses results are shown in the table below:

H ₁ : TQM practices significantly increase employee satisfaction	Valid
H ₂ : Leadership has a positive impact on employee satisfaction	Valid
H ₃ : Training and education has a positive effect on employee satisfaction	Valid
H ₄ : Customer focus has a positive effect on employee satisfaction	Valid
H ₅ : Teamwork has a positive effect on employee satisfaction	Valid
H ₆ : Employee empowerment has a positive effect on employee satisfaction	Valid

Based on the findings of this research, it is evident that all the hypotheses are valid. Hence, it is clear that the TQM practices have a significantly positive relationship with the satisfaction levels of the employees.

4.4 Discussion

The aim of this research is to investigate if TQM practices affect the employees' satisfaction in the UAE aviation industry. It is clear from the results that education and training, employee empowerment customer focused and teamwork have a positive effect on employees' job satisfaction level. All these aspects related to job attitudes enhanced as the practices of TQM increased in the company. It is crucial for the human resource department of the company to enhance and review motivation, retention and training of good employees and the concept of TQM must be supported by the employees as well as the unions. It is also clear that higher the level of employee empowerment and teamwork, the greater will be the enhancement of the attitudes related to the job. In this regard, the findings of a research by Osland (1997) and Wilkinson (1998) supports this finding. The degree to which the teamwork involves top management or leadership, it is crucial that the leader or the top management is committed highly with the TQM practices. Additionally, it is important for the managers to train their employees to work as team to achieve the shared organizational goals.

Employees must feel free and must have the authority to manage and control their own areas of work. They must have an impact on the decisions and possess greater opportunity to depict the initiative of offering quality services to their clients. Moreover, education and training has a positive impact on employee satisfaction. Continuously educating and providing training is important continuous improve of employee skills. the greater the degree of on-going education and training in a company, the higher will be the employee commitment towards the organization. The department of training must offer continuous education and training to the employees in order to ensure continuous improvement in aspects of attitudes related to the job. It can also be said that the lack of a strong relationship between the important relationship between TQM practices and employee satisfaction states that the management may not have

depicted its commitment to the practices of TQM, specifically of preventing problems and continuous improvement.

It is clear that the customer focus makes a significant contribution towards the attitudes of employees related to work. This shows that the management has been able to communicate their commitment for this crucial practice. A crucial recommendation that emerges from this research is that the UAE aviation companies must concentrate more on resolving customer complaints and feedbacks as a top priority. This finding is also supported by Karia and Asaari (2006). The result is consistent with the past research which showed that the customer focus does not show favorable contribution towards the employees' job involvement (Batista et al., 2013).

A manager with the changes in the TQM practices can lead to an increase in the employees' involvement in their job. The result of this research is supported by the finding obtained by Karia and Asaari (2006), who found that practices of TQM significantly effects the employees' involvement in their job and their overall satisfaction levels. Also, the finding of another research carried out by Ooi et al. (2007a) found that practices of TQM are linked positively to the employee satisfaction supports the results of research. Also, the result is consistent with the past research that found that the customer focus does not show have any contribution towards levels of employee satisfaction (Batista, et al., 2013). Training and education are found to have a positive effect on the employee satisfaction with the implementation of TQM practices. Education and training are provided to employees for enhancing their knowledge and skills so they are able to perform better and can be retained in the company for a longer span of time. This research is consistent with the past research that found that both education and training are linked positively to employee satisfaction (Ooi et al., 2013). Karia and Assari (2006) found education and training to be linked positively with employee satisfaction. Although, this result is not consistent with the finding of Ooi et al., (2013) which showed that education and training are not an effective predictor of employee satisfaction. Although, this result is in contradiction to the finding of Batista et al. (2013) who found that education and training do not show a favorable contribution towards satisfaction levels of employees. Teamwork is shown to have a positive contribution towards employee satisfaction. In practices of TQM, teamwork and collaboration play a crucial role for enhancing and increasing the employees' job involvement. Managers are required to train their employees to work as teams so that they are better able to achieve the set organizational goals. Employees must have the control and should be free to manage their work so that they can achieve better results for the organization. A study by Ooi, et al. (2013) found that teamwork is linked positively with the employee satisfaction as well as their job involvement. Also, the study by Karia & Assari (2006) further supports this finding. The results found in this research are consistent with that of the past researches and that employee empowerment, leadership,

teamwork, training and education have a positive effect on employee satisfaction, while, customer focus is not found to have a direct effect on the satisfaction levels of the employees.

Chapter 5: Conclusion and Recommendations

5.1 Introduction

This chapter concludes the research and offers recommendations for the UAE aviation industry to increase employee satisfaction levels. Moreover, this chapter makes recommendations for future research.

5.2 Conclusion

The aim of this research is to investigate the improvements that TQM practices make to employee satisfaction levels in the UAE aviation industry. It is found that the leadership, teamwork, education and training, employee empowerment and customer focus all have an impact on the employee satisfaction levels. Implementation of TQM practices and ensuring quality improvement in all the departments of a company will help the organisation to increase its employees' satisfaction. All these aspects related to job attitudes enhanced as the practices of TQM increased in the company. The degree to which the teamwork involves top management or leadership, it is crucial that the leader or the top management is committed highly with the TQM practices. Additionally, it is important for the managers to train their employees to work as team to achieve the shared organizational goals. Hence, it is clear that TQM practices do have a positive impact on the satisfaction levels of the employees working in the UAE aviation industry. Moreover, it is recommended that UAE aviation companies must focus on complete application of TQM practices to increase their employee satisfaction levels as well as increase their employee and customer retention. Employees must feel free and must have the authority to manage and control their own areas of work. They must have an impact on the decisions and possess greater opportunity to depict the initiative of offering quality services to their clients. Moreover, education and training has a positive impact on employee satisfaction. Continuously educating and providing training is important continuous improve of employee skills. the greater the degree of on-going education and training in a company, the higher will be the employee commitment towards the organization. The department of training must offer continuous education and training to the employees in order to ensure continuous improvement in aspects of attitudes related to the job.

This research also showed that TQM practices lead to greater participation of employees, help promote empowerment and assigning authority, helps in identifying the true worth of employees as they play a crucial role in achieving the targets set by the organization. Therefore, it is extremely important for any organization to treat its employees or human capital as their primary resource. Moreover, this research also confirms that TQM practices have a significant impact on the employee's job involvement,

level of their job, career satisfaction and organizational commitment. Furthermore, organization's must show commitment towards practices of TQM and implement them successfully.

5.3 Recommendations

This research study offers significant insight on how employees should employees can be satisfied with the application of TQM practices. The results of this research are consistent with the past researches. Although, there are various researches that have been carried out on the practices of TQM and how it overall improves employees' involvement in their jobs and satisfaction. It is recommended that UAE aviation company managers must pay close attention to the different TQM practice dimensions with which the TQM practices must be focused on when the TQM policies for the company are being devised. Also, greater emphasis must be on the customer focus, team work, education and training as well as on empowering the employees. In order to successfully implement the practices of TQM in the sector to achieve the organizational goals and retain skillful employees for a longer span of time and to enhance the employees' involvement in the job.

It is also recommended that managers must devise effective practices of TQM for increasing their employees' involvement. Based on the direct impact that certain TQM practices have on employee satisfaction, the senior management of the company must carry out formal TQM programs for all the newly hired employees and offer their already existing employees with education and training programs on a regular basis, including both on and off the job training so that their employees gain attitudes and the turnover rate reduces. Although, the results of the survey show a good picture of how UAE aviation has implemented TQM practices in their companies, but since there is always room for improvement, managers must continuously monitor the activities of the organization for implementing the TQM practice properly.

5.4 Recommendations for Further Research

In future, this research can be carried out in different sectors of UAE. Moreover, a cross-country analysis for aviation companies can be carried out to see how different is the TQM practices implementation. Moreover, other variables that are important such as changes in job like rewards for performance, job security, organizational support for the employees must be included in the conceptual framework for future researches. This will help incorporate more variables and will provide a better picture of how TQM practices improve the level of employee satisfaction in the long-run.

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Appendices

Appendix A: Informed Consent Form

Dear Sir/Ma'adm,

I am investigating impact of TQM (Total Quality Management) on employee satisfaction levels in the UAE aviation industry. This dissertation is based on a quantitative data analysis for obtaining opinions of the employees to investigate if implementation of TQM improves and increases their satisfaction levels.

I will be grateful if you fill the attached questionnaire and participate in the study. In appreciation to your participation, I will email you the summary of my research findings after the study is completed (if you are willing to offer me our email address, it will be kept confidential). I am hopeful that my research results are of value to you and your organization.

I assure you that complete confidentiality will be maintained. Also, none of your personal information like your name and professional position will not be required on the questionnaire and no other private information will be collected. Moreover, anonymity will be maintained.

I would be grateful to you if you answer they survey questions and email it back to me. Moreover, I would be pleased if you require answer to any questions relative to the research I am conducting.

Thank you in advance for your assistance.

Sincerely Yours.

Ashwin V

Appendix B: Ethics Form

Applicant Details

Applicant name	Ashwin Varughese
Contact Email	Ashwin.varughese89@gmail.com

Project Details

Project Title	Investigating Improvements in Employee Satisfaction and Attitudes Through Total Quality Management in UAE Aviation Industry
Has peer review taken place	Yes
Predominant nature of this project	Data based

Participant Details

Does the study involve recruiting participants through a gatekeeper?	✓ Yes	No
Source and means by which participants are to be recruited	References provided by colleagues	

Participant Information

	Yes	No
Participants will be informed that their participation is voluntary	✓	
Participants will be informed that they may withdraw from the research at any time and for any reason	✓	
Participants will be informed that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs	✓	
Information sheet will include the contact details of the researcher/team	✓	
Written consent for participation will be obtained	✓	
Participants will be given an option of omitting questions that they do not want to answer	✓	

Appendix C: Survey Questionnaire

This questionnaire is based on 3 sections. This research studies the effect of TQM improvements on employee satisfaction levels in the UAE aviation industry.

Section A: Demographic Information

1. Gender

- Male
- Female

2. Education

- Bachelor's Degree
- Master's Degree
- PhD
- Diploma

3. Experience with the UAE aviation company

- Less than 5 years
- 5-10 years
- 10-15 years
- More than 15 years

Section B: Extent of Implementing TQM practices by Aviation firm in UAE

4. Has your organization implemented TQM?

- Yes
- No

5. If yes, to what extent?

- Fully
- Partially
- Slightly

7. Using a scale of 1-5, where 5= strongly agree; 4=Agree; 3=Neutral; 2=Disagree; 1=strongly Disagree; Please indicate the extent to which you agree with the following statements?

Leadership	1	2	3	4	5
1. The leadership of the company offers significant resources for meeting new requirements due to implementation of quality management systems					
2. Leadership provides a conducive working environment to involve employees in the process of quality management					
3. Leadership play an effective role in developing plans, systems and strategies for obtaining superior quality in the company					
4. Leadership inspires management and staff to make efficient use of resources					
5. Communication system is well-developed in my organization					
6. Quality management information flows freely between your organization's departments					
7. Quality management information flows freely between employees in the company					
Customer Focused					
8. A crucial factor for a company's success is its customer					
9. The result of a process has a direct impact on company's customers					
10. Satisfaction of customers increases organizational cash flow					
Employee Empowerment					
11. The top management of the company manages employees' quality of quality effectively due to the implementation of quality management					
12. Company spends a significant amount of its yearly budget on training and development of its employees to teach total quality management systems					
13. Systems of quality management promotes employees' freedom to make use of their initiative related to customer delivery					
14. Management of the company promotes to build an environment which encourages efforts of employees towards attaining institutional objectives					
15. Employees possess authority at all levels to take decision which impact them and their teams					
Training and Education					
16. Assessment for training needs is carried out for junior ranked officers					

17. Junior officers obtain career development at work					
18. Junior officers are trained adequately on how they should execute their tasks					
19. Junior officers experience personal improvement while at work					
Teamwork					
20. TQM help create a bond between employees while working in a team					
21. TQM encourages employees to achieve their goals by using skills for improving work quality					
22. TQM builds an environment that produces the best from its employees					
Organizational Performance					
23. TQM ensures effective reduction of waste in the operations					
24. TQM has improved operational efficiency and reduced costs					
25. TQM ensure customer and employee satisfaction and retention					