

The role of the integration approach of Total Quality Management in the operational management of organizations

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Abstract

Complete quality management as a modern concept is starting to be implemented in organizations in the Republic of North Macedonia. Its implementation is based on the perceptions of the positive effects it offers. This concept enables visible changes in organizations, while offering several organizational forms of application. The organizational structure is influenced by several factors that will be discussed later, as well as competition as an element for achieving structural changes in organizations. The analytical concept of the integration approach covers the definition of the same, in the direction of gaining a competitive advantage. The organizational culture should not be forgotten when introducing TQM.

The complex, dynamic and changing environment, in which every organization achieves the goals of its functioning, imposes the need to introduce new concepts of work to gain a competitive advantage in every business.

The introduction and use of full quality management in organizations is a very current and complex category, which in the future will provide an incentive for its implementation in order to achieve a competitive advantage. The effects of total quality management are only indicators for further research.

Keywords: quality management, total quality management, integration gap, operational management, competitive advantage

1.1. Changes in organizations when introducing total quality management

Complete quality management represents a change in terms of the way of doing things, but also in the relationship between and with employees, the relationship with customers and the relationship with the environment. With the application of total quality management occur:¹

¹ Kelly, J., „Total quality Management”, Potecon, Zagreb, 1997, str. 38-49

- technological changes;
- structural changes;
- changes among employees and
- changes to products and services

Technological changes occur in production technologies, means of production and procedures as well as in other technologies that assist work functions in the organization.

Structural changes are changes that occur in terms of the organizational structure in the organization as a whole or changes in its separate parts in organizational units, plants, etc.

Employee turnover occurs when people are the main cause of operational inefficiency in the organization. And that implies changes in the values, skills and attitudes of each employee.

In addition to the changes in the employees, there is also a change in the organizational culture as a result of the application of the TQM process. Changing the organizational culture implies new norms, values and beliefs about how the organization should function. Product/service changes also occur. There are several reasons that lead to changes in products and services, among which is the loss of interest among buyers for a certain product/service. In the event that there is disinterest due to the poor quality of the product/service, then TQM is an inevitable necessity and an integral part of the process to restore trust in products/services. It can rightly be argued that with the application of TQM important organizational changes and changes in the organizational culture occur. It is for this reason that organizational culture should be understood, which represents a set of opinions, beliefs and "normal" behavior inside the organization. With the introduction of TQM, the organizational culture changes, the organizational roles also change, and the number of management levels can be reduced. Most of the time, the middle and lower level of management no longer have the task of supervising and controlling, but are in charge of coordinating and leading the workers who perform the set tasks. By introducing TQM, greater efficiency is achieved. Employees should know that TQM has no end and is constantly being improved. Managing the organizational changes caused by the introduction of TQM is essentially a critical component of the implementation itself. So, the main task of managers at all levels when deciding to apply TQM in the organization is to convince employees that they should abandon the previous way and focus on a new way of performing tasks and activities.

Organizational changes go through three stages:²

1. current state (Status quo) – state of the organization before implementing TQM;

² Ibid,

2. transition - essentially represents a point in the change process where employees break away from the status quo. They no longer have the previous behavior, but they have not yet fully adopted the new way of working;

3. future state is the point when the organizational changes are already applied and fully implemented in the organization and its complete structure.

It is understandable that employees will initially show disagreement, because it will not be clear to them how costs or administration will be reduced, just as it will not be entirely clear to them how better results will be achieved. That is why, at the very beginning of the implementation of the TQM system, it is desirable for the employees to perceive the benefit of its introduction, but also to see the need for quality improvement.

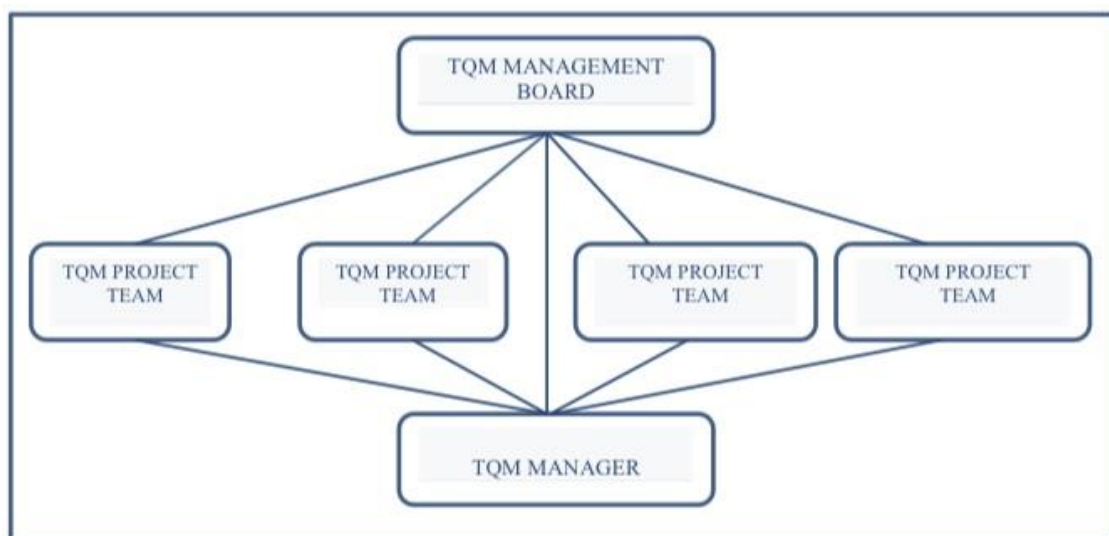
1.2. Modernization of organizations and models of TQM

Innovative organization is achieved by applying the TQM system. This system is different in each organization and directly depends on its size. Managers have the task of defining the goals, requirements for continuous improvement and providing full support in the development of the TQM system in the organization. There are many forms of TQM organization. Namely, three models of the TQM system will be shown, namely:

Organizational model No. 1

The organization is composed of TQM management board, TQM management and TQM project teams. Here's how it looks pictorially:

Picture no. 1: Organizational model of TQM no. 1



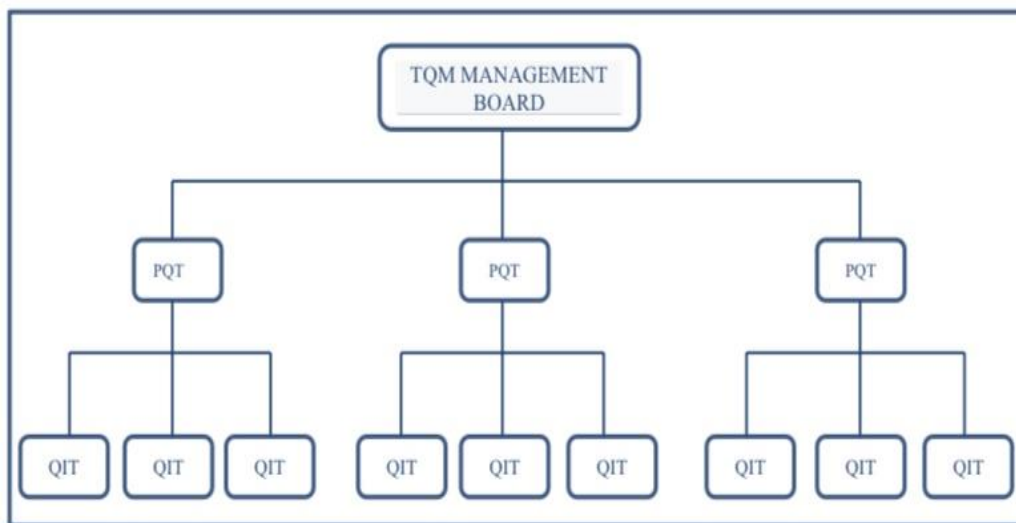
Source: Извор: Kelly, J., „Total quality Management”, Potecon, Zagreb, 1997, str. 38-49

It can be seen from the figure that each TQM project team is connected to the TQM steering committee and the TQM manager.

Organizational model of TQM No. 2

In this case, the organization is composed of: a TQM management board, a process quality team (PQT- Process Quality Teams) and a team in charge of quality improvement (QIT- Quality Improvement Teams), (see picture no. 2)

Figure no. 2: Organizational model of TQM no. 2



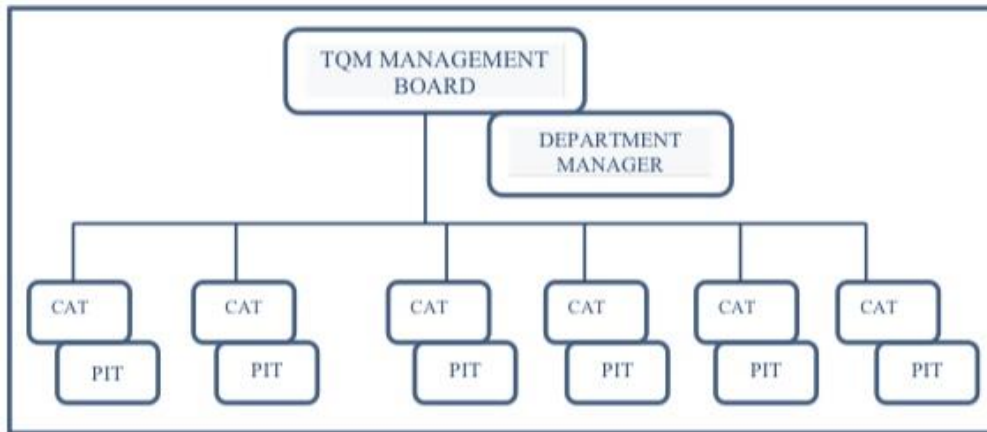
Source: Kelly, J., „Total quality Management”, Potecon, Zagreb, 1997, str. 38-49

The different teams are linked by horizontal and vertical links, which means that each team in charge of quality improvement is linked to a corresponding process quality team, while all process quality teams are linked to the TQM steering committee. Those connections should ensure that each member properly understands the mission, vision, goals and stimulate the improvement process of the entire organization.

Organizational model of TQM No. 3

This TQM model includes: TQM management board (described in more detail in model no. 1), corrective action team (CATs - Corrective Action Teams) and process improvement team (PITs - Process Improvement Teams), (see picture no. 3).

Figure no. 3: Organizational model of TQM no. 3



Source: Kelly, J., „Total quality Management”, Potecon, Zagreb, 1997, str. 38-49

Once the corrective action team (CAT) controls the process, the improvement team (PIT) continuously improves and maintains it to achieve the desired end results. Both teams are connected to the TQM steering committee, which is in cooperation with the manager of the respective department.

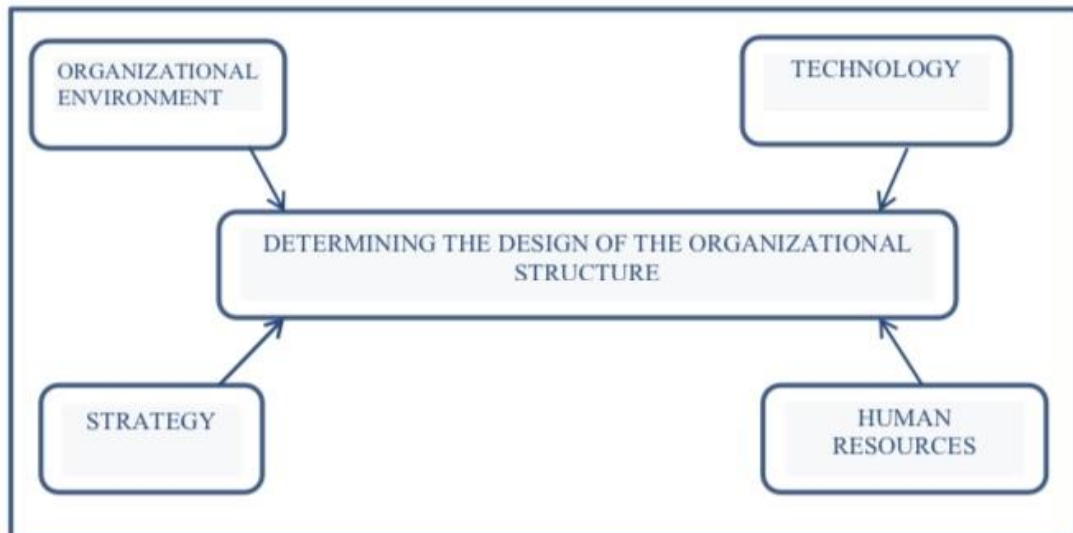
This model is a condition for implementing the statistical process control method. The corrective action team consists of 5-8 employees who know the processes best. In that team there are also representatives from the departments with the task of providing support during the work of the process.

Given that each of the three organizational models of TQM has certain specifics, organizations, depending on their size and nature of operations, use one of them that best suits them.

1.3. Factors affecting structural change

Significant determinants of the type of organizational structure are the following four factors: the nature of the organizational environment, the type of strategy applied by the organization, technology (especially information technology), as well as the characteristics of organizational human resources (see Figure 4).

Figure 4: Factors affecting the organizational structure



Source: R. Duncan, What is the Right Organizational Design? *Organizational Dynamics*, Winter 1979, p. 59-80

The organizational environment, strategy, technology and human resources have a direct impact on determining the design of the organizational structure.

The organizational environment as a primary factor greatly influences the organizational structure. Therefore, to speed up decision-making and communication, and to facilitate the provision of resources, managers make choices that result in more flexible structures and entrepreneurial cultures.³

If the external environment is stable, uncertainty is low, resources are readily available, and less coordination and communication between people and functions is required. In this situation, managers prefer to make decisions within a clearly defined hierarchy of authority, apply detailed rules, standard operating procedures, and restrictive norms, which guide and manage the activities of employees - mechanical work.⁴

In every organization, when a strategy is chosen, the right means for its implementation must also be chosen. Different strategies also require the application of different organizational structures and cultures. For example, a differentiation strategy, which is intended to increase the value perceived by consumers in organizational goods and services, usually succeeds best in a flexible structure, with a culture that values innovation; flexibility facilitates a differentiation strategy because managers can quickly develop new or innovative products—an activity that requires extensive collaboration between functions or departments. In contrast, a low-cost strategy, which aims to reduce costs in all functions, thrives best in a more formal structure with

³ T. Burns, G.R. Stalker, *The Management of innovation*, London, 1966

⁴ Gareth R. Jones, Jenifer M. George, „Современ менеджмент”, Глобал комуникации, 2008, стр. 386

more conservative norms, which give managers more control over activities in different organizational sectors.⁵

In addition, at the corporate level, when managers decide to expand the scope of organizational activities through vertical integration or diversification, they should design a flexible structure to ensure sufficient coordination between different business sectors.⁶

International expansion and operations in many different countries challenge managers to create organizational structures that allow organizations to be globally flexible.⁷

The combination of knowledge, skills, machines and computers used to design, produce and distribute goods and services constitutes technology. The more complicated the technology applied, the more difficult it is to regulate and control, as unexpected events can occur. Therefore, the more complicated the technology, the greater the need for a flexible structure and a progressive culture, in order to be able to respond to unexpected situations and give them the freedom to discover new solutions to the problems that arise. Conversely, the more routine the technology, the more appropriate the formal structure, because the tasks are simple and because there are predetermined steps for producing goods and services.

Human resources are the last significant factor influencing the choice of organizational structure. The more skilled the workforce and the greater the number of employees working together or in groups or teams, the more likely it is to employ a flexible, decentralized structure that emphasizes employee autonomy and self-control. Therefore, managers must pay more attention to the required workforce and the complexity and type of work performed by employees.

The organizational external environment, strategy, technology and human resources are factors that managers should take into account when designing the structure in the enterprise.

1.4. Competition as an element for achieving structural changes

New working conditions require new approaches in the study of organization management, as well as new approaches in practice.⁸

Market, dynamic changes have the most immediate impact on the way of thinking in terms of management of organizations. Porter believes that competitive advantage is created through the value that the organization needs to create for its customers, which exceeds the costs incurred for

⁵ D. Miller, Strategy Making and Structure: Analysis and Implications for Performance, *Academy of management Journal* 30, p. 7-32.

⁶ A. D. Chandler, *Strategy and Structure* (Cambridge, MA: MIT Press, 1962).

⁷ J. Stopford, L. Wells, *Managing the Multinational Enterprise* (London: Longman, 1972).

⁸ Peters, T., Waterman, R. Jr., *U potrazi za vrhunskim*, Global, Novi Sad, 1996, str. 63

its creation.⁹ According to Kotler, any new technology for an organization represents a force of creative destruction because the application of new technological solutions is the greatest danger, not other organizations.¹⁰

Information and communication technology minimizes the time it takes to transmit information. The result is a rapid flow of information that brings the sender closer to the receiver.

Information has its own value, and knowledge turns into market power. Transparency is based on the transmission of information from the informed to the uninformed.¹¹

The five forces of competition (entry of new competitors, threat of substitutes, power of buyers, bargaining power of suppliers, and rivalry of existing competitors) reflect the fact that competition in a sector exceeds existing entrants. Depending on the kind of competition organizations face, they should aim for their own structural changes resulting from a realistic assessment of their strengths and weaknesses, advantages and threats (SWOT-analysis), each in its sector.

Different forces stand out in determining the form of competition in each sector. Accordingly, organizations must make structural changes arising from the five forces of competitiveness.

Innovations that occur under the influence of information technologies allow for increased efficiency. This means that they contribute to reducing the cost of communication, it is increased, the degree of reliability in decision-making is also increased, and data processing is faster and cheaper. The integration of information technology represents one of the conditions for structural changes in organizations, for gaining a competitive advantage.

Management in the economy, striving to achieve a competitive advantage, faces several challenges. First of all, there is the reorganization and reengineering, followed by restyling, redefining one's own goals and seeking new ones, and thus refocusing, revaluation, revitalization and revision.¹²

If an organization wants to establish, maintain and develop a competitive advantage, it must be willing to learn. The willingness of the organization to learn in the first place implies that it must follow the developments not only in the market, but also in science, in order to achieve operational excellence. The organization must monitor not only the direct competition, but also all other organizations that are the best in their fields, even though they are not direct competitors.

The modern working environment is slowly but surely approaching the phenomenon of technological parity, which means that the assumption is increasingly true: very few products,

⁹ Porter, M., *Konkurentska prednost*, Asee, Novi Sad, 2007, str. 22

¹⁰ Kotler, P., *Marketing od A do Z*, Adizes, Novi Sad, 2004, str. 156

¹¹ Goleman, D., *Ekoloshka inteligencija, Geopoetika*, Beograd, 2010, str. 58

¹² Tisen, R., Andrisen, D., Depre, F. L., *Dividenda znanja*, Adizes, Novi Sad, 2006, str. 159

technologies, services, knowledge, areas of knowledge or procedures are available to all interested groups around the world.¹³ Techno-economic parity assumes that the basic preconditions for operation will equalize rapidly, and this will result in the victory of the best, regardless of where it comes from.

Today, there is more and more talk about redefining the management of the organization. Tisen, Andrisen and Depre believe that the new logic of the organization is as follows:¹⁴ dynamic, willing to learn, information rich, global, large or small, product or service oriented, team oriented, involvement oriented, networked, customer oriented. All this requires structural changes that will enable organizations to be more competitive. Riderstrale and Nordstrom are of the opinion that the new form of organization succeeds thanks to the changing circumstances and unpredictability of today's times.¹⁵ Basic characteristics of such a new organization are: focus, influence, innovation, heterarchy.

Market research, that is, the collection of objective and quality information, is the first step an organization should take when formulating its strategy.

Porter defines focus as one of the generic strategies.¹⁶ The next aspect of an organization is the influence that can be: internal, industrial and international.¹⁷ Practice shows that no organization can secure a noticeable position in the market or maintain an already secured one without having a powerful management. In head-to-head competition, in the long run, it's always skill that pays off, not capital.¹⁸

Each organization must use its capabilities and each individual as a carrier of capabilities to enter new market segments. As far as collective goals are concerned, there are rules that boil down to: being aware of your impacts, supporting improvements and sharing the knowledge gained.¹⁹ The new organization is under the influence of global competition and therefore must be clearly determined towards global action. The modern organization must be innovative because innovation is the basis for business development. The degree of innovation affects the acquisition of a competitive advantage, and financial success in the market implies complete innovation. An innovation can be based on: strategy, speed, brainpower, consumer voice, and a combination of homogeneity and heterogeneity.²⁰ The modern organization must be heterarchic, that is, it should represent a system of several different hierarchies.

¹³ Riderstrale, J., Nordstrom, K., Funky Business, Plato, Beograd, 2005, str. 40

¹⁴ Tisen, R., Andrisen, D., Depre, F. L., Dividenda znanja, Adizes, Novi Sad, 2006, str. 158

¹⁵ Riderstrale, J., Nordstrom, K., Funky Business, Plato, Beograd, 2005, str. 150

¹⁶ Porter, M., Konkurentska prednost, Asee, Novi Sad, 2007, str. 34

¹⁷ Riderstrale, J., Nordstrom, K., Funky Business, Plato, Beograd, 2004, str. 164

¹⁸ Rejnert, E., Spontani kaos, Cogoja Stampa, Beograd, 2010, str. 105

¹⁹ Goleman, D., Ekoloshka inteligencija, Geopoetika, Beograd, 2010, str. 42

²⁰ Riderstrale, J., Nordstrom, K., Funky Business, Plato, Beograd, 2004, str. 175

Riederstall and Nordström believe that a modern organization should be based on seven principles: to be smaller, flatter, temporary, horizontal, circular, open and measurable.²¹ Similarity does not buy success, just as competitive advantage cannot be bought.²² Knowledge is the basis of modern management where the ultimate goal is innovation and the re-energization of the organization. Reenergization represents the creation of a new structure of an organization with creative energy that will enable more efficient operation, based on the application of knowledge and modern management methods and techniques.

²¹ Ibid, p.195

²² Riderstrale, J., Nordstrom, K., Karaoke Kapitalizam, Plato, Beograd, 2006, str. 209

Conclusion

The management of the organization must proactively change and synchronize the subsystems that will make it stronger. A sufficient condition for creating a competitive advantage is re-energization.

According to the needs of cooperation with users, suppliers and competitors, the organization must be open and ready for networking. In the modern organization, all processes should be measurable, and control should be less direct. The new economic logic is a feature of modern operations.

The research in the paper showed that the integration approach of total quality management as a modern concept of working in organizations, represents an opportunity and a challenge for them, because it is essentially a concept whose application is not "overnight", but a gradual, systematic and continuous process with the aim achieving long-term development and progress in operations and successful performance on the market that will lead to the acquisition of a competitive advantage. During the process of applying the integration approach of total quality management in the operations of organizations, a strategic framework should be clearly and comprehensibly created, which will enable the acquisition of a competitive advantage.

If the organizations in the Republic of Macedonia accept and integrate the new concept of TQM in their operations and realize its benefits in a timely manner, they will be able to perform successfully in foreign markets, gaining a competitive advantage.

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