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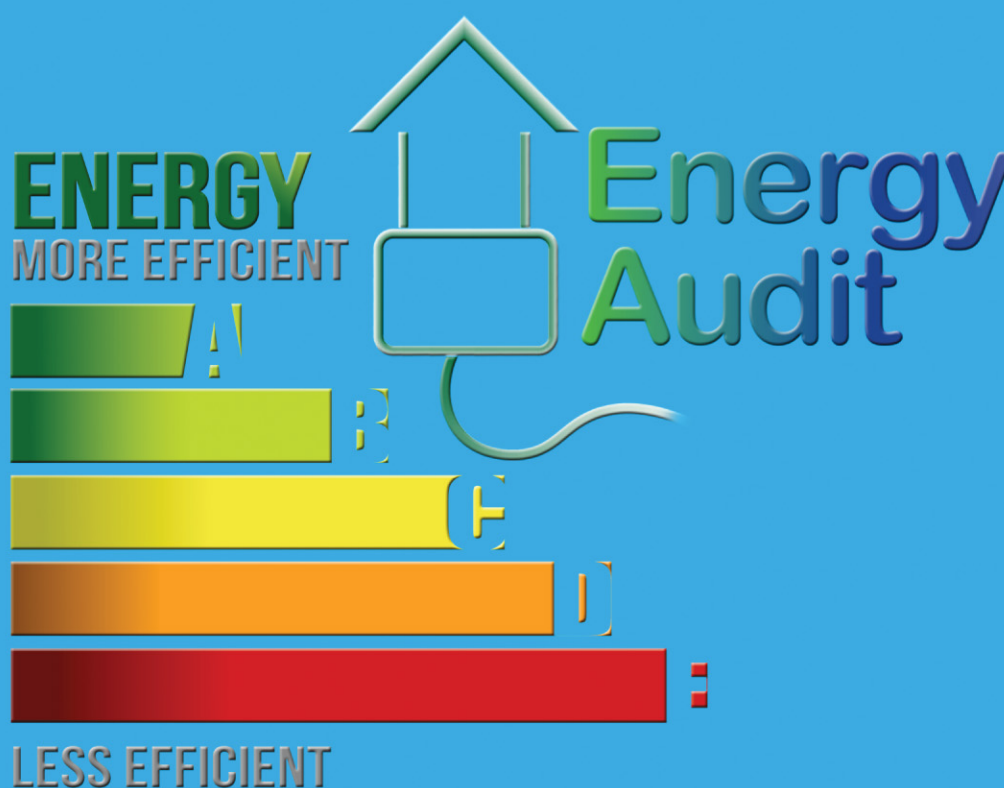
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QUALITY

Journal of Management Systems

Managementul energiei

Un exemplu generic de analiză energetică, conform cerințelor standardului ISO 50001



Managementul calității

Riscurile generate de Sistemul de Management al Calității

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Calculul Overall Equipment Efficiency pentru decizii manageriale. O versiune șocantă a OEE și performanța corectă

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Certificarea – impuls al afacerii profitabile

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Implicarea oamenilor – secretul succesului în afaceri. Impactul naturii umane asupra afacerii

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Certificarea Sistemului de Management al Calității și procesul de îmbunătățire continuă. Exemplul unei companii de formare profesională din Germania

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Analysis of the Current Conditions in the Macedonian Companies concerning the Quality of Products, Services and Processes

Elizabeta MITREVA*, Nako TASKOV**, Vineta SREBRENKOSKA***, Oliver FILIPOSKI****,
Ilija LAZAREVSKI*****, Ruzica JOVANOVIĆ-MALINOVSKA*****

Abstract

The changes in the environment and in the companies themselves on one hand, and the development of the organization on the other hand, can be complementary factors in the company. This can be achieved only if a dynamic process of internal changes is set in the company, which will respond to the outside changes and it will obtain a competence on the market. One of the biggest changes that the new TQM strategy (Total Quality Management) seeks, concerning the Macedonian companies, is a change of the mentality and releasing the old habits and the transitional syndrome.

In this paper are shown the findings from the research concerning the approach toward quality in Macedonian companies, the abilities of the managers to create a good quality system and the directions that are needed for the development of the business processes, the products and the services.

The solution should be searched for in the development of the quality system through the application of the TQM strategy, the development of the staff, the introduction of studies about quality development and development of the processes very early even before the purchase of a new technology.

The reengineering of the business processes is essential, in order to design the processes in the direction of the satisfaction of the buyers/users, and also to have profitability.

Keywords: standardization, TQM system, reengineering, reengineering of the business processes, methodology.

1. Introduction

In the search for an active national strategy in Macedonia as an exit for the crises, we are faced with many questions in relation to the economic development of the country and if the country is ready to release the past or it is necessary to simultaneously accept new strategies that will create the way toward higher goals, performances and values.

Although it is always talked about a European concept of quality, there isn't a strength to fully accept and establish it in all departments of the companies. The need for accepting a new strategy in projecting the management system in Macedonian companies based on the TQM (Total Quality Management) philosophy requires a lot less money and time, but it can have the same or larger effects than the big investments in equipment.

The appearance of the ISO 9000 standard series and the philosophy of TQM (Total Quality Management) in the world has led to a massive application of this strategy: on one hand, it is represented as a market strategy for satisfying the needs of the buyers/users, and on the other hand it is represented as a superior style of work for the development of the competitiveness and the efficiency, decreasing the costs and a long-term advancement. The new approach toward the quality requires new activities on the educational field of the employees, introducing standardization of all the processes, introducing a statistical processed control over non-defect work, a new approach toward analysis of the costs. All of this requires a scientific, methodological and planned approach, being determined and systematic.

Also, this means a drastic change in the employees' behaviour, radical changes in the organization, clear definition of the rights, obligations and responsibilities of each individual.

The disintegration of the ideological values and the transition toward the capitalistic values and work standards in Macedonian caused different success in different companies. The degree of the success depended on the intensity of the conflicts, the business culture and the readiness of the country and the companies to accept the values of the developed countries and the European standards (Chepurnoska & Mitreva, (2008). Many companies in Macedonia have certified a quality system according to ISO 9001:2008, but many of them have failed to survive the transitional period.

Although there is constantly a talk about the European concept of quality, it hasn't been possible to truly establish it into all departments of the companies. It has been years with a talk about of the European standards that need to be translated, adjusted, given on public discussion and to be adopted, but it is still blocked.

Much more socially useful is the creation of a successful and a rich company. For that kind of achievement of the companies you are required not only individual entrepreneurship of the owners, but also a vision, mission and culture oriented toward satisfying the needs of all of the interested sides: buyers, employees, business partners and the association, because all of them are users of the achieved results.

2. Literature review

The standardization in the management system has become a key task for the managers and a priority question for the survival of organization in the 21st century (Mitreva & Filiposki, (2012a). Besides the owner of the organization, who is mainly

* Corresponding author, "Goce Delčev" University, Štip, Republic of Macedonia; E-mail: elizabeta.mitreva@ugd.edu.mk; elizabeta.mitreva@gmail.com.

** "Goce Delčev" University, Štip, Republic of Macedonia; E-mail: nako.taskov@ugd.edu.mk.

*** "Goce Delčev" University, Štip, Republic of Macedonia; E-mail: vineta.srebrenkoska@ugd.edu.mk.

**** "Goce Delčev" University, Štip, Republic of Macedonia; E-mail: oliver.filiposki@ugd.edu.mk.

***** "Goce Delčev" University, Štip, Republic of Macedonia; E-mail: ilija.lazarovski@ugd.edu.mk.

***** Standardization Institute of the Republic of Macedonia, Macedonia; E-mail: malinovska.ruzica@isrm.gov.mk.

interested in the profit and the faster multiplication of the ventured capital, the different sides such as: the buyers, the community, the employees and the deliverers also create pressure and make requests so that the organization adjusts its management system according to the various standards and with that to ensure that their expectations will be met. Many authors emphasize that the introduction of a quality system needs to help the companies surpass their problems.

According to the requests of ISO 9001:2015, the companies should not only work, but also think in a different way. This means that the reengineering in the companies is needed as a new radical way of thinking.

The implementation of ISO 9001 is for many companies the first step toward a TQM (Total Quality Management). The upgrade to ISO 9001:2015 with TQM strategy means improvement of the quality through an examination of the organizational processes, not only for defining, improving and designing the process, but also for the improvement of productivity and optimization of the costs (Casadesus & Gimenez, (2000). The advantages of the competitors often have the deciding role in the development and the usage of the system for quality provision.

The everyday practice of the employees shouldn't be only their self-control, but they also must be qualified to act preventively. They need to be responsible, to correct their mistakes and to discuss each discovered problem concerning the quality (Prodanovska & Mitreva, (2012). The application of the new TQM strategy means projecting a well documented system of quality that encompasses all of the business processes in the company and it represents an essential basis for a successful application of the statistic process control (SPC) and an efficient team work, which would not have been set in a case of a bad quality system (Mitreva, et. al., (2015b). In this way we have a guaranteed views of the top management, which are part of the quality politics and we also have a climate for an information basis with prospective development of the team work.

The design of the organizational structure is a task of the strategic management. It happens as a result of the conducting activities that determine the elements and the structure of the company; the tasks are delegated and connected to the elements as a whole. In terms of the conducted activities, we have an equilibrium is achieved between the wanted aims and the real possibilities in the company. In terms of the division, the number of the parts or the organizational units is being defined and their integration is being realized.

In order to describe the business process, we must respond to the following questions:

- Is the business process covered with documents, and how much?
- Is it in an interaction with the other processes and in what kind of an interaction?
- How will be the made document valorised?

When describing the informational flows, we get the answer to the question: Which information is needed for running the process and which information is produced by the process? (Mitreva & Filiposki, (2012a).

When describing the conductor, we answer the question: Who is responsible for the process described in the document?

When describing the authority, we get an answer to the question: Who is responsible for the contents of the document, which are the other standards and procedures, and what other parts are interested in the process and the document?

In terms of the control, we answer the following question: Under which conditions and limits is the document applicable?

During the construction of the standard operative procedure (SOP) which is the base for the quality system, it is essential that chiefly all of the conceptual elements of the organizational structure and the management are being considered. In describing the general concept, it is necessary to establish a connection among the directives, the procedures, the working conditions and the matrix of obligations and responsibilities as part of the defined hierarchy (Mitreva, et. al., 2014b).

The structure of the organization, the number and the span of the separate management levels influence the number of SOP and the number of directives. The difficulties in the application of the quality system appear as a result of the difference that exists between the organizational structure and the structure of the processes that are realized in it. The structure and the number of documents (SOP and directives) need to match the real need of the organization and their actual connection. In case of differences, it is necessary to obtain appropriate directives for their usage. The documents and the information need to answer the following questions: who should know, what should be known, why to know it, where and when it happens, to whom to be pass the information etc. (Mitreva & Filiposki, (2012a).

The application of the separate documents of the quality system (manual procedures or directives) depends on the business culture and the maturity of the top management and the employees, also on the working norms and values, the behaviour towards the quality and the consciousness of the employees. Herein, it is essential to make preparations (before the process of quality introduction) that concern the decreasing of the organizational momentum and resistance, and the creation of a suitable climate for accepting the changes. The educational programme is the first step in the realization of the aim (Chepujnoska & Mitreva, (2008).

3. Methods in the research and analyses of the results

A deep analysis was done concerning the problems of the Macedonian companies on the global market, which has imposed a global increase of the requests for creating even more strict rules. The analysis of the current situation of the Macedonian companies concerning the approach toward quality was conducted through an inquiry and a detailed analysis that was done according to the two following basis:

- To note the deviations of the subsystems which are part of the TQM system through the symptoms of the quality system's "health";
- To determine the "age" or i.e. the development of the companies based on the branches of the house of quality (from a young and underdeveloped system toward a mature and developed system or vice versa).

The quality house consists of four subsystems: the internal standardization, the quality methods and techniques, the education, motivation and analysis of the quality costs with the higher management at its top (Mitreva et. al., 2016a). The basis is in the measuring, the assessment, the analysis, the analysis and the comparison of quality vs. non-quality. The structure of the inquired companies – participants in the research, is give on picture 1 according to the economic field that they belong to (National classification of work fields, Art.2 – (The official gazette of RM, no147/08) and change and addition with the application of 01 January 2013). In the research participated 470 companies and institutions from different economic branches from the made register of 3000 Macedonian companies. The percentage of response is 15%, while the usual percentage is between 16-25% (Bohdanowicz 2005a; Jeong et al. 2003; Medina-Munoz and Garcíá-Falcón 2000). Participants of the research were representatives of those companies with projected and implemented quality systems, while the companies without that kind of system have the first or secondary level managers as representatives. The research was conducted in May, June and July 2016 (Figure 1).

The condition of the Macedonian companies was analyzed through the four levels of the quality house (standardization, methods and techniques for non-defective working, education, motivation and analysis of the quality costs). In this research are presented the results from the research concerning the application of the internal standardization and the provision of quality.

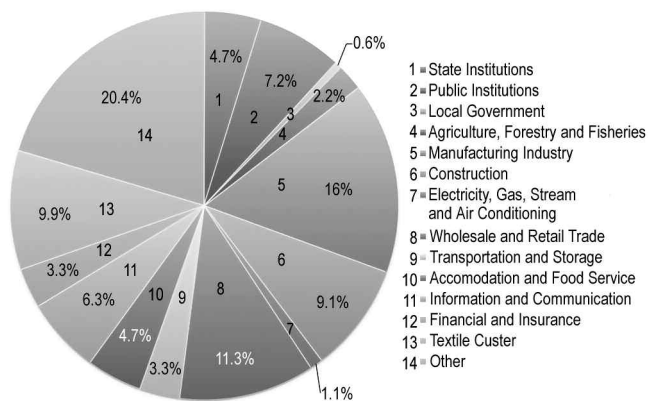


Figure 1. The companies – participants in the research shown in percentages according to the different economic fields

3.1. The application of the internal standardization and the quality provision in the Macedonian companies

If the introduced quality system is certified according to the ISO 9001:2015 standard, it means that the companies are aware of the quality values and are capable of conducting the system.

There is a strict determination of the top management for quality, a defined organizational structure, documentation for the quality system and trained staff. For that aim we pose the question: Do the Macedonian companies have an introduced quality system according to ISO 9001:2015 and what are the benefits of its application. The data that only 36.9% of the researched companies have this kind of a quality system is very alarming. The need to do the training following the international standards and the strategic relation to the western countries has imposed on certain managers and owners to implement a quality system (Mitrevska et. al., 2016b). Therefore the start of the quality system introduction is directly connected to the determination and the readiness of the top management, in order to improve its own quality of work and also to enable competition on the market. The companies which have certified the quality system according to ISO 9001:2015, are faced with the following question: "Where do they see the benefits of its implementation".

- 57% of the companies that have introduced a quality system note its benefits in the higher quality of their products/services, the decrease of total costs, and the satisfaction of the buyers/users;
- 38.5% of the participants aim to only have the ISO certificate without the need to use it in the company, to produce quality products/services, or to determine the business processes for the collaboration with the buyers and the partners all over the world;
- 4.5% of the companies – participants that have certified a quality system to provide quality of their products/services do not see the benefits, but note the unwanted costs and bureaucracy don't meet the desired advantages on the market and do not fulfill the requests of the ISO 9001 standards.

Those companies that already implement a system for the management of quality (unlike those who don't), realize the following benefits:

- obtain quality of the products/services that satisfy the needs of the buyers/users;
- improve the quality of the business processes;
- achieve compatibility between the strategic and the operative management in the companies;
- the management system according to the ISO 9001 standard represent the basis for constant advancement of quality with the application of the TQM strategy;

- to introduce order and discipline in the work.

Our analysis has shown that the companies that have only formally certified the system for quality provision to the products/services do not fulfill the needs of the ISO standards and do not have any benefits from the formal certified quality system. There is a large number of companies in our country that have a certified quality system according to ISO 9001, but haven't survived the transitional period as a result of the badly conducted transformation. The application of the quality system means a new organizational arrangement and takes a special place for the representative for the quality conduct.

In order to know the role of the representative for the quality conduct and the determination and readiness of the top management in relation to the established quality system, we ask the following question: "Where is the manager of quality in the organizational structure".

- 51.2% of the researched companies, that implement a system for quality provision, have responded that the representative for quality conducts is an employee that is responsible directly in front of the top management;
- 22% of the participants stated that they don't have a representative which means that the system of quality has been only formally certified;
- 15.4% of the companies that have introduced a quality system have responded that the place of the representative for quality conduct is in the executive board (the board of directors);
- 11.3% of them stated that the representative for quality serves the quality.

The application of the quality system means writing and using the standard operative procedures (SOP) and directives. During the writing of the document happens the change of the model and the contents which results in a changed organizational structure, a reengineering of the business processes, and all of that only for the adjustment of the company to the new requests. The changes concern the new way of grouping the organizational parts (units), the delegation of the obligations and the responsibility, the coordination and the communication. The condition of the companies concerning this question is shown:

- 44.1% from the participants that have an implemented system for quality provision responded that the work tasks, the obligations and the responsibilities are defined to the slightest details;
- 25.6% from the participants that have an implemented system for quality provision responded that the work tasks, the obligations and the responsibilities are defined in some cases;
- 20.1% from the participants that have an implemented system for quality provision responded that but they are not used into practice;
- 10.2% from the participants that have an implemented system for quality provision responded that the work tasks, the obligations and the responsibilities are not defined.

In order to identify if the Macedonian companies have an efficient quality system through the way of conducting the business processes (identifying, documenting and controlling) and the formed documentation for the efficiency of the system, we pose the following question: Do the employees expect standardized procedures for all the business processes from their employers:

- 47.7% of them have stated that they gain and expect precise commands only for complicated tasks or specific requests from the buyers/users;
- 29.5% of the researched companies have made SOP for all the parts in the business processes for which the employees also expect clear and precise commands for each activity;

- in 12.4% of the researched companies, *the employees manage on their own, without any expectations*;
- in 10.5% of the researched companies, *the employees receive precise commands for each situation*.

In order to have an effective and efficient system, it is important that the employees receive clear and precise SOP for every activity, and also to have evaluation criteria for the best results and not only for specific or complicated things, specific decisions or specific requests from the buyers/users. *This data shows the fact that in the Macedonian companies the system of quality is only formally certified as a need imposed upon the market without essentially regulating the company, nor defining the responsibilities and the obligation or even advancing the quality* (Mitreva, et. al., 2015a). The formal certification of ISO 9001:2015 standards doesn't provide the needed advantages of the market and doesn't fulfill the needs of the ISO standards.

The Macedonian managers who struggle with the survival of their business can hardly grasp the modern trends in the development of the management system based on the TQM strategy.

Nowadays, there are more and more owners and g of private companies who want to become skilled for working according to international standards and the strategic connection to the West. The half-hiring of the managers about the quality management cause losing of the gained market positions.

The analysis of who is in charge of the quality of the products/the services in the Macedonian companies has given the following results:

- in 56.2% of the researched companies have stated that *the quality services, the management and all the employees are in full charge of the quality*;
- While in 23.7% of the participants have stated that *nobody is in charge of the quality*;
- 15.7% of the researched companies have stated that *the quality services and the management are in charge of the quality*;
- and 4.4% of the researched companies have stated that *the quality services is in charge of the quality*.

After the analysis of the results from the inquiry, we conclude that need of the Macedonian companies for a certified quality system appeared because of the pressure on the market a major power, which will lead to the following: an increase of the ability to work in the competence with the competition, a need to spread and maintain the current markets, an increase of the satisfaction of the buyers/users and also an improvement of the marketing activities.

When this trend will lead most of the companies, it will entail a positive atmosphere for the quality in our society which means a safe exit from the crisis.

The decision for the development of the quality system can go hand in hand with the advancement of the company and the

mature conception of the total management of the quality. Herein follows that the total management of quality means an existence of a formal system for quality provision that will be constantly controlled and developed (Mitreva, 2011).

The application of the TQM strategy means that the company itself identifies the problems unlike the previous case with the projection and the implementation of ISO 9001:2015 where they used services from an external institutions and experts. The half-hiring of the managers about the quality management cause losing of the gained market positions.

These conditions are a result of the general level of the economy development for our country. To improve these conditions, we need an integral methodology for the projection and the implementation of the TQM system (Mitreva, 2011). This methodology can be applied when new changes in the employees' way of thinking are made or when the company strives to use the TQM strategy and have "world class". In order to achieve those things, it is needed that the managers and the employees gain additional theoretical and practical knowledge that will help them conduct the companies.

The application of the TQM strategy in our companies is the real way to meet perfection. The benefits that are expected from the implementation do not have an educational character, but their practical application will lead to an increased efficiency and productivity and also a maintained development.

4. Conclusion

The problem of our mentality is that we continuously and irrationally go against the external mental models, instead of wisely to analyze and use them. Also when we accept a new mental model without a detailed analysis, we give up our traditional model very easily. Most of the Macedonian companies are based on the traditional approach and that creates the necessity for reorganization/reengineering of the work. However, the most important aspect in the development of the new theory is based on the third approach or the organization that is being learned. Herein follows the conclusion that the successful functioning of the company is possible only with good functioning manager teams, good collaboration among the employees, clear standards for awards or penalties, clear orders and precise instructions of the employees, and all of that is possible only with the existence of managers that develop the TQM strategy (Mitreva & Prodanovska, 2013a).

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