

**THE REPUBLIC OF TURKEY
İSTANBUL KÜLTÜR UNIVERSITY
INSTITUTE OF GRADUATE STUDIES**

**THE ROLE OF LEADERSHIP IN ENHANCING THE TQM
PERFORMANCE**

MASTER OF SCIENCE THESIS

By Razan ABURAHMAH

1800004562

Department: Industrial Engineering

Program: Engineering Management

Supervisor: Assist. Prof. Ibrahim Ethem TARHAN

FEBRUARY 2021

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LIST OF SYMBOLS

TQM	Total Quality management.
EFQM	European Foundation for Quality Management Model
MBNQA	Baldrige National Quality Award
PDCA	Deming's Cycle
GC	General Coordinator
CFO	Chief Financial Officer
CEO	Chief Executive Officer
FOC	Focus on Customer
LC	Leadership Commitment
CI	Continuous Improvement
MAS	Management Administration Systems
OP	Operation Procedure
SP	Strategic policies
OPE	Organizational Performance

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ÖZET

TKY’NİN UYGULANMASINDA LİDERLİĞİN ROLÜ

Razan ABURAHMAH

Toplam Kalite Yönetimi (TKY) 21. yüzyılda ulusal bir konu haline gelmiştir. Liderlik, TKY'nin başarılı ve etkili bir şekilde uygulanması ve sürdürülmesi için çok önemli bir faktördür. Kalite yönetim süreci, bir kuruluşun yaptığı işinden ayrı bir faaliyet olarak düşünülemez. Aksine, bir kuruluşun işinin önemli bir parçası olarak sayılmaktadır. Ayrıca, etkili ve uygun liderlik olmadan kalitenin geliştirilmesi mümkün değildir. Bu doğrultuda, bu konu üzerine yapılan çalışmalara bakıldığında, araştırmacıların TKY'deki liderliğin rolü ve performansı hakkındaki bakış açıları arasında bir farklılık görülmesine rağmen, bu çalışmada toplam kalite yönetimi unsurlarının uygulanmasında liderliğin rolünü ve bunun bir kuruluşun performansı üzerindeki etkisi incelenmiştir. Bu çalışma, (reform sport group) sanayi sektöründeki bir şirketler grubu olarak inceleyerek ve TKY unsurları ile organizasyonların performansı arasında bir etki ve ilişki olup olmadığını öğrenmek için yapılmıştır. Bu bağlamda araştırmacı, nicel bir araştırma yöntemi kullanmıştır. Sonuçlar, TKY'nin müşteriye odaklanan unsurları, liderlik taahhüdü, sürekli geliştirme, yönetim ve idare sistemi, operasyonel prosedürler ve stratejik politikaların hepsinin organizasyonun performansı üzerinde olumlu ve önemli bir etkiye sahip olduğunu göstermiştir. Ayrıca, organizasyonun performansının artma derecesi veya düşüşler, belirli TKY değişkenleri tarafından ölçüldüğü görülmüştür. Bu nedenle, bir kuruluşun performansının başarısı, liderin TKY unsurlarını uygulamadaki başarısına bağlıdır. Dolayısıyla lider, TKY uygulaması hakkında ne kadar anlayış gösterse ve bilgiye sahipse, o kadar fayda elde edilebilecektir.

Anahtar kelimeler: Toplam Kalite Yönetimi, liderlik, TKY unsuru, organizasyonun performansı

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ABSTRACT

THE ROLE OF LEADERSHIP IN ENHANCING THE TQM PERFORMANCE

Razan ABURAHMAH

Total Quality Management (TQM) has become a worldwide topic in the 21st century, and leadership is a very important factor for the successful implementation and maintenance of TQM. The quality management process can't be considered as an isolated activity from the rest of the organization's work, but rather an essential part of its business, and quality cannot be improved without effective and appropriate leadership, thus, this study examined the role of leadership in implementing the elements of total quality management and its impact on the organization's performance, even though there is a difference between researchers' point of view about the role and performance of leadership in TQM. This was done through conducting a case study within the industrial sector in turkey, and (reform sport group) was a case chosen to study it and knowing if there is an impact and correlation between the elements of TQM and organizations' performance. In this context, the researcher used a quantitative research method. The results were the elements of TQM which are focus on the customer, leadership commitment, continues improvement, management and administration system, operational procedures and strategic polices all have positive significant effect on organization' performance, and the degree to which the organization's performance increases or decreases is measured by certain TQM variables. Thus, the success of the organization's performance depends upon a leader's success in implementing TQM elements, so the more understanding the leader has about TQM implementation and commitment, the more benefits are gained.

Keywords: Total quality management, leadership, element of TQM, organizational performance

Science Code:

1. INTRODUCTION

This chapter is made up of the background of the study, problem discussion, research questions, hypothesizes and the scope of the study.

1.1. Background of the Study

Total Quality Management (TQM) has become a worldwide topic in the 21st century. TQM was found in the United States of America (USA) and partly in Japan and it was adopted by Japanese companies after World War II. After the war, W. Edwards Deming (1986) derived the first philosophy of cooperation and continual improvement, and he set the ideas of TQM in organizations to achieve product quality and meet customer satisfaction. Japan was the first country that applied Deming's concept and principles. At the end of the fifties, Joseph M. Juran (1989) supported and developed Deming's concept and was the first to incorporate the human aspect of total quality management. In the early seventies, Crosby (1979) improved the concept of TQM in the USA and considered that the competition with Japan needed a lot of effort to create and develop total quality management in different organizations. Crosby also stated that the idea of quality is free if done right the first time while conforming to the standards. Deming, Juran, and Crosby all focused on customers, continuous improvement, cooperation, and continual update. At the end of the eighties and the beginning of the nineties, significant developments in TQM took place, such as Quality Circles, Quality of Work Life, and International Standardization Organization (ISO 9000 series).

According to studies in recent years, there were a lot of researchers, scholars, books and articles that agreed with quality gurus, they even explain it from their point of view, but most researchers reached at the conclusion that effectively applying TQM in different organizations can improve their performance, productivity, and maintain customer's satisfaction. Additionally, they determined that

a very important factor for the successful implementation and maintenance of TQM is **leadership**.

Along with TQM, leadership is the main concentration in this thesis. According to Alharbi et al. (2012), the quality of leadership is a major factor to enhance the quality of the manufacturing processes, products, and services. Moreover, quality and speed could prolong an organization in a competitive site, and they are possibly accredited to the success of firms for a long period of time. Kovach (2018) defined leadership theories as a theory formed from several theoretical standpoints, include the theories of leading thinkers, models, tools, frameworks, paradigms and concepts.

While the literature on quality management demonstrates the development of leadership as something important, many scholars propose that there haven't been studies that systematically explain the essence of management or leadership processes that make the implementation of quality culture easier. Lakshman (2011), there is a possibility for an extreme combination of leadership literature with quality management literature, and it may benefit both theory and practice. Furthermore, Lakshman (2011) said that previous studies highlight the positive impact of TQM on organizational performance and lack of leadership support led to failure in TQM.

Although there is a difference between researchers' point of view about the role and performance of leadership in TQM, this study deeply investigate the role of leadership in implementing the elements of total quality management and its impact on the organization's performance, and this was done through conducting a case study within the industrial sector in turkey, and (reform sport group) was a case chosen for this study to knowing if there is an impact and correlation between the elements of TQM and organizations' performance.

Reform Sports Group was first established in 1995 in Turkey. They specialize in building sports facilities, such as, golf courses, rugby fields, artificial turf football fields, athletic tracks, etc. They also have works in landscape decoration and kids' playgrounds. There are six companies with the headquarters in Turkey, as well as suppliers in different countries. The focus in the study is on the headquarter of the company which is in turkey.

1.2. Problem Discussion

Total Quality Management is a decisive feature in the manufacturing, distribution and trading industries. For a company to remain competitive on a global scale, improvements must be made to achieve a high level of quality. Sometimes organizations fail to comprehend quality improvements due to a lack of a holistic understanding of the quality tool(s) or concept(s) by the entire organization (Teece, 2010). Some companies or organizations adopt the successes and failures of large international companies, and that's considered a problem because an approach that is suitable for one organization might not be for another organization, so successful companies have to adopt unique approaches of TQM according to their own requirements.

There are different constraints in organizations and the most important ones are differences among people, lack of realization that clients can go and deal with the competitor, reluctance and unwillingness to pay for improved service quality, difficulty putting a specific definition for the quality and therefore difficulty in measuring its levels, believing that results will be achieved in a short period of time, exaggeration in the promises regarding the service provided without fulfilling it, and making group plans for service provision without providing the service on an individual level, and some companies refuse to change. These are the kind of problems that an organization might face because of leadership failure. Hence, the researcher is conducting this research to studying the reform sport as a group of companies within the industrial sector and knowing the role of leadership in implementing the TQM and if there is an impact and correlation between the elements of TQM and organizations' performance.

1.3. Aim of the Research

This study aims to investigate the effects of leadership practices TQM implementation on the organizational performance in industrial sector, to better understand their influence and to highlight effective leadership, fact-based decision-making, strategic planning, participation and collaboration, community, continuous improvement in performance and achieving customer satisfaction. The intention is to demonstrate that TQM without the right leadership cannot fully succeed.

The main objectives of the study are:

- To investigate the extent of leadership commitment in implementing the TQM elements within the company.
- To recognize major TQM implementation obstacles in industrial sector.
- To identify the impact of the role of leadership practice TQM on the organizational performance.
- To determine which elements had a highly impact on organizational performance in Reform sport group.

1.4. Research Questions

The current research seeks to answer the questions below:

1. What is the TQM and how its benefit the organizational performance?
2. Is there a significant and positive correlation between total quality management elements (focus in the customer, leadership commitment, continuous improvement, management and administration system, operational procedures, strategic polices) and organizational performance?
3. Does the role of leadership in implements the TQM elements increase organizational performance?
4. What is the effect of TQM elements on organizational performance?

1.5. Hypothesis

Leadership is responsible for analyzing organizational problems, revising their vision and mission, and determining the strategies needed for achieving organizational objectives and goals (Jabbar & Hussein, 2017).

Strong positive and open-minded leadership will contribute to sustainable business success in the long-term. Thus, the following hypothesis is proposed:

H1: focus on the customer has a positive effect on the performance of the organization.

H2: leadership commitment has a positive effect on the performance of the organization.

H3: continuous improvement has a positive effect on the performance of the organization.

H4: management and administration system has a positive effect on the performance of the organization.

H5: operational procedures have a positive effect on the performance of the organization.

H6: strategic policies have a positive effect on the performance of the organization.

H7: There is a strong positive relationship between role of leadership in implementing the elements of TQM and the performance of the organization.

1.6. Reserch Scope and Structure

The current research is focused on the role of leadership in implementing TQM and its impact performance of the organization. The study is applied on “Reform Sports Group”.

In order to achieve the main aim of the research, ensure the fulfillment of the subsequent objectives and answer the research questions, the thesis report is divided into five main chapters:

Introduction: this chapter is made up of the background of the study and discusses the research problem, as well as sets the research questions and the objectives the researcher is looking for, in addition to the hypothesizes that will be tested in this research.

Literature Review: this chapter provides an overview of the literature related to the different issues of TQM (concept of quality, quality management and different definitions of total quality management), in addition to the TQM gurus and their contributions. Furthermore, it provides a summary of the elements and the benefits of TQM implementation in the industrial sector, the barriers that may prevent the

application of TQM. In addition, it highlights the concept and definitions of leadership, identifies the leadership styles in TQM practices, and presents the Action-Centered Leadership Model and the functions related to the model.

Methodology: this chapter describes the methodology that will be used in this thesis. The researcher will use the quantitative method in order to reach a logical result and test the hypothesis. Also, this chapter gives a brief insight into the data collection, data analysis, reliability and the sample that is targeted in this research.

Implementation and Results: in this chapter the researcher gives a brief introduction about the case study, as well as the data analyzed by using two software program the first one is Excel and the second one is SPSS "Statistical Package for Social Scientist", descriptive and inferential statistics were obtained to achieve the main purpose of the thesis, which is understanding the impact of leadership in implementing TQM on organization' performance. Also, the results will be stated in this chapter.

Conclusion: this chapter consists of the findings discussion, the recommendations of the research, and it concludes with the summary of the research outcomes.

2. LITERATURE REVIEW

This chapter offered an overview of the literature associated to the different issues of TQM (concept of quality, quality management and different definitions of total quality management), in addition to the TQM gurus and their contributions. Furthermore, it provides a summary of the elements and the benefits of TQM implementation in the industrial sector, the barriers that may prevent the application of TQM. In addition, it highlights the concept and definitions of leadership, identifies the leadership styles in TQM practices, and presents the Action-Centered Leadership Model and the functions related to the model.

2.1. The Concept of Quality

To make a company successful, it must be based on a set of values that will support the business, such as, convincing consumers that it is the right choice and attracting new customers while maintaining existing ones. The importance of quality as an element is to maintain customer satisfaction through production or services. Quality is considered as one of the most popular terms in the world nowadays. Evans et al. (2013) stated that the roots of quality concepts could be grouped into four groups, value, performance, and standards enforcement and consumer expectation. There are various explanations and conflicting views of quality among different people, and all these definitions share the common factor in that quality of products or services is related to the degree to which the product or service fulfills customer outlooks.

By reviewing the literature of quality, the researcher became familiar with the quality meaning and is able to define quality as "It is the degree of value which is offered through a product or service by maintaining the minimum cost while providing maximum quality features for customer satisfaction".

2.2. Quality Management

Conscious management in all types of organizations whether it be public or private, profitable or non-profitable, commodities or services, seeks to achieve quality in their works. There are already different terminologies that indicate the

quality in organizations, like productivity and effective efficiency. The definition of quality comes up with totality because the management seeks to achieve quality that includes all aspects.

Zeng et al. (2015) stated that the components of quality management, which can be divided into two dimensions: soft and hard. Hard elements apply to manufacturing and process control strategies that ensure the safe operation of systems (including the design process, ISO 9000, 'just-in-time' philosophy and the 7 basic quality control tools), whereas soft elements contain topics such as leadership, human resource management, supplier relationship and customer attention (Zeng, Anh Phan, & Matsui, 2015).

2.3. Concept from Quality Gurus

For understanding the roots of TQM, it is important to acknowledge the quality gurus whose ideas, approaches, and tools have become the practice. A comprehensive literature review has been conducted to identify the concept of total quality management. The following parts present TQM's major philosophies, methods and concepts suggested by the founders of quality.

2.3.1. William Edwards Deming

Many scholars agreed that William Edwards Deming is the founder of business' quality. Deming (1986) recognized the significance of defining and evaluating customer needs, establishing manufacturer relationships, leveraging responsive teams to recognize and resolve quality problems, improving management expertise, employee involvement and continuous development.

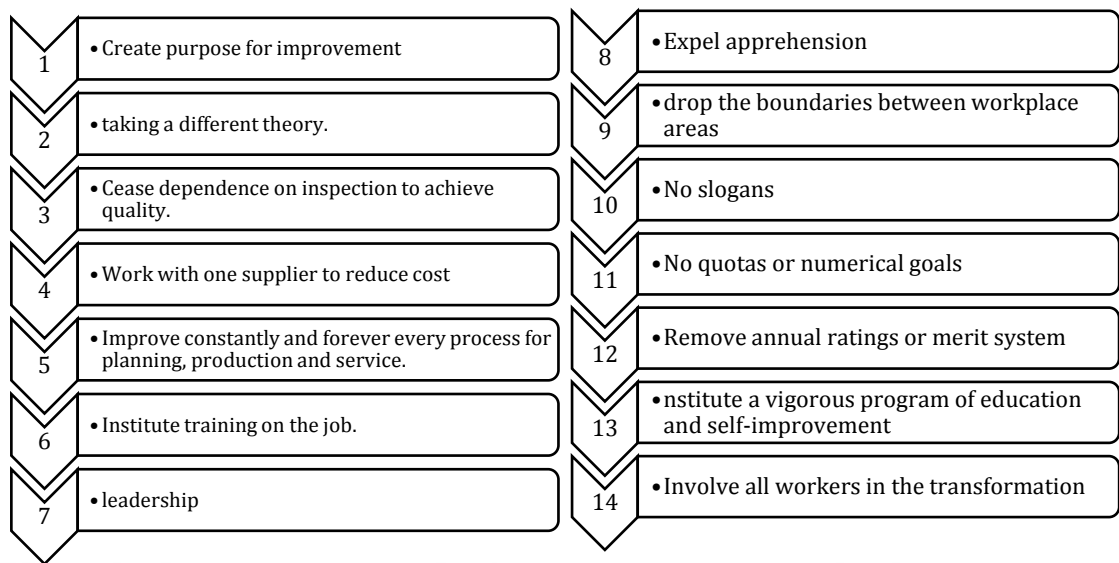


Figure 2.1 Deming 14 principles of TQM

Deming (1986) believed that quality was crucial to reach a competitive position on the market, and to achieve this each staff member has a position to play. Deming proposed 14 points as the principles of TQM (Beckford, 2010), which are listed below in Figure 2.1

Johnson (2016) mentioned that Deming created a cycle known as the PDCA that was the result of the need to associate product manufacturing with the customer's needs with the concentration on departmental resources in order to meet those needs. The four continuous processes for improvement or change known as Plan, Do, Check, Act (Johnson, 2016).

- **PLAN:** identify the problems and study components of company processes to enhance consequences.
- **DO:** developing and executing the plan and assessing its effectiveness.
- **CHECK:** evaluate the actions and detect the findings of decision-makers.
- **ACT:** standardize the solution and decide what adjustments the process requires to be enhanced.

2.3.2. Joseph M. Juran

Aole et al. (2013) articulated that Juran followed Deming and agreed that most quality problems are due to management not employees. The Juran approach focuses on teamwork and project work that help to increase quality, better communication between the administration and the coordination of staff, and the top management

effort, motivation, involvement, participation and rewards. According to Aole et al. (2013), Juran classified quality management as three fundamental processes which are listed in Table 2.1.

Table2.1 The Juran trilogy

Quality Planning	Quality Control	Quality Improvement
• Establish the project • Identify the customer • Discover customer needs • Develop the product • Develop the process • Develop process controls and transfer to operations	• Choose control subjects • Establish measurements • Establish standards of performance • Measure actual performance • Compare to standards • Take action on the difference	• Prove the need • Identify projects • Organize project teams • Diagnose the causes • Provide solutions, prove that the solutions are effective • Deal with resistance to change • Control to hold the gains

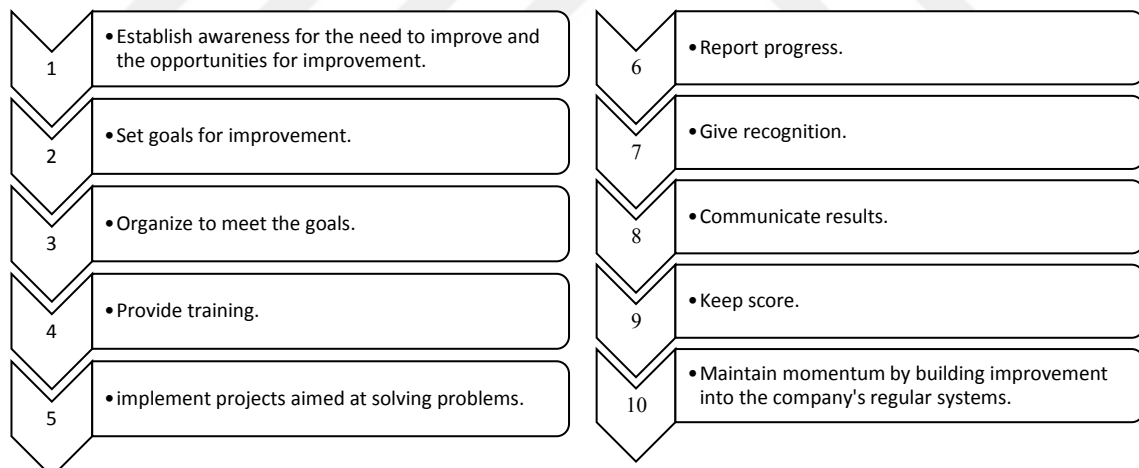


Figure 2.2 Juran's steps for quality improvement

2.3.3.Armand V. Feigenbaum

According to Dale et al. (2013), the first known quality guru to use the term of "total quality control" was Feigenbaum.

Feigenbaum (1983) named his method as Total Quality Control and expresses it as: *"Total quality control is an effective system for integrating the quality development, quality-maintenance, and quality improvement efforts of the various groups in an organization so as to enable marketing, engineering, production, and service at the most economical levels which allow for full customer satisfaction"* (Feigenbaum, 1983).

Beckford (2010), Feigenbaum articulated that the importance of management is to coordinate and entirely control the operational duties of the organization, while simultaneously concentrating on customer satisfaction and supplier's relationship (Beckford, 2010).

2.3.4. Philip B. Crosby

Crosby is widely recognized for the theory of "zero defects," meaning that there is no place for flaws in his method for statistically appropriate quality levels. Crosby (1979) listed some main concepts and strategies for an effective quality improvement system, for instance quality control accountability, appreciation of staff, training, reduction in production costs, management participation, doing things correctly the first time and zero defects. Crosby (1979) stated that mistakes happen for two reasons: lack of awareness and lack of focus. Crosby also stated that training and education contribute to eliminating the lack of awareness, a personal interest of performance (zero defects) and attention to detail that will reduce the second.

Crosby (1979) provided a 14-step program that can lead companies in pursuing quality improvement. These steps are listed as follows:



Figure 2.3 Crosby's steps of quality improvement

2.3.5. Outcome from Quality Gurus Review

It gives the researcher a deeper understanding of the TQM theory. Their findings provide a strong foundation for carrying out the study. Although they do not have the exact same approach to total quality management, but they share similar points that are summarized below:

1. Management is in charge of providing technical and human processes with commitment, leadership, empowerment, and support. In addition to determining the environment and operating framework within a company or organization.
2. Management must encourage employees ' participation in quality enhancement and develop a culture of quality through varying insights and attitudes to quality.
3. The significance of training and practice for employees is highlighted.
4. Process management, performance process, and product design are very necessary in TQM.
5. The priority is on consumer defects prevention, not post-event inspection.
6. The continual improvement of all the company's systems and operations is required.

Ultimately, the contributions of the quality experts are considered the correct starting point for the development of new quality models and frameworks for many researchers and scholars.

2.4. Definitions of Total Quality Management (TQM)

TQM is one of the highest quality strategies. Although various private and public organizations have taken up TQM widely and thousands of books and articles have been written on that subject, there is no single definition of TQM agreed by all writers. As regarded by some authors, TQM is a method for controlling all aspects of the business to achieve continuous improvements. Other authors study TQM as an integrated strategy that contribute to the accomplishments and sustainability of the organization's effective results. Additionally, many other authors consider it as a management philosophy that leads the organizations to achieve their goals. Yong et al (2010) identify that there are categorizations of the total quality management phenomenon. These categorizations are not only focused on the concepts of quality gurus but also on the explanations and insights of TQM that have since developed. The explanations are, TQM as a management process, an integrated approach, an organizational culture, a strategy, a management system and a management philosophy. Hence, the following definitions are a result of these interpretations:

2.4.1. TQM as a Management Process

Jonsdottir et al (2014) defined TQM as a controlling process proposed to build a continuous improvement throughout the organization, which are based on satisfies customer needs and expectations, developing performance processes, as continuous improvement achieves effectiveness and competitive advantage and achieves objectives for successive success (Jonsdottir, Ingason, & Jonasson, 2014). Continuous improvement is one of the crucial TQM processes that are intended at ensuring the organization is managed well (Madar, 2015).

2.4.2. TQM as an Integrated Approach

Oakland (2003), TQM is an integrated method implemented to encourage productivity, flexibility and understanding of every aspects of the company. TQM as integrated process can be improved by including each member in all of the

organization's activities, evaluating staff feedback schemes and using staff's suggestions to improve the organizational atmosphere and meet its needs. Therefore a motivated and qualified employee is needed to boost productivity and customer loyalty (Dobre, 2013).

2.4.3. TQM as an Organizational Culture

TQM from an organizational culture perspective is a continued development that meets customer's needs. Gimenez et al (2013) believed that the organizational culture is considered as one of the most critical criteria in order to achieve or deceive of total quality management implementation in improving performance. TQM depends upon the established organizational culture and attitudes of the workforce. It is a management which creates an open and co-operative culture that make all employees in the organization be responsible for reaching the organization's goals. According to Cadden et al (2013), with organizational culture it can build a suitable environment which influences both operational performance and business.

2.4.4. TQM as a Strategy

From the strategy perspective, TQM can be specified as an increasing and enhancing the efficiency of the organization using the commitment of workers to fulfill the customers' exceptions and needs at the lowest cost by constant product and service development, business practices and stakeholder participation. Hietschold (2014) defined TQM as an organizational strategy that needs long-term management orientation that leading businesses to become successful and efficient.

2.4.5. TQM as a Management Philosophy

TQM was described as a management philosophy to continually enhance the performance of processes, products and services so that customer expectations can be met and exceeded. Talapatra et al (2018), TQM's philosophy has indeed been strongly expressed in quality, occupational health and safety, environmental and social responsibility, and management system. Thus, an integrated management system supports the continuous improvement of culture, which promoting the four core elements of TQM such as planning, operations, analysis and modifications (Talapatra, Uddin, & Rahman, 2018). The same opinion is by Luburić (2012) who

recognized that TQM is a philosophy underlying which all employees of an organization make continuous efforts to recognize, fulfill consumer demands, needs and expectations (Luburić, 2012).

According to the various definitions listed above, it is obvious that TQM has no single definition which means that it can be defined differently according to perceptions of the author or researchers with keeping the continuous improvement and customer satisfaction as the main aims of TQM. The researcher is able to define TQM according to the thesis study as " a management system based on foundations and requirements that represent TQM, where the leader has to commit to implement it through strategic planning, focus on both internal and external customers, continuous effort, identify measurement standards, analyze the tasks and prevent errors before they occur and provide encouragement to all staff members in the organization as well as offer them adequate training in order to satisfy the customers' needs in an efficient, reliable and profitable way".

2.5. TQM Elements

Total quality management based on a set of management principles that focus on improving quality, so the researchers believes that if these principles are applied effectively in the organizations or firm, it will definitely succeed in achieving the highest level of quality. These principles enable the researcher to understand the concept of TQM, and they are:

2.5.1.Leadership Commitment

Leadership plays a significant role in implementing TQM. Moreover, the leader's commitment to the TQM strategy reflected in the willingness to work on a day-to-day basis would motivate employees to provide quality services that meet customer needs. Nasseef (2010) stated that leadership is a process to transform the company from the current situation into something the leader aims to be, where senior managers contribute to productivity, customer satisfaction and all relevant quality concerns. Furthermore, professional leaders are who develop processes that

help the company achieve its goals, encourage workers to invest actively in their roles, and ensure that each stakeholder is involved. A study conducted by Mustafa et al. (2010) demonstrated that the total quality management can not be success without the strong commitment of leadership and its support which directed towards high performance.

In the total quality management literature, lots of studies that examine the relationships between leadership and organizational performance and the results indicated that a leadership is a major factor in an organization performance

2.5.2.Customer Focus and Satisfaction

Understanding and satisfying customer needs is the key part of TQM. By listening to customers, products and services can fulfill their expectations at a low price and zero defects. Shan et al (2013) stated that the organization should create excellent customer relationship, work directly with customers, track their satisfactory levels continuously, and always try to meet future demands and changing needs. According to Richards (2012), customer is the main factor of TQM and the level of quality can be determined by the customer not by the organization or products and services manufacturer (Richards, 2012) .

2.5.3.Continuous Improvement

According to Aziz et al (2019), trying to implement a mindset of continuous improvement requires reviewing current practices. Involvement to improve both quality and quantity is a continuous effort to higher quality management, better management procedures, better working relationships with other teams and departments, excellent customer service and productive ways of achieving targets. An organization's primary goal should be continuous improvement in the overall performance. Leaders and managers can enhance the continuity by evaluating the product design and the quantity of standardization in the organization (Aziz, Sumantoro, & Delli, 2019).

2.5.4.Decision-Making Based on the Fact

In any company or organization decision-making must be based only on facts and analysis of data and information in order to provide accurate information, not on

opinions or motions and personal interests, and data will facilitate the cycle of decision-making. According to Al- Saffara et al (2019) stated that practices of the TQM need decisions to be delegate on an average and operational level, the delegating process and the participation of the staff in decision-making on their tasks, as well as increasing their knowledge of the decisions they take. Thus, decision-making that rely on fact is one of TQM's core requirements for successful implementation that enhance the cooperative performance of employees and achieve the goals of organizations (Al- Saffara & Obeidat, 2019).

2.5.5.Process Management

The desired outcome is accomplished more successfully when tasks and associated resources are handled as a process. Process management is recognized as improved processes, raising levels of quality, and the development of productivity for each employee. Therefore, the idea of process management is to view an organization as a system of related processes and continuous improvement of each processes are a step into performance improvement.

Crosby (1979) stated that all activities in the organization may be divided into sub-processes, defined as a transformation of an input set to output, which are combined into a quality chain; this will make all processes have an impact on each other.

2.5.6.Total Involvement

Individuals at all levels are essential of organizations and their full involvement absolutely benefits it. Dobre (2013) defined the total involvement and empowerment of employees as a two features that can't be ignored as they increase commitment and understanding. Employees will also be less likely to be resistant to changes and will not only feel respected by the company, but will also find valuable knowledge because they are in direct communication with customers or with the managers.in the other word, if individuals are respected from their mangers and involved in decision-making, their increased enthusiasm and motivation will result in greater productivity and loyalty (Dobre, 2013).

2.5.7. Training and Development

Training, development and education in a TQM organization are very important to enable employees to understand what they have to do and why. Oakland (2003) stated that the introduction of new technology and broader collection of responsibilities that require the vital training lead to important changes in many organizations. Employee training is a significant activity that companies provide to improve their employees' particular skills and to enhance organizational efficiency, productivity and satisfaction of customers, as well as minimize defects and costs.

According to Dale et al (2013), in order to practice quality management's concepts, all teams must be involve with the suitable training and development because if employee are without training, the organization will experience hard times when solving production problems, also the employees' attitude and behavior will not be focused towards the shifting to a quality culture (Dale, Wiele , & Iwaarden, 2013).

2.5.8. Strategic and Systematic Approach

The implementation, quality improvement, and the production of services of an organization must be part of a strategic plan. The organizations that plan to implement TQM must have a strong, realistic vision for the future and stay focused on achieving their objectives by carrying out the company's mission. Dahlgaard et al (2011) pointed out that the TQM requires systemic factors such as leadership, process improvement and collaborations in order to create a new organizational culture to support and enhance the core processes.

In conclusion, TQM principles can be summarized as the leader's responsibility to motivate and encourage employees to work hard to fulfill the vision and mission of the organization. Focusing on the customer is essential to the success of a TQM organization, to achieve customer satisfaction, their needs must be met and their comments must be put into consideration.

The general goal that relates to TQM concepts is to achieve continuous performance improvements, and this enables the finding of production systems based on overall quality management. Successful improvement is determined by a better understanding of how processes operate. Training and development are important

components that enable employees to be up to date with new technologies. Therefore, push the organization forward.

Lastly, TQM implementation, quality improvement and production of services of an organization must be part of a strategic plan.

2.6. The Benefits of TQM Implementation

The quality management is based on the operational concept that benefits the customers, workers, manufacturers and owners in a context where quality enhancement is a significant organizational strategy for obtaining a competitive advantage. Kumar et al (2009) approved that the TQM's positive effect on company performance. This is in regard to four areas of company performance, improved employs relations, decrease in waste, customer satisfaction, and enhanced financial results done through decreasing the cost and increasing the profit (Kumar, Choisine, Grosbois, & Kumar, 2009).

2.6.1.Benefits Related to the Customer

There are five benefits of TQM implementation related to the customer as given below;

- Less complaint regarding to products and services
- Enhanced focus and satisfaction for customers.
- Improved customer loyalty and retention
- Reduction of waiting time and better customer care by adjusting the method of appointment scheduling and customer handling
- Product reaches the customer faster due to delivery process management.

2.6.2.Benefits Related to the Employees

There are eight benefits of TQM implementation related to the employees as given below;

- Employee empowerment.
- Offers an opportunity for self-development and growth.

- Increases innovation.
- Promotes the most appropriate level of decision-making.
- Increases job satisfaction.
- More training and skills development and talents identification.
- Promotes teamwork.
- Better morale of work force.

2.6.3.Benefits Related to the Company and Financial Performance

There are six benefits of TQM implementation related to financial performance as given below;

- Cost Reduction and Increased Profitability.
- Reduces Redundant Activities.
- Encourages Continual Improvement.
- Enhanced effectiveness and maximizing returns on assets.
- Promote the value of the company.
- Improved market share, reduced returns and increased revenue.

2.6.4.Benefits Related Environment and Society

There are three benefits of TQM implementation related to environment and society as given below;

- Corporate Social Responsibility (CSR) which involve Initiatives for the environment for instance, recycling, sustainability, social planning and training of natural ecosystems.
- Enhance alignment with regulations for environmentally sustainable future.
- Beneficial to society due to operate within acceptable environmental parameters.

2.7. TQM Implementation Barriers

In some cases, Total Quality Management implementation is prevented by several barriers. A lot of recourses and articles show that the lack information, lack of significant tools, lack of leadership commitment, unsatisfactory managerial skills, lack of customer focus, lack of continuous improvement, resistance to culture change

all contribute to unsuccessful TQM implementation. So, if barriers to TQM implementation are not acknowledge before application, extensive efforts and time wasted in fixing the error and reactivating it. Since the study applied in industrial sector the researcher reviewed the articles' findings associated with TQM barriers may accrue within the sector. According to Sadikoglu et al (2014), the main obstacles to successfully implement TQM in the Turkish industrial sector have been identified as not only inadequate company structures do not support the implementation of TQM but also absence of resources, lack of contribution of employees, awareness and commitment to the implementation total quality management. Moreover, Mosadeghrad (2014) conducted a study about the failure of TQM implementation, and the result was due to the absence of consistent manger's and employees' commitment and participation in TQM implementation, inappropriate leadership and management, quality culture inadequacy, nonexistence of financial support, insufficient training, and inadequate resources were the major barriers in TQM implementation.

Mosadeghrad (2014) placed the most mutual TQM barriers that obstruct the success of TQM implementation. The researcher categorizes these barriers within 5 sections:

2.7.1. Top Management Barriers

There are six barriers of TQM implementation related to top management as given below;

- Lack of leadership commitment.
- Deficiency in customer focus.
- Lack of teamwork.
- Lack of motivation.
- Bureaucracy.
- Lack of delegation.

2.7.2. Employee Barriers

There are three barriers of TQM implementation related to employee as given below;

- Inadequate education and training.
- Resistance to change.
- Employee turnover.

2.7.3. Customer barriers

There are three barriers of TQM implementation related to customer as given below;

- Quality is not defined by the customer.
- Failure to concentrate and satisfy customers.
- Nonexistence of an effective customer feedback system.

2.7.4. Planning barriers

There are four barriers of TQM implementation related to planning as given below;

- Poor planning.
- Lack of benchmarking.
- Lack of continuous improvement.
- Insufficient financial resources.

2.7.5. Process Management Barriers

There are four barriers of TQM implementation related to process management as given below;

- Organizational culture.
- Unqualified human resource.
- Inadequate resources.
- Poor quality culture.

2.7.6. Information management barriers

There are four barriers of TQM implementation related to information management as given below;

- Lack of information.
- poor of government support.

- Poor understanding and awareness.
- Poor communication.

2.8. TQM and Organizational Performance

Mojtahedzadeh et al. (2011) stated that the implementation of successful TQM leads to customer satisfaction and gain of organizational competitive advantage. An organization's performance can be evaluated by measuring its ability to achieve competitive goals or by measuring its effectiveness in achieving profitability goals. According to Al-Qahtani et al. (2015), researchers noted that organizational performance measures both production goals, which include the effects of market share investments and other financial activities, and the organization's performance, which relates to product quality, employee productivity, and satisfying customer demands.

The previous studies also indicate that to evaluate organizational performance, the researchers used different approaches. Some studies have indicated that successful use of the elements of total quality management can lead to various benefits, including such enhancing employee productivity, process design and cost reductions, while others have indicated that the elements of overall quality management of top management and employee engagement are significantly associated with high performance (Sharma & Gadenne, 2010). A study conducted by Nguyen et al. (2017), examined the impact of total quality management practices on organizational performance, and the results displayed that the top management, customer satisfaction, planning and administration management have a highest impact on organizational performance.

Other study conducted by Akhtar et al. (2014) performed an empirical study to assess the impact of total quality management components on organizational performance in Pakistan's service sector, and the conclusion of the findings articulated the benefits of implementing total quality management, and also stressed the significantly positive correlation between total quality management components and organization performance (Akhtar, Zameer, & Saeed, 2014).

2.9. Concept and Definition of Leadership

As mentioned in total quality management (TQM), likewise in leadership there is no specific definition that all authors or researchers can agree upon. However, most of researchers and scholars agreed that leadership acts as a force for the implementation of TQM through the creation of values, priorities and processes to meet consumer needs and to increase the efficiency of an organization. The leader in general as it is individual or more even more person who choose, organize, train and influence one or more followers who have different talents, abilities and skills and concentrate their followers on the organization's mission and goals causing them to willingly increase spiritual, emotional, and physical energy in coordinated efforts to achieve the goals of the organization. Furthermore, Ulle (2014) stated that the leadership is the most organizational approach where it will direct employees to the organization's strategic goals and ensure that the organizational roles suit the external environment. Also, leadership is one of the most basic and fundamental needs of each company (Ulle & Kumar, 2014).

In addition, Anvari et al. (2011) pointed out that the leadership in TQM can be defined as providing tools for effective work and an environment that promotes productive work. Workers would definitely have more difficulty achieving organizational goals unless they feel satisfied and feel like they are part of the organization (Anvari, Ismail, & Hojjati, 2011). Lastly, leadership is a behavior of managing and guiding individuals in order to organize and harmonize the team, thereby achieving goals within and beyond the ability of the individuals being directed (Dubrin, 2010).

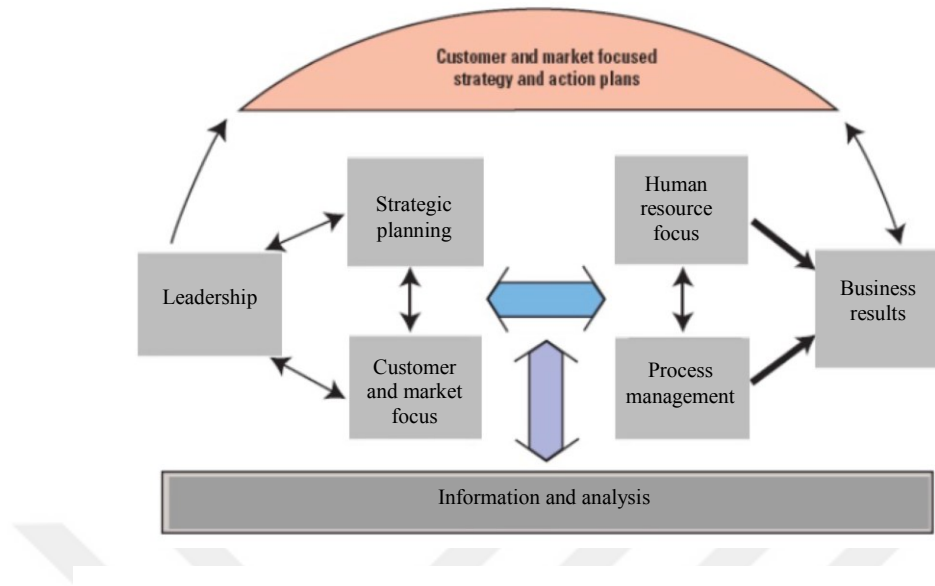


Figure 2.4 MBNQA Model (Oakland, 2014)

According to Oakland (2014), Leadership is one of the main classifications of the Malcolm Baldrige National Quality Award (MBNQA), which emphasizes the role of leadership in achieving quality and known to be exceptional in 7 criteria as illustrated in Figure 2.4, that is utilized to evaluate organizations (Oakland, 2014).

In addition, the European Foundation for Quality Management Model (EFQM) aims to develop quality management, as illustrated in Figure 2.5 the model began with the leadership as a main part in quality management.

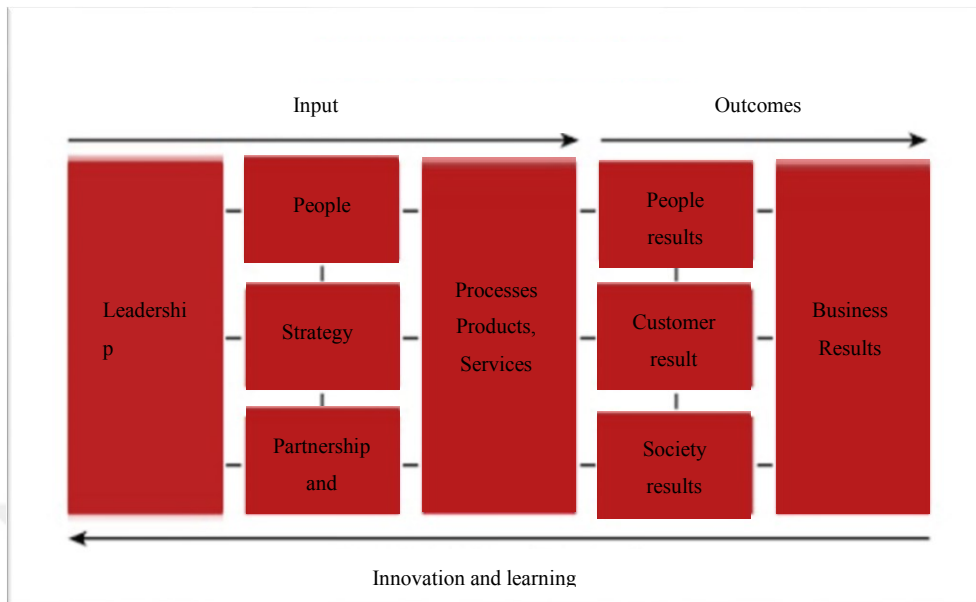


Figure 2.5 EFQM Excellence Model

However, the leadership may describe in TQM as a Leader who has to understand the main concept of organizational management to create effective leadership, and that can be done through supportive organizational environment, offering opportunities, continuous cultural change. Since they accomplish the requirement Continuous improvement can be achieved and increasing customer satisfaction

2.10. Leadership Styles in TQM Practices

Leader's performance and personality are the method in where the roles of leadership are carried out and the manner in which managers characteristically behave toward members of the group (Kumar & Sharma, 2018). Through previous studies that studied leadership styles, it was found that there are many styles of leadership and the difference depends on the consideration domain, assumption and definition.

Leadership can be defining in the early studies as the capability to let the people work as a group to realize organizational target. In the recent studies, leadership styles can impact the effectiveness and that depends on the focus of TQM

on continuous improvement and innovation (Kumar & Sharma, 2018). Additionally, Kumar et al (2018) stated that leadership is theorized within behavioral domains differing from transformational, servant, adaptive, rational leadership and leadership for kinesthetic styles. Clipa et al. (2018) acknowledged that managers, workers, learners and professionals prefer leadership and attitude that is more encouraging, positive, psychologically challenging and optimistic more than a reward system or modification of mistakes (Clipa & Greciuc (Serban), 2018).

In the diverse world of today, leaders have to align their management with internal and external environment and they must be willing to assist followers to deal with difficult business conditions. Accordingly, the researcher in this study is going to review the two main types of leadership which are considered the most significant typology according to Avolio (2010), and these leadership styles called transformational and transactional and both have impact on the organizational commitment, performance, productivity, profitability and customer satisfaction.

2.10.1. Transformational Leadership

Bass (1985) suggested the theory of transformational leadership, after that it developed by Avolio (2010) who extended the theory by integrating a level-of-analysis framework and this development was in the new perspectives of leadership that appeared after the 20th century. According to Burns (1978), the transformational leader can be defined as *“one who raises the followers’ level of consciousness about the importance and value of desired outcomes and the methods of reaching those outcomes”* (Burns, 1978). According to Jauhar et al (2017), a transformational leader can decrease the intention to quit by building loyalty, trust, enhanced job satisfaction, and improved employee performance. The practice of transformational leadership in the workforce will contribute to greater creativity, improve organizational awareness and inspire employees by focusing on the good qualities of the individual (Ghasabeh, Soosay, & Reaiche, 2015). Transformational leadership can be very beneficial for managers to apply in the workplace, and organizations that adopt this type of leadership will be able to remove the barriers stopping productivity. Bass (1985) mentioned that the behavior of transformational leaders is characterized by four factors: (Ghasabeh, Soosay, & Reaiche, 2015).

- **Individualized Consideration:** presents the leaders who advise and consult employees in addition to paying high attention to each follower's need for achievement and development, by acting as mentors. This method encourages collaborators to achieve objectives which benefit both employees and the company.
- **Intellectual Stimulation:** presents the leaders who inspire innovation and creativity by addressing a group's standard beliefs or opinions. This type promotes strategic thought and resolution of issues in order to strengthen the organization.
- **Inspirational Motivation:** presents the leaders who motivate associates to view the future optimistically, raising team spirit. This type encourages team work in order to achieve goals of increasing the organization's income and productivity.
- **Idealized Influence:** presents the leaders who are ideally role models for associates. This type can be valued and respected by leaders to make optimal organizational decisions.

2.10.2. Transactional Leadership

Brahim et al. (2015) stated that transactional leadership is based on a chain of command. Transactional leadership emphasizes the interaction between leaders and their followers (Northouse, 2007). The interaction enable leaders to achieve their performance targets, complete responsibilities needed, improve the current organizational situation, encourage followers to reach established objectives, prevent unnecessary risks, and concentrate on improving organizational performance which helps and motives clients and employees to fulfill their own self-interest (Northouse, 2007). Moreover, Sadeghi et al. (2012) also agreed that transactional leadership minimizes pressure at the workplace and focuses on specific organizational goals, including higher quality, rising customer loyalty, and reducing costs. Transaction leadership is based on exchange between leaders and their followers to achieve the desired performance. Transactional leadership does not support the idea that employee motivation leads to greater productivity and organizational performance.

According to Bass (1985), there are three components of transactional leadership which are listed as the following:

- **Contingent Reward:** identifies the degree to which the leader provides rewards in exchange for the efforts of the followers for satisfactory performance (Northouse, 2007). It involves interpretation of the work required to gain rewards and the use of incentives to influence motivation.
- **Management-by-Exception Active:** clarifies the degree to which a leader monitors follower carefully to observe any deviation from standards and mistakes of the followers (Sadeghi & Pihie, 2012). Active leaders check follower's behavior, figure the challenges, and take educative action before the behavior creates severe issues.
- **Management-by-Exception Passive:** leaders wait until errors and deficiencies occur and then take action to fix, they don't actively seek out deviations from desired performance and only take corrective action when problems happened as described by Sadeghi et al (2012), this type of leadership explains expectations and guidelines to be followed by subordinates instead of describing agreements, but will interfere after certain difficulties become apparent (Sadeghi & Pihie, 2012).

2.11. Authentic Leadership Traits

Many researchers studying leadership theories tried to discover whether the person is born to be a leader or leadership talents can be gained by personal development. Some theories found that leaders are born to be so and it's inherited. On the other hand, new theories emphasize that leadership skills are not necessary to be inherited; they could be learned from their own experiences and continuous development. Also, the styles and behaviors are more important than characteristics.

Avolio (2010) suggested that authentic leaders have a high level of consciousness of their behaviors, beliefs, and values to achieve goals and are objective in the organization. Moreover, authentic leaders are truthful, future oriented, responsible, and loyal, while being respectful towards all employees and understand that they are not all alike (Avolio, 2010). There are generic leadership

characteristics identified by different researchers that every leader must generally adhere to regardless of his/ her level.

Adair (2007) set seven characteristics as listed below:

1. Enthusiasm
2. Integrity; this can be considered as a quality to gain followers' trust.
3. Warmth; mind and heart are involved in leadership. This is equally important to love what you do and caring about others.
4. Toughness; leaders are often demanding people, uncomfortable to have around because of their high standards.
5. Humility; this is a characteristic of the very best leaders. The signs of a good leader are the willingness to listen and the lack of an overweening ego.
6. Fairness; effective leaders treat individuals differently but equally.
7. Confidence; developing self-confidence is always preliminary to becoming a leader while making sure to avoid overconfidence.

Moreover, many authors like Gardner et al. (2005), proposes four elements of authentic leadership that contain self-awareness balanced processing, relation transparency and internalized moral perspective (Avolio, 2010).

Self-Awareness

Self-awareness considered as the core element in authentic leadership. Authentic leader ready to receive the suggestions, accept their weakness and criticism to preserve its high level of moral values. Therefore, they facilitate open contact with the people who work.

Balanced Processing

Balanced processes refer to impartial collection and accurate evaluation of self-related information, both positive and negative. The optimum balanced processing will encourage the leader to accept critically their deficiencies at work (Avolio, 2010).

Relation transparency

The authentic leader encourages trust and honesty to reveal his true thoughts, feelings and values to the followers. Relational transparency refers to the performance indicating that the leader shows high level of transparency and trust in close relationships (Avolio, 2010).

Avolio et al. (2004) argued that relational transparency can be described within three aspects:

1. Relational transparency describes how authentic leaders freely share information about their decision-making process.
2. Relational transparency is defined in relation to authentic leadership communicate and receive input.
3. Relational transparency reflects how authentic leaders communicate with others, how open and able they are to share their emotions.

Internalized Moral Perspective

Internalized moral perspective depends to stage in which the leader sets a strong ethical and moral conduct. This method of self-regulation is driven by a clear ethical framework that the leader adheres to despite contradictory social demands or organizational culture. However, the trait of leaders with high levels of internalized moral experience is honesty and accountability in decision making. Because of the activities and possible initiatives around the company are clear, workers feel dedicated to the organization (Avolio, Gardner, Walumbwa, & Luthans, 2005).

2.12. Action-Centered Leadership Model

Adair presents a fundamental model (Action-Centered Leadership model) to describe the leaders' actions and they must do it whatever their working environment, and this model based on three overlapping circles and it can be define as following (Adair, 2020):

1. Achieve the task.
2. Build and maintain the team.
3. Develop the individual.

The three overlapping circles express the demands of modern business management in which the task, team, and individual have different managerial responsibilities. Starting with the task, the managerial responsibilities are expressed as, identify aims and objectives for the group, create the plan to achieve the task, allocate responsibilities by agreement and negotiation, set performance standards and quality, control and maintain the activities, monitor overall plan output, report progress and review. Moving on to the team, managerial responsibilities are expressed as communicate performance requirements and behavior, set up style and culture of the group, maintain ethics and integrity, motivate team work and morale, increase group freedom and authority, identify and meet group training needs, as well as develop and agree on team and project leadership roles within the group and give feedback to the group on overall progress (Adair, 2007). Lastly, the individual managerial responsibilities can be defined as the leader's understanding of the team members as individuals, as well as their skills, personality fears, strengths and needs, assist the individuals' plans and challenges, give individuals appreciation and reward them for their achievements and train each team member (Adair, 2020).

All three areas overlap and affect each other (Adair, 2007). For illustration, if the common task is completed, it helps build a team and fulfill the individual's personal needs as displayed in Figure 2.6.

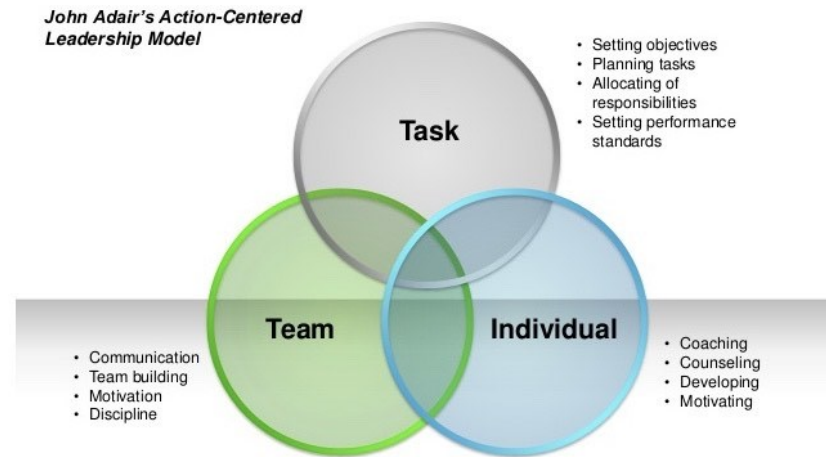


Figure 2.6 Action-Centered Leadership Model

2.13. Functions and Role of Leadership

Adair (2007) believed that there are eight functions that must be performed and improved by any level of leader as seen in Figure 2.7, and in order to fulfill the three overlapping circles of Action-Centered Leadership (task, team and person) and leads to organizational success (Adair, 2007). Moreover, Adair believed that these functions are vital to the Action Centered Leadership model. Moreover, leadership functions can be summarized in following: (Adair, 2020).

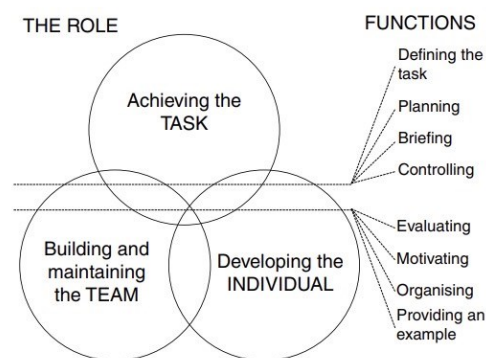


Figure 2.7 Adair's functional leadership model

2.13.1. Defining the task

Leader has to set their vision and SMART goals and share it as a task with individuals and team. SMART means Specific, Measurable, Achievable, Realistic, and Time-related. SMART goals can be described briefly in Figure 2.8.



Figure 2.8 Rubin's SMART Goals

2.13.2. Planning

Leaders must be fully prepared and thoroughly plan in advance, including emergency planning; also time schedules need to be addressed. Adair (2010) identified planning as a leader creating a mental bridge from the starting point to reach the objective. Planning is a vital task of any team or organization. This requires the search for alternatives that are best achieved with others in an open, encouraging and innovative manner (Adair, 2010). Additionally, contingencies should always be planned (Adair, 2020).

2.13.3. Briefing

According to Adair (2010), briefing is the function of communicating goals and plans to the team. Typically, it involves standing or sitting in front of the team and briefing them in a direct way (Adair, 2010). Briefing the team will promote teamwork, create the right atmosphere, and motivate each individual (Adair, 2020).

2.13.4. Controlling

Adair (2007) wrote that successful leaders produce optimal performance with minimal resources in leadership skills. To achieve this, a leader is required to have

good control systems and effective delegation and monitoring skills. Adair (2007) mentioned that the controlling functions ensure that all the team's energy and resources are used to turn wheels and make things happen.

2.13.5. Evaluating

At every stage of the process, the leader needs to assess team and individual performance. They have to make a mid-course correction to the process and if necessary, offer mentorship and training. Leaders must be qualified to evaluate outcomes, evaluate the performance of the team, assess and train individuals, and judge people (Adair, 2020).

2.13.6. Motivating

Adair (2020) distinguished six principles for motivating others in his book *Effective Motivation*: be motivated by your-self, select people who are highly motivated, set realistic and challenging targets, remember that progress motivates, provide fair rewards and give recognition (Adair, 2020).

Additionally, Adair (2007) stated that *"If communication is sister to leadership, then motivation is its brother"*.

2.13.7. Organizing

Smart leaders are often coordinate their teams and individuals so that they can achieve the mission and results. Time management and appropriate coordination are the main features to enable the leader to accomplish in the organization (Adair, 2007).

2.13.8. Setting an Example

Leadership must give an example to people as well as the entire team, if a wrong example is observed more than a good one, it is necessary to set a good example constantly (Adair, 2020).

2.14. Conceptual Framework

The framework was adapted based on the literature review above and the summary of the previous empirical studies such as Mustafa et al (2010) emphasized on the leadership commitment and its effect on the performance. Other study done by Slack et al. (2017) approved that the operational procedures impact on the organizational performance positively.

Moreover, Akhtar et al. (2014) stated that the management and administration is significantly positive correlation with organization performance. Furthermore, Jaafreh et al. (2013) investigated the effect of TQM on organizational performance and it showed that there was a significant relationship between strategic polices and organizational performance. Nguyen et al (2017) stated that the customer satisfaction have a highest impact on organizational performance.

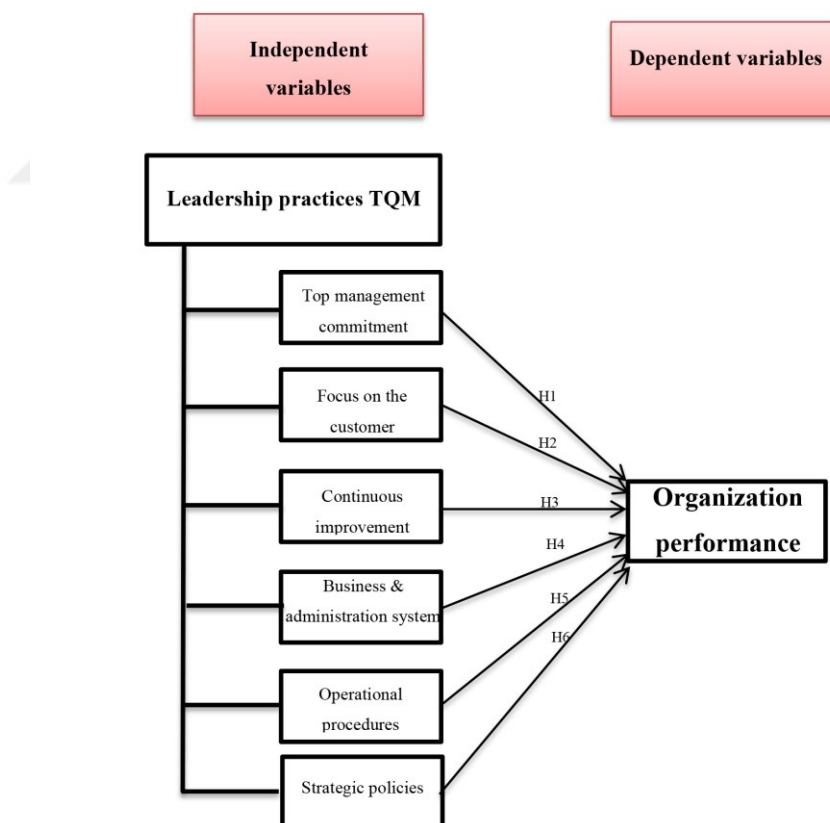


Figure 2.9 Conceptual framework

In this study a research framework is developed to examine the relationship between leadership practices the elements of TQM and organizational performance. The leadership commitment, customer satisfaction, continuous improvement, management and administration system, operational procedures and strategic policies are considered independent variables and organizational performance is a dependent variable as illustrated in Figure 2.9. The model suggests that the higher the leader's performance in applying all elements of TQM, the higher the organization's performance will be.

2.15. Similarities and differences of the study

This study examined the role of leadership in implementing the elements of total quality management and its impact on the organization's performance, and it focused on the industrial sector in general and reform-sport as a case study in particular. This literature review deals that how industrial sector survive in its performance by implementing the total quality management and choose the right leader in the right place. The fact that quality is considered as an integral part of the company's operations, this means that quality is a way to implement the business efficiently and it's a way to achieve major objectives of the organization with satisfying both employees and customers. Thus, the researcher believes that every successful company includes effective leadership.

Some studies have indicated that successful use of the elements of total quality management can lead to various benefits, including such enhancing employee productivity, process design and cost reductions, while others have indicated that the elements of overall quality management of top management and employee engagement are significantly associated with high performance (Sharma & Gadenne, 2010). The previous studies also indicated that to evaluate organizational performance the researchers use different approaches and different outcomes are found.

In this in this context, a lot of previous studies had a same result with the this research study, such of these studies Nasseef (2010), Mustafa et al. (2010), that

agreed with the leadership is the main factor in TQM who transform the company from the current situation into something the leader aims to be, and the TQM can not be success without the strong commitment of leadership and its support which directed towards high performance. Similarly, the study done by Nguyen et al. (2017), Akhtar et al. (2014), Fotopoulos et al.(2010), which all agreed with the TQM had a significant positive impact on the organization performance.

On the other hand, there were studies that had an opposite point view and findings. For instance, Richards (2012) stated that the customer is the main factor in TQM and other elements are the sub- factor and the quality can be determined by the customer not by the organization or products and services manufacturer. Likewise, Ang et al. (2011), and Keng et al. (2011) stated that the leadership has no significant relation with performance organization. Moreover, Islam et al. (2008) stated that top management's commitment has no significant contribution to the success of TQM implemented

At the end, the similarities and the differences between the studies are due to the specification of the study itself, meaning the country, sample, case study selected, field or the sector and year of study affects the results of the study thus, the difference arises between the studies.

3. METHODOLOGY

This chapter describes the methodology that will be used in this thesis which is quantitative approach as shown in the Figure 3.1 below:

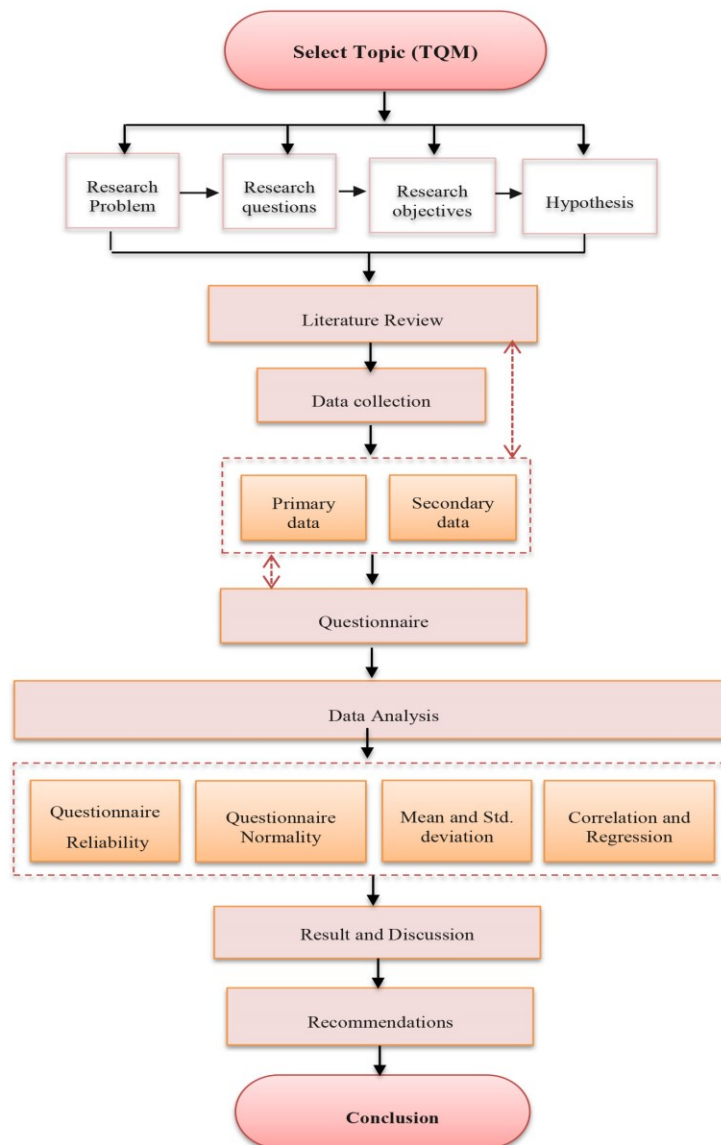


Figure 3.1 Methodology flowchart

3.1. Research Purpose and Approach

In this thesis, the researcher used the quantitative research method to test the suggested framework and the hypothesis that results from it, by starting with theory and moving to data. Firstly, collecting information by giving insight into the theory related to the area of study, then including the theoretical studies in the literature review related to TQM and leadership, in order to understand the actions regarding management and decision making that need a close look at details. Moving to quantitative data analysis, after analyzing the data, the researcher able to discuss the results and findings, thus, a list of recommendations are given at the end.

To meet the goal of this study, surveys are considered to be a well-established technique for collecting and obtaining data. Gray (2014) stated that surveys were known as an efficient tool in the domain of business research for many advantages. Some of these advantages are saving time method which could reach more participants in less time than interview methods, Costless methods compared to interviews, so there is no need for a high budget for questionnaires. moreover, minimizes the possibility of participant bias that might occur in interviews and feedback and answers within a short time (Gray, 2014).

3.2. Data Collection

Bell et al (2018), there are various methods of collecting data, depending on the questions asked, who or what are being a researched, time constraint, and the amount of detail desired. In this thesis, two basic data collection methods are applied, the primary data is collected from the questionnaire and formed the major source of primary data used in the study, and these are gained directly from the originators or main source and it is original information collected exactly for the research' purposes (Saunders, Lewis, & Thornhill, 2015). The secondary data is collected by using desk research, this kind of research uses data from online sources, for instance, the web, company data and sources, handbooks and journal or other published sources.

3.3. Study Sample

Data gathering process are implemented by conducting a structured survey that designed online through google forms. The majority of quantitative survey studies are based on population and samples, so the researchers first need to recognize who the population they want to generalize their results then selecting the sample (Bell, Bryman, & Harley , 2018). Therefore, the research studies the case of “reform sport group” one of the largest industrial group in artificial grass with headquarter in in turkey. Section 4 gives a full image about the case study, and samples.

Taherdoost (2017) stated that the important feature of any and every empirical analysis is sample size, in which data on a sample population are collected. A random sample should be large enough to generalize a random sample and to avoid sampling errors or prejudices.

3.4. Questionnaire Design

The questionnaire is the main method used in this study. It designed based on a comprehensive review of past literature and scholar articles. Davey et al. (2010), the questionnaire is process in which the serial questions are sent to the target audience in order to respond to the questions and choose the most relevant responses that reflect their opinions. There should be three main aspects to be considered to build a successful questionnaire in a systematic way to optimize its advantages: Content, measurement principles, and appearance (Davey , Gugiu, & Coryn , 2010). This can be translated that as a questionnaire must include contents that are clear easy to understand and the questions are listed in a logical way that makes sense when answering it, analyze the functionality of the questionnaire and then use the required scale methodology to assess the validity of the problems, and the reliability of the questions as a measure to ensure their relevant constructs, and to improve the appearance of survey it should be presented in a flat-face visual way, checked via various devices such as computers and mobile devices and not taking too long to answer the questionnaire (Davey , Gugiu, & Coryn , 2010).

In this study, the researcher considered the above aspects when designed the questionnaire, and checked previous TQM questionnaires to ensure that the questionnaire content and structure is fully valid.

The questionnaire was divided into three parts. First part was about demographic questions which are 4 general questions. Second part had 34 questions which related to the elements required from leaders to implement the TQM in the industrial sector. While the third part had the 8 questions asked about the performance of the company.

3.5. Measurement of Variables

An independent variable is a predictor variable that tested by the researcher to evaluate the influence it has on another variable, while the variable that is influenced by the independent variable called dependent variable (Degenhardt, Seifert, & Szymczak, 2019). Different questions were used for measuring the respondents perception in each variables as listed below:

3.5.1.Focus on Customer

According to Richards (2012), customer is the main factor of TQM and the level of quality can be determined by the customer and the success of organizational performance depends on the customer satisfaction. Focus on customer were coded in this research as FOC1, FOC2, FOC3, FOC4, FOC5, these items were adopted from (Chepkech, 2014) , and (Nguyen & Duong , 2017).

3.5.2.Top Management Commitment

Mustafa et al. (2010) demonstrated that the total quality management can not be success without the strong commitment of leadership and its support which directed towards high performance. The statement related to the top management coded as LC1, LC2, LC3, LC4, LC5, LC6, LC7 and were adopted from (Mustafa & Bon, 2010) and (Chepkech, 2014).

3.5.3. Continuous Improvement

According to Aziz et al. (2019), the primary goal of a organization should be to improve the overall performance continuous, and continuous improvement is strongly correlated with performance of the organization. The statement related to the top management coded as CI1, CI2, CI3 were adopted from (Chepkech, 2014), (Eguren, Elorza, & Pozueta, 2012).

3.5.4. Management and Administration System

According to Akhtar et al. (2014), Process management is recognized as improved processes, raising levels of organizational performance, and the development of productivity for each employee. So, the idea of process management is to view an organization as a system . The statement related to Administration system: were coded as MaA1, MaA2, MaA3, MaA4, MaA5, MaA6, MaA7 were adopted from (Akhtar, Zameer, & Saeed, 2014) and (Chepkech, 2014).

3.5.5. Operational Procedures:

Statements were used to measure the operational procedures were adopted from Slack et al. (2017) approved that the operational procedures impact on the organizational performance positively, and the statements coded as OP1, OP2, OP3, OP4, OP5. were adopted from (Slack, Lewis, & Lewis, 2017) and (Chepkech, 2014).

3.5.6. Strategic Policies:

Baird et al. (2011) confirmed that the strategic planning or policies effect the performance of the organization which directly impact TQM implementation. Hietschold (2014) stated that the organizational strategy in TQM needs long-term management orientation that leading the performance to become successful and efficient. In this study the statement related to strategic policies coded as SP1, SP2, SP3, SP4, SP5, SP6, SP7, were adopted from (Chepkech, 2014) and (Baird, Hu, & Reeve, 2011).

3.5.7.Organizational Performance

According to the empirical studies have been done by Akhtar et al. (2014), Nguyen et al. (2017) and Fening et al (2013), to assess the impact of total quality management components on organizational performance and the results from all of these studies showed a significant positive effect of TQM practices on organizational performance. This dependent variable was coded in this research as OPE 1, OPE 2, OPE 3, OPE 4, OPE 5, OPE 6, OPE 7, OPE 8, were adopted (Mutham, 2016).

All variables measured by used 5-point Likert scales: (5.strongly agree, 4.agree, 3.neutral, 2.disagree, and 1.strongly disagree).

Table 3.1 Variables and statements of the hypothesized model

Variables code	Statement
Focus on the customer	
FOC1	The organization is willing to supply a wide range of Products to meet the needs and expectations of the largest number of clients.
FOC2	Customer complaints are followed up by the organization's leaders and provide them with acceptable solutions.
FOC3	Managers believe that quality is determined by meet the needs of customers.
FOC4	The employees recognize their most important customers.
FOC5	Employees seek feedback from the customers and inquire if the customers are satisfied or dissatisfied with their work
Leadership commitment	
LC1	The organization management 4s with the idea of Authority delegations and information flow facilitation among the various departments within the organization.
LC2	The organization management is working to spread the quality culture throughout all level and departments of management
LC3	Management seeks to build a reputation among customers, and it is characterized by quality and perfection.
LC4	The leadership team uses the organization's values to guide the organization and its employees
LC5	The leadership team works to create a work environment that encourages employees to perform their duties.
LC6	The leadership team encourages learning that will facilitate the advancement in careers of all employees
LC7	Employee opinion and feedback is an important aspect for the leadership team
Continuous improvement	

CI1	The organization management is seeking to continuously improve the production system and service to improve quality.
CI2	The organization management is constantly seeking to reduce discrepancies or gaps between customers' expectations about product quality and the actual quality provided to them.
CI3	The planning, development, testing and delivery of products to market are considered an integral (indivisible) process of improvement the quality.
Management and administration system	
MAS1	The organization management concerned with involve of all employees in improving quality and performance.
MAS2	The organization is characterized as quickly respond to requests and changes through the presence of clear and explicit systems.
MAS3	There is a Quality Control Department in the factory organizational structure.
MAS4	An annual training plan for employees is available to improve their skills.
MAS5	Employees know and are well aware of the organization's mission and what it is trying to accomplish.
MAS6	Employees work together as a team and within a safe workplace.
MAS7	Employees are valued by the managers and the organization.
Operational procedures	
OP1	The organization depends on many suppliers to purchase its needs.
OP2	The organization adopts certain criteria when choosing resources or suppliers, and the most important standard is a quality.
OP3	The organization is concerned with purchasing from lowest-priced suppliers, regardless of quality.
OP4	The organization maintaining the integrated database about suppliers and the purchased goods
OP5	The organization analyses the processes and results that related to the customer complaints for the purpose of reducing inconsistencies.
Strategic policies	
SP1	The organization making a study of the market and the customer needs before making any modification on its products
SP2	Through the pricing process the company seeks to sell its products affordably with customers.
SP3	The organization provides full information of customer feedback about the price changes.
SP4	Through the promotion and advertising process the organization aims to increase customer understanding of the product offered.
SP5	The organization strives to improve its distinguishing from its competitors through promotion and advertising.
SP6	The factory evaluates its distribution channels occasionally.
SP7	The organization believes that providing after-sales services are one of the important

	ways in which customer loyalty is gained.
Organizational performance	
OPE1	Implementation of total quality management focuses on increased retention as a result of customer satisfaction.
OPE2	Implementation of quality management has increased organizational profitability.
OPE3	Implementation of total quality management practices has ensured effective waste reduction of operations.
OPE4	Quality management practices have enhanced service delivery in the organization.
OPE5	Quality management practices have enhanced sales which have contributed to company performance.
OPE6	Effective implementation of total quality management has increased organization competitiveness.
OPE7	Implementation of total quality management resulted in acquisition of bigger market share.
OPE8	The organization making a study of the market and the customer needs before making any modification on its products

3.6. Data Analysis

The next step after data collecting is data analysis. Miller (2020), the analysis of quantitative data mostly starts with a mathematical description to demonstrate the different data patterns, so the researcher uses exploratory descriptive research to create an understanding of the studies. Nardi (2015) stated that descriptive research is a typical aim of exploratory and practically all types of research. Its purpose is to provide basic information describing the topic and respondents involved and it is regularly the first step in most data analysis. Secondly, the researcher uses evaluation research, which assesses specific results and provides explanations as to why and how a particular event happened, it also pays attention to problem-solving and measures multiple social programs results. Nardi (2015) mentioned in his book that quantitative research is used to describe the number of individuals having personal beliefs or involved in certain behaviors. It can either be in a manner of using archival data that have been collected by others over the years, or it can be used to explain how people act or predict how they might act in the future.

The questionnaire responses has been transferred to an excel sheet and then to the SPSS 26.0 statistical program to analyze the data. The researcher adopted a descriptive analysis to improve the results by the mean value and Std.deviation for each item, as well as used the spearman correlation to examine the relationship between each elements that required from leadership to implement TQM and organiztional performance, and after that used regression analysis to testing for significance after calculating the correlation coefficients.

3.7. Correlation Analysis

According to Gogtay et al. (2017), ccorrelation analysis is a concept used to describe the relationship or correlation between two or more quantitative variables. This analysis is based primarily on the assumption that the quantitative variables are linearly connected. It tests the strength or level of the relation between the variables. Moreover, Gogtay et al. (2017) stated that correlation coefficients are used to assess the strength and direction of the linear relationships between pairs of continuous variables. When both variables are normally distributed Pearson's correlation coefficient must be used, while Spearman's correlation coefficient rho should be used with non-parametric data. Correlation analysis is rarely used alone and is usually accompanied by the regression analysis (Gogtay & Thatte, 2017). In this study the spearman's correlation used since the research is non-parametric.

3.8. Regression Analysis

Schroeder et al. (2017) defined the regression analysis as a statistical technique that offers a quantitative summary of the relationship between an interest variable and one or more variables predicted to influence the variable. The linear regression analysis is one type of the regression and it is an analysis of situations in which a straight line can be summarized for the relation between the explicit variable and the other variable (Schroeder, Sjoquist, & Stephan, 2017). According to Darlington et al. (2017), statistical regression analysis is a powerful and reliable process to determine the effect of one or many independent variables on a dependent variable and it is the most generally used of all statistical methods and has broad applicability to numerous practical problems. Furthermore, Abramovich et al. (2013) defined the

regression analysis as a statistical learning technique useful to infer the relationship between a dependent variable Y and independent variables X.

Darlington et al. (2017) stated that regression modelling has many uses; it is widely used throughout the behavioural sciences, medical research and public health, business and marketing and countless other fields. The multiple linear models are expressed using the following equation (Darlington & Hayes, 2017):

$$Y = a + b_1 X_1 + b_2 X_2 + \epsilon$$

Where:

Y – Dependent variable

X – Independent (explanatory) variable

a – Intercept

b – Slope

ϵ – Residual (error)

The linear regression model allows to quantifying the strength of the relationship between dependent variable Y and each of the X independent variables. Also selecting those variables that have no relationship with Y, as well as identifying which subsets of explanatory variables have to be considered in order to explain sufficiently well the response Y (Schroeder, Sjoquist, & Stephan, 2017).

3.9. Reliability and Validity

Research design represents a logical set of statements, and according to four logical tests the quality of the design can be determined (Yin, 2018). The first test is construct validity test that recognizing correct operational measures for the concepts being studied. The second test is internal validity which is a test for explanatory not for descriptive or exploratory studies. While the third test is external validity that display whether and how the results of a research study can be generalized. Lastly, reliability test that indicating the operations of a study in order to minimize the errors and biases in a study (Yin, 2018).

The purpose of reliability is to minimize the possibility of incorrect results and enhance the credibility of such results; attention must be given to the reliability of the research instruments. The aim of reliability test is to ensure that, if a future researcher follows the same methods as a previous researcher and carries out the same analysis again, the future researcher will come to the same results and conclusions (Yin, 2018). Indeed, Cronbach's alpha coefficient is tool that measure the internal consistency of reliability as seen in Table 3.1.

Table 3.2 Cronbach's alpha value (Cho & Kim, 2015)

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

4. IMPLEMENTATION AND RESULT

In this section the researcher gives a brief introduction about the case study, as well as investigates the process of data analysis, the hypotheses tested based on upon the findings of the questionnaire, and the data analyzed by using two software program the first one is Excel and the second one is SPSS "Statistical Package for Social Scientist", descriptive and inferential statistics were obtained to achieve the main purpose of the thesis, which is understanding the impact of leadership in implementing TQM element on the Reform sport® performance. The sampling size and selection were discussed. And at the end, the results for the study were highlighted.

4.1. Sample Selection and Size

The study was conducted on the industrial sector and the "Reform Sports Group" chosen to be a case study. The researcher concentrated the survey at specific managers and employees which are from the following departments: 1. Internal Auditor (Budget), 2. General Coordinator (GC) 3. Deputy General Manager (Production), 4. Chief Financial Officer (CFO), 5. Chief Executive Officer (CEO), the reason behind that is the questionnaire includes different types of questions for members of the TQM and these questions consist of specific issues which did not relate to all workers in the company. Figure 4.4 displayed the organization's chart.

The researcher emailed the survey which designed by Google form to the manager of company and he in turn distributed the questionnaire to the employees and other managers, and within three weeks the researcher got 120 respondents Figure 4.1 displayed the part of the electronic questionnaire.

“Role of leadership in implementing Total Quality management in the organizations”

The researcher is conducting a study to know the role of leadership in implementing TQM principles in "Reform Sport Factory"

Please kindly help to reach the most accurate results, by answering the accurate questions attached by placing a sign (✓) in front of each phrase that fits your answer.

We would like to point out that the statements you make will be considered strictly confidential and not used. "It is used only for the purpose of scientific research only"

part 2

In this section, there is a group of questions, related to the extent of applying the Reform sport factory to the concepts of total quality management

Please put a mark (✓) in front of the appropriate option

A- Focus on the customer

The organization is willing to supply a wide range of Products to meet the needs and expectations of the largest number of clients *

Strongly disagree ☐

Agree ☐

Neutral ☐

Disagree ☐

Strongly agree ☐

General information

Name

Customer complaints are followed up by the organization's leaders and provide them with acceptable solutions *

Strongly agree ☐

Figure 4.1 Electronic questionnaire

4.2. Case Study (Companies' Profile)

The study was conducted in one of the largest group called “Reform Sports Group” within the industrial sector. There are six companies with the headquarters in Turkey, as well as suppliers in different countries.

Reform Sports Group was first established in 1995 in Turkey. They specialize in building sports facilities, such as, golf courses, rugby fields, artificial turf football fields, athletic tracks, etc. They also have works in landscape decoration and kids' playgrounds.

As presented in Figure 4.2 and Figure 4.3, Reform Sports Group is continuing its activities in 97 countries in 7 regions with superior quality and experience, with a professional and experts' team, professional sales personnel, and with an expert assembly team. It has 9 brands; each of them is a leader in their own sector, not only in Turkey or Europe.



Figure 4.2 Reform-sport Group



Figure 4.3 Reform-sport Group factory

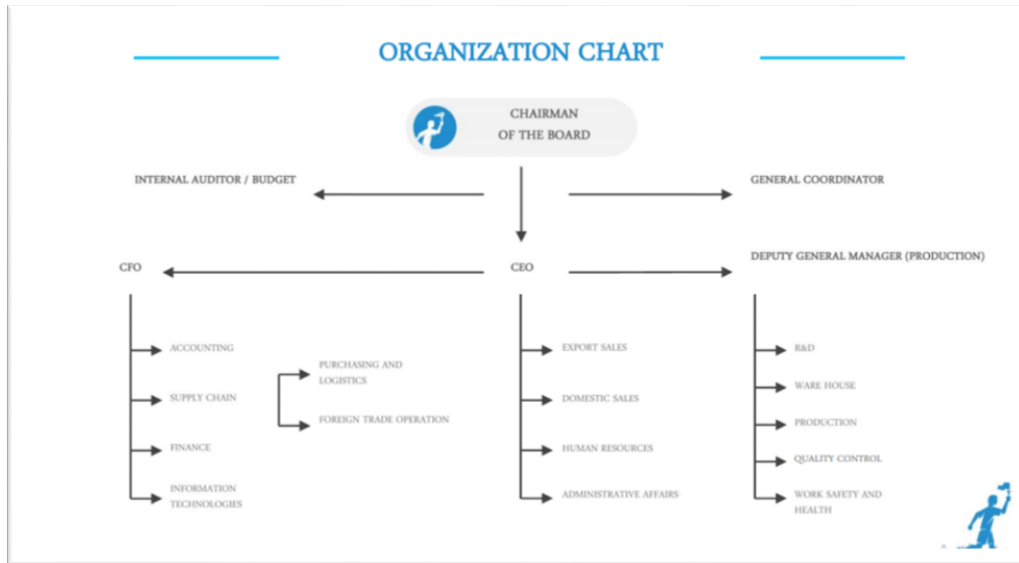


Figure 4.4 Organization chart

4.3. Test of Normality

Normality test used to determine the distribution type of the survey is it normally distributed or no. The results from Shapiro-Wilk test and Kolmogorov-Smirnova as shown in Table 4.1 illustrates that significant value (p-value) less than 0.05, so if the p-value less than 0.05 that means the distribution are not normal thus, non-parametric analysis was used.

Table 4.1 Test of normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Focus on the customer	.156	120	.000	.954	120	.000
leadership commitment	.124	120	.000	.945	120	.045
Continuous improvement	.175	120	.000	.945	120	.000
Management and administration system	.149	120	.000	.953	120	.000
Operational procedures	.140	120	.000	.956	120	.003
Policy and Strategy	.169	120	.000	.954	120	.000
Performance	.155	120	.000	.935	120	.000
a. Lilliefors Significance Correction						

4.4. Test of Reliability

Reliability test were made for the each variable in the survey and the result as shown in Table 4.2 are between $0.9 > \alpha \geq 0.8$, so it considered as measured by Cronbach's Alpha all the questions to be in an excellent level as displayed in Table 3.1 mentioned in the methodology .

Table 4.2 Test of reliability

All variables	Cronbach's Alpha	N of Items	Level of Reliability
Focus on customer	.936	5	Excellent
Leadership commitment	.805	7	Excellent
continuous improvement	.865	3	Excellent
Management and administration system	.811	7	Acceptable
operational procedures	.803	5	Excellent
Strategic policies	.871	7	Excellent
Performance	.958	8	Acceptable

4.5. General Demographic Information:

The key characteristics of the respondents are described in this part using tables and graph.

Table 4.3 displayed the gender, level of education and experience for each respondent were the male had a higher percentage than female, and the level of education for each respondent and according to the findings most of the employees and managers in the company have a bachelor's degree and higher degree qualifications which indicates that the leaders in the company are concerned with

educational qualifications. Moreover, the level of experience were almost high which means that most of the respondents have a long working background and indicates good awareness of their company current situation.

Table 4.3 Demographic information

Demographic variable		Frequency	Percent %
Gender	Male	87	72.0%
	Female	33	28.0%
Total		120	100%
Level of Education	Secondary School	5	4%
	Bachelors	90	75%
	M.A.	21	18%
	PHD	4	3%
Total		120	100%
Experience	1-5 year	17	14%
	5-10 years	19	16%
	10-15 years	66	55%
	above 15 years	18	15%
Total		120	100%

4.5.1.The Gender of the Respondents

Figure 4.5 illustrates the percentage of the respondents in the survey to the gender variable, where the results of the analysis showed that the percentage of male employees reached 72%, while female employees were 28%.

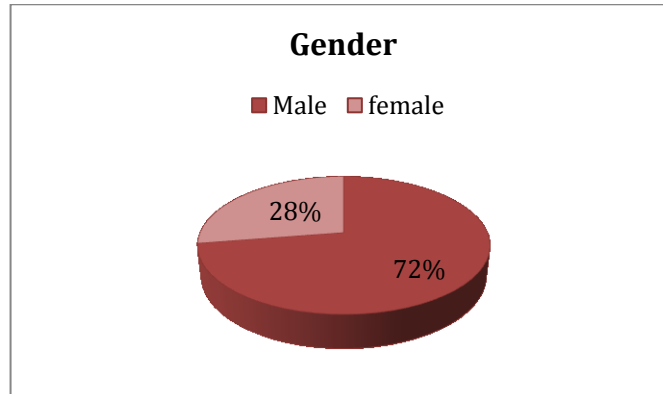


Figure 4.5 Gender

4.5.2.The Level of Education of the Respondents

The data gathered show that the Bachelor's degree earned by the largest percentage of respondents which is 75 %. Second-ranked, obtained for a Master's degree qualification with 18% of respondents and another 3% for respondent's PhD within the field of higher education, while the remaining 4% earned a secondary school diploma, as shown in the Figure 4.6.

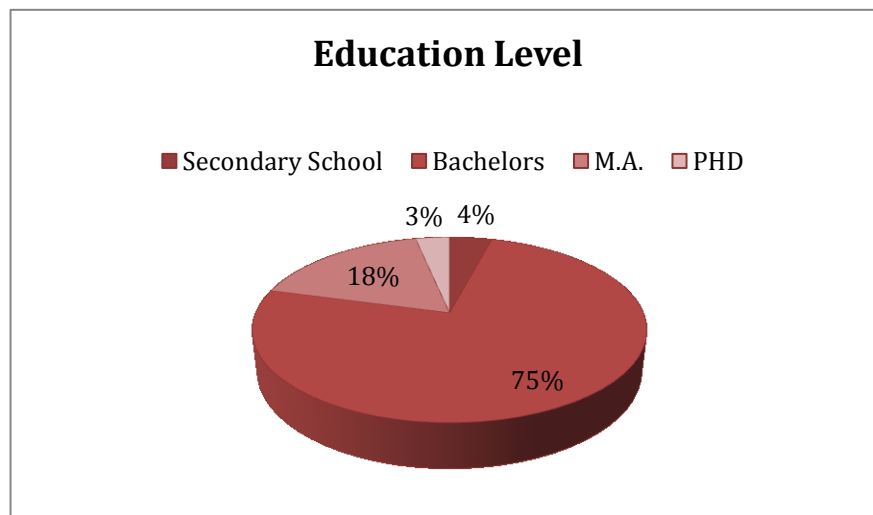


Figure 4.6 Educational levels

It is well understood that the application of TQM involves education for employees at all levels. It is obvious that most of the employees and managers in the company have a bachelor's degree and higher degree qualifications which indicates

that the leaders in the company are concerned with educational qualifications as a contributor to the effectiveness of the employee. Consequently, it can be confirmed that these results are positive in regards to the qualifications of the respondents.

4.5.3.The Work Experience of the Respondents

The outcomes illustrated in Figure 4.7 shows that approximately 14% of the respondents have 1-5 years' experience, 16% have an experience between 5-10 years, 55% have between 10-15 years' experience, and 15% have above 15 years' experience.

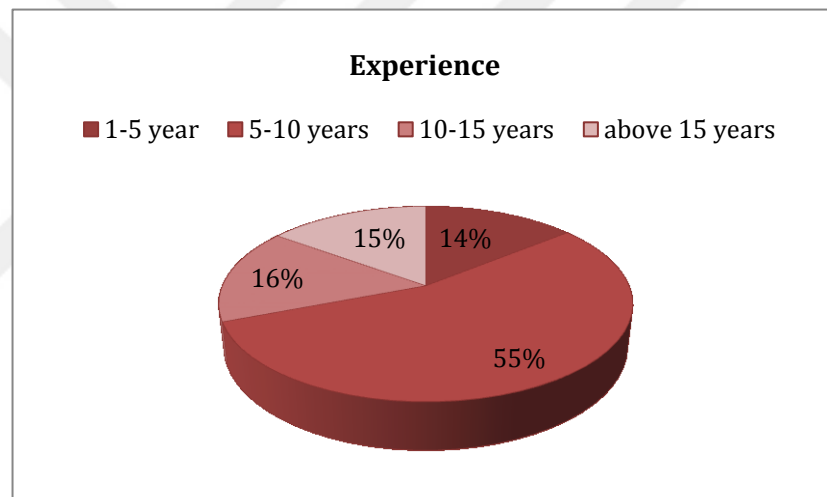


Figure 4.7 Work experience

The findings reveal that 55% of the overall survey respondents have 10-15 years ' experience, which means that most of the respondents have a long working background and indicates good awareness of their company current situation. Increased efficiency and quality in a large company is affected by employees' work experience, thus they can support the company's strategies and implement TQM.

4.6. Questions Related to the Elements of TQM:

This part deals with the main elements required from leaders to implement the total quality management in the industrial sector. The significance of all TQM key elements was evaluated by 34 questions based on the 5 points of the Likert scale. Moreover, the classification level of the respondents was given on a Likert scale, as shown in the table 4.4. Each elements of TQM correlated with different questions, in order to define and evaluate the features of each. In addition, the researcher adopted a descriptive analysis to improve the results by the mean value and Std. Deviation each main factor of TQM. Furthermore, the researcher used Spearman's correlation and regression analysis to test the research hypothesis.

Table 4.4 Rating scale as classified by Likert scale

Point scale	Likrate scale	Score of mean	Rating
1	Strongly Disagree	$1 < 1.8$	very low
2	Disagree	$1.8 < 2.6$	Low
3	Neutral	$2.6 < 3.4$	Moderate
4	Agree	$3.4 < 4.2$	High
5	Strongly Agree	$4.2 < 5$	very high

Focus Customer's Satisfaction (FOS)

Regarding to findings that received from survey in Table 4.5, it turned out that there is a focus by the leadership and employees on customer satisfaction. The weighted average of this agreement was 3.746 with the Std. deviation 0.651, which indicates the trend of focus on customer is (Agree), and the level of this statement is classified as high since the mean value lies between 3.4 and 4.2, according to the Likert scale as illustrated in Table 4.4.

So it clearly seen that the company seeks to meet all the customer needs and achieve the expectations of the largest number of clients, because of the leaders and management with the employees together follow up the customers' complaints and provide them with acceptable solutions. For this the employees know their most

important customers and inquire if they are satisfied or dissatisfied with work being done. So by letting the customer feels important this reflect on company reputation and profitability with notable ratio, because important customers usually are influencer and they can influence the other new customer.

Table 4.5 Descriptive analysis of focus on customer satisfaction

Statement code	N	Mean	Std. Deviation
1.The organization is willing to supply a wide range of Products to meet the needs and expectations of the largest number of clients.	120	4.03	1.250
2.Customer complaints are followed up by the organization's leaders and provide them with acceptable solutions.	120	3.85	1.082
3.Managers believe that quality is determined by meet the needs of customers.	120	4.00	1.061
4.The employees recognize their most important customers.	120	3.75	1.169
5.Employees seek feedback from the customers and inquire if the customers are satisfied or dissatisfied with their work	120	3.99	1.240
Weighted Average		3.746	.65094

4.6.1.Top Management and Leadership Commitment

Moving to the most important component of this study which is commitment of leadership in implementing TQM, and as results found from quantitative data the weighted average of this agreement was 3.479 with the Std. deviation 0.674, which indicates the trend of LC is (Strongly agree), and the level of this statement is classified as high.

By looking to the respondents in Table 4.6, it can clarified that the leadership and management facilitate the moving and flow the information among the various departments within the company, working to spread the quality culture throughout all

the levels and departments of management and continuously support learning that help all employees to move forward in their careers with the aims to build a working atmosphere that allows workers to carry out their duties, and all these lead to successful TQM application. Also there is a sufficient connection among both operators and managers.

Table 4.6 Descriptive statistics of top management and leadership commitment

Statement	N	Mean	Std. Deviation
1. The organization's management agrees with the idea of authority delegations and information flow facilitation among the various departments within the organization.	120	3.89	1.222
2.The organization's management is working to spread the quality culture throughout all the levels and departments of management	120	3.88	1.199
3. Management seeks to build a reputation among customers, and it is characterized by quality and perfection	120	2.42	1.164
4. The management team utilizes the values of the company to control the company and its employees	120	4.13	1.100
5. The leadership team aims to build a working atmosphere that allows workers to carry out their duties	120	3.92	1.185
6. The leadership team supports learning that will help all employees to move forward in their careers	120	4.22	.611
7.Employee perspective and feedback is an important aspect for the leadership team	120	3.30	1.213
Weighted Average		3.4793	.67456

Based on the above discussion, the Top management commitment can be the solid foundation required for successful implementation of TQM within the organization. These findings can be supported by the study done by Javed (2015), who Studied the impact of top management commitment on the success of quality

management in ARL company in Islamabad, and stated that the top management commitment of an organization is positively related to the success of quality management (Javed, 2015).

4.6.2. Continuous Improvement

The weighted average of this agreement was 3.56 with the Std. deviation 0.734, which indicates (Agree) with continuous improvement within the company and the level of this statement is classified as high.

The main findings of the survey in Table 4.7 indicated that the respondents in agreed with the consideration of continuous improvement as an important features to TQM implementation, and that's can be seen throughout the agreements which approved that the leadership seeks to continuously improve the production system and service to improve quality, and looking for improvement rather than maintenance and that obviously lead to qualified employees, increased productivity and lowered costs. Furthermore, as mentioned literature review in Aziz. et al (2019) study, it also lead to higher quality management, better management procedures, better working relationships with other teams and departments, excellent customer service and productive ways of achieving targets (Aziz, Sumantoro, & Delli, 2019).

Table 4.7 Descriptive statistics for continuous improvement

Statement	N	Mean	Std. Deviation
1. The company's management seeks to continuously improve the production system and service to improve quality.	120	3.92	.967
2. The company's management constantly seeks to reduce discrepancies or gaps between perceptions of customers about the quality of the product and the actual quality received.	120	3.71	1.155
3. The planning, development, testing and delivery of products to the market are considered an integral (indivisible) process of improving the quality.	120	3.87	1.053
Weighted Average		3.5688	.73443

4.6.3. Management and Administration System

Regarding to the data collected in Table 4.8 it turned out that the respondents agreed with statements related the Management and administration system with weighted average 3.528 with the Std. deviation 0.727.

Table 4.8 Descriptive statistics for management and administration system

Statement	N	Mean	Std. Deviation
1. The management of the company is concerned with involving all employees in the enhancement of quality and performance.	120	3.49	1.250
2. The company is characterized as a quick responder to demands and changes through the presence of clear and explicit systems.	120	3.70	.931
3. There is a Quality Control Department in the factory's organizational structure.	120	3.68	1.354
4. An annual training plan for employees is available to improve their skills	120	3.50	1.053
5. The employees know and are completely aware of the company's mission of and what they have to accomplish	120	3.73	1.037
6. The employees work as a team and within a safe workplace.	120	4.27	1.061
7. The managers respect and value their employees	120	3.79	.916
Weighted Average		3.5284	.72761

It clearly seen that the company involving all employees in the enhancement of quality and performance, and providing them with appropriate training programs which makes the employees aware of the company's vision and mission and know their customers' needs which leads to customer satisfaction and low cost with high quality and this is due to the leadership develop clear and explicit systems which

enhance the capabilities of the employees, and therefore improves their performance and thus reflects on customers and achieves the highest quality that satisfies the customer.

4.6.4. Operational Procedures

As a result in Table 4.9, the respondents to the survey confirmed that the top management had implemented the issues related to the operational procedures very well by mean equal to 3.728 with the Std. deviation 0.711 which indicates (Agree), and the level of this statement is classified as high since the mean value lies between 3.4 and 4.2, according to the Likert scale as illustrated in Table 4.4.

Table 4.9 Descriptive statistics of operational procedures

Statement	N	Mean	Std. Deviation
1. The company depends on many suppliers to purchase its needs.	120	4.13	.744
2. The company adopts a certain criteria when choosing suppliers or resources, and the quality is the most strategic standard.	120	3.79	.934
3. The company is concerned with purchasing from the lowest-priced suppliers, spicaly of quality.	120	3.72	.936
4. The company maintains an integrated database about suppliers and the purchased goods	120	3.93	.871
5. The company analyzes the processes and results that relate to the customer complaints for the purpose of reducing inconsistencies.	120	3.93	.896
Weighted Average		3.7282	.71185

Thus, having as much supplying option as possible reduces the manufacture company's stresses which also initiate a competition among the suppliers to serve the high quality possible with lowest cost offered. To be successful in business it can be defined by the lowest product available with acceptable quality but to be the best in any business field it must be belt on criteria which is quality focus, along with

having an integrated database about suppliers that the manufacturer company's need or might need, that requires a fallowed up about all the suppliers and customers complaint, analysis which lead to reformation possess about the department that are responsible about certain stages of the product manufacturing, this lead to successful operational procedures.

4.6.5.Strategic Polices

As a result from the Table 4.10 it illustrated that the most of respondents agreeing about the statements related to the role of leadership in applying the strategic polices, and the weighted average was 3.574 with the Std. deviation 0.822, which indicates (Agree), and the level of this statement is classified as high since the mean value lies between 3.4 and 4.2, according to the Likert scale as illustrated in Table 4.4.

Table 4.10 Descriptive statistics of strategic polices

Statement	N	Mean	Std. Deviation
1.The organization making a study of the market and the customer needs before making any modification on its products	120	3.5750	1.11267
2. Through the pricing process the company seeks to sell its products affordably with customers.	120	3.6750	1.02213
3.The organization provides full information of customer feedback about the price changes.	120	3.6583	1.07294
4. Through the promotion and advertising process the organization aims to increase customer understanding of the product offered.	120	3.7500	1.10955
5. The organization strives to improve its distinguishing from its competitors through promotion and advertising.	120	3.8167	.94365
6.The factory evaluates its distribution channels occasionally.	120	3.8403	1.11221
7. The organization believes that providing after-sales services are one of the important ways in which customer loyalty is gained.	120	3.6083	1.10230
Weighted Average		3.5749	.82295

As a result from the statements above, it can summarize the outcome as follow;

Conducting study about a desire shape size and design of products help in satisfying and grabbing attention of customer toward the product with taking in consideration the social and environmental barriers when design a new products in addition, producing more than the market demand lead to losing cost.

As evidence, utilizing the promotion and advertising can help the company to build unique reputation in the market among the customers by understanding the offered products and leave great image about the company in the customer's mind by for example giving a free sample, souvenirs or even by make an exhibitions. Promotion and advertising are the leadership responsibility, paying more attention to promotion is a kind to quality improvement because the company becomes able to know what customers prefer.

Furthermore, the company has to build a wide distribution network and continually evaluate the workability of each root of network to assure delivering the products in the right time and right place which makes obtaining or reaching products by the customer very easy process. Additionally, rolling the customers in the design process incenses the customer satisfaction which leads to attract new customers by making the existing customer satisfy because they were served what they had desired form the company which lead to indict advertisements among the population. Tracking and requesting a feedback from the customer is a way to gained customer satisfaction hence the loyalty is earned, and providing the help when defect occur in the products result in a successful services Before and After-Sale.

4.7. Questions Related to Organizational Performance

This part deals with the organizational performance questionnaire. The researcher adopted a descriptive analysis to improve the results by the mean value and Std. deviation for each item.

Table 4.11 Descriptive statistics of the organization's performance

Statement	N	Mean	Std. Deviation
1. Implementation of total quality management focuses on increased retention as a result of customer satisfaction.	120	3.67	.929
2. Implementation of quality management has increased organizational profitability.	120	3.81	1.023
3. Implementation of total quality management practices has ensured effective waste reduction of operations.	120	4.18	.741
4. Quality management practices have enhanced service delivery in the organization.	120	3.74	.948
5. Quality management practices have enhanced sales which have contributed to company performance.	120	3.98	.860
6. Effective implementation of total quality management has increased organization competitiveness.	120	3.77	.983
7. Implementation of total quality management resulted in acquisition of bigger market share.	120	3.95	.878
8. The organization making a study of the market and the customer needs before making any modification on its products	120	3.8583	1.09465
Weighted Average		3.7482	.70211

Regarding to the data collected in Table 4.12 it turned out that the respondents agreed with statements related the organizational performance with weighted average 3.748 with the Std. deviation 0.702.

4.8. Correlation Analysis

Table 4.12 illustrates that the correlations between the independent variables which are focus on the customer, leadership commitment, continuous improvement, management and administration system, operational procedure, strategic policy and the dependent variable which is Organizational Performance is strongly positive correlation.

The result of the correlation between elements and organizational performance were between 0.75 and 0.914, which means that there is a positive strong relationship between each elements and organizational performance, and this translates into positive correlation where whenever the elements are increased, the performance of the organization is increased. With notifying the significance ratio in all the variables is 0.000 which is confirming the statement above. Hence, hypothesis 7 that states "There is a strong positive relationship between role of leadership in implementing the elements of TQM and the performance of the organization" is confirmed.

Table 4.12 Spearman correlation between elements and performance

Correlations									
			OPE	FOC	LC	CI	MaA	OP	PS
Spearman's rho	OPE	Correlation Coefficient	1.000	.889**	.913**	.854**	.862**	.747**	.766**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000
		N	120	120	120	120	120	120	120
** Correlation is significant at the 0.01 level (2-tailed).									

4.9. Scatterplot

The benefit of the scattering plot is that it is easy to construct, it is non-numerical data. It also instantly informs about whether or not there are outliers or

whether the relationship is truly linear or not (Gogtay & Thatte, 2017). Typically a line is drawn by points of a scatter plot to define linearity. This line is known as the regression line.

To investigate the relationship between the independent variables (focus in customer, leadership commitment, continuous improvement, management and administration system, operational procedures and strategic polices) and dependent variable (performance of the organization) a scatter plot made to suggests the nature and strength of the relationship between two variables and Figure 4.8 display the scatterplot for each variables.

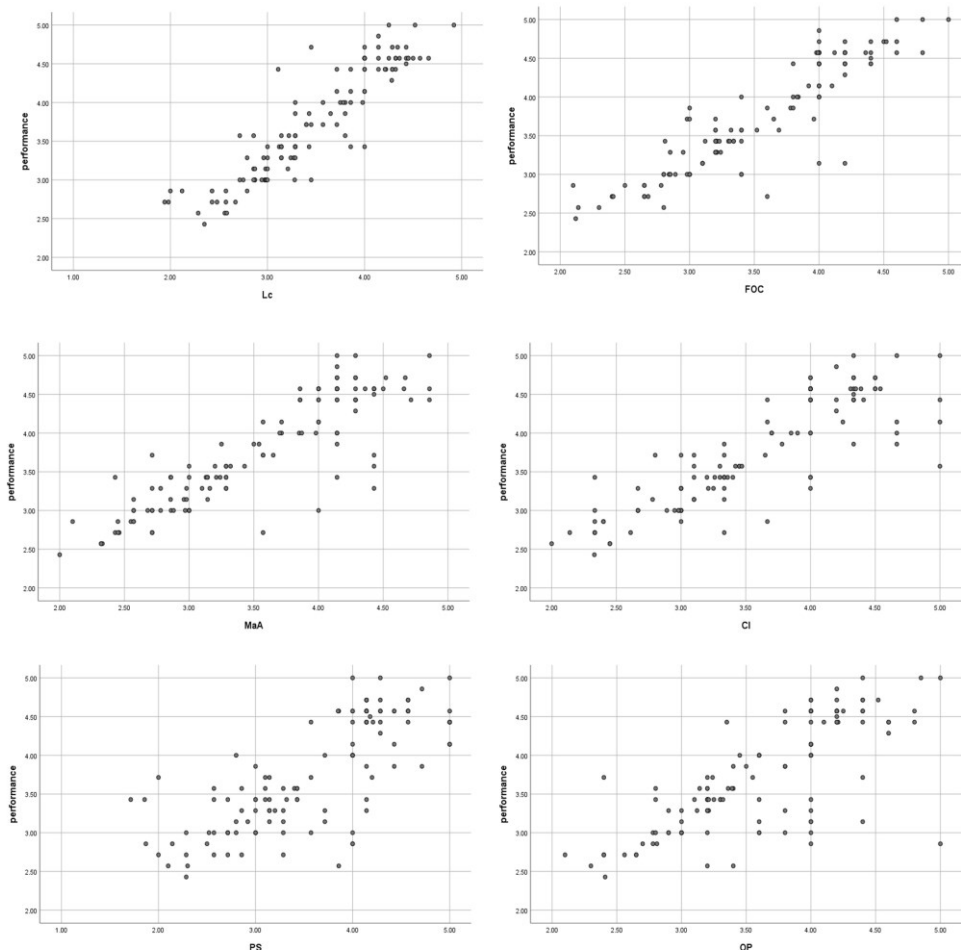


Figure 4.8 Scatterplot for each independent variable with dependent variable

The results from the scatterplot showed the strong positive correlation between the variables.

4.10. Regression Analysis

The regression analysis performed to test the hypotheses that were proposed in this study to determine the significance relationship between the role of leadership in implementing the TQM elements (focus in the customer, leadership commitment, continuous improvement, management and administration system, operational procedures, strategic polices) and the organizational performance in Reform sport Group. The summary of the findings are presented below.

Table 4.13 Regression analysis

Haypotheses		Unstandardized Coefficients		Standardized Coefficients			
	R2	A	B	Beta	Sig	F	Result
H1	.817	.304	.971	.904	.000	525.472	Accepted
H2	.830	.44	.948	.911	.000	575.301	Accepted
H3	.727	.839	.815	.853	.000	314.312	Accepted
H4	.770	.761	.847	.877	.000	394.857	Accepted
H5	.559	.810	.805	.750	.000	152.061	Accepted
H6	.761	.580	1.426	.650	.000	162.716	Accepted

*All regression are significant at P<0.001level

The results from the Table 4.13 above can be translated as following;

Testing hypothesis 1

The R^2 of focus on the customer is 0.576, which means around 58% of total variation in organization' performance is described by focus on the customer, where the coefficient of focus on the customer $a=0.680$ and coefficient of constant $\beta=0.819$ are positively significant. The beta was 0.75, which means that more focus on

customer yields in a 76% increase in performance, hence the finding support the H1 that states "focus on the customer has a positive effect on the performance of the organization".

Testing hypothesis 2

The R square related to leadership commitment was equal to 0.830, which means 84% of the total variation in organization' performance is explained by the leadership and top management commitment, where the coefficient of independent variable $\alpha = .44$, and coefficient of dependent variable $\beta = 0.94$ are positively significant. The beta was 0.911, which means that the leadership commitment yields in around 92% increase in performance, According to the outcome; it can be approve the H2 that states "leadership commitment has a positive effect on the performance of the organization".

Testing hypothesis 3

The R^2 of continuous improvement is 0.727, which means around 73% of total variation in organization' performance is described by continuous improvement, where the coefficient $\alpha = 0.839$ and coefficient of constant $\beta = 0.815$ and this mean positively significant. The beta was 0.85, which means that more continuous improvement by the leaders yields in an 85% increase in performance of the organization, hence, the findings support the H3 that states "continuous improvement has a positive effect on the performance of the organization".

Testing hypothesis 4

The R square related to management and administration system was equal to 0.770, which means 78% of the total variation in organization' performance is explained by management and administration system, and, where the coefficient of independent variable $\alpha = .761$, and coefficient of dependent variable $\beta = 0.847$ are positively significant. . According to the outcome, it can be said that the H4 that states "Management and administration system has a positive effect on the performance of the organization" is accepted.

Testing hypothesis 5

The R square related to operational procedures equal to 0.475, which means only 48% of the total variation in organization' performance is explained by operational procedures, and, where the coefficient of independent variable $a = 1.20$, and coefficient of dependent variable $\beta = 0.66$ are positively significant. The beta was 0.689, which means that more contribution in operational procedures by the leadership yields in a 69% increase in performance of the organization. Hence, the findings approve the H5 that states "operational procedures have a positive effect on the performance of the organization".

Testing hypothesis 6

The R square related to strategic polices equal to 0.761, which means 77% of the total variation in organization' performance is explained by strategic polices operational procedures, and, where the coefficient of independent variable $a = 0.58$, and coefficient of dependent variable $\beta = 1.42$ are positively significant. The beta was 0.650, which means that more input in strategic polices yields in a 65% increase in performance of the organization, Hence, the findings approve the H6 that states "strategic polices has a positive effect on the performance of the organization".

The findings in the Table 4.13 illustrated that the P-value of all variables equal to $.000 > .005$ and that can be translated to there is statistically significance relationship between the role of leadership in implement TQM elements and the organizational performance in Reform sport Group. Based on the data above, it can be concluded that all the variables influence on organizational performance.

5. CONCLUSION

This chapter provides a summary and conclusion for the study, recommendations that helps the leadership in implanting the TQM elements to improve and increasing the organization' performance, and the research suggested areas that may be researched by future similar studies.

The focal aim of this study is to investigate the role of leadership in implementing the elements of total quality management and its impact on the organization's performance. This was done through conducting a case study within the industrial sector in turkey, and (reform sport group) was a case chosen for this study to knowing if there is an impact and correlation between the elements of TQM and organizations' performance

Reform Sports Group was first established in Turkey. They specialize in building sports facilities, such as, golf courses, rugby fields, artificial turf football fields, athletic tracks, etc. They also have works in landscape decoration and kids' playgrounds. There are six companies with the headquarters in Turkey, as well as suppliers in different countries. The focus in the study is on the headquarter of the company which is in turkey.

The concentration was on the importance of TQM elements required from the leader for TQM application and how it impact on the organization's' performance. Thus, the detections from the previous studies have recognized six main elements. The researcher used quantitative method, a survey were designed and distributed online to the target sample, and the questionnaire responses has been transferred to an excel sheet and then to the SPSS 26.0 statistical program to analyze the data.

The researcher adopted a descriptive analysis to improve the results by the mean value and Std. Deviation for each item, as well as used the Spearman correlation to examine the relationship between the elements of TQM and organization's performance, and the regression analysis to test the extent of the impact between the variables.

The results support the proposed hypothesis and found a significant positive relationship between the variables. As shown in Figure 5.1 where:

- A significant impact was found for leadership implements TQM elements on organization performance.

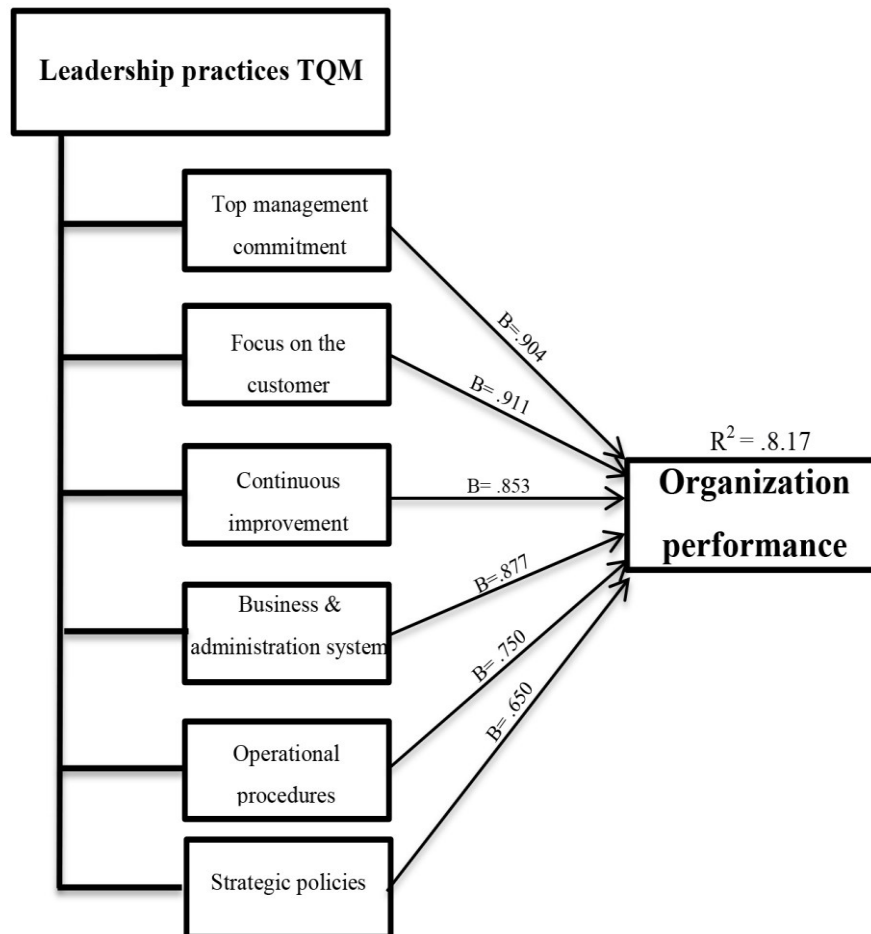


Figure 5.1 Hypothesis results

Regarding to the findings of this study, it can be concluded that elements of TQM which are focus on the customer, leadership commitment, continues improvement, management and administration system, operational procedures, strategic polices have positive significant effect on organization' performance. These results show that the degree to which the organization's performance increases or decreases is measured by certain TQM variables.

Thus, the researcher summarized the outcome of study as the following, the successful of organizational performance depends upon a leader's success in implementing TQM elements, therefore, the more understanding the leader is about TQM implementation and commitment, the more beneficial it is for the company in regards of customer satisfaction, company performance, productivity, and barriers reduction.

In conclusion, the researcher realizes that leadership and quality management are two interrelated phenomena which can't be separated. The quality management process can't be considered as an isolated activity from the rest of the organization's work, but rather an essential part of its business, and quality cannot be improved without effective and appropriate leadership. On the other hand, the fact that quality is considered as an integral part of the company's operations, this means that quality is a way to implement the business efficiently and it's a way to achieve major objectives of the organization with satisfying both employees and customers. Ultimately, the researcher believes that every successful company includes a leader who implements the quality management in an effective way.

According to the results of the case study in this thesis, the researcher suggests some recommendations for improving the practice of TQM in the industrial sector generally and in Reform Sports Group particularly;

Leadership in company must continue on this administrative level that is characterized by proper planning and continuous development to maintain the performance of the organization, customer satisfaction, and increased profit. The

necessity to create a working partnership between leaders and employees, so each member of the work force is in knowledge of the company's policies and future goals. Furthermore, the top management in the company shell considers TQM elements variables in improving organization' performance.

The suggestion for further research can improve this research by raising the amount of sample, the number of variables to be studied, and conducting the study on the all regional branches to figure out if the performance of the leadership affected by the different place, culture and country. Other suggestion is to make a study from the customer point view to measure how they are really satisfied. Although the results of this research are particular to the industry sector, they are assumed to be applicable to other companies operating in the context of the Middle East. Further research is therefore needed to verify the greater generalizability of these results.

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APPENDIX A

Dear Sir,

My name is Razan Basil Aburahmah I am a student in Istanbul Kultur University and currently studying master in engineering management.

As part of data collection for my Master study, you are kindly invited to participate in this study by providing information that might be valuable to my Master study.

My research titled “role of leadership in implementing TQM”. The research aims to find out if the role of leadership has an impact in implementing the elements and policies of total quality management.

Therefore, I am requesting your kind cooperation in giving your time, experience and thoughts by answering my questions.

Thank you very much for your participation.

Razan Aburahmah

Master student at IKU

Part 1:

1. Sex:
Male () Female ()
2. Level of Education:
Secondary School (), Bachelors () M.A. (), PHD (), Others
3. How long have you been with the organization?
1-5 year (), 5-10 years () 10-15 years () above 15 years ()
4. From the experience with the company, how do you describe the leadership style? Autocratic () Participative () Democratic ()

Part 2: State your opinion in terms of the following statements that related to each of the following TQM key Elements. Your opinion will be used to identify whether your company had implemented or considered these factors in its activities or not.

Please tick (✓) in the box that matches with your appropriate answer.

Focus Customer's Satisfaction					
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The company is willing to supply a wide range of products to meet the needs and expectations of the largest number of clients					
Customer complaints are followed up by the organization's leaders and provide them with acceptable solutions.					
Managers believe that quality is determined by meet the needs of customers.					
The employees know their most important customers					
Employees pursue feedback from the customers and inquire if the customers are satisfied or dissatisfied with their work					
Top management commitment					

The organization management agrees with the idea of Authority delegations and information flow facilitation among the various departments within the organization.					
The organization management is working to spread the quality culture throughout all level and departments of management					
Management seeks to build a reputation among customers, and it is characterized by quality and perfection.					
The management team utilizes the values of the company to control the company and its employees					
The leadership team aims to build a working atmosphere that allows workers to carry out their duties					
The leadership team supports learning that will help all employees to move forward in their careers					
Employee Perspective and feedback is an important aspect for the leadership team					
Continuous improvement					
The company management is seeking to continuously improve the production system and service to improve quality.					
The company management is constantly seeking to reduce discrepancies or gaps between perceptions of customers about the quality of the product and the actual quality received.					
The planning, development, testing and delivery of products to market are considered an integral (indivisible) process of improvement the quality.					
Management and administration system					
The management of the company concerned with involves all employees in the enhancement of quality and performance.					
The company is characterized as quickly respond to demands and changes through the presence of clear and explicit systems.					
There is a Quality Control Department in the factory organizational structure.					
An annual training plan for employees is available to improve their skills.					

The employees know and are completely aware of the company mission of and the accomplishments have to.					
The employees work as a team and within a safe workplace.					
The managers respect and value their employees					
Operational Procedures					
The company depends on many suppliers to purchase its needs.					
The company adopts certain criteria when choosing suppliers or resources, and the quality is the most strategic standard.					
The company is concerned with purchasing from lowest-priced suppliers, regardless of quality.					
The company maintaining the integrated database about suppliers and the purchased goods					
The company analyzes the processes and results that related to the customer complaints for the purpose of reducing inconsistencies.					

Part 3: State your opinion in terms of the following statements that related to performance of the organization.

Please tick (✓) in the box that matches with your appropriate answer.

Organization' performance					
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Implementation of total quality management focuses on increased retention as a result of customer satisfaction.					
2. Implementation of quality management has increased organizational profitability.					
3. Implementation of total quality management practices has ensured effective waste reduction of operations.					
4. Quality management practices have enhanced service delivery in the organization.					
5. Quality management practices have enhanced sales which have contributed to company performance.					
6. Effective implementation of total quality management has increased organization competitiveness.					
7. Implementation of total quality management resulted in acquisition of bigger market share.					
8. The organization making a study of the market and the customer needs before making any modification on its products					

APPENDIX B

Full table of Spearman's correlation test

Correlations									
			OPE	FOC	Lc	CI	MaA	OP	PS
Spearman's rho	OPE	Correlation Coefficient	1.000	.738**	.913**	.854**	.862**	.692**	.766**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000
		N	120	120	120	120	120	120	120
	FOC	Correlation Coefficient	.738**	1.000	.720**	.653**	.609**	.641**	.602**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000
		N	120	120	120	120	120	120	120
	Lc	Correlation Coefficient	.913**	.720**	1.000	.803**	.813**	.699**	.712**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000
		N	120	120	120	120	120	120	120
	CI	Correlation Coefficient	.854**	.653**	.803**	1.000	.821**	.653**	.743**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000
		N	120	120	120	120	120	120	120
	MaA	Correlation Coefficient	.862**	.609**	.813**	.821**	1.000	.731**	.780**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000
		N	120	120	120	120	120	120	120
	OP	Correlation Coefficient	.692**	.641**	.699**	.653**	.731**	1.000	.605**

		Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000
		N	120	120	120	120	120	120	120
	PS	Correlation Coefficient	.766**	.602**	.712**	.743**	.780**	.605**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.
		N	120	120	120	120	120	120	120
	**. Correlation is significant at the 0.01 level (2-tailed).								