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MASTER'S THESIS

**THE ROLE OF EMPLOYEES AND LEADERSHIP IN ACHIEVING
TOTAL QUALITY**

Sarajevo, April 2014

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AUTHORSHIP STATEMENT

The undersigned Alden Vladavić, a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), declare that I am the author of the master's thesis entitled » The role of employees and leadership in achieving total quality «, written under supervision of Professor Dr. Borut Rusjan.

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INTRODUCTION

The question of quality is increasingly represented in all spheres of society, as well as in contemporary management. In the opinion of many, this age will be the age of quality, because quality is a concept that is a key to success for many organizations and countries around the world.

To be successful, all functions of the organization should be subordinated to contribute as much as possible to greater quality and profitability. If only one phase occur mismatches a decrease in quality can be expected whether it is in a final product or service. However, the concept and philosophy of quality is not always the clearest to both, managers and employees and the task of all is to first understand the concept of quality.

We can conclude that if we want to meet the customer needs we have to implement quality in all phases of business, i.e. business ethics and organizational culture, quality technology, human resources, marketing, management and the final product or service itself. All this can be called TQM (total quality management), but to understand the concept of TQM it is important to fully understand what “quality” means.

According to Winston (1997, p. 85), the best definition for quality is “returning your customer more than they expect.” It as a “moving target” because what the customer gets now affects what he expects in the future. The very definition of quality has to be narrowed down to a set of descriptions that are based on customer expectations. Ishikawa (in Winston, 1997, p. 86) defines: "Practicing quality means developing, designing, producing and providing a quality product or service which is most cost effective, most beneficial and always meets customers' needs."

According to Reid and Sanders (2005, p. 138), one unique universal definition of quality does not exist. Some view it as “meeting or satisfying customer needs” while other understand the concept of quality as “performance to standards”. Besides these, there also exist definitions of quality which are more general, such as: compliance with specification, fitness for use, provided support service, value for price paid and other, subjective definitions.

Reid and Sanders (2005, p. 137) defined that setting quality as a priority in an organization implies prioritizing customer needs which means to meet and exceed customer expectations. In order to succeed in this, everyone in the organization must be involved through joint efforts. TQM is a joint effort of the whole organization to improve quality at every level.

Juran (1998, p. 372) defined TQM as a set of systems and processes to satisfy customers through motivated and empowered workers which leads to higher incomes and decreased costs; Ross and Perry (in Liang, 2010, p. 66) describe TQM as unification of all processes and

functions in order to achieve continuous improvement of product and service quality, targeting the main objective - customer satisfaction.

Ahire (1997, p. 93) states that TQM operates on the assumption that process and product quality is the responsibility of every factor involved in the generation or consummation of products and services provided by the organization. In other words, TQM includes and uses advantage of management involvement, employees, vendors as well as the end customer in order to satisfy him and exceed his expectation. TQM is a comprehensive method for long-term success that includes continuous improvement in all spheres of an organization describing it as a “journey” and not as a “short-term travel”. TQM tends to fundamentally reverse the organization progressively changing stances, practices, the structure and the system of the organization itself.

According to Šehić (2002, p. 160) the concept of TQM is simple, all employees are responsible for quality achievement. There is no quality control department or any formal control system. Organizations educate and train their employees to implement quality in everything they do. This means that TQM puts in the focus the quality improvement by the engagement of everyone pointing out that every operation in the organization must be oriented to that goal. The organization philosophy implies the cooperation of different functions for successful achievement.

Evidence that quality is an efficient strategic tool in market competition has encouraged organizations to implement and practice a variety of programs to continue to improve their products and services in order to meet customers' expectations and keep them satisfied. One of the main focal points of these programs is the concern to technical elements, including products design, reliability analysis, and statistical process control which is definitely needed and brings overall an significant quality improvement. Modern TQM includes more than just a preeminent technical system. For an appropriate TQM implementation and lasting success, Hart and Schlesinger (in Chen, 1997, p. 24) stated that a change in the culture of the organization is necessary, including changes in the structure of the organization, values, the joint work of all involved people and the way they think about involvement and engagement. The main ideal of TQM is to provide premium value to the customer and managers must tend to enhance not only the technical system, they must also improve the organizational system in order to succeed. Thus, effective and involved management is considered as the main driver for successful TQM implementation in an organization. In addition to management, equally important is the engagement of workers and the way they function together in order to integrate several interdisciplines into one connected system, but if the workers do not sense the recognition and backup from other team members and other workers in the organization, then TQM implementation is perhaps not the best option at that time.

From the above stated we can conclude that TQM clearly emphasizes the essentiality of human resource management in quality management, pointing out the importance of effective

leadership, and development and management of human resource factors. Organizations initiate process improvements within the human resource division supporting the strategic goals of quality and aligning them with TQM principles.

To reach and successfully implement TQM an organization must change the working manners and habits of the employees. Various factors related to behavior and attitudes are essential for achieving these goals: job satisfaction, motivation and commitment to organizational goals. For employees which work in a TQM organization quality must become a culture at work as well as an everyday routine. Furthermore, it is essential to realize that TQM is a continuous improvement process that takes a long time and requires substantial human and financial resources. It is not a static process, it is very dynamical.

The quality issue gets worse when workers of an organization either are not empowered enough to correct the quality inadequacy or are not ready or prepared to fix this issue. Most people have had experience with some service workers who do not care about the quality of their work and who were clearly demotivated. This results with losing customers and providing an opportunity to the competitor to take advantage of the situation and gaining a bigger market share by having a more quality service or product.

As already mentioned, the concept and philosophy of quality is not always the clearest to both, managers and employees and the task of this study is to first understand the concept of quality. Quality improvement in an organization is in a close relation with improving the efficiency of individuals, groups and the organization in whole. TQM views an organization as a collection of processes. It maintains that organizations must strive to continuously improve these processes by incorporating the knowledge and experiences of workers. Purpose of the master's thesis is to analyze the role of employees and leadership in achieving total quality. For TQM to be achieved the most important thing is leadership and employee empowerment. Defining goal orientations for employees, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction is a big step toward achieving TQM.

The objectives of this study are as given below:

1. to understand what quality is and why it is important
2. to bring out the characteristic features of TQM
3. to understand the role of all employees in TQM
4. to explain how management should support achieving TQM
5. to explain how TQM can improve the competitiveness of enterprises, while empowering and delegating responsibilities to employees
6. to summarize the main results of several previously published scientific research papers regarding human resource management in TQM and their main problems.

The work is based on available literature, published scientific articles and other resources in the area of TQM and human resource management. Research methods include collection of a broad specter of literature about TQM and the importance of human resource factors for it.

In order to explore the scientific knowledge, both scientific and professional literature in the field of TQM and human resource management and practices are studied. The work includes theoretical research based on existing literature, publications from academic institution, e-books, official journals, various periodicals, statistical sources, as well as online sources of information of TQM and human resource management. For exploring the variety of these sources the following research methods are used: inductive method, analysis and synthesis, generalization, comparative method, verification method, classification, description, compilations.

The first chapter of the thesis deals with the theoretical perspective on the history, concept and definition of quality, while the second chapter explains the basic characteristics, history, concept and definition of TQM. This chapter describes the tools, models and implementation process of TQM and presents the impacts on the organization after successful implementation. The second chapter also deals with advantages and traps of TQM.

The third chapter delves into the concept of human resource management and the relationship between human resource management and TQM. This is the core chapter where emphasis is to highlight the role of employees and leadership in achieving TQM and describe the conditions for success. The last part of the study incorporates concluding part highlighting the main findings of the master's thesis.

1 QUALITY

1.1 The history of quality

One of the first signs of a quality system can be recorder in the Code of Hammurabi, ruler of Babylonia in the period around 3000 BC. Among the references to quality is the following excerpt: “The mason who builds a house which falls down and kills the inmate shall be put to death” (Ross, 2009). Other forms of controlling the production processes originate from ancient Egypt, evidencing perfectly shaped and finished stone blocks which were used during the construction of the pyramids.

Another example of applying a quality system is the Chinese emperor Qin Shi Huangdi, in whose empire all the goods that had been brought into the imperial household should have a label with the name of the manufacturer in case of a failure of the product to identify and punish the manufacturer. However, we can conclude that the term quality was known a long time ago.

At that time products were manufactured by single workers, who also tracked and controlled the quality of their product understanding the dependence of their existence on their reputation which was directly linked to the quality. After this period, commercial growth followed and manufacturing transformed to stores with multiple employees directed by a master artisan who tracked and controlled their work. Back then, a new dimension of quality appeared - the quality of management. The master taught the interns, controlled and monitored the accuracy and quality of their work, and analyzed the final product testing its level of satisfaction. The master was at the same time the owner of the store so quality was very important to him because his existence was at stake. The commercial benefits of providing a high quality product were realized even by certain people highly positioned in government. Jean-Baptiste Colbert e.g., minister of Louis XIV, stated "If our plants could provide superior quality of our products, foreign countries would recognize the benefits of buying French products and more financial resources would inflow to our kingdom" (Burrill and Ledolter, 1999, p. 1).

When we look back, we find that Frederic Taylor influenced on many changes in the field of production. At a time when workers and managers lacked on education, it was necessary to separate the functions of managers and task workers. This first separation was done by Taylor. He separated the executive functions from functions that are performed by managers. However, a problem appeared because everyone, managers and workers, focus on the fact that quality control is just the responsibility of those who control the finished product, so this approach resulted with an invasive production of goods (Virtual University of Pakistan, n.d., p. 4).

During the early years of production, control was not used systematically, although it functioned when the volume of production was small. But as the organization became larger and larger the need to produce greater efficiency increased. In 1911, Frederick Taylor was able to contribute to meeting these needs publishing "Principles of Scientific Management". This provided certain guidelines for the efficient usage of human resources in industrial organizations. One of the concepts of Taylor plainly determined tasks performed under a standard condition. Controlling quality was one of these tasks. The general goal was ensuring that no improper product exits the shop or store. The focus should be on the product and timely detecting problems in order to ensure compliance with the product specification aimed at high performance control by specially trained inspectors (Business Performance Improvement Resource, n.d.).

Juran (in Burrill and Ledolter, 1999, p. 2) explained that Bell Telephone Laboratories was the place where contemporary quality management was born. Shewhart developed in the 1920s a process-based quality control concept that will later replace the traditional management approach. Early in their life, quality gurus Joseph M. Juran and W. Edwards Deming worked for Bell—Juran at Bell Labs and Deming at Western Electric, a Bell organization which were closely linked with the Laboratories. After the Second World War the "Bell people"

introduced contemporary quality concepts to Japan. Even though Bell Telephone Laboratories is more famous as the place where the transistor originated, history may show contemporary quality management to be a more important contribution to mankind. Recognition to this gave Lord Cherwell, the science consultant of Winston Churchill, stating the concept of quality assurance and control as the most important contribution from Bell Telephone Laboratories to the British effort in the Second World War.

Japanese products in 1940 were cheap imitations but no value. It's certainly caused that the Japanese manufacturers realized the need to introduce an innovative approach to providing better quality products. They invited some of the gurus of quality: Deming, Juran and Feigenbaum to teach them how to achieve it (Burrill and Ledolter, 1999, p. 2).

According to known facts, Deming proposed five years as a period for reaching targets. Many Japanese did not believe but they listened to his advice and followed what he suggested. Quality management and controlling in the fifties quickly evolved and became the major topic of Japanese management. The quality movement did not stay long only at the level of management. It started as a voluntary presentation of employees to improve their job and presented management their business ideas. The big hit for the scope of quality was exactly the motivation of employees. Employees felt like part of the team with the ability that their vote is worth. A big hit was also the fact that to achieve product quality, organizations must improve all aspects of their business operations. This, of course, was the beginning of the idea of TQM (Business Performance Improvement Resource, n.d.).

At that time, many organizations in the West have faced the problem that is called competition from Japan. Japanese organizations have developed and successfully adopted various quality systems and turned into the biggest suppliers in the world while their competitors in the United States continued to follow the traditional management approach to achieve their goals.

In the period between 1980 and 1990, a new phase of quality control and management begun. This became known as total quality management or TQM. Looking at the Japanese success in solving issues of quality, western organizations have begun to introduce their own initiatives in quality assurance. TQM was developed primarily as a phrase indicating a wide range of activities focused on strategies for the development of quality, programs and activities, as well as techniques during this period that would become the center and focus of all Western countries in creating quality (Business Performance Improvement Resource, n.d.).

1.2 Defining quality

Quality is considered to be a characteristic of a product or service that meets the required standards. To put it simply, we can say that a product or service is quality when there is no lack. The word “quality” comes from the Latin word “Qualis”, “Qualitas”, which means “how

to perform”. The term quality is often used with adjectives such as good, bad, deficient, perfect, describing the extent to which the requirements are met and not standard or luxury.

Quality is in the broadest sense of the word a need of present and future development of the entire human society. Given that the quality is present in daily life, there is a need for a comprehensive study of such phenomena. Quality is not a static category, it is very dynamic and it challenges professionals and scientists who deal with issues of quality to always research new tasks.

According to Bajaria (2001, p. 842) there are several dimensions for quality. It can be viewed as quality of a product, quality of a service, quality of an action, quality of encounter and quality of life. Quality also can have multiple definitions depending on what needs to be pointed out in certain situations. For example, quality can be defined as accordance with requirement from the product control perspective, as suitability for usage from the marketing perspective, consistency around objectives from the producer’s perspective or status of the outputs from a general perspective.

The American Society for Quality (n.d.) stated that the term “quality” shouldn't be used as a particular concept to explain a level of superiority from a comparative viewpoint; neither should it be used from a quantitative viewpoint for technical assessment. To explain this meaning, an adequate attribute should be used. Achieving adequate quality includes all levels of interacting moves that influence quality in general. The contribution to quality of this variety of levels is sometime recognized apart for emphasize: for example, quality due to defined requirements, quality due to products design, quality due to compatibility, and quality due to adequate supporting during the lifetime of the good. In certain literature, quality is related to as “fitness for use”, “suitability for purpose” or “customer’s satisfaction” or “compatibility to requirements”. Such definitions present just some aspects of quality.

Juran and Godfrey (1998, p. 27) state that quality is “customer satisfaction”. However, in order to obtain a basis for action it is necessary to define the term customer. A customer is anyone who is affected by the product or by the process used to produce the product. Customers may be external or internal.

According to Winston (1997, p. 85), the best definition for quality is “returning your customer more than they expect”. It as a “moving target” because what the customer gets now affects what he expects in the future. The very definition of quality has to be narrowed down to a set of descriptions that are based on customer expectations.

Ishikawa (in Winston, 1997, p. 86) defines: “Practicing quality means developing, designing, producing and providing a quality product or service which is most cost effective, most beneficial and always meets customer needs”.

According to Reid and Sanders (2005, p. 138), one unique universal definition of quality does not exist. Some view it as “meeting or satisfying customer needs” while other understand the concept of quality as “performance to standards”. Besides these, there also exist definitions of quality which are more general, such as:

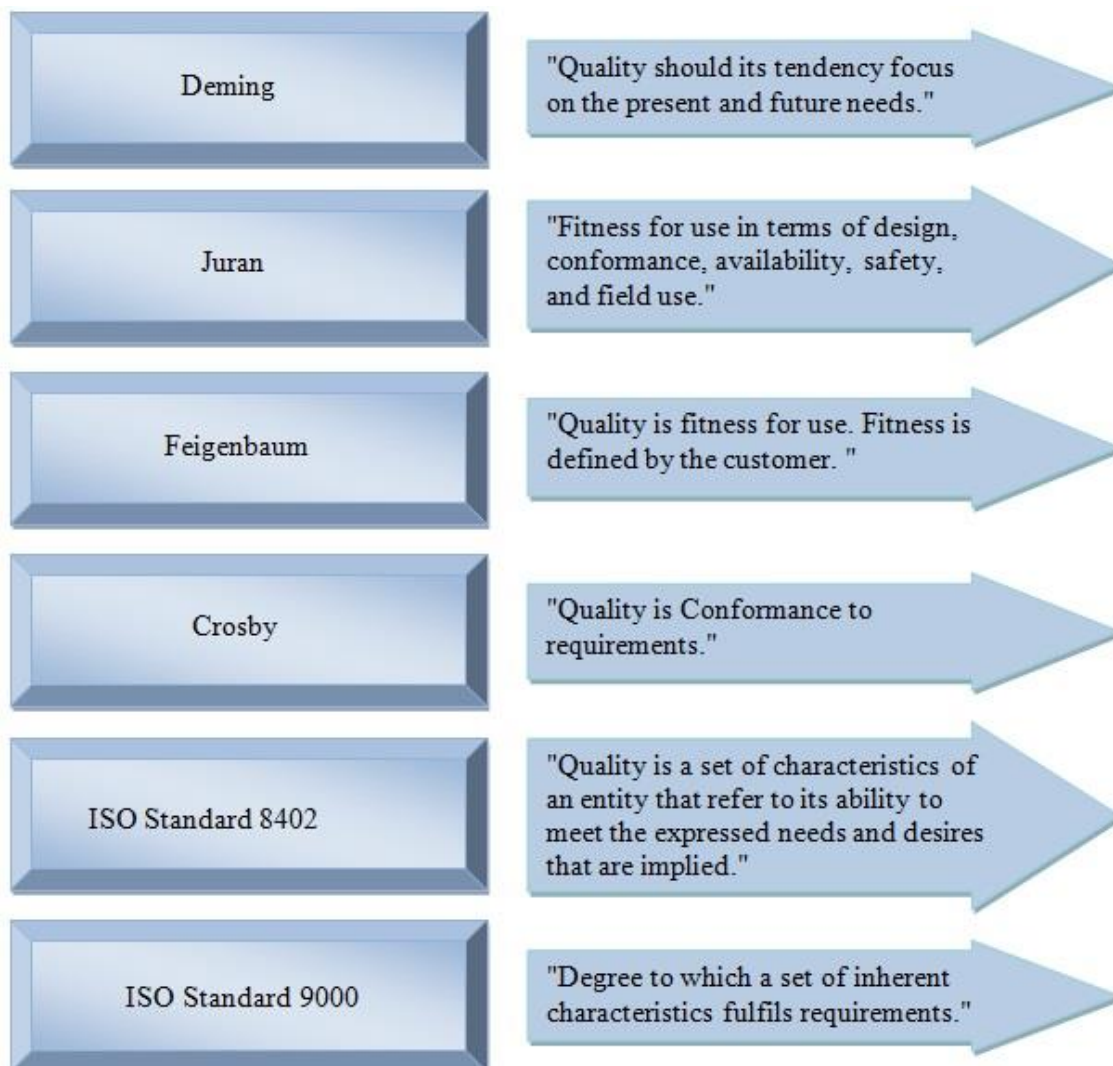
- **compliance with specification:** estimates to which extent the good provided meets the goals and tolerances defined by its creator
- **fitness for use:** estimates to which extent the good provided carries out its designed functions or usages
- **value for price paid:** defines quality from customer’s perspective of the utility of the good provided
- **provided support service:** brings in new dimensions of judging a good emphasizing Quality doesn't refer just to the product or service itself; it refers to the employees, processes, and business environment combined with it as well
- **subjective definitions:** are based on psychological criteria concentrating on the condemning estimates of what the good provided is composed.

In different periods, as economic development has changed the very purpose and meaning of quality itself changed a lot. Various experts have in different ways interpreted and defined the concept of quality. This is supported by a lot surveys conducted among managers in a number of U.S. organizations. These surveys confirm the diversity in the understanding of quality and highlights the fact that the concept of quality is related to the role that individuals have in the chain of production-market.

Significant differences in the understanding and the perception of quality in different regions and countries of the world confirmed researches that conducted Clotaire Rapaille (in Burrill and Ledolter, 1999, p. 17). Thus, for example, generally speaking the Germans think of quality as meeting standards, the French relate it to luxury, the Japanese relate quality to perfection, and Americans' idea of quality is that “it works”. According to the aforementioned studies cultural archetypes are playing a significant role in shaping the human perception of quality.

Definitions of quality arose at different times, and each definition carries a time stamp when it was created and is meaningful in the context in which it was created. The most important quality definition provided the authors and institutions displayed in figure 1.

Figure 1. The most important quality definitions



Source: J. E. Ross, *Total Quality Management: Dr. Joseph Juran*, 2009; I. Šušić & R. Radić, *Upravljanje kvalitetom*, 2009; *Quality (business)*, 2013; International Organization for Standardization, *Standards: What is a Standard*, 2013.

Summarizing the described definitions of quality we can conclude that quality is not a static category, it is very dynamic and the purpose and meaning of quality itself changed in different regions and countries as economic development has changed. According to this, managers and employees need to first understand that quality can have many definitions based on what needs to be emphasized in a given situation. However, the best way to measure quality is by customer satisfaction compared to customer expectation and the definition of quality should rely in this fact. To survive on constantly changing and more demanding market, an organization must focus on the present and future needs of its customers, and in order to meet these expressed needs it must provide a product which is economical, useful and always satisfactory to the consumer. In order to succeed in this, a set of activities must be developed based on which the conformity of products for use is accomplished.

1.3 The role of quality and quality management

1.3.1 The main roles of quality

The role of quality is directly linked to understanding of the term “quality” which was presented in the previous chapter. Quality has different levels of understanding and application but the most prevalent is certainly related to the quality of products or services meeting the customer satisfaction compared to customer expectation. In other words, the main role of quality is to ensure customer satisfaction.

Another role of quality is related to business strategy. There were two important periods in recognizing the role of quality in business strategy. First, various organizations realized that a quality driven strategy leads to higher market benefits. Second, the border among quality strategy and general business strategy became unclear so that quality management principles are already included into various businesses’ normal planning (Virtual University of Pakistan, n.d., p. 23).

Reid and Saners (2005, p. 140) stated that the reason quality has become so featured is that organizations realized the “high cost of poor quality”. Quality strikes every facet of organizations and has significant consequences on costs. The most evident consequence happens when low quality results with unsatisfied customers and ultimately creates business losses. From this we can conclude that quality has a very important cost-saving role.

Another very important role of quality refers to achieving competitive advantage. Several research studies demonstrated the role of quality in achieving competitive advantage, and the main findings of these were following (Virtual University of Pakistan, n.d., p. 25):

- quality is of highest importance for business profitability
- organizations providing superior quality goods commonly have a big market shares and early enter potential markets
- quality has a direct positive and significant impact on greater return on investment for nearly all types of products and market conditions
- a quality based strategy commonly leads to larger market share, but at a price in the form of decreased short-run profitability
- organizations which provide inferior quality goods commonly charge premium prices.

The value of goods is also affected by the quality of their design. Advance in performances, characteristics, and confidence will discern the product from the competition, advance the quality reputation, and upgrade the perceptual worth of the product. This enables organizations to charge premium prices and gain a larger market share. This, in turn, increases revenues that abolish the additional cost of better design and ensures a stable foundation for competitive advantages.

Theoretically, the possibilities for the application of quality are limitless. In specific situations the application and role of quality depends on the organization's abilities and the fact is that each model has its limitations and opportunities for improvement. Using the principles, methods, processes and tools of quality can affect all aspects of the business. All organizations tend to have good business results, what in the end is the basic internal motive of each organization to engage in what we call the broadest “movement quality”.

1.3.2 Quality management

Various definitions of quality indicate that there are many strategies to proceed when advancing the performance of an organization. Various people select variety approaches to provide meaningful ideas of quality management and gain advantages of quality management practices (Vinni, 2007, p. 125). However, Reed et al. (2000, p. 11) claimed that Deming, Ishikawa, Feigenbaum, Juran and Crosby agreed on a common purpose of quality management and that is cost reduction and higher customer satisfaction.

Quality management can be defined as a set of strategic processes insensibly including all activities, functions, and management processes of an organization for continuous improvement of quality of products, and the goal of quality management is achieving superiority in all performances. The main task of quality management is providing quality in all spheres, be it business, social environment, institutes, home, or government (Kannan, 2009, p. 21).

In order to accept a quality management system, an organization should first of all implement a strategic decision making system in its organization. The design and implementation of quality management in one organization is affected by different needs, defined goals, provided product or service, all activities as well as the size and structure of the organization itself. For this reason, it is almost impossible to expect anyone to bring unification in the structure of quality management or to create uniform documents and therefore this part differs from organization to organization.

The main aspects for the development of quality management include progress through:

- **Inspection:** implies sorting out from bad to good. According to statistics, about 15% of error goods pass the level of inspection. It is very important to make progress regarding the stated statistics.
- **Quality control:** it is necessary to plan control much earlier in production circle. This helps to identify errors earlier and in some way influence the prevention. The organization's output is no longer only its product or service - it also produces quality. Control must above all be carried out on the process. If the process is of high quality the

result will surely be one of quality, and if the process has zero defects, so too will the product or service (Gazzola et al., 2009, p. 6).

- **Quality assurance:** the goal of any commercial organization is to find out what are the needs of consumers and by concentrating on this needs all problems can be spotted and therefore prevented. In return we get a huge customer satisfaction.
- **All activities based on management quality:** tending towards quality management in business means to produce a kind of synergy that resulted in a process-based quality management. Constantly improve the effectiveness of quality management system impacts the constantly improve of the business itself.

2 TOTAL QUALITY MANAGEMENT

2.1 Basic characteristics of TQM

Quality is today one of the main factors in defining an organization's success or failure on a competitive market. Contemporary, very secure production methods enabled great opportunities to produce a premium quality product. This led to the trend that more and more organizations place quality as a main principle in their business strategy in order to gain competitive advantage. The success of the main Japanese organizations is indeed a result of their long-term efforts to improve their quality. The upgrade of their quality is a long-term effort to continuous improvement in all spheres of their business processes. The contemporary competitive marketplace, in nearly all segments of products and services, is marked by rapid changes, innovations, and a more and more increasing number of new information. A constant change in customer needs results with accelerated evolution in global marketplaces. A large number of organizations that have been successful with their tendency to improve the quality of their products have done this by implementing an integrated management approach generally specified to as **Total Quality Management or TQM** (Talha, 2004, p.15).

Total = all people and every action within in an organization is involved in quality.

Quality = compliance with specification (meet customer's expectations).

Management = quality is not produced, rather than it is managed.

TQM = an approach to manage quality which implies unification of all people and every action in order to achieve continuous improvement of quality, targeting the main objective - customer satisfaction.

TQM is a philosophy of profitable organizations that invest great efforts to satisfy their customers by continuously improving the quality of their products or services (Hsieh et al., 2002, p. 900). It is an advanced management approach and its implementation covers much more than just ensuring product or service quality – it involves all people and every action within in an organization in order to satisfy the customer on every level, internal and external. The combination of TQM and good leadership will help organizations to operate in the right business on an effective way.

The foundation of TQM is the external and internal customer-supplier interface, and each one of them represents various activities. This foundation must be encircled by high quality efforts, presentation of the quality idea, and identification of the exigency for cultural shift of the organization in order to create total quality. This is the basis of TQM, and as displayed in figure 2, it is backed up the core management functions of people, processes and systems within the organization (Department of Trade and Industry, 2011, p.1).

Figure 2. The customer-supplier interface



Source: Department of Trade and Industry, *Total Quality management (TQM)*, 2011, p.1.

The basic idea, when talking about TQM, is that quality is not produced, rather than it is managed. The essence is that TQM must be focused on quality, based on the participation of all members of the organization, aimed at achieving long-term success through the satisfaction of all members of the organization and society as a whole.

A sequence of values connects all activities within and outside the organization which culminates in delivering value to the end user. The closing point in this series (a user who is more than satisfied) also represents the beginning. Therefore, as mentioned before, “customer satisfaction” is one of the most important measures of TQM which evaluates and optimizes the whole operation.

Presumption for success of TQM is the willingness of management to make quality the center of all activities and to prove it by example (Marolioa, 2007). It is important for management to establish a clear vision for the organization and to present various objectives and policies as

guidance to direct its employees (Fukui et al., 2003, p. 37). Employees' impact is crucial for quality. If their activities and ideas become quality oriented, then significant errors and the buildup of hidden costs may be decreased to an admissible amount or even totally excluded. TQM requires quality orientation towards a general objective from all people involved within the organization. Regardless of what the structure or management process of an organization is, the essential connections must be created between employees (Dahlgaard et al., 2007, p. 212).

Great TQM organizations appreciate and invest in their employees in a continuous search for good leadership and promotion of their employees. This includes strict planning of processes, skillfully implementation, constant monitoring of processes, and commitment to continuous improvement (Oakland, 2003, p. 277). Modern TQM philosophy has enabled the development of operations in which all organizations and all internal business processes tend to a single goal, which is to continuously improve them. In accordance with the stated, management must consider all the possible problems and identify all possible resistance to the introduction and application of TQM philosophy.

TQM is an immediate challenge to traditional management approach. Because of the big diversity compared to the traditional approach, it can't be just a supplement to it. The main differences between TQM and traditional management approach to quality are presented in table 1.

Table 1. Comparison between TQM and traditional approach to quality

Traditional approach	Total quality management
Quality is a technical issue	Quality is a strategic issue
High quality spends money	High quality saves money
Quality department is responsible	Everyone in the organization is responsible
Goal is to meet the requirements	Goal is continuous improvement
Quality is measured by average quality level	Quality is measured by "zero defects"
The emphasis is on finding defects	The emphasis is on prevention measures
Quality defines the organization	Quality defines the consumer

Source: *Poptuno Upravljanje kvalitetom*, 2013.

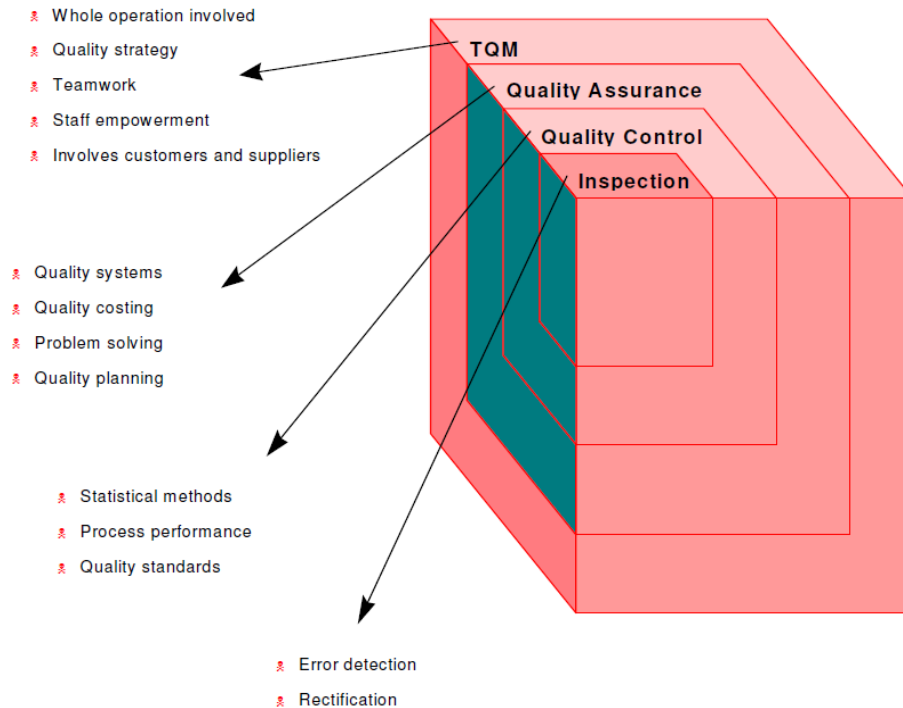
2.2 The history of TQM

As mentioned by Dahlgaard et al. (2007, p.7), TQM has evolved through four levels which can be divided into four categories (see figure 3):

1. quality inspection
2. quality control

3. quality assurance
4. total quality management.

Figure 3. The natural expansion to quality management



Source: WBS Group, *Total Quality Management*, 2013, p.7.

According to Dahlgaard et al. (2007, p.7) quality exists in human work since we can remember. However, **the first phase** in the emergence of TQM can be observed in the early twentieth century when Ford's Model-T car came out from the factory for the first time. At that time Ford started to hire inspectors and form teams in order to compare or examine the cars with standards. With further industrial progress **the second phase** of TQM development emerged. At this era organizations started to control quality through monitoring ability, written specifications, assessments and standards. **The third phase** of this development is known as the “quality assurance era”. Integrating the previous phases, quality assurance endeavors to provide enough trust that a product or service will meet customers’ expectations. **The fourth phase**, i.e. TQM includes the comprehension and implementation of quality management tenets and concepts in all spheres of the business. TQM requires that principles of quality management must be implemented in all levels, stages and divisions of organizations.

The progress of TQM after these four phases can be attributed to the acts of several quality gurus. These gurus have contributed to the theory and practice of TQM evolution using two methods. Some of them focused on the theoretical facet of quality improvement while other focused on tools for quality improvement. However, Deming, Juran, Crosby, Ishikawa and

Feigenbaum can be credited for the largest contribution to the quality management evolution (Lorente in Twaissi, 2008, p. 47).

In the following part of my thesis, only several contributions to the quality management evolution will be described, i.e. the works of Deming, Juran and Crosby. As stated before, various other gurus can be credited for a big contribution to the quality management evolution but it is not my intention to describe all details of their work and TQM evolution.

Deming (in Winston, 1997, p. 12) explained that many issues within organizations are caused by management processes but various statistical methods are available to track the root cause of the issue. With the intension to assist managers to upgrade the quality of their products or services and the system of the organization itself Deming presented several management points. He developed the following fourteen points which should be a component of every TQM organization:

1. enforce persistency in upgrading quality
2. implement the quality philosophy
3. stop depending on mass inspection
4. Stop rewarding business only by price.
5. continuously and permanently upgrade the system of production and service
6. establish training
7. establish leadership
8. drive out fear
9. knock down obstacles among employee areas
10. eliminate slogans, incentives and goals for employees
11. eliminate numerical quotas
12. knock down obstacles to pride of workmanship
13. establish a strong program of education and training
14. take precautions for accomplishing the transformation.

At the same time Juran (in Dahlgaard et al., 2007, p. 9) emphasized the customer's perception of products' fitness for use or purpose in his teachings. Juran stated that even products or services passes all specifications they still may not be fit for use or purpose. Juran is the patron of the following steps for quality upgrade:

1. create consciousness of improvement necessity
2. establish improvement objectives
3. arrange to accomplish the objectives (institute a quality committee, identify issues, appropriate project selection, establish teams, nominate leaders)
4. provide training
5. conduct projects in order to solve issues
6. report progress

7. give recognition
8. present results
9. keep score
10. make continuous quality improvement a part of the system and processes within the organization.

Both, Deming and Juran, preferred the usage of statistical process control for implying TQM. However, Crosby (in Oakland, 2003, p.19) on the other hand was not a supporter of the implication that quality is referred to statistical process control. According to him quality is “conformance to requirement” and the only way to assess it is to measure it by the cost of non-conformance. Crosby presented four absolutes and fourteen steps for the quality upgrade process. The four absolutes are:

1. definition of quality – conformance to requirements
2. quality system – prevention
3. quality standard – zero defects
4. measurement of quality – price of non-conformance.

Crosby’s fourteen steps for quality upgrade can be explained in the following way:

1. management commitment: Clarify management’s opinion of quality
2. quality improvement teams: Carrying out the quality upgrade process
3. measurement: Providing an overview of temporary and potential non-conformance issues in a way that targets allow
4. cost of quality: to determine the elements of the cost of quality and describe its usage as a management tool
5. quality awareness: to ensure a way of lifting the personal concerns of every worker regarding the conformance of the good provided and the quality reputation of the organization
6. corrective action: to create a method for permanent resolution of the identified issues of the above explained steps
7. zero defects: to investigate different actions those have to be carried out in preparation for officially starting zero-defects day
8. employee education: to determine the kind of training that every worker needs for active conducting his role in the quality upgrade process
9. planning and zero-defects day: to make a manifestation that will clarify the transformation to every worker through personal experience
10. goal setting: to actualize promises and commitments by emboldening everyone to determine quality upgrade goals for themselves and for their teams
11. error-cause removal: to provide methods to workers for informing management about things which make it hard to fulfill quality improvement promises
12. recognition: to appreciate those who participate

13. quality committees: to assemble adequate individuals to communicate quality management information regularly
14. do it all over again: to stress that the quality improvement process is continuous.

2.3 Definitions of TQM

TQM is a title like any other and the objective of it is to determine its elements. The titles: “total quality management”, “continuous Improvement”, “the learning organization”, and “process management” all have defects in them (Winston, 1997, p.2).

Proposal for the definition of TQM, developed by the International Organization for Standardization (n.d.) as follows: “TQM is a way of keeping the organization with the intention of participation of all employees and cooperation among all groups, to improve the quality, which is achieved by the organization by: goods and services, activities and targets, customer satisfaction, long-term profitability, the benefits for associates and compliance with the requirements of society”.

Reid and Sanders (2005, p. 137) defined that setting quality as a priority in an organization implies prioritizing customer needs to, which means to meet and exceed customer expectations. In order to succeed in this, everyone in the organization must be involved through joint efforts. TQM is a joint effort of the whole organization to improve quality at every level.

Juran (1998, p. 372) defined TQM as a set of systems and processes to satisfy customers through motivated and empowered workers which leads to higher incomes and decreased costs; Ross and Perry (in Liang, 2010, p. 66) describe TQM as unification of all processes and functions in order to achieve continuous improvement of product and service quality, targeting the main objective - customer satisfaction.

Ahire (1997, p. 93) states that TQM operates on the assumption that process and product quality is the responsibility of every factor involved in the generation or consummation of products and services provided by the organization. In other words, TQM includes and uses advantage of management involvement, employees, vendors as well as the end customer in order to satisfy him and exceed his expectation. TQM is a comprehensive method for long-term success that includes continuous improvement in all spheres of an organization describing it as a “journey” and not as a “short-term travel”. TQM tends to fundamentally reverse the organization progressively changing stances, practices, the structure and the system of the organization itself.

According to Šehić (2002, p. 160), the concept of TQM is simple, all employees are responsible for quality achievement. There is no quality control department or any formal control system. Organizations educate and train their employees to implement quality in

everything they do which means that TQM puts in the focus the quality improvement by the engagement of everyone pointing out that every operation in the organization must be oriented to that goal. The organization philosophy implies the cooperation of different functions for successful achievement.

One significant contribution to TQM regarding the definition of quality and the cost of quality is carried out by use of the “Juran Trilogy” by Joseph Juran (1998, p. 30), which basically consists of three steps:

1. Quality Planning

- establishing quality goals
- identify the customers
- determine customers' needs
- develop processes that are able to produce those product features
- establish process controls, and transfer the resulting plans to the operating forces.

2. Quality Control

- evaluate actual quality performance
- compare actual performance to quality goals
- act on the difference.

3. Quality Improvement:

- establish the necessary infrastructure to ensure quality upgrade
- determine the unique needs for improvement- the improvement projects
- create project teams with clarified responsibilities for leading the project to a successful completion
- provide resources, motivation, and necessary training for the teams in order to: find the cause, encourage foundation of means, and establish controls to hold the gains.

TQM provides a focus on organizational quality, continuous improvement and the organization's orientation to the culture of quality, constantly monitored by management and statistical tools used to design and manufacture high-quality products and services for consumers.

TQM is the foundation on which high developed countries have achieved success in global economy. Generally, in many global industries, by introducing of TQM a cost reduction was also achieved which is nowadays is the only key for survival in the market. Reducing costs is coming from products or services that do not have an error and this is the result of constant improvement of all processes and reducing errors, complaints and waste.

Organizations with long-term loyal customers can financially outperform the competition, primarily by cost reduction, and the principal determinant of successful organizations that apply TQM is exactly to keep their customers.

There are many definitions of TQM, but we can conclude that they all lead to the same response that relates primarily to the satisfaction of customer and promotion of products and services to meet the demands of customer. TQM is set of management processes and systems that put customer needs first. Empowered employees and quality oriented management are the main drivers for achieving TQM through continuous improvement of the business including progressive changes in the attitudes, practices, structures, and systems improving quality at every level and making it a responsibility of everyone.

2.4 The philosophy of TQM

TQM tries to install quality at all levels of the organization. It deals with the technical facet of quality as well as participation of all employees to improve quality (Reid & Sanders, 2005, p. 147). To achieve a systematic approach to TQM it is very important to develop an appropriate conceptual model. The specific concepts that make up the philosophy of TQM are displayed in table 2.

Table 2. Specific concepts that make up the philosophy of TQM

Concept	Main Idea
Customer focus	The target is to recognize and meet customer expectations.
Continuous improvement	The concept of never-ending quality improvement
Employee empowerment	Employees are expected to search out, recognize, and fix quality issues.
Use of quality tools	Constant training for workers in the proper use of quality tools.
Product design	Product design has to meet customer expectations.
Process management	Quality should be embedded in the process; sources of quality issues should be recognized and fixed.
Managing supplier quality	The quality concept must be applied to everyone involved in the process, including suppliers.

Source: R. D. Reid, & N. R. Sanders, *Operations Management: An Integrated Approach*, 2005, p. 147, Table 5-3.

2.4.1 Customer focus

Apparently, the main mission for organizations, regardless of their size and activity, is to survive on the competitive market. In order to succeed in this they must meet customer's expectation and satisfy them (Fukui et al., 2003, p. 6).

As mentioned in the previous chapter, all definitions of TQM lead to the same response that relates primarily to the satisfaction of customer and promotion of products and services to

meet the demands of customer. Meeting customer's demands became the main operating goal (Juran and Godfrey, 1998, p. 41) and organizations must continuously collect information in order to understand and be up-to-date with the constantly changing trends of customer needs. It is also important to always keep in mind that the customers are the main driver for the business (Reid & Sanders, 2005, p. 147).

2.4.2 Continuous improvement

Another concept of the TQM philosophy is the focus on continuous improvement or Kaizen, a philosophy of never-ending improvement. Continuous improvement is an element of an organizations management of every system and process. A clearly determined and successfully implemented model of continuous improvement is a key to achieve excellent business results (Virtual University of Pakistan, n.d., p. 18).

The Kaizen approach implies a constant effort including all people involved in the organization - management and employees. The core meaning of Kaizen is "continuous improvement" (displayed in figure 4).

Figure 4. The meaning of Kaizen



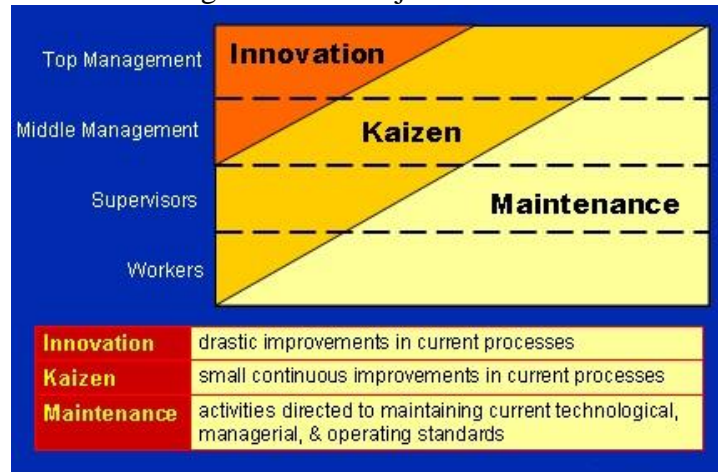
Source: Quality Planilhas, *Kaizen*, 2013.

According to Oakland (2007, p. 282) Kaizen is an approach of continuous improvement in which everyone in the organization improves the performance of his task – day by day. It is a constant wheeling focused on the tenet that methods can and should be every day further upgraded. Kaizen philosophy is focused on continuous improvement of all aspects of life, but applicable and the organization's business (Juran and Godfrey, 1998, p. 806).

Winston (1997, p. 211) expressed Kaizen as a Japanese word describing continual and progressive improvement. According to him it became a synonym for the TQM philosophy.

Kaizen does not mean changes just for the management, but for all workers and the main advantage is that the employees and their suggestions may participate in strengthening the organization. The Kaizen job functions are displayed in figure 5.

Figure 5. Kaizen job functions



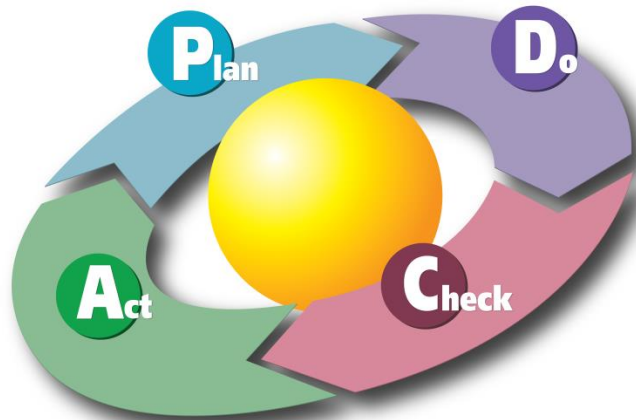
Source: V. Kotelnikov, *Kaizen: The Japanese Strategy of Continuous Improvement*, 2013.

One of the basic tools of Kaizen to eliminate waste is a process called 5S or five steps to be taken by the organization in order to establish a stable production process and maintain quality environment in an organization. 5S is a productivity method whose name is derived from the five first letters of Japanese words: *seiri*, *seiton*, *seiso*, *seiketsu* and *shitsuke* (Parker, 2012, p. 1):

1. *seiri* (tidiness): leave only the important things in the workplace, store less used items in a separate storage, get rid of unnecessary things
2. *seiton* (orderliness): systematic Arrangement for the most efficient and effective retrieval
3. *seiso* (cleanliness): maintain the work area and all accessories, keep it pure, neat and organized
4. *seiketsu* (standardization): an operational practice must be coherent and standardized
5. *shitsuke* (discipline): the above given four S's must afterwards be established and become the new way of working. This approach (Kaizen) results with less waste, improved quality and better delivery time.

According to Reid and Sanders (2005, p. 148) there are two approaches that can help organizations with continuous improvement: the plan–do–check–act (PDCA) cycle and benchmarking. Al Smadi (2009, p. 204) stated that the Kaizen strategy depends mainly on human efforts to improve results, and this requires process improvement. A process-oriented approach, referred to as **PDCA cycle** (see figure 6) is used for process improvement. **Plan** refers to setting a target for improvement; **do** is implementing the plan; **check** is the control for effective performance of the plan; and **act** refers to standardizing the new (improved) process and setting targets for a new improvement cycle. This cycle is described as “improving cycle”.

Figure 6. PDCA cycle



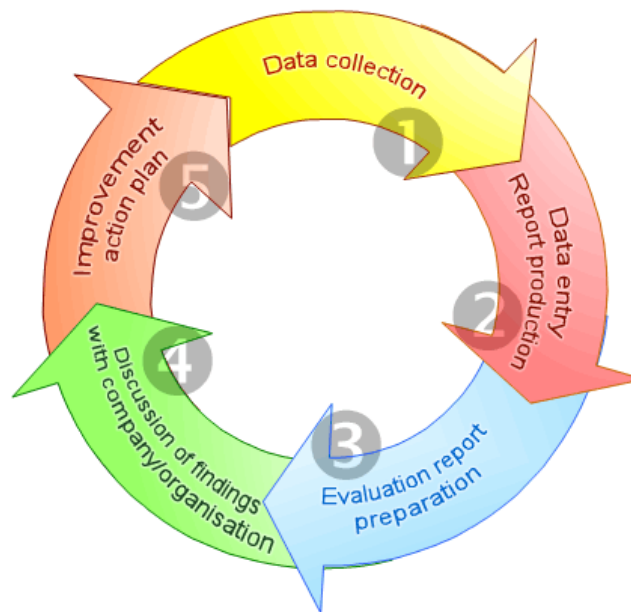
Source: Inzinc Consulting, *The PDCA Model (PDCA Cycle or the Deming Cycle)*, 2013.

Benchmarking is the comparative evaluation of technologies, production processes and products of an organization, compared to the leading organizations in the same market (Wikipedia, n.d.). In the stage of benchmarking analysis, the organization examines in detail its own situation and studies the advantages of others. By comparison on “best practice” base the organization determines the changes which must be implemented.

The outcomes of Benchmarking imply to comprehend the weak points of any organization as well as the capacity to assess exactly the limits of its upgrade. Benchmarking also opens opportunities for other ways of innovation progress to be implemented, such as creativity, technological progress, process engineering, production control, etc. As shown in figure 7, the overall benchmark procedure includes five levels (Greek Benchmarking Centre, n.d.):

1. information gathering
2. inputting the information in the “Best practice” database and assembling the assessment diagrams
3. creating the assessment report based on outcomes and diagrams from the database
4. examination of the assessment's outcomes with the organization and with industry professionals, in order to investigate other options
5. specifying upgrade suggestions and implementing the method of innovation.

Figure 7. Overall benchmark procedure



Source: Greek Benchmarking Centre, *The technique of Benchmarking*, 2013.

Depending on the subject of analyzing, benchmarking can be divided into the following three methods (Dahlgard et al., 2007, p.198):

1. **internal benchmarking:** the subjects of analyzing of internal benchmarking are departments, divisions, or connected organizations from the same group in order to recognize the greatest execution of a certain action within the organization
2. **competitor benchmarking:** the organization compares its performance and business directly with the competition which operates in the same branch
3. **functional benchmarking:** the subject of comparison is any organization which is flagged as outstanding within the business which is benchmarked.

2.4.3 Employee empowerment

At the core of TQM is the term of internal motivation-inclusion in decision making. It became a more and more popular sentence of good management that people are the overriding factor in quality and productivity upgrade (Sun et al., 2000, p. 350). A key role in the TQM philosophy is to empower all people to identify quality issues and fix them (Reid & Sanders, 2005, p. 149). The role of employees in achieving TQM will be elaborated later in my thesis.

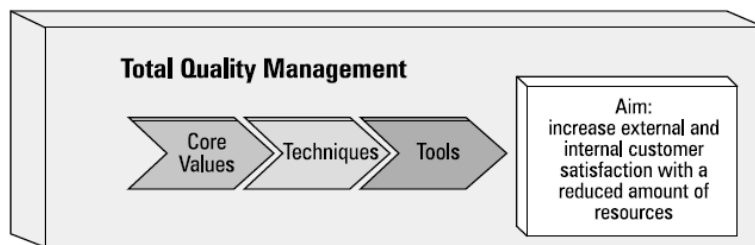
2.4.4 Use of quality tools

Contemporary TQM has evolved into a management approach based on series of basic quality tenets and equipped with a workbox of various techniques and procedures that provide directions and structure in the practical activities of organization management. These different quality techniques and procedures have to be implemented in a concentrated and integrated

approach (Stringham, 2004, p. 184). TQM implement analytical tools, such as statistical diagrams, charts and sheets in order to collect information about actions within an organization (Kaluzny et al., p. 257).

According to Hellsten and Klefsjö (2000, p. 243) TQM should be viewed as a management system consisting of the three interdependent components: values, techniques and tools (see figure 8). Techniques and tools support the values and together they form a whole. TQM should begin with the identification of core values that should characterize the organization. The next step is to distinguish techniques that are suitable to for the organization use and which support the chosen values. Ultimately, from that decision suitable tools have to be identified and used in an efficient way in order to support the techniques.

Figure 8. Role of core values, techniques and tools



Source: U. Hellsten, & B. Klefsjö, *TQM as a management system consisting of values, techniques and tools*, 2000, p. 242, Figure 4.

Dahlgaard et al. (2007, p.72) explained, like a woodworker needs tools, e.g. a saw, nails, meters etc. leaders and employees need tools for effectively upgrade the quality of their product. The main idea of the TQM tools is to deal with TQM issues in a systematic method. TQM tools are useful to properly plan a quality upgrade and when examining the outcomes of the implementation. Some quality tools are described below.

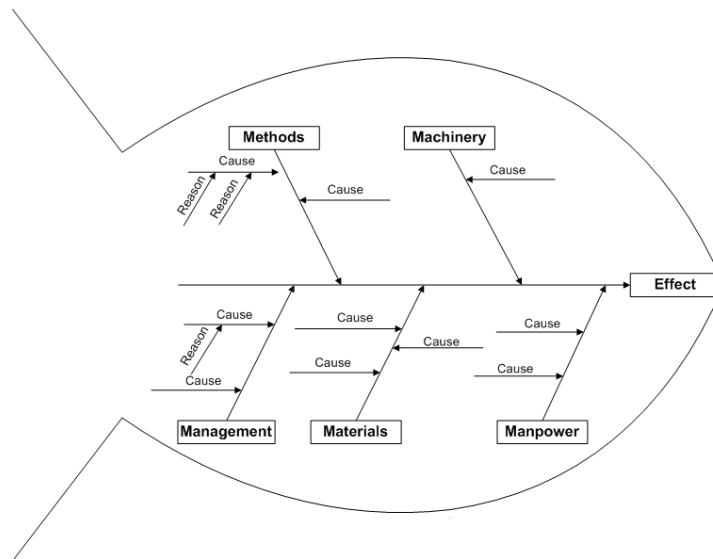
The Pareto diagram is a graphic display of the relative distribution and the absolute distribution of types of error, issues or reasons. The common knowledge is that in most cases certain types of error are the causes for 80–90% of the total number of errors in products. For this reason, we can conclude that it is essential to find this certain types of error and the main tool used for this is the Pareto diagram (Dahlgaard et al., 2007, p. 78).

The checklist is a list of general errors and the number of considered repetitions of these errors. It is an easy and efficient fact-identifying tool that allows employees to gather certain data about the noticed errors (Reid & Sanders, 2005, p. 151).

A histogram is also a quality tool. It is a graphic display of the frequency distribution of noticed values of a variable (Reid & Sanders, 2005, p. 153).

The cause-and-effect diagram is a valuable tool for presuming the causes of quality errors and issues. The diagram's advantage is that it is easy to use, understandable and it useful in every section and at each level. Many people call the cause-and-effect diagram also “Ishikawa diagram” because the diagram was invented and first applied by Dr. Kaoru Ishikawa in 1943 in a quality program at the Kawasaki Steel Works in Japan. Because of its form (displayed in figure 9), the diagram is sometimes also called a “fishbone diagram” (Dahlgaard et al., 2007, p.80).

Figure 9. The cause-and-effect diagram



Source: R. Ruiz, *Industrial Engineering - Engineering for all*, 2013.

Another quality tool is a control chart. It is useful to assess if a process works within expectations with regard to certain measured values (Reid & Sanders, 2005, p. 152).

A scatter diagram is a graphic display that shows the relationship between two variables. The tool is especially valuable in identifying the correlation intensity, or the level of linear coherence of two variables (Reid & Sanders, 2005, p. 152).

Flowcharts are visual tools of the series of steps implicated in activities or processes. The flowcharts are simple and understandable and by visualizing the steps implicated in activities or processes, everyone obtain a clearer picture of how the activity functions and where the source of the issues could be (Reid & Sanders, 2005, p. 150).

2.4.5 Product design

Shewhart (in Dahlgaard et al., 2007, p. 163) stated that the problem in determining quality is to convert prospective customer requirements to measurable features in order to design and create a product to satisfy the customer at a by him acceptable price. The identification of customer needs represents the main requirement for creating a proper product design which is

able to satisfy the customer. In other words, the estimation of customer's perspective is the main input for a proper design. The most effective way to estimate this perspective is to use various quality tools and the technology of the specific branch (Juran and Godfrey, 1998, p. 46).

A valuable tool for converting customer's perspective to a particular technical requirement is **quality function deployment**. Quality function deployment provides an overview of the interrelation between variables related to the product design, like the relation between technical requirement and customer needs. Quality function deployment starts with recognizing significant customer needs, which in most cases provides the marketing division. These needs are then converted into measurable numbers and ratings based on their significance, and ratings are converted into particular product features. The estimations are created based on the comparison with the major competitor with regard to recognized features. Finally, particular objectives are defined to deal with the recognized issue (Reid & Sanders, 2005, p. 154).

An essential part of product design is that the product performs as planned. Certainly, a substantial stake in the eligibility of a product or service takes the capacity to perform satisfactory for a certain period. The performance of a product or service is crucial for continuous satisfaction of customer's expectation and gives meaning to the term **reliability**. Reliability is as equally important as quality because it is a crucial criterion in most product selection processes where almost every time alternatives are considered. Many of the fundamental management problems regarding quality achievement also apply to reliability problems (Oakland, 2003, p. 4).

2.4.6 Process management

The TQM philosophy recognizes the quality process as a precondition of a quality product. This implies that quality should be integrated in the process (Reid & Sanders, 2005, p. 158).

Organizations provide a certain value by delivering their products to customers and every step in that set of activities is a part of the process. Therefore, to be successful organizations must have an excellent process management in which every process must be managed: planning, evaluation and progress (Oakland, 2003, p. 167).

Process management unifies every activity and worker and guides the workflow within the organization. TQM tends to minimize obstacles among process steps. Customer needs are best met when everyone is focused on the overall product or service rather than the single elements (Winston, 1997, p. 76).

2.4.7 Managing supplier quality

To identify supplier-relations opportunities and to capitalize on them, an understanding of supplier's quality is of paramount importance (Juran and Godfrey, 1998, p. 592). The philosophy of TQM refers to everyone involved in the quality process which is also applicable to suppliers and implies that they participate in the quality process. Today, successful organizations have agents which work and at their supplier's location and include and control the supplier in every step of the process (Reid & Sanders, 2005, p. 158).

2.5 TQM implementation

Almost all big organizations consider quality as a critical factor in their business and put great effort to successfully apply TQM in their culture or certain segments of their business. On the other hand, many others have left this approach to business (Cassidy, 1996, p. 24). The main reasons for this were problems in the very implementation of TQM. Researches conducted by consulting organizations revealed that just 20-35% scored positive results in quality upgrade, increased productivity, larger market share and income. This resulted with skepticism regarding TQM implementation by many people but when observing successful organizations a significant higher rate of positive results can be reported (Stark, 1998).

With increased competition senior management often identify the essentiality of changes in certain aspects of the business, but on the other hand they don't understand how these changes should be applied. Good business modifications are not done based on changes in the formal structure or system, but by adjusting process management teams. This begins with determining the very mission communication, assessing the critical success factors and apprehension of the crucial processes. Senior management may start the mission of process adjustment through a self-strengthening bond of commitment, communication and cultural changes (Oakland, 2003, p. 346).

According to Juneja et al. (2011, p. 96) a crucial part of TQM implementation is estimating the organization's present situation. Certain prerequisites regarding the organization's history, its present exigency, causal developments leading to TQM, and the present employee quality of working life must be considered. If the present situation does not include crucial prerequisites, TQM implementation should be postponed until the organization reaches the level with a greater probability rate for TQM success.

Kanji and Asher (in Dahlgaard et al., 2007, p. 224 -232) used the four-stage process of implementing TQM in an organization. The stages are:

1. **identification and preparation:** recognizing and gathering data about the organization in the main zones where improvement will have the greatest influence on the organization's performance and preparation of a comprehensive framework and structure for the improvement of every process within the organization (policy deployment)

2. **management understanding and commitment:** ensuring that management perceives the targets and TQM methods and is committed to apply the principles continuously
3. **scheme for improvement:** provide a plan of the improvement process, management involvement, supervision, training and communication
4. **critical analysis:** creating a new initiative with changed objectives applying the overall quality upgrade process to everyone included in the quality cycle and collection of development data and drivers of successes.

Similar steps to the above mentioned process were outlined by Beckhard and Pritchard (in Repčić, 2005, p. 29). According to them, the fundamental stages for implementing a new philosophy such as TQM are: identifying tasks to be done, creating necessary management structures, developing strategies for building commitment, designing mechanisms to communicate the change and assigning resources.

Task identification implies an assessment of the current situation including the willingness to change, design a structure of the targeted state (implementation of TQM), communicate the mission to everyone involved in the process and allocate responsibilities and resources. The last step implies hiring consultants, provide training and ensure that the process is properly monitored which should be done by top management. The next stage, i.e. **creating management structures**, is also a task to be done by top management. Cohen et al. (in Repčić, 2005, p. 29) claimed that management must mainly act as leaders rather than delegating their responsibilities to lower management level to carry out the efforts. An overall steering committee to monitor the activities is also recommended. The responsibilities of the steering committee are: monitoring and analysis of customer researches, identification of elements for improvement, compiling teams for specified task execution and ensuring their adequate training, monitoring of the improvement process and worker efforts for quality upgrade, and finally presenting the successes and development (PHCC Educational Foundation, 1996, p. 12).

In addition to the current process new activities must be established in order to **communicate the change**. Extraordinary meetings with all employees attending and by executives' led can be established to start the change process, and TQM bulletins can be a good continuous communication way to strengthen employees' awareness of operations and achievements (Repčić, 2005, p. 29).

A proper **management of resources** for a successful TQM transition is essential. Pfeffer and Veiga (1999, p. 47) underlined this essentiality stating that half of organizations are not aware of the strong bond between human resource management and their profit. About 50% of the conscious half will make a common mistake – they will try to change as less as possible to deal with their issues without realizing that good human resource management demands a more comprehensive and systematic approach.

If an organization has a good reputation regarding its impact on the environment and if the organization was flexible enough in the past adopting fast to market changes, the probability rate of a successful TQM implementation is greater. If this is not the case there may be difficulties by employees as well as external consultants, and only a comprehensive application of management and leadership evolution can steer the process in the right direction. Introduction of a management audit team can be an appropriate utility to estimate the current situation in the organization and identify critical elements for improvement. In other words, an important precondition of a successful TQM implementation is that an organization must be “healthy” before the first stage of implementation begins; otherwise TQM would not be appropriate and should be delayed until the organization is cured and reaches a satisfactory level for TQM introduction (Juneja et al., 2011, p. 96).

In summary, TQM implementation should begin with estimating the prerequisites and the current situation of the organization in order to ensure a proper communication of the essence of change and adequacy of the TQM strategy. The leadership style and organizational culture must be aligned with TQM requirements; otherwise TQM implementation should be postponed until better conditions occur with a greater probability rate for TQM success.

2.6 TQM models

The TQM implementation process is different for every organization and there exist no unique method that can guarantee a successful implementation. However, various TQM models can contribute to the process and increase the probability of success: the Deming Application Prize, the Malcolm Baldrige Criteria for Performance Excellence, the European Foundation for Quality Management, and the ISO quality management standards. By applying any of these models organizations can carry out the self-estimation process and improve their performance (Total Quality Engineering Inc., n.d.).

At the core of every TQM model lays customer perception. In other words, TQM begins with understanding customers, their requirements and expectations and continues with a set of other activities in order to provide a product or service which satisfies them, recognizing the importance of leadership and employees in achieving these targets (Management study guide, n.d.).

2.6.1 The Deming Application Prize

The Deming prize explores the effectiveness of the TQM implementation based on the quality of the product or service provided. Oakland (2003, p. 22) presented the examination viewpoints of The Deming Prize in the following manner:

1. top management leadership and organizational vision and strategies
2. TQM frameworks
3. quality assurance system

4. management systems for business elements
5. human resources development
6. effective utilization of information
7. TQM concepts and values
8. scientific methods
9. organizational powers
10. contribution to realization of organization objectives.

2.6.2 The Malcolm Baldrige Criteria for Performance Excellence

The USA **Baldrige award** examines business performance and competitive progress using the following seven dimensions for evaluating organizations (Oakland, 2003, p. 28):

1. leadership
2. strategic planning
3. customer and market focus
4. information and analysis
5. human resource focus
6. process management
7. business results.

2.6.3 The European Foundation for Quality Management

Similar to the Baldrige award, the European Foundation for Quality Management (**EFQM**) model identified processes as tools by which an organization uses the work of its employees to create efficiency. The EFQM model functions on certain dimensions for performance upgrade through engaging employees in process improvement. There are nine dimensions divided in two categories, one covering the enablers of the organization and the other the results (Dahlgaard et al., 2007, p. 66):

Enablers:

1. leadership
2. policy and strategy
3. human resource management
4. resources
5. processes.

Results:

6. customer satisfaction
7. employee satisfaction
8. influence on society
9. business results.

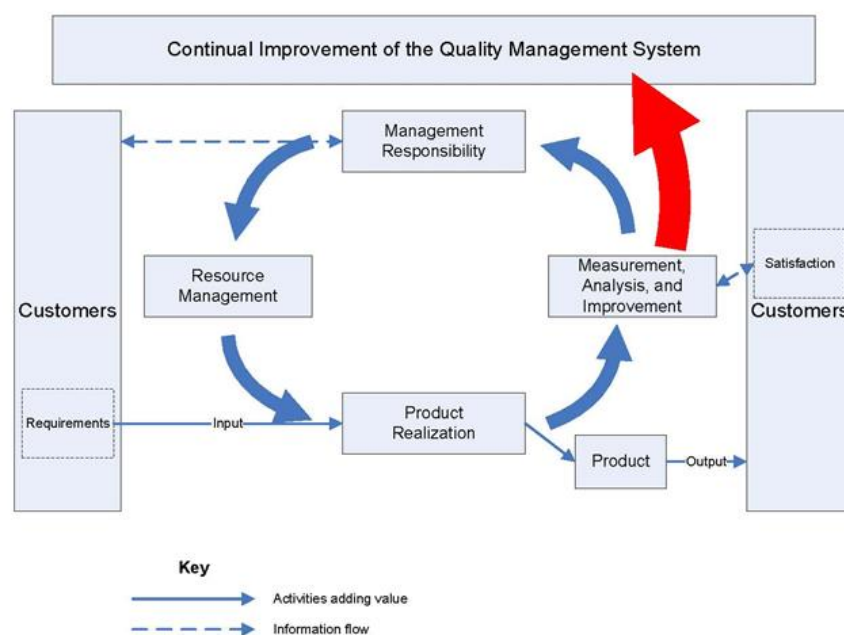
2.6.4 The ISO quality management standards

Today there are a large number of different associations and organizations for standardization, covering a broad area. Certainly one of the most important international organizations for standardization is **ISO** (International Organization for Standardization).

According to the International Organization for Standardization (n.d.) a standard offers demands, properties, instructions or characteristics that should be used continuously to make sure that materials, products, processes and services are on a satisfactory level. ISO is the main creator of standards on international level. International standards provide technical properties for products, services and well performance, tending to create a more effective industry and decrease obstacles for international trading through development based on global consensuses. The main ISO standards are based on quality management systems which are treated by the **ISO 9000** category of standards. This category define features and guidelines on which an organization should function in order to meet customer needs and satisfy them in terms of the quality of a product or service, comply with regulator's requesting, and tend to achieve comprehensive and continuous improvements in scoring these goals. Proof of the popularity of ISO is the fact that the ISO 9001:2008 standard already applied over a million organizations in 176 countries (Continental Data Graphics, 2011).

Figure 10 shows the process based quality management model presented in the ISO 9000 category of standards. Figure 10 also shows that stakeholders have a huge role in obtaining inputs for the organization. These inputs are a prerequisite for tracking of stakeholders' satisfaction level and the volume of meeting their expectation (Quality Systems 3P, 2008).

Figure 10. ISO 9001 model of process based quality management system



Source: S. Flick, *Warrior Mentality vs. ISO 9001*, 2009, Figure 1.

It is important to point out that ISO 9000 standards are not designed to provide solutions. They just give the requirements to be complied with and guidelines that should be followed in order to provide a quality system. The standards are intended for industrial, commercial and government organizations with the aim of providing them with security to satisfy the requirements and needs of customers, to maintain good economic performance and to develop a more effective and efficient system. However, quality systems ISO 9000 alone are no longer sufficient to meet the increasing demands of customers (price, delivery, utility for the customer) and other right holders, but they are necessary as a starting point for the rapid development of TQM.

2.6.5 The Oakland model of TQM

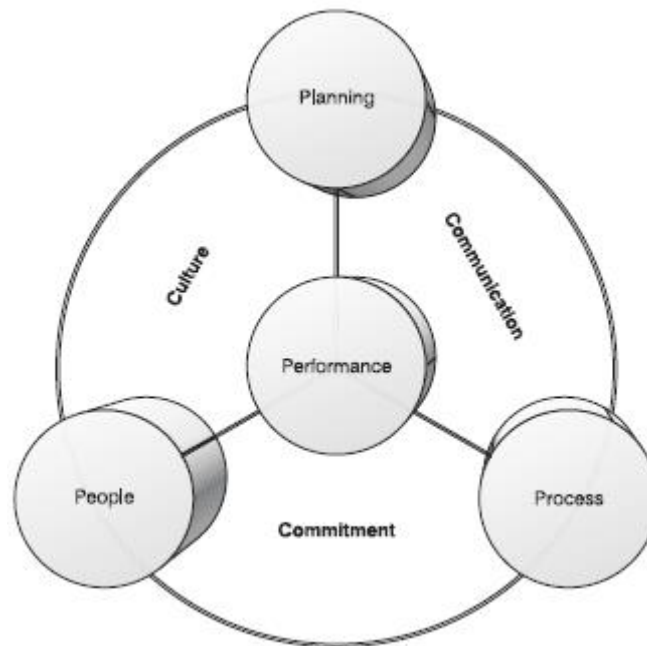
According to Oakland (2003, p. 27) a good process is crucial for providing a quality product or service. Like EFQM, the Oakland model of TQM recognizes processes as the main connection between the enablers of performance upgrade (leadership, policy and strategy, human resource management and other resources), through employees into the results (customer and employee satisfaction, impact on society and business results).

The Oakland model is composed of four P's and three C's of TQM. The '**four P**' are the foundation of an easy TQM model and represent the "hard management essentials" for the transition to a contemporary approach (Oakland, 2003, p. 27):

1. **planning:** to develop policies and strategies, search for effective partnerships and resources and to create a proper quality design
2. **performance:** to establish a performance assessment framework, execute self-estimation, revision, monitoring and benchmarking
3. **processes:** to comprehend, manage and design quality management systems and continuously improve them
4. **people:** to manage people, change the culture, improve the communication and promote teamwork, innovation and training.

It is also crucial not to depreciate the essentiality of the **three C's** – Culture, Communication and Commitment. The Oakland TQM model is completed only if this "soft management essentials" are united with the four P forming a comprehend approach (see figure 11).

Figure 11. The Oakland model of TQM



Source: J. S. Oakland, *Total Quality Management text with cases*, 2003, p. 27, Figure 2.5.

2.7 The impact on the organization

TQM as organizational and cultural change is certainly a fundamental reform in the organization in terms of organizational strategy and ways of doing things, but also the relationships of employees, co-workers, customer relations and relations to the environment.

Leonard and McAdam (2002, p. 51) performed a study of the impact of TQM on the organization. Their research revealed series key issues in regard to TQM and organizational strategy. The main results indicate an overall need for TQM to import organizational strategy planning by clarifying terminology in order to minimize confusion. The use of TQM in its widest sense to assist organizational strategy implementation is encouraging and should help to create an upstream influence on business strategy formulation.

Montes et al. (2003, p. 189) presented a framework for exploring the connection between TQM and business performance with regard to TQM contents and TQM elements. They found that TQM contents have to be persistent to the business direction and surrounding suspense to be successful and TQM elements have a huge influence on behavioral and individual learning processes. These connections are intermediated by the TQM required cultural change embracement. Furthermore, TQM elements have a direct influence on these individual processes and are intermediated by systems and individual causes. Therefore we can conclude that high importance must be given to both, TQM contents and elements in order to be effective and efficient.

Prajogo and McDermott (2005, p. 1118) consider organizational culture as the antecedent of TQM practices. There are many arguments that promote TQM as a vehicle for organizational change, including the cultural element.

Therefore, it is very important to first understand organizational culture. According to Colesca et al. (2006, p. 1) it is as an aggregation consisting of beliefs, values, stances and behavioral models which are used to qualify everyone involved in the organization. This aggregation directs people's stances. These are basically very powerful influences that affect people, acting in their work, life and behavior. Precisely these influences, opinions and beliefs within an organization define what "normal behavior" within the organization is.

It is important in advance, before the introduction of TQM, to convince workers and of course the lower and middle managers that no one will lose their jobs due to the introduction of TQM. The purpose of TQM in the foreground is to make the organization more efficient as a whole.

The system must be driven by a desire to achieve results and should not be self-ending. A system has no end, it is constantly being refined. A critical component of the introduction of TQM lies in the way of treatment and management of organizational change that they cause. Therefore, the main task of managers at all levels is to persuade people to leave their current state, move on to a new, turbulent way perform all their tasks and activities related to them.

Pheng and Teo (2004, p. 12) explained that organizations must understand that positive TQM outcomes can't be achieved suddenly and that organizations implementing TQM must first adjust, change and learn which usually takes a long time. The main obstacle for organizations is to change their existing condition and apply a culture which is adequate for TQM. The dedication from top management to quality is a precondition for a successful implementation and their decisions are the main initiator for further TQM progress. Top management must also initiate training and continuously invest in their employees, always conveying them the exigency of TQM. Employees must understand that TQM is not an extra load; it will help them to decrease their workload through systematic operations and error reduction which finally leads to less to customer appeals and time amount for corrections.

Joiner (2007, p. 617) explored the connections between the volume of TQM implementation and business performance, and the calibrated impact of associate support and organization support on the TQM - performance relation. The main outcomes of this study showed that the implementation of the TQM approach had a positive impact on the business performance. Furthermore, outcomes of the study stressed the essence of creating a supporting culture for further progress of the business performance results from the TQM application. If workers don't get an appropriate recognition and positive support from management and other associates, then the implementation of TQM may be sub-optimal and postponed until better conditions occur.

From the above mentioned it becomes understandable that at the beginning of the process employees will show disagreement with the upcoming changes. Surely they will not be entirely clear on that it will reduce costs and administration and that they will achieve better quality. That's why employees must from the beginning see the benefits of the introduction and must recognize the need to improve quality and then the way in which will the introduction of TQM help them.

2.8 Advantages and traps of TQM

Summarizing all TQM benefits from the previous chapters we can conclude that once TQM is achieved, the advantages of introducing this system are multiple:

- increased quality of products or services
- increased customer satisfaction and retains its loyalty
- strengthened competitiveness and market power of the organization
- reduced costs
- increased productivity and profitability
- increased satisfaction of all employees
- increased quality of management
- increased reputation and value of the organization.

TQM redesigns the business approach of an organization leading it to certain mutual strategic planning targets – **continuous improvement in the quality of products and services** (Schonberger, 1992, p. 80). Mehra and Ranganathan (2008, p. 923) explored in their study the connection between TQM impact on organizations and the customer's perspective, particularly their satisfaction and expectations. The outcomes of their study proved that a proper application of TQM **positively impact customer satisfaction** level which directly influences their **loyalty**.

Reed et al. (2000, p. 21) researched the relation between TQM and competitive advantages. They argued that the performance advantages of organizations using quality management approaches give recognition to the finding that there is a connection with competitive advantage, but even more convinced were various managers who based on their professional experience recognized the positive impact of TQM on an organizational **competitiveness**.

Reid and Saners (2005, p. 140) stated that the reason quality has become so featured is that organizations realized the “high cost of poor quality”. Quality strikes every facet of organizations and has significant consequences on costs. The most evident consequence happens when low quality results with unsatisfied customers and ultimately creates business losses. From this we can conclude that **quality has a very important cost-saving role**. According to Oakland (2011, p. 519) time and money spent on quality-related activities are

not limitations of profitability, they make **significant contributions towards greater efficiency and enhanced profits.**

Guimaraes (1996, p. 20) conducted a research addressing the effect that TQM has on people. The main findings were that after TQM, on average, employees reported **higher job satisfaction**, job involvement, commitment to the organization, and intentions to stay with the organization.

Serafimovska and Ristova (n.d., p. 26) stated that the TQM approach can vary between different branches and organizations but there is a unique statement about the essence of leadership for successful TQM application. **A good management** is a prerequisite for successful strategies and plans and successful TQM organizations are characterized by strong management.

According to Oakland (2003, p. 16) the reputation of organizations heavily depends on the quality, reliability, delivery and price of its products or services. Quality is the most crucial of these reputational elements. A bad reputation caused by low quality is hardly changed, and this reputation can even evolve into national and international level. TQM practices are a strong tool to improve **reputation** which directly affects the **value of the organization.**

However, it is important to mention that when introducing TQM mistakes can occur in the phase of preparation for the introduction, in the stage of transition from pilot projects to the entire organization and in the stage of implementation of the previous management power, philosophy and practices. TQM is very demanding in terms of time, it is difficult to implement and slow in getting concrete measurable results. Kelly (1997, p. 38) presented eight TQM traps:

1. TQM approach is not focused: it is about the impossibility of identifying key factors that represent quality because they do not take into account the strategic interests
2. efforts are crushed by bureaucracy and paperwork: quality becomes an additional burden rather than an integral part of the action
3. TQM is used as a “quick patch”: an organization in trouble looks at TQM as a way to quickly solve many problems
4. it is difficult to obtain and use information: employees do not have required information to make decisions
5. conflicts within the organization slow TQM down: inability to implement an inter-functional approach which is required in TQM
6. poor planning derails TQM: instant solutions are chosen without awareness that TQM has to be applied particularly for each organization
7. measuring the wrong things: the organization is unable to focus on features that really encourage quality

8. management is an obstacle to the success of TQM: instead of leading the qualitative efforts managers prefer to talk about them unwilling to take responsibility and delegate them to lower levels.

3 THE ROLE OF EMPLOYEES IN ACHIEVING TOTAL QUALITY

In this part of my thesis i will explain the basics of Human resource management and the role of employees and leadership in achieving total quality.

3.1 Basic characteristics of human resource management

The complexity of human nature and their needs makes human resource management to a broad and complex science but in most cases it narrows on the culture and criteria on which an organization functions. Any human resource management issue which facilitates management to understand the complexity of employees is mainly based on historical information and positive and negative examples caused by certain triggers and conditions. While the complexity of employees represents a big challenge to managers it also provides a great opportunity to explore human resource related activities and their impact on achieving total quality.

The ways people are managed and led is central to the process of value creation: how technology is implemented, how change is dealt with, how customers are served, how products and services are marketed, how investors make gains – all depend, one way or another, on people (Overell et al., 2010, p. 72).

According to Zorlu (2009, p. 14) anything that could be considered as a strength or weakness of an organization represents a resource, and main three are: financials, technology and people. The term human resource management has been a topic of many researchers and they all focused on providing a concrete definition which covers the whole philosophy and character of human resource management. The complexity of the topic led to the fact that this unique definition could not been provided. Also, many human resource management authors tended to specify the best way or approach to manage employees but no leader has framed such specific way because they vary from case to case. However, below are some definitions of human resource management.

Storey (1995, p. 5) described human resource management as a characteristic approach for managing people in order to gain competitive advantages through strategic development of dedicated and competent employees using various techniques. Buchanan and Huczynski (2004, p. 679) defined human resource management as a management outlook which considers the requirement to implement an integrated sequence of staff policies to underpin organizational strategy.

According to Bratton and Gold (2007, p. 7) human resource management is a strategic approach of controlling working relationships emphasizing the crucial impact of employee abilities on gaining competitive advantages through characteristic series of implemented employment policies, procedures and functions. Graham (in Zorlu, 2009, p. 15) stated that the purpose of human resource management is to install a system in which organizations use their workforce in a manner to gain the most feasible advantages of their capabilities and in return workers gain material and psychological awards from their operations.

Summarizing the above mentioned definitions we can conclude that Human resource management is a strategic management approach of an organization's workforce obtaining the greatest possible benefits from their abilities in order to achieve competitive advantage.

3.1.1 Human resource management as strategic function

The essence of human resource management has evolved with the inevitable require for globalization. Globalization was one of the main trigger for organizations to compete for markets with high requirements of efficiency, quality and profitability. The effects of globalization also expanded on the human resource management function forcing them to adjust to constantly changing organization requirements simultaneously enhancing their value (Friedman, 2007, p. 157).

The increasing globalization demanded changes in the way human resources are managed. This demand increases the importance of human resource management and makes human resoures an essential function not only on the organizational but also on strategic levels. According to Bratton and Gold (2007, p. 37) a strategic approach to human resource management implies connecting human resource management functions with the overall strategy of the organization with the aim of striving towards a common goal simultaneously enhancing organizational performance.

There are four fundamental issues that human resource management needs to evaluate for establishing good strategic HR function (Bloisi et al., 2007, p. 827):

1. **The current status of human resources:** are employees currently doing the right things in the right way in order to achieve common organizational targets?
2. **Internal strengths and weaknesses:** what are the fundamental abilities of employees to gain competitive advantages, how to train, develop and retain them and what are their limits?
3. **External opportunities and threats:** how to properly use the opportunities of the current environment, which human resources approaches to use if current conditions change?
4. **The path:** how to identify the right path, meet deadlines and be on schedule?

Applying human resource management on strategic level enables more options for dealing with multiplex issues caused by changes in business nature, worker variety, customer requirements and globalization. An efficient strategy can only be established if human, financial and technological resources are also considered. The identification of these resources is the foundation for planning any further step towards achieving organizational goals (Zorlu, 2009, p. 20).

3.1.2 Motivation and commitment at work

Contemporary business relies on motivated and committed workforce who contributes to increased organizational performance and competitive advantages. Therefore, a key challenge for organizations regarding human resource management is to establish and retain an environment which promotes motivation and commitment to work (Zorlu, 2009, p. 23).

Motivation and commitment are amazing notions in terms of their potential to enhance employee and business performance and therefore they remain to be a critical topic in almost every management literature. As such, they also represent an unavoidable human resource management condition for achieving successful TQM.

The term **motivation** can be described as driving force in people who makes them strive for achieving various objectives in order to meet requirements and expectations. People have different, often not corresponding, needs which they strive to meet in a various ways (Mullins, 2005, p. 503).

Understanding motivation and the needs of employees is the only way for organizations to properly influence and drive workforce behavior towards a desired direction. Due to its complicated nature, a universally recognized theory of motivation does not exist but there are a various theories that tend to define the main triggers for motivation at work. Each theory depends on the viewpoint of approaching to motivation and provides various indications how to enhance workforce wellbeing, and finally establish and retain a motivated environment (Zorlu, 2009, p. 24).

Commitment is a state of mind which is in evidence when the employee assumes responsibility for creating success, and takes initiative to achieve that success. Organizations must earn the commitment of employees by continuously demonstrating that the employees are valued members of the organization, and by appropriately recognizing and rewarding them (Juran and Godfrey, 1998, p. 424). Successful human resource management approaches are mainly constructed to encourage commitment to work and motivate employees to work outside the agreed business time in order to get a step closer in achieving overall organizational objectives.

3.1.3 Groups and teams

Increased competition forced organizations to provide greater quality at lowest possible prices. Soon organization recognized that this could only be done with committed and motivated workforce. Gaining the best possible benefits of employees and encouraging motivation requires a culture of teamwork and cooperation (Mullins, 2005, p. 723).

Groups and teams are a key element of organizational functions. The labor organization and its subdivisions consist of groups of individuals. Almost every organizational operation demands a certain level of coordination through the function of groups and teamwork. The apprehension of the nature of groups is crucial if a manager wants to properly influence and drive workforce behavior towards a desired direction. It is also crucial that managers are conscious of the great influence of groups and teams on organizational performance (Mullins, 2005, p. 517).

The term **group** can be defined in various ways but the essence of this term is that its individual members view themselves as part of the group. Even though a universally recognized definition of the group does not exist everyone understands of what a group consists. Schein (1988, p. 145) presented a psychological definition of a group describing it as various individuals who:

1. collaborate
2. are psychologically conscious of each other
3. consider themselves as a group.

Groups at work can be very powerful in influencing individual behaviors, beliefs and values. Often individuals will be willing to compromise with their own satisfaction, ideals, norms, values, beliefs, etc. for the benefit of the group. Thus, groups can exert control over their members' behavior and this makes group leaders powerful individuals.

Oakland (2003, p. 298 - 299) explained that the development of a group takes place in certain steps before achieving a satisfactory operating level. The first step is **forming**, where groups meet and have lot incertitude in terms of their purpose, composition, management and role of individuals within the group. The next step is called **storming**. At this step common activities of the group are starting in order to resolve identified issues and all discrepancies. The third step is **norming**, where the development of member relationship occurs and operational guidelines are placed. Beside guidelines, a structure is also defined in order allocate activities and responsibilities to members. The fourth step is **performing**. At this point the unity of the group is apparent. The group is now fully developed, entrusted and committed to common objectives of the group as well as organizational level.

According to Zorlu (2009, p. 36) there are four main reasons for grouping which are presented in the following table:

Table 3. Four main reasons for joining groups

Certainty	Affiliation to a group provides certainty and trust to its members. Also, a joint negotiation force can sometimes harmonize the bond between workers and the organization.
Assignment execution	It is more likely that a group of individuals can jointly execute an assigned task rather than just one individual. The members of the group combine all their capacities, skills and time in return the effectiveness and the quality of the work will be improved.
Social needs	People are complex beings and it is in their nature to have feelings of belonging. These feelings are crucial for motivation and creating social connections at the job which are a precondition for proper communication and employee's wellbeing.
Power	Groups have greater power to encourage changes within an organization. It is more likely that a group can influence the management to make changes in not desirable organizational segments rather than just one individual who, in most cases, won't be taken seriously.

Source: S. Zorlu, *Managing the Human resource in the 21st Century*, 2009, p. 36, Table 1.

It is important to point out that there are subtle differences in the terms group and team. All teams can be seen as groups but not all groups can be regarded as teams. The first difference is in the size, thus groups can be middle or large sized but teams have usually less members. In order to be successful, a good selection of future members is crucial for teams while the selection process for a group is usually irrelevant. Another difference is in the leadership structure, thus teams strive to have a shared structure while groups are mostly subordinated to one leader. Team members tend to have a dynamic environment with strong coordination and empowerment of all members, whereas groups usually appreciate more fellowship toward their leader. Another difference lies in the management process between these two terms. Formal groups which were set up by management must continuously give feedback to management in form of reports, written information, etc. Unlike groups, teams are flexible and all members are empowered to execute their responsibilities without continuous monitoring requirements from their supervisors.

According to Winston (1997, p. 143) a **team** is an ad-hoc collection of people with a common goal and purpose. The members of the team possess skills that, in unison with each other, create a synergistic relationship. Management, or the greater whole of employees who will be affected by their decisions, choose team members. The team is mutually accountable and collectively responsible for the attainment of the assigned goals or objectives. The team has

the authority to request information and resources up to a prescribed limit set by management and the authority to make changes in the organization pertinent to the assigned goals and objectives.

Zorlu (2009, p. 41) explained that composing teams is a demanding job and human resource management must consider the four steps of team compilation in order to find the best combination of individuals with different skills and abilities. The first step is **prework**. It must be decided to form a team based on current and future organizational requirements. Another issue which must be identified is whether specific projects are more appropriate for teamwork or would the project outcomes be better if tasks are done on individual level. A precondition for identification of such issues is to understand specific operations and actions which must be done during the project. The next thing which must be done in this step is defining team targets. After targets are defined, required abilities for successful target execution must be identified, a timeline must be created and potential future team members must be nominated.

The second step is **performance conditions**. Management must ensure required resources for successful target execution. They must ensure human, financial, technological and supportive resources.

The next step is **forming**. In this step the selection of future team members must be accomplished and individual responsibilities assigned. It is also important to nominate the leader of the team who will carry out the monitoring and fork flow planning process in the future.

The las step is **continuous advice and support**. When the team starts to operate, a good communication process must be created in order to ensure proper and constant information exchange, on horizontal and vertical hierarchical level. This enables teams to be able to early identify and solve issues within the team members as well as issues in performances.

The top management support is crucial for proper team function. In addition, it is also very important that team members realize their purpose, responsibilities, targets and the means and abilities required to execute these targets. If team members do not completely realize these important points and does not become fully cooperative, occurring problems are unavoidable.

A distinct work organization of a team which is also relevant for developing and designing a workflow is a self-managed team (Mullins, 2005, p. 723). The purpose of a self-managed team is to gather individuals with a variety of abilities and experiences to jointly operate on a specific project. There are some substantial differences between self-managed and ordinary teams. The main difference is that self-managed teams operate without a leader, thus every team member must be included in the leadership role and are demanded to gain new abilities from the jointed operations. According to many authors this mutual support increases

employee's job satisfaction. Another characteristic of self-managed teams is coaching and work trainings. Many successful organizations proved that self-managed teams enhance employee empowerment, motivation and work commitment (Zorlu, 2009, p. 40).

According to Mullins (2005, p. 723) key futures of self-managed teams include the following:

- targets are defined by management but the team chooses how they will be executed
- team members manage their tasks jointly
- team members shall have supplementary abilities
- supervision is set to minimum
- feedback and estimation refers to the team as a unit and not on individual level.

The main issue in this part of my thesis is that groups and teams are a fundamental part of every successful organization. Supplementary abilities are a key for a group or team, and when members with such skills work together to achieve a common target the outcomes will be greater performance and better information flow. Another key issue for a successful team setup is to nominate a good leader who will manage and organize the workflow properly and early identify and avoid the occurrence of any potential problem. Redesigning the workforce is a demanding job but when it is successfully accomplished it will result with improved competitiveness and workforce wellbeing, simultaneously promoting a brand new and significantly improved organizational culture.

3.1.4 Organizational culture

According to Jones et al. (1998, p. 285) organizational culture is a series of values, standards, behaviors and shared expectations which define how employees and teams within the organization collaborate and operate in order to reach common targets. Organizational culture is not a third party enforced model with strict limitations and rules, rather it is a series where workforce embrace values and standards of the organization and establish all their activities, beliefs and behaviors based on these values and standards. Organizational culture is communicated to the workforce by the values, social behavior, vision and rites of the organization.

There is a popular view that organizational culture can neither be changed nor developed fast enough to remain competitive in the environment and that culture of an organization is a system made up of organizational artifacts, values and assumptions (Zahra et al, 2004, p. 364). It is argued that employee behavior is strongly related to organizational culture which in turn is influenced by a combination of internal and external factors.

It is known that human resources are a critical factor in contemporary management for every organization because they represent the most precious competitive advantage. The manner in which this critical resource is guided has a great impact on the organizational culture as well

as on the overall organizational performance. Human resource management and the organizational culture is strongly linked, thus every change in one of them causes changes in the other.

Human resource management operations tend to build up practices that harmonize management activities with the overall organizational strategy, simultaneously enhancing workforce wellbeing and performance improvement. Elementary human resource management operations like enlistment, selecting candidates, employee training, etc. have a great impact on organizational performances and stability, thus these operations must be capable to guide workforce behavior and develop values that evolve organizational culture (Zorlu, 2009, p. 44).

Various cultural values represent external types of factors that impact human resource operations and workforce behavior. Organizations with highly developed employee involvement have also higher employee satisfaction and motivation than organizations that do not practice employee involvement. However, there also are some cases where employees do not want to get involved because of several reasons, thus they might perceive their contribution as unnecessary risk or they could have other, i.e. personal reasons.

In summary, human resource management must operate according to the cultural factors of the organization, both external and internal. It is impossible to develop a successful human resource management if the underlying factors that make up rules, values and standards are not entirely covered with its application. Human resource management can be a great assistant in developing or redesigning an organizational culture which is able to increase competitive advantages. One of the main tasks for human resource management is also ensuring employee teams and their identity which represents the foundation of a healthy organizational culture.

3.1.5 Challenges for human resource management

Managing employees is a difficult job. Even with new findings in the fields of management, psychology and sociology the complex human nature prevents human resource managers to routinely do their job and requires a case to case approach. Besides people diversity, a human resource manager's decision making is heavily hampered by the influence of their values, beliefs, political and social views, etc.

Zink (2011, p. 567) cited several present trends which human resource managers must take into account in order to develop a successful strategy: globalization, market dynamics, demographic differences, values and technological innovation. Technological progress causes more work intensity followed by new requirements regarding flexibility, simultaneously making jobs even more insecure. The redesign process must be adopted as continuous operation rather than just a onetime process, additionally stressing the wellbeing of an organization's workforce. All this have impact human resource management operations and even hinders achieving organizational excellence.

Human resource management cannot be viewed as a contemporary method of managing people, it is a strategic approach. Every operation in human resource responsibility has long-term implications and must therefore be planned and forward looking.

Besides other, above mentioned activities, a key operation for human resource managers is planning. Planning in terms of human resources implies understanding the current and future human resource needs of the organization, development and implementation of activities to meet these needs and tracking of the total efficiency. However, a big challenge for developing a successful human resource plan is the evaluation of influencing factors for labor supply as well as the labor market itself which today has become very variable (Zorlu, 2009, p. 67).

Providing career progress opportunities became one of the main tools to attract and retain workforce. It is therefore mutually important in terms of career promotion for employees and keeping tough resources for organizations in order to gain competitive advantages. To be able to retain the trust of their workforce, human resource managers must always tend to enhance their commitment and motivation and extend their engagement within the organization. As mentioned, providing career progression opportunities is also a crucial job of human resource managers because ignoring this issue will probably lead to unsatisfied employees who will seek their chance with another employer.

3.2 The relationship between human resource management and TQM

Many successful organizations evidenced that quality is an efficient strategic tool in market competition which encouraged other organizations to implement and practice a variety of programs to continue to improve their products and services in order to meet customers' expectations and keep them satisfied. One of the main focal points of these programs is the concern to technical elements, including products design, reliability analysis, and statistical process control which is definitely needed and brings overall a significant quality improvement. Modern TQM includes more than just a preeminent technical system. For an appropriate TQM implementation and lasting success, Hart and Schlesinger (in Chen, 1997, p. 24) stated that a change in the culture of the organization is necessary, including changes in the structure of the organization, values, the joint work of all involved people and the way they think about involvement and engagement. The main ideal of TQM is to provide premium value to the customer and managers must tend to enhance not only the technical system, they must also improve the organizational system in order to succeed. Thus, effective and involved management is considered as the main driver for successful TQM implementation in an organization. In addition to management, equally important is the engagement of workers and the way they function together in order to integrate several interdisciplines into one connected system, but if the workers do not sense the recognition and backup from other team members and other workers in the organization, then TQM implementation is perhaps not the best option at that time.

From the above stated we can conclude that TQM clearly emphasizes the essentiality of human resource management in quality management, pointing out the importance of effective leadership, and development and management of human resource factors. Organizations initiate process improvements within the human resource division supporting the strategic goals of quality and aligning them with TQM principles.

Human resource management can also reinforce the interpersonal relationship of employees and organizational consciousness, improve employees' abilities and stances, and help to change the organizational culture in a desired direction. Therefore, human resource management has a crucial role in the TQM implementation process (Palo and Padhi, 2005, p. 467) and the effective human resource management is an important precondition of a successful TQM practice in the future (Hoogervorst et al., 2005, p. 92).

For TQM to be reached the most important thing is leadership and employee empowerment. Defining goal orientations for employees, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction is a big step toward achieving total quality. TQM has a great impact on employee's stances towards their job assignments and the business of the organization. Researches proved that the perceptions of employees regarding TQM practices are positively linked to their job satisfaction (Ooi et al., 2005, p. 72).

Sahney et al. (2008, p. 502) stated that workforce wellbeing is a precondition and a main driver in implementing a customer oriented management approach like TQM. Every human resource manager must first of all understand the needs of their employees and do all in his power to satisfy these needs and thus enhance overall workforce wellbeing within the organization.

Workforce satisfaction positively impact their operations which according to Yeh (2003, p. 257) is a prerequisite for successful TQM implementation. Other features like professional training, active involvement, job conditions, organizational structure and social advantages are also considered to impact continuous quality upgrade operations.

Sila and Embrahimpour (2002, p. 902) made a very interesting investigation of TQM based surveys published between 1989 and 2000. They concluded that after customer orientation and meeting their needs, human resource management concerned TQM factors were the most frequently listed in the whole survey literature. This proves that the investigated literature gives significant importance to human resource management in the implementation process of TQM. Besides human resource management, great importance was also given to issues regarding the impact of leadership and top management commitment to TQM implementation, and these issues were therefore considerably often covered in the survey literature.

As mentioned above, numerous studies underline the critical impact people have on the successful implementation of TQM, but Guimaraes (1996, p. 20) conducted a research addressing the effect that TQM has on people. The main findings were that after TQM, on average, employees reported higher job satisfaction, job involvement, commitment to the organization, and intentions to stay with the organization. Thus, in terms of human resource management goals and objectives, one is encouraged to think that TQM programs are having a positive influence.

Hoogervorst et al. (2005, p. 92) confirm this positive influence of TQM on employees. They stated that from the perspective of TQM the importance of a human-centered approach to organizing is big. The employee focused approach basically enables organizations to harmonize employee and organizational interests. To work in a TQM organization enables employees to realize and develop themselves in a quality oriented environment and this phenomenon is considered to be one of the most important contributions of TQM.

According to Shahraki et al. (2011, p. 2) the human resource management department should support operations like job design, team assembling, promote cooperation, empowerment, information flow, participation, foster organizational culture, training and progress toward the quality objectives and develop policies based also on the organizational quality objectives. A good cooperation between human resource management and TQM will result with improved business results. The harmonization of human resource management and TQM like helping the organization and employees during the TQM transition stage, fostering the TQM vision and quality awareness in all spheres of the organization should contribute to an improved business performance (Palo and Padhi, 2005, p. 482).

Palo and Padhi (2005, p. 483) explained that the cooperation between human resource management and TQM can be further fostered by the application of following activities:

- human resource managers must act as TQM trainers
- employee evaluation must be conducted also considering his contribution to the TQM implementation
- provide TQM incentives for stronger focus on organizational quality objectives
- unions should be included in the TQM process
- influence on the work mentality of employees to focus on survival linkage to TQM
- help employees to perceive quality as the main objective
- upgrade the system in information flow, suggestion programs, tracking outcomes, liability and feedback coordination.

Soltani et al. (2003, p. 45) conducted an empirical research on evaluation and managing the employee performance in the context of quality management. The research outcomes showed that human resource performance assessment is crucial in terms of quality management, but

the outcomes also showed that it is not simple to perform a good performance assessment which corresponds to every facet and requirement of TQM.

In summary, to reach and successfully implement TQM an organization must change the way in which employees behave at work. They must let quality become their lifestyle and a culture at work and everyday routine. Furthermore, it is essential to realize that TQM is a continuous improvement process that takes a long time and requires substantial human and financial resources. It is not a static process, it is very dynamical. Quality upgrade must become a fundamental long-term perspective and a main driver to the business strategy and employees should therefore be viewed as an asset rather than labor cost strengthening that way the role of the human resource management function (Vouzas, 2011, p. 196).

In the next parts of my thesis I will briefly explain what employee empowerment and leadership means and how it contributes to achieving TQM.

3.3 Empowering the involvement of employees

As presented in the previous chapter, the mutual impact of human resource management and TQM is most intense in the field of development and empowerment of employees and the transition from traditional management approach to a continuous quality improvement approach where attention is given to coaching and leading rather than controlling. It is generally known that TQM implies employee empowerment which is proven by the fact that five of Deming's fourteen components of TQM organizations refer directly to employee involvement and empowerment (Shahraki et al., 2011, p. 3).

Employee involvement is a key to increase the outcomes of TQM. However, understanding of employees' attitudes towards involvement, and their perceptions of barriers to involvement is required. It is important to identify factors which are likely to encourage employees to be involved in TQM and use them to develop and implement effective strategies which aim at maximizing the outcomes of TQM (Tang et al., 2010, p. 1253).

The implementation of quality management techniques enables organizations to improve internal efficiencies, which is considered as a prerequisite to become competitive in global marketplace. TQM is an overall organizational process focused approach that implies changes in production, decision making, employee progress and involvement (Wickramasinghe, 2012, p. 836).

Employee involvement implies empowering employees of an organization to make decisions and to deal with various issues in accordance with their responsibilities within the organization. The idea of employee involvement is that employees who are most familiar with certain problems are probably the most qualified persons to make decisions for resolving this problems if sufficient competence is given to them.

To encourage employee commitment and involvement, successful organizations place great importance on empowering their employees. They consider empowerment to be a key issue and make efforts to create a working environment that is conducive to the employees taking responsibility (Oakland, 2003, p. 272).

Employee empowerment is an advanced form of employee involvement. Empowerment is a state in which the employee has enough knowledge, abilities, competence, and takes the initiative to make decisions and perform activities within his responsibilities. The employee takes responsibility for the consequences of the actions and for contribution to the success of the enterprise. In an empowered organization, employees take action to respond to the needs and opportunities they face every day regarding: customer satisfaction; safe operations; quality and value of products and services; environmental protection; business results; and continuous improvement of processes, products, and people (Juran and Godfrey, 1998, p. 423).

An organization empowers its employees to look for and implement improvements to all work processes (Pun and Gill, 2002, p. 448). Employee empowerment spells the difference between success and failure in the quest for TQM. Unless employees are given the opportunity to plan and perform their own work assignments, there can be little initiative for participation in the improvement process. Empowered workers know how to apply their skills and experiences in their jobs and they exercise good judgment coupled with a strong sense of responsibility (Gatchalian, 1997, p. 430).

3.3.1 Employee involvement and quality management

Various research findings showed that employee empowerment has a positive impact on customer and employee satisfaction. For example, Bowen and Lawler (1995) conducted researches on empowering service employees in three fields:

1. individual management practices related to empowerment
2. employee empowerment programs
3. the service profit chain.

In summary, they found that employee empowerment can have a positive impact on these fields but it may also depend on specific cases and the implementation should therefore be based on evaluation outcomes of the current state of the organization.

Uitley et al. (1997, p. 5) argued that organizations that are motivated to improve the quality of their products or services will probably have more success in implementing the new quality based management approach than organizations that just want to enhance their performance. Wood and Peccei (1995, p. 52) concluded that communication flow encourages awareness of quality. Boon et al. (2006, p. 528) observed that organizational confidence and empowerment have a very positive impact on employee retention.

Gatchalian (1997, p. 430) researched the success of TQM implementation in several organizations. The findings showed that only 20% - 35% of organization had success in implementing TQM. The reasons for this were in most cases related to leadership and purpose issues, obstacles in communication flow, poor teamwork and the lack of commitment to quality improvement. Summarizing these reasons it is obvious that there were a clear lack of understanding of the TQM concept by management and employees in terms of training involvement and acting accordingly to the mission and vision of the organization. In other words, insufficient attention to employee empowerment was paid for ensuring TQM success.

A very interesting research was done on the empirical relationship between employee involvement and TQM by Sun et al. (2000, p. 350) examining the connection between employee involvement, TQM, ISO 9000 and the upgrade of overall organizational performances. Perhaps the most interesting results from the study are how employee involvement and TQM work together to impact on organizational performance. In various researches it could be found that employee involvement has a great influence on quality management features like kaizen teams and enhanced communication flow. Evans and Hogan (in Sun et al., 2000, p. 351) stated that employees should be involved in advisory groups to present and discuss potential quality problems. However, the connection between ISO 9000 and employee involvement was rarely explored. Velury (1996, p. 11) provided a logical explanation for using employee involvement in order to acquire ISO 9000 certificate with his finding that the primary advantages of ISO 9000 are directly commensurable to the effects of employee involvement. Curkovic and Handfield (1996, p. 3), on the other hand, concluded that ISO 9000 registration criteria is not eligible to assess the main quality management areas like strategic quality planning, employee involvement, quality outcomes and customer satisfaction. Data analyses provided findings described below.

First of all, employee involvement is positively correlated with improvement in business performance which indicates that employee involvement is highly related to the implementation of TQM. There are two explanations for this. First, employee involvement will enhance the implementation of TQM programs; and second, TQM programs provide opportunities for employees to be involved.

The second outcome of the study showed that the correlation between employee involvement and business performance is significant. This indicates there is a learning-curve effect in employee involvement. In other words, it takes time for the benefits to be obvious.

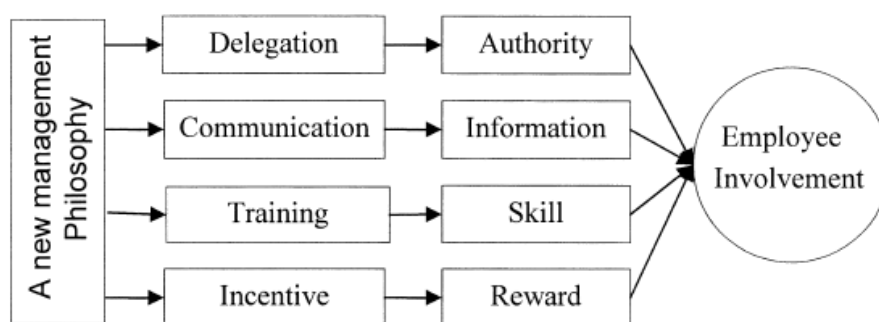
Another finding is that employee involvement positively influences the contribution of TQM. In other words, TQM programs accompanied by employee involvement tend to be more successful. The degree of employee involvement is slightly different between those organization with and without ISO 9000 certificates which indicates that there is some positive relationship between ISO 9000 certification and employee involvement.

We can conclude that employee involvement is positively related to various aspects of quality management and should be emphasized in quality management programs. Organizations should therefore more focus on employee involvement and its implementation in TQM. To effectively get employees involved, management must provide sufficient power, information and abilities to employees and include them in the TQM program.

Employee involvement is a process for empowering members of an organization to make decisions and to solve problems appropriate to their levels in the organization. To be included in the business, employees must also be empowered. Empowerment implies delegation of various responsibilities and granting certain power to employees. If employees are not sufficiently empowered or have not enough power, employee involvement is useless for accomplishing continuous improvements and shall be restricted to a simple suggestion making option.

According to Sun et al. (2000, p. 354) employee involvement takes various forms, such as work teams, job enrichment/rotation, quality circles, task forces and labor-management action. However, quality circles are the most common, with many successful instances being reported. It is suggested that organizations use quality circles as the first step in implementing employee involvement. Finally, management must hold a new management philosophy and new attitude towards employees. To implement employee involvement, management should hold the assumption that employees are willing to contribute and be able to contribute. The above implications are summarized in a framework as shown in Figure 12.

Figure 12. A managerial framework for employee involvement



Source: H. Sun et al., *Employee involvement and quality management*, 2000, p. 354, Figure 2.

Summarizing all above, we can conclude that employee involvement has several contributions to TQM. The result proved that employee involvement is one of the main preconditions of a successful TQM approach and its programs. To practice employee involvement, management must embrace the new management philosophy and approach towards employees and employees should be empowered, more information should be provided to them, trainings should be manifested to improve their abilities and rewards should be introduced.

3.3.2 Quality circles or kaizen teams

The objective of TQM, meeting customer needs, can rarely be met by single employees operating separately within their specialties but teamwork, on the other hand, allows several areas of the organization to cooperate and jointly contribute to achieve this objective. TQM acknowledges the interrelationship of several areas of the organization and uses teams as a tool for coordinating operations in order create sufficient resources required to promptly adapt to changes in customer needs.

A study by Asim (2001, p. 2) examines how the Malaysian Public Service has adopted quality management concepts in reforming public service organizations. The main finding of the study was that the main organizational changes are those that have taken place within the teams themselves. Perceptions of organizational and job restructuring, and organizational culture reflect changes in the functioning of organizations. The impacts on organizational culture are shown in statements such as “team spirit”, “esprit de corps”, “empowerment”, “good working environment and healthy relationship between employees”, and “more careful in dealing with the customers”.

From the above stated we can conclude that TQM implies an organizational culture based on teamwork with the main objective to satisfy the customer. These two concepts of teamwork and customer focus represent the main TQM tenets that are a key for introducing an approach which strives toward quality upgrade.

One very favored and widely published feature of TQM are quality circles or kaizen teams. Winston (1997, p. 219) defines quality circles as small groups or project teams formed to seek solutions to perceived problems in quality and process. They are ad-hoc, consist of people from several areas within an organization and many times include vendors and clients. Possible quality circle members should implement the solutions and operations themselves. These operations must be closely related to overall organizational quality control activities. The quality control circle activities are the quality control activities of the first-line workers on the shop floor (Juran and Godfrey, 1998, p. 1116).

Circles should evolve out of a comprehension and cognition of quality on the part of senior management. They should not be presented as an agonizing try to do somehow improve quality. The notion “quality circle” can be found under different names but the essential concept and operational aspect are similar in most organizations.

According to Oakland (2003, p. 283) the unified characteristic of quality circles is that employees are requested to participate but it is not mandatory. Therefore, it is hard to determine a specific structure of quality circles but the most common elements in such circle organizations are the following:

1. management
2. coordinators
3. leaders
4. members.

Management support and dedication are a prerequisite for well-functioning of quality circles. Management represents the main decision-making body in terms of acceptance and implementation of quality circle proposals.

Coordinators manage quality circle programs and are most responsible for the success of the concept within organizations. They must coordinate meetings, initiate trainings for leaders and circle members, and connect circles with other parts of the organization.

Leaders commonly represent members and act as a front man of the group. Leaders also must be trained in order to gain abilities and skills for a good leadership. Since the leader is accountable for the success of his team he also must encourage his team members to gain new skills and to become more productive, which at the same time facilitates his activities in terms of assistance in resolving complex issues.

Members constitute the major element of the quality circle. They must be trained in order to gain necessary skills to resolve problems and control the process, simultaneously acquiring new abilities for recognizing and dealing with work-related issues.

We can conclude that a prerequisite for the well-functioning of quality circles is the establishment of a healthy working environment with empowered employees. When properly operating, quality circles contribute to achieving TQM by increasing managements' consciousness of employees' abilities and skills, as well as employee consciousness to convey their skills to other colleagues, simultaneously cultivating an innovative and communicative working environment.

3.4 The role of leadership in achieving TQM

Achieving great business performance is hard enough. To retain such performance in the contemporary marketplace of globalized and reinforced competitors accelerated innovations and technological progress, continuously and frequently changing trends in economic environments and customer needs is even harder and demands **leadership** to act as a "spine" of TQM (Oakland, 2011, p. 531).

Leadership is one of the eight basic principles of quality management and a key element in the implementation of innovations and cultural changes in quality. Many gurus (like Deming, Duran etc.) in the field of quality give great importance to leadership in their research and specially emphasizing the leading role of top management.

As described in the previous chapter, a quality team is a good team of good people. Transforming a group of people into a quality team surely implies to make necessary changes. If quality teams within an organization are already established it still does not imply that changes unnecessary because quality teams must constantly upgrade themselves accordingly the new organizational approach of continuous improvement. In fact, there are several cases registered where top management after TQM implementation failed on initiating proper training and leadership. This resulted with a group of employees surrounded by some slogans, supposing to work within a TQM organization but perceiving TQM as a farce and not realizing how to properly cooperate in order to achieve quality. A team is formed by the leader and in order to successfully lead a quality team he must first get himself into form (Kannan, 2009, p. 161).

Eskildsen and Dahlgaard (2000, p. 1085) stated that it is the behavior of the organization's management and the manner in which they perform leadership that lays down the ground rules for the way that the core job characteristics will be addressed. Top management is the main carrier of quality leadership. They must provide guidance (ensure a customer focused environment, clear values, and create big quality prospects) and incorporate it in the overall quality process. Top management must stress employees' progress and foster their involvement, training and creativity through the quality process. The establishment of quality values and prospects demands a significant dedication and participation of top management. By their engagement in the planning process, monitoring of the overall quality performance, and recognition of employee's quality accomplishments, top management provide a leadership standard and strengthens quality values for the whole organization.

If dedication to quality upgrade is not the prime effort, the TQM application will certainly fail. Most organizations therefore established a quality assembly which constitutes of top management members who are creating quality policies and are monitoring the organizational performance objectives.

Quality must become the key element in the strategy planning and competitive assessment process. Various new management tenets and practices needed for establishing the TQM philosophy are probably opposite to the former, not quality oriented, management approach. Top management, beginning with the managing director must act as the organizational quality leader. The managing director in his role as the prime quality leader should therefore be the main initiator and provide a quality based vision, stimulation and acknowledgement, continuously operating to improve and retain successful quality practices. Such approach enables leaders to easier get through the unavoidable resistance of employees to change.

However, many examples unfortunately demonstrated that organizations do not always have the dedication and developed leadership role top management. These examples also showed that the new quality orientated approach is necessarily doomed to failure. The lack of top management commitment where in some cases largely buffered by a strong quality oriented

middle management leadership and empowered employees. Considering that leadership is a key element for the development, implementation, application and improvement of the quality management system and the organization's success, organizations need leaders at all levels. These leaders must be a follower of ideas identified at organizational level and must be able to convey the intentions and goals of top management to the employees so that they understand and accomplish the targets. A quality manager must also be a leader in development and improvement of quality management and development of a quality culture in the organization. In many cases, this is where quality begins. However, a strong quality oriented middle management leadership and empowered employees will in the long-term not be able to maintain a good quality performance without the support and commitment of the top management leaders.

The example of the organization G.T. Electronics proved the above mentioned fact. The managing director of G.T. Electronics got himself informed about the TQM philosophy and decided to implement this approach. The managing director personally arranged a meeting with middle management and introduced the new organizational prospects. Afterwards he also published an engrossing paper about TQM in the organizations bulletin. The top management members were sent to various TQM trainings and the start of implementation of TQM was officially announced to all employees. However, the managing director subsequently had certain negotiations ongoing in Europe where he personally had to attend. The business trip lasted for several months and when he returned to G.T. Electronics he encountered a significant lack of interest in TQM. Because of the lack of his commitment the former TQM initiative and enthusiasm disappeared and the TQM program was almost forgotten.

Another prove of top management commitment essentiality were provided in a research performed by Fotopoulos and Psomas (2010, p. 539). The objective of this research was to explore the connection between TQM factors and overall business performance. The backgrounds of the study were questionnaires conducted in 370 organizations in Greece. The TQM factors found in this research were top management commitment, employee involvement, customer orientation and the application of TQM tools and techniques. The main findings revealed that top managers are the main driver of the TQM approach. Top managers are also the main decision makers, and it is therefore necessary that they stimulate employees to get involved in the quality process, simultaneously focusing on customer needs by using quality tools and techniques. In this way everyday process will be performed based on quality. Thus, improvement will be achieved in terms of business operation, customer satisfaction, natural and social environment and market share.

Many authors argue that one of the most important tasks for leaders is to first equip themselves, considering this as one of the biggest challenges in life generally. To do so, leaders must fundamentally reassess their feelings, emotions and inner limits. After equipping themselves leaders must become examples of “how it is done” for their teams. Kim and Hong

(2006, p. 202) stated that the role of leadership by example is critical, which indicates the transformational power of leadership.

Leadership is a dynamic feature of TQM. It must be properly and continuously practiced for a successful TQM application. The leader's dynamic and continuous performance depends on various elements of the business as well as on continuous precision of these elements in terms of planning, application and TQM analysis (Svensson, 2005, p. 530).

3.4.1 The five requirements for effective leadership

According to Oakland (2003, p. 36) there are five requirements for effective leadership:

1. developing and cultivating a clear organizational vision and mission
2. developing a strategy which supports the mission
3. identify critical success factors
4. review the management structure
5. empowerment.

Organizational values and beliefs must be applied by **developing and cultivating clear vision and mission**. Together, the vision and mission must provide clear guidance for the desired state and set targets which must be achieved in accordance with the organizational culture. They also give an insight of what the organization is all about. Top management members are the responsible for vision and mission development, as well as for programs required for the implementation process.

A clear vision and mission is a prerequisite for a proper cooperation between employees, top and middle management towards a common objective. The vision and mission should contain beliefs and objectives related to following features:

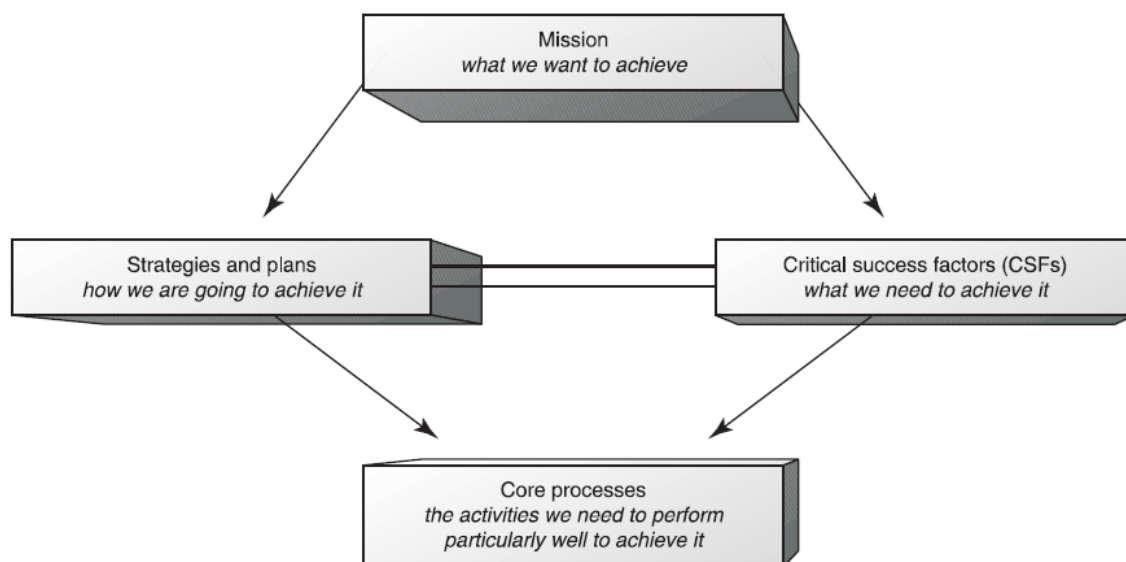
- business definition
- dedication to quality and quality driven leadership
- targeted branch sector, customers and market
- the role of the organization
- service department, opportunity-seeker
- characteristic organizational competences
- goals for the future
- performance based on customer satisfaction and continuous improvement.

After development and implementation of the vision and mission they should become the main guideline for future communication and desired state. Top management must become absolutely dedicated to the vision and mission creating thereby awareness and commitment for all employees.

The second requirement for an effective leadership is **developing a strategy which supports the mission**. Leaders need to set and to strengthen the real values that are instrumental for the achievement of organizational strategies, business objectives and ensure continuous success (Sikavica et al., 2008, p. 441).

As displayed in figure 13 the next requirement is the **identification of the critical success factors**, a concept denoting the main organizational sub objectives. Critical success factors provide overview of what must be done in order to accomplish the mission and represent the operations that must be especially well performed in order to be successful – the core business processes.

Figure 13. Mission into action through strategies, critical success factors and core processes



Source: J. S. Oakland, *Total Quality Management text with cases*, 2003, p. 37, Figure 3.2.

Developing the vision, mission, strategy, critical success factors and core processes implies also to **review the management structure**. Employees, top and middle management can only achieve their total performance if a proper structure is developed which is in accordance with process management. This indicates that responsibilities must be allocated and procedures implemented based on the best possible way of performing the core processes.

The last requirement for effective leadership is **empowerment**. In empowered organizations, leaders create an environment to make people great, rather than control them. Successful leaders are said to “champion” employees and make them feel good about their jobs, their organization, and themselves (Juran and Godfrey, 1998, p. 439).

According to Oakland (2003, p. 37) particular attention must be paid to the following:

- attitudes
- abilities
- participation.

The **attitude** towards customer and supplier is crucial for a successful quality oriented leadership. Leaders must recognize the customer of the organization, as well as their requirements and expectations. This recognition must become the leader's main driver and every activity must be performed in order to fully satisfy the customer. Quality oriented organizational requirements are based on customer expectations but they also depend on their suppliers. Suppliers play an indirect but very important role in fulfilling customer needs and they must be well informed about organizational requirements and changes. The attitude towards customer and supplier must be initiated by top management and percolated down to middle management and employees. Top management must therefore lead by example and not simply communicate and delegate quality activities that even themselves do not believe in.

Organizational requirements and expectations must be clearly communicated to employees, while employees on the other hand must gain **abilities** to meet those requirements and expectations. The main tool for gaining abilities is training, but it also can become an inappropriate tool if it is not provided effectively in terms of accordance with organizational requirements and expectations. Training should also be included in the planning process and its suitability continuously monitored.

Besides gaining abilities, employee **participation** is crucial for improvement of organizational performance. Improvement efforts must become everyone's responsibility and not only top and middle management's.

Attitudes, abilities and employee participation must be supported with trainings in project management, planning and problem-solving methods. Usually these are not demanding trainings and they enable employees to make effective changes and to properly deal with problems. Very often top and middle management needs such training sessions as well, therefore it is recommended that they also participate.

3.4.2 Excellence in leadership

From the previous chapter we can conclude that a leader must create distinctive and consistent purposes. Developing a proper vision, mission, and organizational values are a prerequisite and represent the main basis for long-term success, but in order to maintain this success in the highly increasing competitive market and globalization, merely "proper leadership" is no longer enough and forces managers to achieve excellence in leadership.

Russel (2010) presented following mindsets for managers to achieve excellence in leadership:

- strategic thinking
- sharp focusing
- quick actions.

The common features of all successful organizations are their dedicated and actively involved leaders whose strengths are reflected in their **strategic thinking** about business challenges and opportunities. Leader's **sharp focusing** on leverage market and organizational features enables him to speed up actions and enhance their influence on the business. These **quick actions** of the leader define the speed of the organization to make necessary changes and to adapt to constantly changing market trends and customer needs.

Many authors claim that the vehicle for achieving excellence in leadership is TQM. TQM covers the entire organization, all the people and all the functions, including external organization and suppliers.

The TQM implementation activities can be difficult, and top and middle management become confused with the propagation of quality theory and practice, thus a streamline is sometimes necessary. The foundation of TQM is the external and internal customer-supplier interface, and each one of them represents various activities to turn inputs to outputs. Therefore, dedication to incorporate quality by managing these inputs and processes must be created.

Using as a construct of the "Oakland TQM model" (described in chapter 2.6.5), the four P's and three C's with one additional C (Customers), may be presented as the core requirements for achieving excellence in leadership (Oakland, 2003, p. 39):

Planning

- developing the vision and mission as the main basis for long-term success
- developing policies and strategies
- reorganizing the organizational structure in accordance with policies and strategies.

Performance

- ensuring proper performance assessment, monitoring and progress
- Informing workforce regarding their efficiency in meeting customer and performance objectives.

Processes

- ensuring a processes management system is developed and properly implemented
- participation in developing, implementing and upgrading management systems
- fostering quality upgrade activities on organizational level.

People

- encouraging empowerment, teamwork, creativity and innovation

- fostering trainings and proper education
- providing motivation and support to teams and individuals
- helping and supporting employees in achieving their objectives
- providing proper feedback.

Customers

- understanding customer needs
- ensuring customer needs are understood from everyone and properly met
- establishing partnerships for enhanced continuous improvement.

Commitment

- personal and active involvement in quality upgrade operations
- monitoring and improvement of the effectiveness of own leadership.

Culture

- development and implementation of values supporting the TQM culture
- ensuring education, innovation and creativity activities are developed and implemented.

Communications

- fostering good communication flow and cooperation
- personal communication of the vision, mission, values, policies and strategies
- accessibility and active listening.

Throughout the organization there must be no ambiguity related to TQM, hence it is important to understand that TQM demands effective leadership with clear guidelines and a thoroughly prearranged and completely implemented strategy in accordance with the vision and mission of the organization. Various great customer and industrial markets proved that excellent leadership results with upgraded business performance. Furthermore, excellent leadership can also lead to superior quality which enables organizations to charge higher prices to gain greater profits. Leadership and quality obviously affects profitability but, as described in chapter 3.3, for long-term success employee involvement and empowerment is equally important because continuous improvement involves everyone. Quality must become the new lifestyle for leaders as well as for other employees in order to succeed in the contemporary market.

Achieving TQM and excellence in leadership demands a long term and intense focus customers, workforce, suppliers, society, etc. Strategic planning must provide the main guidelines to achieve overall quality excellence within the organization. It must allocate resources in accordance with predicted core changes such as future customer and market requirements and opportunities, partnership, competition, legal factors and technology progress. It is also important to understand that excellence cannot be gained overnight and it is important to be patient. The Japanese, for instance, developed TQM for many decades before they become excellent in leadership and quality improvement.

3.5 Qualification through training

The purpose of training and preparation of personnel is to develop the skills necessary to successfully perform the job. When it comes to workers, the goal of training is to improve the skills, but when it comes to managers the goal is to develop managerial skills.

Improving staff through a variety of plans and special systems of motivation is of great importance because depending on how much an organization motivates and invests in its employees to enable better business, the more are customers motivated when purchasing products and services. It is important that everyone in the organization must learn in order to improve his skills. Specifically, TQM is based on teamwork and only with the necessary knowledge can all be creative and successful and contribute to increasing the quality of the work and achievements of the organization. Learning creates and strengthens team spirit, because knowledge leads to understanding, trust and culture, behavior and work.

Individuals, geniuses cannot affect the improvement of the business if they are not followed by the others. Investing in technology, equipment and process changes are very important, but these inputs do not provide business growth and competitive advantage without a corresponding investment in people. People are initiators of all actions.

People are often the carriers of all important functions in the organization. Apelian (2009, p. 14) states that education opens doors to a variety of career paths where one can make a world of difference. Continuous improvement cannot occur within an organization unless training is part of management's agenda (Pekar, 1995, p. 5).

Creativity that carries an individual comes to the fore in a particular climate in enterprises and a social environment which is incentive. Therefore, the task of management is to recognize the creative individual in the organization and provide working conditions which will come to the fore his abilities and where he will be able to further develop creativity.

Contemporary management implies not only responsibility for accomplishing business objectives. Management's responsibility is also to select employees who are able to accomplish these objectives, cooperate with stakeholders, deploy and keep current employees, motivate them, enhance their productivity, etc.

Knowledge of employees strengthens the competitiveness of enterprises. An important role is played by a management that is willing to learn and that is capable to convey this will and need to all employees. A manager must encourage and stimulate learning because learners stand out as an example to others and are rewarded by making progress on the job and paid better.

Oakland (2003, p. 36) presented several management requirements for training strategies:

- active involvement and support in providing trainings
- participation in trainings based on personal development plans
- fund training and improvement operations in order to enable autonomy at lower levels
- coordination of debates and co-worker estimation to evolve customized trainings for individual employees.

Factors such as lack of top management support and or employee empowerment, failure to create a conducive culture, inconsistent human resource management policies, and others have often been cited as factors contributing to TQM failures. In organizations, motivation should be a combination of financial and non-financial factors to meet the very diverse request of employees. There are multiple researches that explain what most motivates employees to perform better job in achieving organizational goals.

Various researches underline the importance of training, communication with employees and rewards of priority in order to have productive employees that are willing to grow together with an organization (Salleh et al., 2012, p. 344). Ahmad and Schroeder (2002, p. 540) created a study trying to understand the interaction between human resource management systems and TQM practices, specifically focusing on training and selection of employees. They explained that practicing continuous improvement through TQM implies teamwork eagerness, ability to deal with various quality issues and innovation and creativity for process improvement. One of the main tools for bringing people into this state is providing effective training and conducting an appropriate selection process. The training and selection process enables organizations to recognize potential future team members and individuals who possess skills and abilities which are in accordance with TQM requirements. Their study highlighted also the essence of proactive employee behavior for an effective TQM practice. They revealed that monitoring and analysis of employee's behavior throughout the training and selection process is decisive for achieving TQM. A careful approach to training and selection is in accordance the fundamental principles of TQM - better prevent than to cure.

The success of the operation is a permanent concern of everyone in the organization and investment in human resources is essential for the promotion of all that results in the success of the business. Motivation, creativity and performance evaluation plays in this an important role.

Training also can influence the reputation of organization. When training is conducted appropriate and continuous it becomes an "added value" and a symbol of the organization, thus enhancing the reputation. Otherwise, when training is not conducted appropriate, serious doubts could appear regarding the effectiveness of management and investment in human resources which in some cases can have negative consequences for the reputation.

It is important to raise the awareness, particularly in less developed markets which usually have lower reputation, that it is not the essence to have cheaper managers and employees in the organization because they often eventually cost far more because they will not make necessary efforts. It is the opposite, it is important to invest in more expensive, high skilled managers and workers which will with their efforts and motivation improve system operations, productivity, positive relationships and competitiveness, especially if the organization additionally promote them, motivates and invests in their existing knowledge, skills and abilities.

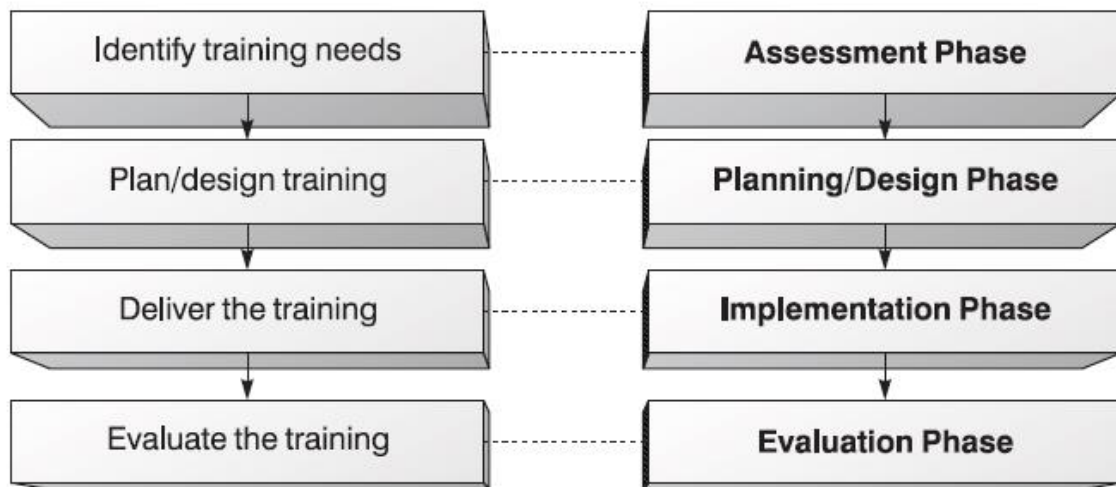
Some big and successful organization have a development and performance management process that uses discussion and peer assessment to help create individually tailored training plans with business objectives through policy deployment. They motivate its employees through training. Training is provided in quality, skills related to the job, general education and safety. These organizations encourage employees to diversify their abilities and a big part of their employees are trained in at least two job functions. As a result of their investments these organizations boast business benefits such as increases in sales volumes, not losing customers to competitors and low employee turnover.

Successful TQM organizations organize training through various programs stressing the importance of problem solving skills through training of employees. During these training emphasis is definitely put on the definition of quality. So it's not uncommon that many large organizations have established their own standards for the training of employees in the form of mandatory number of hours spent on courses to improve the quality, thus evolving a “culture of training”.

This evolved culture of continuous dedication and investment in appropriate trainings also include planning. Trainings must be planned thoroughly and in accordance with organizational, group and individual needs. In order to continuously advance their trainings they developed various training databases and foster diversification through trainings in quality, required abilities, general education, etc.

According to Oakland (2003, p. 275) many writers have developed models of the training process which can be summarized into the four phases shown in figure 14.

Figure 14. A systematic model of training



Source: J. S. Oakland, *Total Quality Management text with cases*, 2003, p. 275, Figure 14.6.

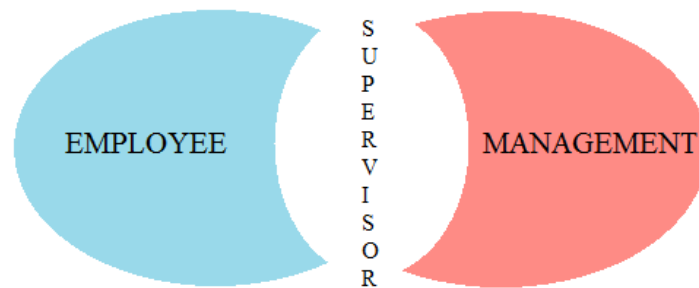
In the first, **assessment phase**, the training content and requirements are defined at organizational, group and individual levels. The **planning/design phase** defines the place and time of the training while the **implementation phase** implies the actual training provision. The last, **evaluation phase**, is the most critical and manifests itself in form of monitoring, interviews, surveys etc.

In sum, big and successful organizations proved that training, when it is done effective, is a strong tool to improve overall organizational performance. In order to conduct it effectively, training must be approached with particular care - it must be developed and planned in a systematic way considering training estimations, requirements, content analysis, and constant monitoring. An important role is played by a management that is willing to learn and that is capable to convey this will and need to all employees.

3.6 The role of supervisors in TQM

In large organizations, levels of supervision inevitably must exist. Supervisors must be a key in the management chain and the main link between management and employees (see figure 15).

Figure 15. Role of supervisors



Sometimes employees perceive supervisors as a sort of management, but management differs from them with their educational and social background. However, for a proper TQM implementation, this perception of difference must be abolished because supervisors represent a crucial connection between employees and top management. Supervisors communicate and implement management's policies and priorities to other employees, thus representing middle management - the main link between top management and employees (Golhar et al., 1997, 555).

It is worth noting that the role of supervisors changed during the implementation of TQM, from a guardian to a person responsible for support. Traditional supervisors simply managed and controlled their group and their responsibilities while supervisors in TQM organizations must have entrepreneurial skills and abilities, they must take risk, be initiative, and make effective decisions in risky and uncertain environments.

Supervisors in TQM organizations are critical for unified strategies because they act as a leader, mentor, adviser and patron simultaneously for their team. Supervisors also have a critical role in implementing TQM specific features such as quality circles. However, striving toward TQM strengthens the role of supervisors but it also had a negative effect in terms of increased stress. TQM implies that supervisors are the main responsible for quality and leadership effectiveness, placing that way an additional physical and psychological cargo on them.

The behavior of the immediate or direct supervisor is one of the major factors when it comes to employee satisfaction. Various studies have shown that employee satisfaction increases when the immediate supervisor full of understanding and friendly to everyone, showing equal interest in all, everyone listened, etc. According to Čatović and Omanović (1999, p. 217) each person in a supervisor role should try to act as a coach and teacher, not a judge or inspector. It is this type of supervisors that has far happier working teams compared to other.

It often happens that people who spend their working time solving everyday operational problems do not get any credit for their work and that supervisors sometimes take the

deservedness of workers and announce it as personnel success. Such cases just can degenerate much larger and causes more complex issues. In these situations employees are not goal oriented, have a constant performance decrease and sometimes ignore problems until a point when they become insoluble. On the other hand, leaders often ask their employees to solve problems as they arise.

Janssen and Yperen (2004, p. 368) developed and tested the idea that goal orientations affect how employees develop and maintain social exchanges with their supervisors. They used data from 170 employees of a Dutch organization and the main findings are that the quality of leader and member exchange mediated positive relations between a mastery focus and leader-rated in-role job performance, leader-rated innovative job performance, and job satisfaction. Contrary to this, performance focus was in a negative relationship or with no effect to those outcomes. From this it can be concluded that workers with stronger mastery focus are more efficient because they strive to develop higher quality exchanges with their supervisors.

From all this follows that the role of supervisors as the main link in the chain that binds the management and employees is of high importance for successful implementation of total quality. Organizations that implement TQM must constantly make changes and improve processes, which is impossible without adequate manpower for it indicating that the mentioned chain has to meet its expectations.

To measure a supervisor's role in quality improvement efforts of an organization, the following eight scales were identified from organizational behavior, human resource management and TQM literature (Golhar et al., 1997, p. 558):

1. top management commitment to quality
2. quality training
3. top management encouragement and support
4. supervisors' job-related tension
5. supervisors' satisfaction
6. supervisors' participation in quality efforts
7. supervisor-worker collaboration
8. quality of manufacturing processes and products.

Top management commitment to quality is crucial for TQM. Top management must establish values, objectives and systems which are able to meet customer needs and enhance overall performance. Commitment to quality should be demonstrated by ensuring proper human, financial and technical resources for a quality oriented business approach. Another important responsibility of top management is to communicate and transfer their quality efforts to supervisors. This responsibility implies facilitating **quality training**. Supervisors are involved in quality trainings to decrease barriers between employees and management and thus increasing the quality of the training and creating quality awareness at every level.

Employees can in this way get more quality information and gain new abilities applicable on their job. Hence, **top managements' encouragement and support** to supervisors to utilize their experience and abilities to improve quality may attest crucial. Encouragement and support is provided through supervisors' role definition, empowerment, project involvement and utilization of his expert opinions in employee suggestion assessments. However, these additional quality upgrade responsibilities for supervisors may also cause an enhanced **job-related tension** in terms of his physical and mental health.

Supervisors' satisfaction influences his attitudes and enthusiasm regarding his new quality objectives. Supervisors' satisfaction could be converted into quality commitment, thus increasing his degree **of participation in quality efforts**. A satisfied supervisor also tends to cooperate more closely with his employees to resolve quality issues. Effective **worker-supervisor collaboration** increases employees' quality awareness, their ability to independently resolve quality issues and the overall relation health between supervisors and employees. Finally, **quality of manufacturing processes and products** can be evaluated based on customers' feedback, share of defect products, rejects, scraps, reworks, production lead time and work-in-process inventory.

TQM organizations show a sincere commitment to quality through their support for supervisors. In return, the supervisors show an increased commitment, are satisfied with their roles, and participate actively in the quality movement in TQM organizations. Thus, TQM organizations recognize that supervisors play a crucial role in implementing quality improvement strategies. They are successful in developing human resource capital and improved quality of products and processes.

3.7 Conditions for success

According to Laszlo (1999, p. 231) the crucial element for a successful TQM application lies within the general statement that “quality assurance means assurance of quality and quality management means the quality of management”. Quality assurance refers to operations regarding provided products and services and the domain of quality management includes every employee and every activity. Since management leads employees’ operations, their process must also be adapted to the general TQM program. Management implies more than just directing employees’ operations; it also includes effective leadership, quality commitment, fostering a quality culture in accordance with the vision and mission and must ensure human, financial and technological resources required for a proper implementation. Without these elements, no organization can effectively provide quality in the long run.

Some managers stated that TQM is similar to quality assurance but has a more proactive approach. However, that is just one of many facets that differs these two. Quality assurance is focused only on ensuring the quality of products and services but the domain of TQM expands throughout every sphere of the organization. The TQM approach must be

incorporated in common organizational beliefs so that continuous improvement becomes the new lifestyle and TQM tools the “weapon of choice” for solving issues.

Many researchers analyzed the crucial elements for a successful TQM application, its outcomes, techniques and tools which are the most appropriate for upgrading quality, etc. We can conclude that there is no universal model for a successful TQM program because TQM is a set of interlinked elements, key factors, practices, techniques and tools (Tari, 2005, p. 191).

According to Tari et al. (2005, p. 186) TQM represents much more than just several critical factors. TQM implies other elements, like quality tools and techniques. He divided these elements into two spheres: the management and technical system, namely the soft and hard elements. In order to successfully apply TQM, a manager must pay attention on these soft as well as hard elements. Therefore, TQM cannot be applied without using quality management methods, and when management becomes conscious of these TQM elements, operations can be established for their implementation. Such operations include the practices, tools and techniques, nominating responsible leaders and defining deadlines, in order to ensure a convenient application.

As stated before, a proper TQM application implies changes in overall organizational beliefs and an introduction of quality trainings. Such application results with a combination of an excellent quality oriented mindset and methods which lead to higher efficiency and finally to improved product quality. Nevertheless, in order to start applying TQM in this manner, an important precondition is to clearly understand all facets included in the process.

Laszlo (1999, p. 231) presented three crucial elements for a successful TQM application and named them “the three C’s of success”: **commitment**, **culture** and **cost**. These elements clearly have a great impact on employees’ performance and responsibilities and can positively influence employee behavior and finally the product quality. More importantly, organizations must understand that without these elements, the application of TQM is probably doomed to failure and not sustainable. In the following part of my thesis I will therefore more closely explain these three elements.

3.7.1 Commitment

TQM is a very complex approach. Managers easily get attracted by TQM but in the long run it is very hard to retain management’s dedication to it and even more hard to retain their support. TQM implies certain responsibilities of management to stakeholders (customers, workforce, shareholders, suppliers and society) as well as to possess leadership skills to motivate the environment to get involved in the TQM vision and starts to operate accordingly. However, if there is a lack of management’s commitment and involvement, TQM will probably collapse.

Therefore, **commitment from the top** is a very important condition for success. It is crucial that TQM is initiated and further led by top management (Marolia, 2007). Top management is under responsibility for strategy establishment in accordance with organizational goals and must define priorities in order to accomplish these goals. Therefore, obtaining the endorsement and dedication of top management is the starting point of applying a convenient TQM environment (Laszlo, 1999, p. 233).

Organizations must show **commitment of organizational resources**. Commitment must be provided for both, proposals and accomplishments on group and individual level (Marolia, 2007).

Commitment of management time is also a very important factor. A simple initiation by management to apply TQM is not enough. Management must become TQM leaders through proactive involvement and clear sponsorship of the TQM process.

3.7.2 Culture

Laszlo (1999, p. 234) explained that to ensure success, the basic principles of TQM must be spread on every level of the organization. Collaboration and teamwork must become the new way of working. Decision making based on facts, respect for all workers, fostering innovations, and focus on improvement are the features of a learning organization.

While following the way of **continuous improvement**, organizations must understand that this is an endless process and if they would stop improving, the competition will overtake them. If the organization is not the market leader, prospective chances will not happen until competition overcomes that state, leaving only prey (Pekar, 1995, p. 21).

Organizations must learn to **deal with changes**. Every organization which wants their employees seeking for methods to improve the process must also establish a culture which is flexible enough to continuously adopt changes. TQM is based on the approach of continuously seeking for methods to improve the process and quality, and dealing with changes must therefore become the new lifestyle within the organization. The readiness of employees to adopt quality is a crucial precondition for TQM application and their extent of willingness to accept these quality changes defines the speed of accomplishing this objective (Laszlo, 1999, p. 236).

Management and the workforce will have to be educated in the new methods, including **teamwork and mutual respect** (Winston, 1997, p. 39). These ways of doing business must involve every sphere of the organizational culture. Founding the organizational culture on these two philosophies enables organizations the opportunity to profit from joined efforts and complementary strengths of employees operating to achieve a common objective. Teamwork is based on recognizing and understanding the main business objectives of the organization by each individual as well as objectives referred to particular activities. A clear purpose is crucial

for proper teamwork and helps bypassing priority obscurities and workflow problems. In order to be successful in the long run, mutual respect among the team members must exist. Fostering an organizational culture based on mutual respect is of great importance for a successful TQM application.

Another very important characteristic of great TQM organizations is an **analytic approach** to all possible issues. This enables organizations to design and initiate particular improvement projects, assess the outcomes and ensure a successful TQM application.

3.7.3 Cost

Reid and Saners (2005, p. 140) stated that the reason quality has become so featured is that organizations realized the “high cost of poor quality”. TQM strikes every facet of organizations and has significant consequences on costs. The most evident consequence happens when low quality results with unsatisfied customers and ultimately creates business losses. From this we can conclude that quality has a very important cost-saving role.

In order to be successful, TQM organizations must foster a **value-added approach**. Quality and finance must be approached in a manner to minimize deficiencies and waste. TQM should implant a value-added stance in workforce and encourage them to inspect their own activities in order to assess what advantages they are providing to customers. This additionally strengthens customer focus and clarifies process priorities aligning them with organizational objectives to enhance efficiency and upgrade quality and customer satisfaction (Laszlo, 1999, p. 237).

Another important part of TQM is the **justification of TQM projects**. Every TQM project must be assessed to determine its importance to organizational objectives and profitability. It must be clarified that TQM must resist to financial surveillance as a profitable investment. Only in this case TQM can become sustainable.

TQM programs must also be **justified**. TQM implies directions for operational management which, when adequately applied, can enhance internal processes and activities focused on quality upgrade. TQM also implies investments in human resource management and time; upgrades in efficiency and quality levels which will ultimately result with a convenient return. Furthermore, the combination of continuous improvement, a quality oriented mindset and improved operating method provide organizations the opportunity to be more dynamic, flexible and competitive.

Summarizing the above mentioned, we can conclude that a proper TQM application implies changes in overall organizational beliefs and an introduction of quality trainings. In TQM “doing things right” is not enough. TQM organizations must continuously seek for ways of doing things better. Dealing with such changes must therefore become the new lifestyle within the organization. The readiness of employees to adopt quality is a crucial precondition

for TQM application and their extent of willingness to accept these quality changes defines the speed of accomplishing this objective. TQM enables organizations through teamwork and mutual respect the opportunity to profit from joined efforts and complementary strengths of employees operating to achieve a common objective. A characteristic of great TQM organizations is an analytic approach to all possible issues enabling organizations that way to design and initiate particular improvement projects. The value-added approach additionally strengthens customer focus and highlights process priorities aligning them with organizational objectives to enhance efficiency and upgrade quality and customer satisfaction. Every TQM project must be assessed to determine its importance to organizational objectives and profitability. TQM implies directions for operational management which, when adequately applied, can enhance internal processes and activities focused on quality upgrade. Investments in training and time in combination with improved operating methods provide organizations the opportunity to be more dynamic, flexible and competitive.

CONCLUSION

Quality management is one of the most important tasks of modern management whose importance increases due to increasingly high competition in the market. Only those organizations that nurture and develop a good working environment and treat their employees and associates good can expect high quality of its products and services, thus ensuring customer satisfaction and lasting secure future.

It is important to know that some gurus of TQM believe that TQM has universal supremacies like increasing competition between organizations and at the same time enabling and empowering the workforce delegating responsibilities to those who perform the tasks. Today organizations, regardless of size, face demands like profitability, quality, technology and sustainable development. In order to turn these constant pressures into a competitive advantage, organizations need to systematically maintain and improve their business.

TQM is a management system focused on continuous improvement of products or services in order to build high levels of customer satisfaction and increase their loyalty to the organization. TQM approach to management involves the development of awareness of quality in all organizational activities.

Quality systems like ISO 9000 alone are no longer sufficient to meet the increasing demands of customers (price, delivery, utility for the customer) and other right holder, but as a starting point necessary for the rapid development of TQM. It is important to point out that ISO 9000 standards are not designed to provide solutions. They just give the requirements to be complied with and guidelines that should be followed in order to provide a quality system. These systems are intended for industrial, commercial and government organizations, with the aim of providing them with security to satisfy the requirements and needs of customers, to maintain good economic performance and to develop more effective and efficient systems.

Changes on market happen faster and faster and are often difficult to predict and the speed of action is becoming increasingly important for success. This means that organizations must as soon and as many as possible apply the latest approaches, models and tools. This is especially important for organizations that are exporting to demanding markets.

TQM clearly emphasizes the essentiality of human resource management in quality management, pointing out the importance of effective leadership, and development and management of human resource factors. Organizations initiate process improvements within the human resource division supporting the strategic goals of quality and aligning them with TQM principles.

To reach and successfully implement TQM an organization must change the working manners and habits of the employees. Various factors related to behavior and attitudes are essential for achieving these goals: job satisfaction, motivation and commitment to organizational goals. For employees which work in a TQM organization quality must become a culture at work as well as an everyday routine. Furthermore, it is essential to realize that TQM is a continuous improvement process that takes a long time and requires substantial human and financial resources. It is not a static process, it is very dynamical.

TQM provides the opportunity to benefit from the synergy resulting from various people working toward a common goal and organizations which have successfully implemented TQM have the ability to turn the diversity among its employees into a complimentary strength through teamwork and mutual respect.

Employee involvement contributes to various aspects of quality management and is a prerequisite for TQM and other quality management programs. In order to get employees involved, management must embrace the new management philosophy and approach towards employees and employees should be empowered, more information should be provided to them, trainings should be manifested to improve their abilities and rewards should be introduced.

The role of management in establishing a quality system is irreplaceable. This role is reflected in both, determining the approach for establishing a quality system and proofing commitment to the development and improvement of quality management system, as well as during the execution of the project for establishment of a quality system.

The authority of top management and a formal source of power must be focused on the successful implementation of the project by establishing a quality system. In the absence of this authority at any stage of the project, the project's success becomes questionable. Any interruption of the project is the worst possible solution and with every new attempt it will be a lot harder than the first time.

The initiation of the top management is not enough to establish a quality system, but also actively participating in all stages of the project. In doing so, we must not forget that the project during all its phases passes through conflict areas. Conflict management thus becomes one of the basic prerequisites for the success of the project and the organization in whole.

Management can and should delegate some authority and responsibility for the project to person authorized for quality (quality manager), but cannot rid themselves of responsibility for the project. Management must show that they are serious about quality and its implementation and if they fail employees won't take it serious and the organization is doomed even before the improving process. Middle managers have a very important role, and that is to communicate all information regarding the quality in an understandable way to employees so they can give their best.

Management and leadership must go hand in hand. They are not the same thing but they are necessarily linked, complementary and a key for a successful TQM organization. Effective leadership starts with the director's vision and develops into a strategy for implementation.

In order to become an effective leader, a manager must have clear beliefs and goals in terms of a clear mission, good strategy and plan, adequate management structure, critical success factors and core processes, continuous improvement, employee involvement and empowerment. They must tend to achieve excellence at their job. The vehicle for achieving excellence in leadership is TQM.

TQM organizations show a sincere commitment to quality through their support for supervisors. They recognized that supervisors play a crucial role in implementing quality improvement strategies. They are successful in developing human resource capital and contribute to improved quality of products and processes. Each person in a supervisor role should try to act as a coach and teacher, not a judge or inspector.

Successful implementation of a TQM program must include a recalibration of organization-wide thinking as well as training in quality assurance methods. The very essence and guiding spirit of TQM is a thirst for improvement that goes beyond the focus on doing things right and embraces looking for ways of doing things better - hence dealing with change needs to become a way of life within an organization that wants to adopt that philosophy. The readiness of employees to adopt quality is a crucial precondition for TQM and their extent of willingness to accept these quality changes defines the speed of accomplishing this objective.

In the future, we must not be guided by the idea that the quality of the organization is a thing for "Quality experts" and that it depends on the performance of each individual in the organization. Quality must become a "way of life" of each individual.

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