

## QUALITY AND ITS ROLE IN GROWTH OF BOSNIAN AND HERZEGOVINIAN ECONOMY

**Mira Šunjić-Beus<sup>1</sup>, Danijela Martinović<sup>2</sup>, Ljiljan Veselinović<sup>3</sup>**

<sup>1</sup>School of Economics and Business in Sarajevo, University of Sarajevo, Bosnia and Herzegovina, mira.sunjic-beus@efsa.unsa.ba

<sup>2</sup>School of Economics and Business in Sarajevo, University of Sarajevo, Bosnia and Herzegovina, danijela.martinovic@efsa.unsa.ba

<sup>3</sup>School of Economics and Business in Sarajevo, University of Sarajevo, Bosnia and Herzegovina, ljiljan.veselinovic@efsa.unsa.ba

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### Abstract

Nowadays in an extremely competitive environment one of the most important issues is efficient management of total business processes which as a result should lead to achieving better financial and development goals and fulfilling customer's wishes. Efficient management turns to be quality management which includes different methods and techniques. Achieving expected quality of the products and services, as well as total business processes in all aspects, is the only way of surviving in this competitive environment.

Framework for the quality implementation in the company is postulates of the different quality concept, such as TQM, Kaizen or Six Sigma. ISO and other certificates are assurance of the product quality. On the other hand, it can be very effective means for entering foreign markets.

Due to importance of mentioned concepts and importance of obtaining certificates, this paper is focused on the methodology of the quality management as well as on experiences from real sector and research results. Main aim of research is to determine practical assumptions for efficient quality management and its role in a growth of economy.

JEL classification: D83, L15, L16

**Key words:** total business processes, TQM, Kaizen, Six Sigma, ISO, growth of economy

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### Introduction

Accomplishment of profit aims and desired positioning in market are closely connected with satisfying customer's demands, efficient expenses management, business processes and quality. Conditions of globalized market prove that "egocentric" vision of company is no longer sustainable, i.e. vision of a company as a single part independent from other subjects – competitors, customers, suppliers - which defines manner and results of business. Customers are becoming those who determine what should be produced and which

performances final product or service must have. Acquiring desired quality, quality perceived by customers, becomes even more significant means of acquiring competition advantage and by that advantage accomplishment of series of aims. Thus efficient quality management becomes inevitable part of total management of business processes in a company.

### **Quality and its expenses**

Quality could be defined as: “Sum of all characteristics of the product or service which satisfy expressed or expected needs of customer/client, and as such it is aim of perfect organization and philosophy. According to this philosophy product or service is quality when it satisfies all desires, needs and expectations of customers/clients” (Dumicic; 2004, 47). We identified two understandings of quality term: internal and external. Internal understanding of quality is the one related to perception of management and which is embodied in business procedures that result in accomplishment of “planned” quality. External understanding of quality is the one based on customer perception and is also based upon what customer perceives as quality. Internal and external understanding are inseparable; customer’s demands for quality responds to defining and designing of business processes whose aim is acquiring of quality. Defining and redesigning of business processes is related to certain time and money investment. Quality expenses are divided in to two groups: (1) expenses caused by quality introduction and (2) expenses caused by having low quality products. Introductory expenses are related to a series of preparation activities and to activity of implementation and assurance of certain concepts of quality. Non-quality expenses are expenses related to mistake removal, merchandise complains and its return from customers, additional controls and analysis of mistake occurrence. Basically, these expenses could be related to expenses occurring in company, but also to expenses occurring at customers, because of acceptance of product and input of unsatisfactory quality. It is advisable for a company to do the right thing first time and thus prevent occurrence of mistakes and non-quality. Mistake removal and return of merchandises is not only expensive but can also jeopardize relation with customers and seriously harm company image.

### **Concepts of quality management**

In modern conditions of business, series of concepts of quality management have been developed:

1. Based on interpretation (comprisement) of “quality” notion.
2. According to time of occurrence.
3. According to degree of formalization.
4. According to focus and aims of quality.

*1. Division of concepts according to interpretation (comprisement) of “quality” notion.*

Concepts of quality management went all the way from control of final product, control of services, through control of production processes in all business activities of a company, and finally control of all subjects in a chain of value creation. Concept overcomes narrow notion of control and becomes process of active management and development, re-designing all processes in company with active participation of all employees but also and customers and suppliers. Aim is to achieve all-comprising quality of product and processes. Traditional interpretation of quality which comprised final product only, has been altered by wider interpretation which comprises all business processes.

*2. Concepts according to time of occurrence*

Division of control to current and additional, which is preventive and corrective, could be applied to the concept of control, which is quality management. In earlier phases of development stress was on both types of control equally. With further development and attempt to achieve aim of “production without mistakes” stress has been placed on a current control and preventive activities. Modern quality management is primarily preventive, and of course it overcomes mere interpretation of control. Aim of additional control is to confirm already set quality standards, and sometimes in a case of deviation and mistakes, it has for an aim to conduct corrective measures. Corrections of course can be caused by mistakes, but also they are regular step in continuous amelioration of processes and their redesigning. Therefore, amelioration alone and ceaseless learning demand certain rectifications and corrections.

*3. Concepts according to degree of formalization*

Concepts of quality management exist as formal, organized concepts with corresponding methodology and accompanying activities, but also they exist as non-formal. Namely many organizations possess quality control in a domain of whole process control, that is they conduct certain measures which belong to the concept of quality management or to the concept of business excellence, without special naming of these measures.

*4. Concepts according to focus and aims*

It is possible to distinguish quality concepts which are primarily directed at removal of mistakes and those who are oriented to the processing. Listed concepts are basically partial, that is they are directed to quality management of

only one dimension of business, productive one. Besides, it is also possible to distinguish series of different methods of quality management, which could be classified under one dimension of quality management – planning a quality, its management, assurance or amelioration. There is a tendency toward connecting and conjoining partial methods. Models of complex quality management such as TQM or EFQM and models based on ISO standards get significance here. Models of efficient management of total business, models of excellence, concept of Balanced Scorecard – pay great attention to quality management. Also some partial models, for example Six Sigma model, by additional building become model of total quality management. We can conclude that narrow, passive, and additional quality valuation of final product only, has been replaced by wide, active preventive quality management of all business processes.

### **Concepts of total quality management and concepts of business excellence**

In a last few years concept of total quality management or shorter (TQM) gained a lot in significance. This model found its expression in concepts of business excellence (business excellence) like European Model of Business Excellence (EFQM BEM) and Balanced Scorecard (BSC). Total quality management could be defined as unique process of introduction, assurance and control of entire range of organizational activities, with an aim of all-comprising introduction and permanent assurance of quality. In defining and creation of quality, all subjects in a chain of value creation must participate. All of them, with their individual demands (suppliers, customers, capital owners), regulations (state) and with their own active participation (employees), take part in shaping and creation of final product. Connecting with all interested sides, results in a series of advantages for company. Result is reflected in amelioration of business image, ability for recognizance of company on market, improvement of relation with suppliers and customers, increase of profit, decrease of expenses, etc. Changing from concept of total quality management to the concept of efficient management of total business processes is a way how to achieve business excellence.

On a principle of TQM philosophy which claims that quality refers to different dimensions, that it represents process which never ends and therefore demands active participation of all subjects in a company, foundations of excellence concept EFQM are set on this philosophy. Given model was developed by European Foundation for Quality Management in 1988. This model is based upon nine criteria, five assumptions and four results. Assumptions refer to the management, policy and strategy, employees, partnership, resources and processes. Results are related to results of employees, customers, organization

and to the results of main exhibits. Each listed criteria is further explained through series of sub criteria.

Given assumptions and results are closely connected: “excellent results which refer to performances, customers, employees and society are achieved by leadership, directed policy and strategy which are achieved by people through partnership, resources and processes” (www.efqm.org; 2009)

Excellent results are results of implementation of eight basic principles, and they are: orientation to customers, partnership with suppliers, active participation and improvement of employees, permanent amelioration and innovations, adequate documentation and its accompanying, professionalism and responsibility of management for results, social responsibility and ethics, devotion to set aims.

Model Balanced Scorecard is based on similar assumption for achieving excellence, that is quality of business processes and results. It is based on four basic aspects/perspectives; perspective of learning and growth, perspective of business processes, client’s perspective and financial perspective (Kaplan & Norton, 1996).

Important part of perspective of internal business is concept of TQM. And model of total quality management and models of excellence rest on the need for redesigning of all business processes and their permanent improvement. Given assumptions are contained in Kaizen model and in assumptions of norms ISO 9000ff. ISO 9004 has made significant step-up in direction of getting closer to the line of direction and content from norms ISO to TQM and to the concepts of excellence. Here different models approach direction of achieving excellence.

### **Results of examination in Bosnia-Herzegovina**

Starting from possibilities and perspectives which are offered by different management models of “partial” and “total” quality, examination has been conducted in order to examine widespread of appliance of a given models in BH companies. Aim was to discover attitude of company toward quality and manners of quality achievement, and toward advantages of certifying according to ISO standards. Starting foundation for examination which was conducted in January and February 2009, on a sample of 40 productive, exporting, certified companies, was another examination of appliance of crucial aspects, that is logic of Balanced Scorecard in BH companies, which was conducted by E. Čizmić in 2007 and 2008, on a sample of 102 companies (See more at Čizmić.; 2008). Author got following results: 26% of examined companies possess some of the certificates, 45% is introducing or is planning to introduce and 29% does not possess any certificate. Taking in consideration results of this examination questionnaire was formed (containing 18 questions of open and closed form),

with an aim of concluding attitudes and experiences of BH exporters toward quality certificates whom they possess and toward a system of quality management. Emphasis was on finding advantages which brings introduction of postulate in certain systems of quality management, but also on problems which in process of certification companies encounter. Sample of 40 exporters with some of the certificates has been chosen. Return of questionnaire was 30%. On a basis of retrieved answers we can conclude:

1. 70% of questioned exporters said that system of quality management is actively applied in all segments of business. Contacts with suppliers and distributors are permanent with an aim of sustaining quality of input and distribution, also contact with customers is permanent with an aim of establishing more efficient returning connection. Questioned exporters agree that planning and implementation of quality includes all processes and all employees, suppliers and customers in defining quality, but also demands team work. 30% of questioned believes that emphasize is on quality of production process.
2. For introduction and following of quality, higher and middle level of management is responsible.
3. Dominating are ISO standards, just like other specific standards, like GMP and HACCP. Only 5% of questioned decided for BH BAS standards. ISO standards (98%) and specific European and world standards (that is special demands of certain countries in which products are distributed) are conditions for successful placing of product in international market.
4. Questioned exporters agreed completely (grade 5) with a claim that ISO and other certificates help in acquiring competitive advantage abroad and at home (grade 4), introduction of certificate helps in acquiring positive company image (grade 5). With grade 5 (large companies) and grade 4 (middle large companies) it is valued certificate introduction, which has positive influence upon financial success of a company. Questioned agreed partially with a claim that introduction of ISO certificates decreases expenses and increases productivity. Questioned disagreed with a claim that there was initial resistance of employees during the introduction of quality system and they agreed (grade 5) that employees react positively to the possession of ISO and other certificates. They did not agree (grade 1 and 2) that expenses of introduction of ISO and other certificates are high. Questioned exporters agreed that introduction of certificates demands permanent, additional control of quality (grade 4).
5. Last set of questions in questionnaire referred to the problems which companies encounter in process of certification. As reasons in questionnaire following were listed: high expenses, unsettled benefits, vague interpretation of certificate essence and non-quality work of

certifying houses (questioned exporters disagree with quoted claims). Significant expense represents sending of product to analysis/certification abroad, BAS standards are not enough for placing a product on a foreign market. Certain offences refer to current BAS standards, also to the support of state and entity in introduction of quality/acquiring certificates are all related to the problem of nonexistence of Institute for standardization on a state level.

It is possible to draw conclusion that questioned exporters are satisfied with effects of introduction of ISO and other standards, especially when we talk about perspectives of placing a product in international market and strengthening of company image at home and abroad. It is also possible to notice positive long-term effects in a form of competition growth and thus profit growth. Introduction of quality management system and certificates demands certain expenses and continuous investment, so it is not possible to see decrease of business expenses. Expenses of certifying are not high if we compare them to the benefits that are expected. Opposite of them is sending a product abroad to be certified which is a result of non-accepting BAS standards from other countries. Questioned exporters consider BAS standards not to be current enough. However it is a fact that BAS standards are mainly based on ISO and EN standards, and partly on specific foreign standard and ex JUS standards. Offences directed to BAS standards are related to non-existence of support from National Agency for standardization, which should support them. Namely Bosnia and Herzegovina has Institute for standardization but it has no institution for product certifying at state level. Authorization for certifying has been given from Institute to the Ministry of foreign trade in 2004, but till today Ministry did not form executive body at state level. Companies are not satisfied with support from Entity and State in introduction of quality and certificates. Certain activities are occurring but stronger coordination and support are necessary. During the examination it is concluded that it is not possible to put sign of equality between ISO certificates and top results which TQM offers. ISO certificate by itself does not guarantee success and future of a company. There is a tendency that possessing ISO certificate represents only purpose. It is necessary to change way of thinking and whole business culture. Continuous improvement of processes and continuous control of results is necessary. Certain number of companies does not consider necessary permanent control of processes after the introduction of standards/acquiring certificate. Automatically activities are supposed, and this is incorrect. Companies do not apply specific knowledge in a process of quality management. They are not familiar with partial methods of quality management, and they decide about quality relying on their experience and intuition.

## Conclusion

Because of the facts which are derived from theoretical concepts of quality management and concepts of excellence, and examination results, it is possible to conclude that in Bosnia and Herzegovina it is necessary to create adequate institutional frame for standardization and certification, also it is necessary to create climate for development of culture quality. Further, change is necessary in companies, in manner of thinking and behaving, in a sense of growth of consciousness about need of acceptance of postulate in quality management of all business processes. This is the only way to achieve competition and successes of Bosnia and Herzegovina companies home and abroad.

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