<sup>1</sup>·Nikola PETROVIĆ, <sup>1</sup>·Edit TEREK, <sup>2</sup>·Tamara PETKOVIĆ, <sup>3</sup>·Dragana SAJFERT, <sup>4</sup>·Jelena RAJKOVIĆ

# THE ROLE OF REENGINEERING AND TQM IN IMPROVING THE QUALITY OF BUSINESS IN ORGANIZATIONS

<sup>1.</sup>University of Novi Sad, Technical Faculty "Mihajlo Pupin", Zrenjanin, SERBIA
<sup>2.</sup>Higher agricultural school of vocational studies, Šabac, SERBIA
<sup>3.</sup>College Dositej, 11000 Belgrade, Bulevar vojvode Pitnika 7, SERBIA
<sup>4.</sup>University "Union Nikola Tesla", Faculty of Engineering management, Belgrade, SERBIA

**Abstract:** This paper presents the role of the application of reengineering and TQM to improve the efficiency of the company's business. In a situation when we have more competition, where there are many organizations today it is needed request for constant development and innovation. One of the possibilities presented in the paper is used. Reengineering represents a complex operation in which everything, except the final objective, is changing. Total Quality Management (TQM) is presented as the continuous satisfaction of customer needs, wants and requirements. Quality was and still is the key aspect in the process of increasing value for the final user. It is believed that reengineering and TQM represent excellent operational and functional brilliance for companies. But with these two concepts there are certain differences.

Keywords: Reengineering, TQM, Business, Quality

### INTRODUCTION

In today's conditions, when many companies are facing market loss, i.e lack of customer confidence, there is a decline in company profits and job losses. In this case, some of the companies to implement reengineering must fundamentally implement a complete reorganization within their company in order to survive at the market. Applying the concept of reengineering is a very complex process where people need to have a good manager with authority and knowledge of the job he is doing. This concept requires great renunciation and great effort for the manager who puts it into action.

The reengineering concept is a radical approach to restructuring all business activities and processes within the company in order to innovate new business activities and increase profits by increasing competitiveness and constantly improving the quality of the company's business. Reengineering does not represent a modification of the current business but it starts from the beginning and searches for better ways of business performance, different from the previous one [19].

Total quality management (TQM) is a management approach through which a company can achieve long-term goals. These goals are customer satisfaction, and improved competitiveness on the market [8]. The seven dimensions of TQM are leadership management; employee relationships; reporting, and data quality; training, and skill employees; development of supplier quality management; product, and service design; and process management [16]. The base philosophy of this concept is the utilization in companies regardless of

their size, and industry. TQM tools and techniques can improve knowledge gathering from the internal and external environment of the organization [15]. Quality management in the organization plays an important role in the realization of the basic principles of long-term and sustainable development of society [17].

### REENGINEERING

### —The concept of reengineering

The concept of reengineering is one of the most radical processes of managing a company. There are many misconceptions about the essence of reengineering. Many times organizations carry out a major reorganization and call it reengineering. Some other organizations reduce staff, and they call it reengineering. And some others just run an efficiency program, different from the usual ones, and turn it into reengineering [6].

In modern business conditions, changes have become constant and faster organizations are forced to make much more effort to adequately follow them. Businesses need to accept the basic principles of entrepreneurial management based on the following factors: the acceptance of change, innovation and knowledge creation as the main economic resource [7]. The needs of the concept of reengineering today present us with new challenges, which require that the problem within the organization be solved in a new and more efficient way. That is why the need for reengineering just today and now.

The concept of reengineering is related to the name of Michael Hamer, who first used the term in the early 1990s. Reengineering was created in response to the Japanese concept of quality management and represents a pragmatic approach to change in line with the American way of thinking. According to Hamer, reengineering is the fundamental design and radical redesign of business processes to achieve dramatic improvements in performance [1]. New times are challenging for us, seeking to address the problem of the organization in a new way. Hence the need for reengineering just today and now. There are numerous reasons for the need to implement business process reengineering [18].

Reengineering does not represent a modification of the current business but it starts from the beginning and searches for better ways of business performance, different from the previous one [19]. Business processes to date are largely outdated and ineligible because they cannot meet customer expectations as well as company requirements. The concept of reengineering represents a different and completely new form of business process, a new quality of business. In addition to productivity growth, it aims to include a healthy and new workplace, new knowledge and full collaboration of employees at all levels in the organization, problem identification, acceptance of any suggestions and criticisms, teamwork and work discipline of all employees of the company. Reengineering began with the idea that all changes in the environment should be overcome [4]. Changes are caused by the application of new science and technology, the rapid aging of organizations and their business processes [11].

radical Businesses can achieve performance they use business improvements if process reengineering, in other words, if they manage to break the old rules of business and organization [11]. The concept of reengineering is a very difficult and risky business process, but it is still accepted as the best option for companies wishing to take a new path of business, reengineering as such process brings with it new changes, attitudes, ideas, modern technology and new organization of work.

For US and European companies, applying the concept of reengineering is acceptable if the companies:

1. Have problems,

2. they still have no problems, but I can predict, and3. they are doing well, but they want to move forward[5].

Determined that 50-70% of reengineering business processes did not give the expected results. In the same time, they found out that there was some progress in certain segments: 20% of cost reduction, 50% of time process reduction and 25% of quality rise [21], [19].

There are two types of approach in reengineering:

 Gradual – it is characterized by a small risk, easy management, less turbulence in short time intervals, and - Radical – based on the idea that when permanent changes or individual corrections do not give results, the only way to change the status is to be exposed to radical changes and the implementation of fresh, new solutions [19].

Radical changes can be achieved by changing organizational performances, such as: price, production time, service, quality, application of different tools and techniques in the realization of certain business activities. Reengineering is a process that contributes to transformation in enterprise's business but the main reason for failure is caused by a tendency to change all processes at once and in the same time [19].

It is wrong to reengineering as a change that applies only to for-profit business. Reengineering does not focus solely on profit or loss in the balance sheets, commodity prices, or value adding in the processes of modern capitalism or globalization. He is engaged in work and is relevant for any organization in which to perform any job, big or small, manufacturing or service, profit or nonprofit, private or public sector [2].

Targeted business in modern business does not always produce the best results. Hammer believes that businesses need to organize their business around processes rather than functions, and that modern Western companies resemble silos - organized vertically, by functions that represent only parts of the process [1]. There are four key words in reengineering: Fundamental, Radical, Dramatic, and Process.

#### —Phases of business process reengineering

The three basic processes of reengineering are entities, objects and activities. Reengineering must be applied to all entities (interorganizational processes, interfunctional interpersonal processes, and processes), facilities (equipment, materials, information) and activities (executive, operational) in the business process [8].

Business process reengineering is a multisector business, which seeks an innovative approach to the problem in an organization. It is implemented through radical changes and through all the functions of the company and involves conceptualizing the project, creating a new business and integrating a new process in the organization. [8]

Generally speaking, the circle of business improvement should start from exploring customer needs and analyzing competition, and possibly the bottleneck of the business process. It is necessary to determine the goals and mission for the company and to begin modifying, or completely replacing the process, it must be constantly monitored and evaluated from the population of results, above all production characteristics. Reengineering finally completes the process by re-exploring the needs and demands of the market. The reengineering process consists of six stages: following [8]:

- Predicting change processes,
- Presentation of the reengineering project,
- Diagnosis
- Redesign,
- Reconstruction,
- Process evaluation [13].

The objective of reengineering is related to satisfying customers' needs and in this particular case the attention should be paid on the following:

- It is necessary to work fast. Reengineering will not be successful if the process is slow because it should be carried out until the resistance in the organization appears,
- Risk is unavoidable. There is no progress without risks. The unknown is always frustrating but the greatest risk comes from unchanged state,
- Imperfection must exist. Mistakes cannot be avoided whenever something new and unknown is done. Mistakes are necessary for learning, and
- Activities mustn't be stopped suddenly. A great number of enterprises stop reengineering process as soon as the results are visible. It is bad because the final objective is important and the process must not be stopped when the first problems appear [19].

The importance of reengineering lies in changing the rules of behavior in the organization so far, rather than on better or more consistent application of existing ones. Instead of custom procedures, reengineering seeks to design and incorporate completely new, inventive solutions that require a different approach and fully capture key processes within the enterprise [20].

### TOTAL QUALITY MANAGAMENT

### -Concept TQM

Modern society requires responsibility and contribution. According to Draker, a knowledgebased organization requires that I take responsibility for the organization's given accomplishments for its contribution and its behavior [8]. All employees belonging to the work organization must fully consider and reflect on the further goal of making and contributing. There are four factors that require public intervention and regulation [10]:

- Protecting the planet,
- Protecting the most vulnerable in the economy,
- Consumer protection,
- The (market economy) system itself has tendencies that destructively affect its functioning.

The essence of the concept of responsibility lies in the

- Each individual must be held accountable for their actions.
- individual should – Everv become я "contributing individual",
- Action is taken on the basis of an analysis of the factors that prevail in the case.

quality management is a concept that Total completely took shape in the 1980s. as such the concept represents the Japanese and American strategy for improving the quality of business. Basic development occurs in Japan after the Second World War, in the 1950s came from US experts who, in the form of technical assistance, educated Japanese experts, how to manage the company. A significant development of the concept of quality of the Japanese economy, in addition to Deming's teachings on the proper management of a company, on certain achievements of Schuhart, was to some extent the application of the Kaizen philosophical principle. It's systematic about permanent, and organized improvement of the company's products and services, that is, a continuous improvement of the quality of business [8].

One of the goals of modern business is to achieve business excellence and to achieve world-class products and services. It can be successful only on the basis of continuous continuous improvement of the quality of business organization, which refers to the constant growth of productivity of work and knowledge of each individual in the organization. The concept of TQM is specifically targeted at employees, ie man is the most significant resource of an organization's business. Every employee in the organization should become responsible for their contribution to improving the quality of business. Each employee can be evaluated on the basis of improving labor productivity and knowledge.

The Kyoto Declaration, adopted at the 4th International Productivity Symposium in 1990 in Japan, provides five suggestions for improving productivity [8]:

- Human resources care,
- Collaboration of management with employees,
- Mutual understanding,
- Global cooperation,
- Work for a better future.

The situation today in the field of quality in domestic conditions characterized by elaboration of a standard ISO 9000, and a dominant direction in the certification of a system of quality, whereby the quality of the system, i.e. TQM becomes the primary goal [6]. In the business world, the largest companies in the world insist on the use of a systematic approach in the implementation of the TQM concept, as the only

correct way of ensuring the quality of business. The application of the modern concept of quality, based on the principles and elements of TQM, is an effective and efficient means of achieving the general goals of the organization (economic efficiency, meeting the needs of the entities of the organization and competitiveness in the market), thus ensuring the survival and development of the organization [6]. The EFQM European Foundation for Quality Managements defines TQM in a company for business excellence, based on customer focus, supplier partnerships, and development and employee involvement [14].

Basic similarities between reengineering and TQM are reflected in the process orientation, the initiative for introduction in both cases is given by top management, and in both cases responsibilities and authorities are delegated, as well as the needs for education and training, as well as the application of quality methods and techniques (quality tools) [6]. TQM is based on product and service quality and excludes innovation and process replacement. Quality management is a monotonous cycle with continuous improvement of quality, while reengineering implies radical changes of process [1].

TQM is a solution focused on quality, not wide enough and does not take into account the speed and innovation of the product. Reengineering involves doing business in a rapid and drastic change, introducing new processes rather than upgrading existing ones [4]. Basic differences of TQM and Reengineering concepts follow in Table 1.

## Table 1: Comparison of TQM and Reengineering features [8]

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	TQM	Reengineering
Trait	Advancement	Innovation
Level changes	Gradual	Radical
Starting point	Starting point	Starting point
Frequency of change	Continuously	Periodically
It takes time	Long	Short
Participation	Bottom up	Top to top
Field of operation	Narrowly, within existing functions	Broadly, through functions
Risk	Moderate	High
Tool	Statistical control	Information Technology

These two concepts are thought to overlap with each other over time over the life cycle of a single process [12]. The best solution for the company is to use both of these concepts, where necessary to insist on the constant improvement of the quality of operations.

It can be concluded that reengineering improves organizational structure, enables rapid and drastic changes, increases quality and reduces costs, reduces process execution time, improves internal and external relations, eliminates unnecessary activities. Makes for a comfortable work atmosphere and defines broad employee responsibility. Unfortunately, because of big costs at applying BPR and a high percentage of failure, it is recommended to enterprises which do not have great problems in their business to implement TQM system [19,22].

#### CONCLUSIONS

It can be said that TQM and reengineering are customer oriented. Both concepts seek to improve customer satisfaction, propose and put management in the role of the user, in order to properly understand the advantages, mistakes and disadvantages of what is offered to the user. TQM and BPR concepts are process oriented. Both concepts go towards improving and improving the process, not just the product. These two concepts can be said to have a similar team approach in business.

Companies that opt for one of these techniques will certainly not go wrong. Reengineering is certainly the most radical concept compared to the TQM concept. TQM approaches as a tactical concept, if a company wants slow but secure and stable growth and development, as well as constantly improving processes and products, TQM should be implemented into the company. If a company chooses to implement a reengineering concept, the top management of the company must spend some time thinking and defining processes and how to improve those processes before they undergo radical changes and reengineering business processes.

Lessons learned through the process of defining processes and eliminating redundant operations, then teamwork of employees from various functions, improving employee knowledge, applying the principles of "get it right" as well as many other activities are invaluable to the organization. If the job is not characterized by a permanent monitoring of the market and knowledge of appropriate response that will satisfy discerning customers and it is not possible to develop and improve the company [9].

### Note:

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