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Total Quality Management as a Paradigm of Business Success

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Abstract: Total Quality Management denotes a path by which - both in a stable and a transitional environment, in a professional and scientific way and by applying a variety of methods and techniques, through constant improvements and involvement of all employees - one could get to a model that enables a simultaneous achievement of the top quality level on one hand, and the top management level, on the other. Total Quality Management is a paradigm of business success in the entire world because its set up, inter alia, improves internal functions of an organisation, instils confidence in customers and triggers improvement chain reactions with suppliers and stakeholders. Quality is the foundation and client orientation is the base of the entire concept of total quality management. Placing customers at the centre is the main idea behind the entire quality concept around which everything is built. Improving the capacity of an organization to understand and meet the actual customer needs, both stated and implied, is the main objective of the total quality management. Teamwork and team leadership play a specific role in the total quality management, top managers have the key responsibilities, and activities of the medium and lower level managers together with all employees are of immeasurable significance. Managing the teamwork within the total quality management is not only a requirement for its set up, development and implementation, but also for its survival. Total Quality Management is a managerial philosophy and a mode of running a business in order to achieve success.

Key words: Customer/user satisfaction, employee involvement, process approach, Quality, Management, Continual improvements

JEL classification: M00, M10, L22

Whatever an enterprise does internally and externally needs to be improved systematically and continuously: product and service production processes, marketing, service, technology, training and development of people, using information. Make systematic improvement a priority.

Peter F. Drucker

1. Origin and Development of Total Quality Management

The term "quality" comes from a Latin word "qualitas" which means characteristic, feature, trait... Rarely does one thing or a phenomenon, however, have one characteristic, feature or trait, but whether or not it has a quality can be found out only by comparing a sum of these characteristics against requirements. Nevertheless, demands of nowadays users are not easy to meet because they have also realized that quality may not be everything, but everything is nothing without quality (Raković, 2006, p. 10-11).

Quality has grown from a fundamentally new scientific view of work. It is not the scientific management of *Frederick Winslow Taylor* from the early 20th century who was the first to use scientific methods in the rationalisation and increase of labour productivity and described them in his books. The Taylor's approach and that of other writers of classical management theory, of which a French scientist *Henri Fayol* (2006, sp. 8-9)² singles out, indicate that quality is ensured with the control from the raw material at the beginning to finished goods at the end of the production cycle. In the meantime, however, engineers and technologists had been inventing new and technically perfected and more sophisticated quality control methods and thus there were small, if any, changes to the approach for a long time.

¹ The books are *Shop Management*, published in 1903, and *The Principles of Scientific Management*, published in 1911. Frederick Winslow Taylor (1865–1915) is one of the most notable American scientists of the early 20th century.

² A very important book of Henri Fayol (1841-1925) *General and industrial management* was published in London in 1949. Its original version titled *Administration industrialle et générale* was published in Paris in 1916, and only four years later it was translated into Serbian language and published in Belgrade where a new edition appeared in 2006.

The market hunger for products during the era of industrial revolution, as well as in the first half of the 20th century (due to World War I and World War II, as well as numerous regional and civil wars), had the pivotal influence on the shifting of attention from quantity to quality of production. Not before few decades following World War II when the world managed to recover from the severe suffering and destruction did the quality of products and services become the obsession of managers in many companies in developed countries worldwide. This also resulted in total quality management, as the most developed and highest level of quality management in organisations, coming to the foreground.

Although managers have addressed quality since the emergence of modern companies, total quality management, both as the concept and programme, has been more clearly shaped in the past few decades, but here we deal with processes that are continuously upgraded and complemented. The basics of Total Quality Management comprises of the principles of the Quality Management System.³

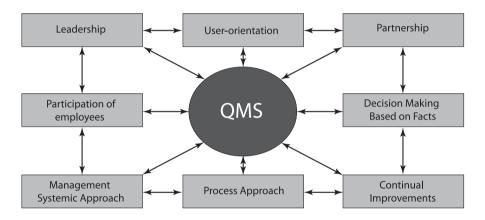
- 1. *Customer orientation*. Organisations depend on their users, they should understand their current and future needs, meet their demands, and try to exceed their expectations.
- 2. Leadership and modern management. Leaders establish common objectives and managing of an organisation. The management creates the situations and environment where employees will be able to fully commit to the achievement of the organisation's objectives.
- 3. *Involvement of employees*. Employees at all levels are the very essence of an organisation and only their full involvement enables the utilisation of their potential to the benefit of the organisation.
- 4. *Process approach*. A desired result is achieved most efficiently when resources and related activities are managed as processes.
- 5. System approach to management. Identifying, understanding and managing all interrelated processes with a view to attaining the anticipated objective contributes to efficiency and possibility of planning within an organisation.
- 6. *Continual improvement*. Continual improvement represents a permanent objective of an organisation.
- 7. Factual approach to decision making. Efficient decisions are based on logical or intuitive fact and information checking. Only that which can be proven is accurate"

³ The usual and generally accepted abbreviation for *Quality Management System is QMS* and it is used in the latter form hereinafter. For more details see *Menadžment kvalitetom usluga* (Perović & Krivokapić, 2007, p. 92).

8. *Mutually beneficial supplier relationships*. Mutually beneficial relations between an organisation and its suppliers increase the ability of both.

The eight QMS principles listed above apply to other management systems as well. They comprise a consistent network system and as such, give their full effectiveness and efficiency. Disregarding only one of the principles and its related requirements jeopardizes the overall quality management system.

Figure 1: Structure of quality management system (QMS) as the basics of total quality management (TQM)



Source: Luburić (2010)

As seen in Figure 1, the network of principles makes up a polycentric system where once it is customer orientation that is in the network centre, then some other time it is the leadership, then involvement of employees, then system approach, process approach, then factual approach to decision making and, in the end, mutually beneficial supplier relationships. As a consistent network system, all the aforesaid principles are both individually and jointly very important for the management success.

Many global companies see the total quality management principle as a concept or a philosophy for operations management, as it largely is. However, it is also a set of principles and ideas for management practice, a way of life, culture and thinking or, briefly, total quality management is a framework for improvement (Perović & Krivokapić, 2006, p. 141-142).

Companies can implement quality successfully only when they accept it as an organisational change. Quality is a set of technical achievements, skills and tools,

a programme at an organisation level, but also a total change in an organisation that is ever unfolding and never ending.

Quality is a continuous process of changes in an organisation, but not any kind of changes. It is a special set of changes that allows an organisation to be able to learn about customer needs, whether stated or not, which is a process that permanently evolves and changes as an effect of newly acquired knowledge or experience (Schiffman & Kanuk, 2004, p. 160-161).

Quality represents an organisational learning of customer needs and the ways of meeting these needs. It is a special kind of learning. Only those changes that bring to this learning mode not only all organisational units and levels but also all its partners, will lead to total quality.

Although everything seems quite understandable at first glance, neither quality nor total quality management are easy to define. A generally accepted and undisputed, but also one of the shortest definitions of quality is "Quality is customer satisfaction." (Juran & Gryna, 1999, p. 3).

An American researcher *John M. Kelly* (1997, p. 19) believes that there is not only one definition of quality and "there cannot be only one." The reason is that quality is basically only "the perception of quality", so whatever a user considers quality "actually is quality." This American researches points that most TQM users believes that quality is not in the product itself but in its use.

American scientists *Joseph Moses Juran*, *William Edwards Deming*, *Philip B. Crosby* and *Armand Vallin Feigenbaum* agree with the conclusion that an organisation's success primarily depends on quality, the management's accountability is of strategic importance, and all employees must be involved in achieving quality. However, these four promoters of quality have different approaches to defining quality in theory, practice, as a movement, religion of life... (Luburić, 2010, p. 61-62).

Juran thinks that quality is "fitness for use", and Deming believes that "quality should be aimed at the needs of the customer, present and future." For Crosby, quality is "conformance to requirement". Feigenbaum, however, says that quality is "the total composite product and service characteristics of marketing, engineering, manufacturing and maintenance through which the product in service and use will meet the expectations of the customer" (Perović, 2003, p. 142).

Deming formulated 14, and Juran 10 principles that have become the basis of a new philosophy where quality is the key criterion in market competition

differentiation,⁴ as well as the main factor of a company success. The market situation also contributed to their success. Increasing globalisation and removal of barriers weakened consumer protection from poor quality goods and services. Growing competition also forced companies to abandon the suicidal strategy of "price wars" and to move the competition battle to the quality field (Janićijević, 2004, p. 188-191).

2. Total Quality Management Philosphy

Total quality management is a comprehensive management philosophy based on labour virtues, as well as on continual changes aimed at improving business processes. To wit, within any organisation, the processes are those that generate results and should be managed and improved. Applying proper quality techniques in working processes and involving all employees create the conditions for lower quality to increase to higher levels and thus bring processes to similar or equal quality levels. This increases mobility and connection of functions, offering possibilities for successful implementation of various models and procedures of process improvement. *V. Deming*, an American theorist and one of the founders of the modern quality movement, claimed that 85 percent of quality related problems are the result of processes and not individual errors (Luburić, 2010, p. 97). Once you start establishing total quality management, the emphasis will shift from identifying errors to reviewing and improving the processes that allow or cause such errors aiming at, if possible, permanently disabling the emergence of problems.

⁴ Paradoxically, Deming and Juran succeeded in Japan in what they were not able to do in their own countries. Deming published his management related papers well before World War II, but they were not accepted in the USA. When he came to Japan as an American expert after the war to assist in the development of the Japanese industry, Deming's ideas landed on a very fertile ground. Very often, fate has a way of playing strange tricks on great people. Deming had been completely ignored in his country between two World Wars, then he was celebrated in Japan in 1950s, and then people from the USA came to study his work, wondering how the Japanese industry achieved dominance over the U.S. industry.

Figure 2: Deming's PDSA cycle of continual improvements

Act – Adopt the change, abandon it or run through the cycle again.

Study – Examine the results. What did we learn? What went wrong?



Plan – Plan a change or test aimed at improvement

> **Do** – Carry out the change or test (preferably on a small scale)

Source: Rentzhog (2000).

No individual organisation, change, process or technique, however, means much by itself. People are those that breathe in life into them and who, both in normal and crisis times, are the most important factors of business success. One cannot expect processes to function better if the people managing those processes do not change for better because they are the managers of everything and everything depends on them. People who manage and those we work with are the key both to our success and failures. An organisation should be approached as guided by the universal principles of total quality and only then can employees give a momentum to tacit creativity and energy, balance systems with processes and work more efficiently on continuous improvement. Total quality management, therefore, is not just a fashion whim or trend in management. Experiences of many companies all over the world prove that this is a revolutionary step forward in business and the return to some of the fundamental management ideas.

There is no unique and perfect method of establishing a total quality management. The best methods are those tailored to individual organisations and environment in which they operate. A strict compliance to standards does not mean that there is no room for creativity in total quality management and that organisations should refrain from searching for models that will best suit their needs. On the contrary, best achievement people have reached by using unfathomable power of imagination and intuition.

But there are some universal values that are the guiding ideas to success of this plan such as customer satisfaction, knowledge, competence and innovation, top quality, commitment, trust and respect, willingness to change and conflict resolution, leadership, team work management, process approach, involvement of all employees, flawless business, a sense of urgency, time, risk and much more.

Knowledge, competency, innovation Change Predicting management Opposing Adapting Opportunities Risk User Ahilities management satisfaction Quality Conflict techniques management Mutual trust and respect **User-orientation**

Figure 3: Tree of sustainable success

Source: Author's presentation

Among all the variables presented in Figure 3, it is the knowledge, competence and innovation that are the key requirements without which there can be no meaningful success in total quality management. It is impossible to improve your own products without improving yourself. *Peter F. Drucker* pointed that managers who are successful today and who want to be successful tomorrow are those that are willing to work on themselves. As *J. Welch* says: "The ultimate competitive advantage is an organisation's ability to learn and translate that learning into action rapidly", and as he also believes, "the key to our operating system is to understand that learning and achieving success are everything." *B. Tracy* points that "knowledge is the magic wand that makes everything possible."

At the times of everyday changes, it is knowledge that becomes obsolete the fastest. Challenges we face in today's time require different knowledge and skills than those we obtained through formal education. But it should be borne in mind that knowledge does not eliminate skill. On the contrary, knowledge becomes

productive only when it is used as a basis for skill. And that is achieved through work and work alone. Even the Chinese sage Confucius said: "The progress of the superior man is upward, the progress of the ordinary man is downward." That is why there is no wonder why there is a global trend where investments in training employees after they have received formal education is greater than the budget available to educating institutions. Unfortunately, while this trend is still in its infantry in our country, this is understood in countries with highly developed work culture.

And what can be said about users? Putting users at the centre of attention is the main idea of the whole way of viewing quality, around which everything is built. Success in the long run will be reserved only for those who will know how to anticipate not only next global developments, but also future customer needs, in parallel with keeping up with continuous improvements in all areas of life and work. These requirements are not easy to fulfil in the long run and that is why they are not only most important but also crucial factors of total quality management. Why is this so?

It is very important that total quality management is not a task to be completed and you are done with it. Total quality management is an endless road. Improvements must continue and be sustained for many reasons, but it seems that those dictated by competition and users in times of accelerated changes and all kinds of unpredictable events are of crucial importance.

If you do not move forward when it comes to quality, soon enough you will lag behind your competition. The only answer is continuous improvements and focusing on users whose needs change; therefore, ongoing improvements do not require only keeping up pace with modern trends but also predict users' demand. The art of prediction is one of the main factors in achieving success.

PROCESS

Customer satisfaction

METHODS AND ECCHNIQUES

OBLIGATION

Figure 4: Model TQM based on customer satisfaction

Source: Oakland (1996)

Enhancing a company's ability to understand and meet actual customer needs, both indicated and implied ones, represent the main objective of total quality management. Quality is the foundation, and customer orientation is the essence of the total quality management concept. Here one should always have in mind that the quality of products and services is what a customer thinks it is, and not what we think it is. In an era of consumerism and different value measures, people increasingly realize that they have to manage quality in order to avoid poor quality to manage them.

3. Japanese, US, and European Quality Approaches

V. Deming, one of the total quality management creators, answered the question whether a country should be poor by using a Japanese example: "The country", Deming wrote in 1950, "had negative balance. It was cut off from natural resources – oil, coal, iron mine, copper, manganese and even wood. It gained the infamous, yet deserved reputation of producer of cheap and non-quality consumer goods. It had to export goods in exchange of food and equipment, and this battle could only have been won by quality. Therefore, they asked for exit in the business philosophy by which the user had to become the most important part of the production change, which was more than heavy challenge for the Japan's management". (Deming, 1996, p. 16)

"If Japan be an example", Deming wrote "then it is possible that any country with enough people and with good management, making products suited to their talents and to the market need not be poor. Abundance of natural resources is not a requirement for prosperity. The wealth of a nation depends on its people, management and government, more than on its natural resources. The problem is where to find good management. It would be a mistake to export American management to a friendly country." (Deming, 1996, p. 16)

What contributed to the success of the quality concept in Japan is its national culture to which the idea of a quiet, gradually evolving quality was a more familiar concept than the American approach involving radical and dramatic quality improvements. Unlike many other management theorists, Peter Drucker particularly pointed out the importance and the role of a nation's business culture, advising: "Don't change corporate culture: use it". The Japanese, being more than an instructive example of this (and many other areas), best demonstrated the importance of understanding and applying this. After the Second World War, they adopted Deming's ideas in their organisation and business system. This resulted in the country becoming the global leader in quality (Kelly, 1997, s.111). Even before Deming, Japanese companies had the philosophy which essence was in gradual but constant business improvements taking one small step at the time.

Total quality management is a system initially designed to implement *kaizen*, the Japanese business philosophy that covers three basic principles (Hindle, 2006, p. 89):

- human resources are the most important company asset,
- processes must evolve by gradual improvement rather than radical changes,
- improvement must be based on statistical/quantitative evaluation of process performance.

From its appearance until nowadays, total quality management in Japan was more of a philosophy than a formal process (Janićijević, 2004, p. 184). One way or another, the kaizen philosophy is embedded into each human activity in Japan. As M. Imai said: "When applied to the workplace, Kaizen means continuing improvement involving everyone - managers and workers alike".⁵

⁵ For more information on the kaizen philosophy, see: Kaizen: the Key to Japan's Competitive Success (Imai, Masaaki, 1989). Gemba Kaizen, (Imai, Masaaki, 1997).

Kaizen has often been translated as "cutting", the process when a rough diamond is gradually polished into a high quality gem. The culture of gem cutting is very important, as per an old saying that "the gem cannot be polished without friction..." For example, taking someone's idea and then polishing it yourself is not considered plagiarism. Moreover, it is even considered a recognition in one's environment.⁶

The Japanese are so obsessed with high quality that they almost "celebrate" when they find an error, since it serves them as an additional incentive for further improvements (Raković, 2006, p. 42). However, sometimes the occurrence of an error with the Japanese may be fatal. When passengers of the *Japan Airlines* poisoned with food during a flight to Europe, the man responsible for catering at the Japan airport committed suicide (Smith, 2002, p. 488). Many similar examples can be found in different areas.

A well-known Deming's "zero defect" philosophy, the zero defect production, applied e.g. in car producing industry has led to multi-decade sale growth of Japanese cars in the U.S. market. Although they have faced severe problems in that segment recently, they have done their best to remove faults and regain clients' trust despite many troubles caused by natural disasters.

For example, when the Japanese detect a car defect, they seek answers to five "Whys". "Why was there a tear in the leather seat? Why was the leather not inspected when it arrived in our factory? Why didn't the supplier detect the tear before sending the leather to us? Why is the supplier's machine lacking a laser reader? Why is the supplier not buying better equipment?" These questions aim to get at the root cause of a defect so that it won't happen again. (Kotler, 2004, p. 78)

Due to the crucial role of quality management, many Japanese companies have become competitively superior to the U.S. and European ones. Japan's strong international competitiveness is rooted in strong competition among Japanese companies both in the domestic (with declining protection) and in international markets (Cerović, 2004, p. 68).

When the Japanese industry started to lag behind in 1990s and many famous brands faced financial problems, it was clear that the pace of changes necessarily calls for the need of swifter "change" of companies if they are to take the opportunity offered by electronic trade and other inventions in informational technology. It was not easy to fit a firm decisiveness brought by *kaizen* into such digital environment. The progressiveness of *kaizen* and the pace of needs in information technology throughout many areas found themselves in the dynamic imbalance, which required mutual adjustments to the new spirit of times (Hindle, 2006, p. 88-89).

The creator of the Japanese economic miracle *S. Shingo*, the largest contributor to the fascinating economic development of the post-war demolished Japan, based its approach on the production rationalisation and "zero defects" product. In its book *New Japanese Production Philosophy*, and acting in direct production, *S. Shingo* (1995)⁷ showed that not only can you survive, but even operate successfully in the case of economic blockade and the termination of business relations with the rest of the world, non-stimulating economic policy measures and drop in companies' economic power and households' purchasing powers.

Many companies in Japan provide accurate measurement of their employees' productivity, but managers receive only aggregate measurements. This is aimed at emphasising production as representing a team work. Managers use aggregate values to improve systems, yet employees are not pressurized into improving their own productivity (Kelly, 1997, p. 77).

The analysis of planning and decision-making in Japan gives much clearer picture. Japanese managers have mostly long-term orientation than the U.S. ones. If planning is defined as the determining of the purpose and objectives of the organisation as a whole or its individual parts, and select means for attaining these objectives, we will see that it requires decision-making.

The decision making in a Japanese organisation includes several levels. In a typical organization, several levels are involved in making the decision. Actually, the most important part of the process is to understand and analyse the problem and developing various alternate solutions. The final authority for making a decision still rests with top management, but before a proposal reaches the executive's desk, the problem and the possible solutions have been discussed at various levels in the organizational hierarchy. Top management still has the option to accept or reject a decision. But more likely a decision is returned to subordinates for further study, rather than being rejected outright.

A proposal is confirmed through the *Ringi* process. The *Ringi-Sho* is a proposal document prepared by a staff member. This paper is circulated among various managers before it goes to top management for formal approval. The document, which is usually initialled by those involved in or affected by the decision, elic-

While working as a manager in the Japanese car giant Toyota, the circulation of deployed funds was 11 times faster than turnover in its US counterpart companies or 60 times higher than the speed of turnover of funds in our industry. Moreover, during his managerial engagement in Toyota, Shigeo Shingo managed to increase labour productivity by more than 150 percent, absolutely eliminate reject material in production, and costs of raw materials and consumer goods.

its cooperation and participation of many people. This, in turn, assures that the problem or the decision is examined from different perspectives. That this decision making process is time-consuming is obvious. But after a consensus is reached, the implementation of the plan is rather swift because the understanding of the plan, the clarification of the problem, the evaluation of the different alternatives, and the involvement of those people who will implement the decision. But the sharing of the decision power and responsibilities can also result in a problem so that no one feels individually responsible for the decision. (Weihrich, 1998, pp. 227–229).

A characteristic of the Japanese approach is that it is constructed to recommend constant work on developing the existing knowledge on processes. This is important for continuous work on process development. Each time a team or an individual analyze their processes, these are improved and the effects monitored, so more is learned about them and that leads to further improvements. Deming particularly highlighted this view back in 1993, as best confirmed by his famous PDSA cycle.

Figure 5: Continuous process improvement



Source: Author's modification of Deming's PDSA cycle

Same as the entire Japanese economy with its powerful companies provokes curiosity worldwide, small Japanese companies have been attracting serious international attention as well. Economic environment is still changing, technological development knows no boundaries, markets demand better quality, and consumers are becoming more and more finicky. These show, as claimed by the Nagoya University professor *Eiji Ogawa* (2001, s. 11), that "Today's know-how for

success does not necessarily guarantee tomorrow's business prosperity", which means that all economic agents are in constant, relentless and endless market competition. Recent occasional quality problems with some Japanese car manufacturers are the best evidence of this, but problems are still resolved so that client satisfaction is the primary concern, no matter the cost.

F. Kotler pointed out that it continued amazing him "how many Americans accepted bad quality in the past. When I took my newly purchased Buick to the dealer one week after purchasing it, he said: "You're lucky. We have only one repair to make." (Kotler, 2004, p. 78).

As per Kotler, *General Motors*' theory of wealth creation reads: "Produce as many cars as you can in the factory. Don't fix them there. Send them to the dealer and let the dealer fix them. There was no thought about the cost to the customer who had to drive back to the dealer, give up the car, and pray that he or she could find alternative transportation while the car was being fixed." Who was responsible for poor quality? Management blamed the workers. But the workers were not responsible.

However, no easy answer can be given to the question – How high should the quality be? In making computer chips, Motorola aims for a six sigma quality level so that there will be no more than three or four defects per million chips. This is much higher quality than is needed if the chips are used in cheap radios; and this is lower than one would want in chips guiding 747s. The right quality level depends on the customer and the product. Peter Drucker also believes that quality originates from customer: "Quality in a product or service is not what the supplier puts in. It is what the customer gets out and is willing to pay for." (Kotler, 2004, p. 78)

After the Japanese experience with constant improvements and faced with the Japanese economic boom, American managers and researchers could not do anything else but to belatedly accept and apply the quality concept as a new pillar of contemporary management. However, they did it in their American way.

We have already said that compared to their US peers, the Japanese managers are usually oriented towards long-term strategic planning. The decision-making in American organisations also completely differs from the Japanese process.

"In US organizations, decisions are made primarily by people and usually only a few people are involved. Consequently, after the decision has been made, it has to be sold to others, often to people with different values and different perceptions of what the problem really is and how it should be solved. In this way, the decision making is rather fast, but its implementation is very time-consuming and requires compromises with those managers holding different viewpoints. The decision that is eventually implemented may be less than ideal because of the compromises necessary to appease those with divergent opinions. It is true that decision responsibility can be traced to people, but at the same time, this may result in a practice of finding "scapegoats" for wrong decisions. In all, the decision power and the responsibility is vested in certain people in U.S. companies, while in Japan people share both decision power as well as responsibility." (Weihrich, 1998, pp. 227–229)

Since individualism and competitive spirit are key characteristics of the US culture, a separate law enacted in 1987 established the U.S. *Malcolm Baldrige National Quality Award*. The award was established as the excellence benchmark to award the best US companies, share best practices, promote learning and organisation growth, and improve the country's competitiveness. The score criteria of the *Malcolm Baldrige Award* clearly shows the importance the U.S. experts give to individual quality system aspects, particularly to customer orientation and satisfaction (customer expectations – current and future, customer relations management, customer commitment, customer satisfaction, results and comparisons in user satisfaction) (Kelly, 1997, str. 51).

In the second half of the 20th century, after total quality management put Japanese companies far ahead of their foreign competition, particularly when the idea was applied and introduced in many U.S. companies, it seemed that Europe has at times looked left out of this game of American-Japanese ping-pong.

Claiming that Europe is the source of total quality, *Raymond Levy*, chairman of *Renault*, said in the 1990s: "Quality is representative of a culture which we Europeans have no reason to let others monopolise. The Europe of Descartes; the Europe of the Age of Reason and the Enlightenment; the Europe of the industrial and technological revolution of the last two centuries holds within itself all the elements of method and exactitude conveyed by the term "total quality". (Hindle, 2006, pp. 266–267)

Unlike the Japanese and U.S. approaches, Europe tackled the quality management issue in the 1980s. The International Organization for Standardization passed a series of standards known as ISO 9000. The first two issues of the ISO 9000 series, published from 1987 to 1996, aimed at allowing organisations to always produce the same quality according to specified procedures and working instructions. The revision of ISO 9000:2000 shifted the orientation towards customers and continuous improvement. The standard largely covers customers,

their demands and satisfaction. The standard ISO 9004-2 as of 1993 presented requirements for quality systems improvement. According to these requirements, an organisation's management should enable and facilitate continuous improvement of the established quality system. Constant management objective at all organisational levels is aimed towards customer satisfaction and quality improvement (Stoiljković, 2006, pp 15 and 415).

By adhering to the ISO standards, an organisation communicates that it is able to achieve, maintain and improve the required quality level.⁸ Thus, receiving ISO 9001 certificate requires proof that the company recognizes and documents its key business processes, and that it possesses all necessary instructions and standards to perform these processes, and that employees use and permanently improve them.

Being the basis for quality management system, ISO 9000 standards promote awareness on users, team activity and permanent improvements, which is also the basis of total quality management. Thus, for example, *Siemens* has the following quality motto: "Quality is when our customers come back and our products don't." (Kotler, 2004, p. 79)

But, it is not like this everywhere. Experience of some managers that worked on certification point that for many companies ISO 9000 standards serve as the "foundation for further total quality management processes", particularly as ISO 9004 standard guides.⁹

We should also note that standardisation has its principles: 1. Standards in application and creation are *voluntary*. 2. Openness in the approach, both in creation and application; full *transparency*. 3. *Inclusion of stakeholders*: inclusion of economy, administration, trade union, science... 4. *Consensus*: only standards passed univocally may be published. When consensus is not reached, only technical rules are issued instead of standard. 5. *Global approach*: compliance with international and European standards. 6. *Uniformity and consistency* in creation and application. The structure of standard is uniform and there is no contradiction to other standards. 7. *Relevance*: means that issuing standards that are relevant to social development. 8. *Standard's adaptability* to the development level: standards are adapted to development level once in five years. 9. *Adaptability to economic growth*. 10. *Adaptability to public needs*. (Perović & Krivokapić, 2006, p. 26)

⁹ ISO 9004 issues guidelines and approaches to areas like purchase, corrective acting, use of statistical control of the process and other requirements. (Kelly, 1997, pp. 228–230)

The European Foundation for Quality Management (EFQM),¹⁰ assisted by the European Organization for Quality (EOQ) and the European Commission (EC) started with the promotion of the European Quality Award (EQA) in 1990. This is the most prestigious European award for business excellence. It focuses on recognising excellence to assist organisations on their path to achieving the goal. Many national and regional quality awards have been institutionalised since 1992, and most of them are based on the methods and processes pertinent to the European Quality Award (Cvetkovski, 2005, p. 73–74).

The European approach is more flexible than the American one, as it leaves to companies to individually establish their quality level. However, it does not motivate organisations to improve quality as the *Malcolm Baldrige Award* does.

The experience of domestic and many foreign companies shows a significant number of those implementing the ISO 9000 series standards primarily in order to obtain different certificates as a "ticket" to more demanding and picky markets, and not as the confirmation of understanding that establishing and implementing quality standards are the sine qua non to survival (Janićijević, 2004, p. 184).

For one reason or another, a huge rush for standardisation is still present not only in Europe and the USA, but more and more in Asia and some other parts of the world. First, it was just certification of quality management systems (ISO 9001), then an environmental management system (ISO 14001), followed by occupational health and safety management systems (OHSAS – ISO 18001), food safety management system (HACCP – ISO 22001), information security management (ISO 27001) and risk management (ISO 31000).

Under the pressure of more rapid and dynamic changes, organisations are increasingly faced with the need to manage different management systems (integrated management systems). Companies are particularly exposed to these challenges, so they tend to ensure synergies among different management systems and quickly adapt to market changes and client needs, legislative changes and the like.¹¹

The European Foundation for Quality Management (EFQM) believes that total quality management strategies have the following characteristics: excellence in all managerial, operational and administrative processes; culture of uninterrupted improvement in all operational aspects; realisation that quality improvement leads to cost advantages and better profit potential; creating more intensive relations with clients/customers and suppliers; inclusion of all employees and marketing oriented organisational practices. (Hindle, 2006, p. 265–266)

¹¹ Read more in the book *Integrisani sistemi menadžmenta* (Stoiljković et. al., 2006).

There is the prevailing view among some managers and researchers that a certificate is not evidence of a better system but some kind of a "driving licence" testifying that standard requirements have been met at some point. However, these requirements are constantly complemented and expanded. For that reason, management systems need constant improvements. Until recently, this was possible only by using quality tools, and nowadays, by many advantages brought by information technologies, from local networks to the internet.

Conclusion

This paper focuses on one of the most powerful, the most complex and the most demanding management approaches, known as Total Quality Management (TQM). Development of total quality management is considered an organisation's key competitive advantage. Survival, development and success in international economy require comprehensive understanding of all business activities. Comprehensively oriented total quality management should respond to these expectations. The power of total quality management is that it shows the path that may lead to the model enabling reaching simultaneously a supreme quality level and supreme management both in normal and crisis times, in a competent and scientific manner, by applying specific methods and techniques, with continuous improvements and involvement of all employees and stakeholders in the process. As a paradigm of ongoing improvements in all dimensions, total quality is an approach based on principles stemming from the best that has ever been created.

Thus, by including all employees, systemic and process approach and permanent improvements, total quality management should upgrade an organisation¹² to the level of sustainable success, regardless the limitations. Therefore, total quality management attracts due attention of the academia and professionals worldwide. This is not surprising, having in mind that, in the conditions of almost dramatic disturbances and crises, it is neither easy to record sustainable business success nor to create effective measures that can minimise operational losses and business failure risk in timely fashion. In order to manage an organisation successfully in such conditions, total quality management and risk management processes should be mastered.

¹² The ISO 9000 standard defines organisation as a group of people, objects and corresponding equipment with set responsibilities, authorities and relationships (company, corporation, firm, enterprise, institution, humanitarian organisation, trade organisation, association or their parts and/or their combination).

However, strict adherence to standards does not mean that organisations should not seek the best tailored models to suit their needs and that there is no space for creativity in total quality management. Against the backdrop of ever fiercer competition that many organisations are facing nowadays, constant improvements, development and innovations are necessary. Improved customer orientation and a better use of teamwork and employees' potential are the two primary principles available to organisations. A typical hierarchical and functional approach makes it difficult for all of us to focus on the main task of creating value for users. Process orientation and constant improvements with the involvement of all employees are surely the chance to overcome such situation. Customer orientation is the basis for the entire total quality management concept where we should always have in mind that quality is what a user thinks it is and not what we mean by that. If you do not advance in quality, you will soon lag behind the competition. However, many organisations realise this when it is too late. An effective response is continuous improvements and orientation to customers whose needs change and so it is not enough only to monitor but also to foresee those changes and/or user demands. The best labour virtues are embedded in the total quality management foundations, philosophy and practice. With all challenges brought by the digital era, total quality management is the paradigm of business success and both present and future managerial challenge.

References

- 1. Cerović B. (2004). *Ekonomika tranzicije*. *Tekstovi*. Beograd : Ekonomski fakultet.
- 2. Cvetkovski Tatjana, *Benčmarking*, Megatrend, Univerzitet primenjenih nauka, Beograd 2005.
- 3. Deming, E. W. (1996). Kako izaći iz krize. Beograd: Grmeč.
- 4. Fajol, A. (2006). Opšti industrijski menadžment. Novi Sad: Adizes.
- 5. Hindl, T. (2006). *Menadžment, Pojmovnik, Od A do Z, Koncepti i ideje koje su oblikovali opšti menadžment.* Novi Sad: Adizes.
- 6. Janićijević N. (2004). *Upravljanje organizacionim promenama*, prvo izdanje. Beograd: Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu .
- 7. Juran M. J, Gryna M. F. (1999). *Planiranje i analiza kvalitete*, *Od razvoja proizvoda do upotrebe*, treće izdanje, pripremio Frank M. Gryna. Zagreb: Mate d.o.o.
- 8. Kelly M. J. (1997). *Upravljanje ukupnom kvalitetom* (*Total Quality Management*), "*Kako i što*". Zagreb: Program za visokoučinkovito poslovanje.
- 9. Kotler F. (2004). *Marketing od A do Z*, 80 pojmova koje svaki menadžer treba da zna. Novi Sad: Adizes.
- 10. Luburić R. (2010). *Umijeće uspješnog upravljanja*, Zasnovano *na svjetskoj teoriji i praksi upravljanja ukupnim kvalitetom*, Drugo izdanje. Beograd: HESPERIAedu.
- 11. Masaaki I. (1997). Gemba Kaizen. New York and London: McGraw-Hill.
- 12. Masaaki I. (1989). *Kaizen: the Key to Japan's Competitive Success*. New York: Random House.
- 13. Ogawa E. (2001). *Upravljanje malim preduzećima danas*. Beograd: Evropski centar za mir i razvoj (ECPD) Univerzitet za mir Ujedinjenih nacija.
- 14. Oakland S. J. (1996). *Total Quality Management, Grower Handbook of Quality Management*, edt. Denis Lock, London: Gower Press.
- 15. Perović J. M. (2003). *Menadžment Informatika Kvalitet*, drugo dopunjeno izdanje. Kragujevac: CIM centar, Mašinski fakultet Kragujevac.
- 16. Perović J. M. & Krivokapić Z. (2007). *Menadžment kvalitetom usluga*. Podgorica: Pobjeda a.d.
- 17. Perović J.M. & Krivokapić Z. (2006). *Sistem menadžmenta kvalitetom hotela*. Kotor: Fakultet za turizam i hotelijerstvo Kotor Mašinski fakultet, Centar za kvalitet Podgorica.
- 18. Raković R. (2006). *Kvalitetom ka poslovnoj izvrsnosti*. Beograd: Energoprojekt, In Graf.
- 19. Rentzhog O. (2000), *Temelji preduzeća sutrašnjice*, *Procesima usmerena poslovna filozofija*. Novi Sad: Prometej.

- 20. Schiffman G. L. & Kanuk L. L. (2004). *Ponašanje potrošača*. Zagreb: Mate d.o.o.
- 21. Smit R. P. (2002). *Marketinške komunikacije, Integralni pristup*. Beograd: Clio.
- 22. Stoiljković V. et al. (2006). *Integrisani sistemi menadžmenta*, ISO 9001:2000, ISO 14001:2004 i OHSAS 18001:1999. Niš: Mašinski fakultet Niš.
- 23. Šingo Š. (1995). Nova japanska proizvodna filozofija, 1. Racionalizacija proizvodnje nekoliko osnovnih gledišta, 2. Tojota--sistem posmatrano iz proizvodno-mehaničkog ugla. Novi Sad: Prometej.
- 24. Trejsi Brajan, *Zaradite više*, *napredujte brže*, 21 način da zaradite više i napredujete brže u vašoj karijeri, Finesa, Beograd 2003
- 25. Velč Džek (u saradnji sa Suzi Velč), *Veština pobeđivanja*, drugo izdanje, Adizes, Novi Sad 2005
- 26. Weihrich H. & Koontz H. (1998). Menadžment. Zagreb: Mate d.o.o.