

THE LEVEL OF USE TQM MODEL FOR INCREASING OF BUSINESS EXCELLENCE IN LARGE ENTERPRISES IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

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ABSTRACT

*Total Quality Management (TQM), as dynamical model of controlling quality using all parameters of business controlling with special attention putted on responsibility of every individual in order of increasing productivity, is one of the mane management tools to achieve **Business excellence**. TQM directly connects, among others, with quality of products and services, user satisfaction and competitiveness. This paper presents the results of survey The level of use TQM model for improving business excellence and competitiveness in large enterprises of the Federation of Bosnia and Herzegovina. This survey also deals with the impact of a given application of TQM, primarily on the quality of products and services, competitiveness and business excellence in large enterprises of the Federation of Bosnia and Herzegovina. The survey was conducted from September 2013 to March 2014 on a sample of 72 large successful enterprises in the FB&H, which are listed on the Sarajevo Stock Exchange. In carrying out the survey, respondent subjects, apart from responding to questions, give theirs opinions too. In this way research give us a wider view on the implementation of TQM in FB&H. Main hypothesis which We approved with this survey is that usage and implementing Total Quality Management model in increasing competitiveness of big companies in Federation of Bosnia and Herzegovina is insufficient.*

Keywords: Total Quality Management (TQM), Business excellence, competitiveness.

1. INTRODUCTION

Quality management, as one of the most used terms in newer economic theory and practice, in its beginnings represented acts of simplest inspection. One of the goals of this paper is to, theoretically and practically, present problem and importance of quality management using TQM as one of instruments of managerial accounting and management.

It is generally said that we are in the midst of a „quality revolution“. Competitiveness could be ensured by quality, price and delivery.² Before choosing model of quality based on which system of quality will be planned, management should make a decision and define reasons for implementing system of quality. Some of those reasons could be: market competitiveness, export, securing management of system quality, increasing efficiency, effectiveness, development of new organizational values (leadership, communication, organization culture...).

² <http://what-when-how.com/metrology/why-tqm-metrology/>; accessed 12.01.2013.

Model of quality represents sample based on which system of quality of business is planned and build. Because of that it is very important that key features of chosen model of quality match conditions within organization and around it, and also fulfill listed reasons for implementing system of quality. In this context TQM is the most widespread and the most efficient model. TQM is comprehensive approach of achieving long term success that considered continual improving of all aspects of organization and processes. TQM could be defined as dynamic model of managing quality that considered all parameters of managing business putting emphasis on responsibility of every employee, and especially for increasing of productivity as imperative. However, one could ask: „Why is TQM necessary for business?“. We can say that TQM is necessary and required in every business strategy because:

- It treats people as most important asset,
- Ensures customer satisfaction,
- Ensures quality for competitiveness,
- Increases productivity through continual improvement.

Main difference between TQM and classical methods of managing appears in fact that classical methods are based on approach managing-organizing-control, while TQM aside that activity insists on approach that generate constant improvements including all employees. The goal of implementing TQM concept is to significantly improve organizational structure, business culture, business policy and procedures providing improvement in organizational quality as whole, thus achieving business excellence of organization and attain world class of goods and services which should lead to long term growth and development. Process of managing business (managing quality) is possible to analyse as cycle of: planning success, training success and assessing success of business.³ We can conclude that the biggest advantage of TQM is creating assumptions and possibilities for adequate and efficient establishment system of business excellence.

For TQM to be even considered, and eventually implemented as one of the available models of management and managerial accounting (because knowing both of these science fields is necessary for its implementation) for achieving better market competitiveness it should be accepted that that connection should rely on quality informational background. Management requires information for control. Those information include information about costs and expenses that represent expression of TQM effects. Practically, it means that implementing TQM requires additional accounting track about costs and expenses adapted to necessity of implementing TQM model. In addition, it is necessary to implement certain techniques and concepts of managerial accounting used in treatment of relevant historical quantitative and qualitative, financial and nonfinancial information for planning, resources allocation, decision making, measuring, motivation and control of determined goals.⁴

2. RESEARCH AND RESULTS

2.1. Data

Our purpose in this research was to determine level of use of TQM model in Federation of Bosnia and Herzegovina. For this purpose we set hypothesis that states:

„Level of appliance of Total Quality Management as instrument of Management and Managerial Accounting, for increasing competitiveness of large enterprises in Federation of Bosnia and Herzegovina is insufficient.“.

For this research we used questionnaire delivered to large successful enterprises in Federation of Bosnia and Herzegovina listed on Sarajevo Stock Exchange. According to the Law of accounting and auditing of Federation of Bosnia and Herzegovina (Official Newspapers of Federation of Bosnia and Herzegovina, year XVI, no 83.), section 4. Large enterprises in Federation of Bosnia and Herzegovina are those who fulfill two of three conditions: over 250 employees, have average business assets at the end of the year over 4.000.000,00 KM or annual revenue over 8.000.000,00 KM. Apart of those conditions, large enterprises are all of those who are registered as joint stock company and listed on Sarajevo Stock Exchange. This research was conducted in period September 2013. – March 2014.. The sample for research included large successful companies in period 01.01.2012. – 31.12.2012.

³ http://en.wikipedia.org/wiki/Performance_management; accessed 26.01.2013.

⁴ Malinić, D., Milićević, V., Stevanović, N., *Upravljačko računovodstvo*, Centar za izdavačku delatnost fakulteta u Beogradu, 2012., str 6.

according to the Law of accounting and auditing of Federation of Bosnia and Herzegovina whose official financial statement were listed on Sarajevo Stock Exchange web site (www.sase.ba) on 22.09.2013.. This research included 72 large successful companies with total of average assets of 9.522.262.119,00 KM, total revenue of 3.230.863.446,00 KM and 23.601 employee.

2.2. Sample structure

Financial directors, financial accountants or managerial accountants were questioned via questionnaire that had 12 questions using a five point Likert-type scale (1 indicating absolute disagreement and 5 indicating absolute agreement).

Answers were in accordance with criteria for setting substantiality of sample structure regard that of total sum of collected answers in absolute numbers percentage represents over 50% of stake in parameters of average assets and total revenue, while parameter of number of employees was represented with just under 46% (see figure 1):

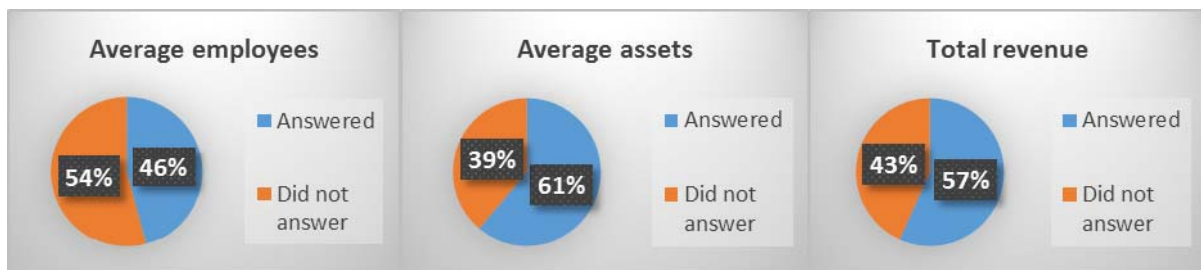


Figure 1. Significance analysis of samples

According to this result we concluded that the size of sample is significant for making valid decisions. For processing of results we used parametrical test for one population. This test is chosen according to type of sample and because it is one population (no comparative population). Parametrical test for one population used for testing hypothesis was **Z-test**, considering relatively large sample, known value of standard deviation and normal distribution of population.

2.3. Results

On the next chart is shown distribution of answers for each of questions considering hypothesis.

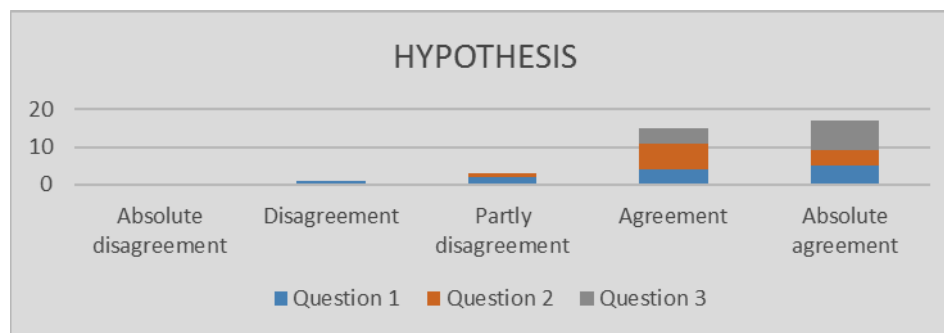


Figure 2. Graphical analysis of answers

Analyzing results it is visible that no one of examinees did not absolutely disagree with statements. Also, it is clear that in absolute amount only one company answered on one claim with *disagree*, while most examinees answered in domain of *absolute agreement*.

Applying statistical Z-test we calculated result as is: $-1,96 < 1,64 < 1,96$ and concluded that there is no obvious evidence that stated hypothesis „Level of appliance of Total Quality Management as instrument of Management and Managerial Accounting, for increasing competitiveness of large enterprises in Federation of Bosnia and Herzegovina is insufficient.“ is false. In other words, we confirmed hypothesis.

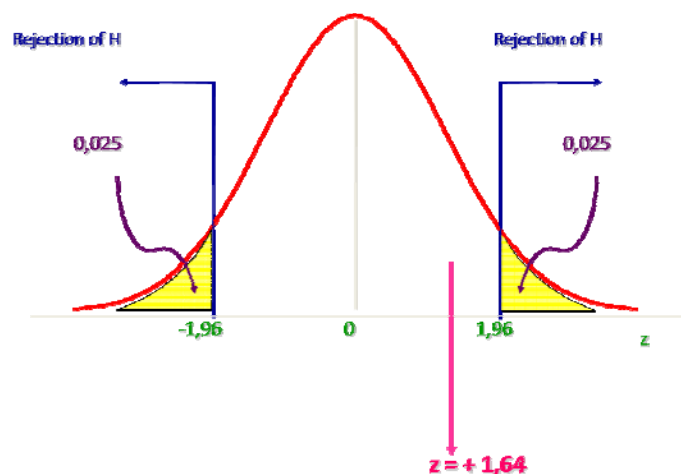


Figure 3. Graphical confirmation of hypothesis – field of acceptance

In support of this goes the result of statistical analysis of research where we proved that the average of all answers is 4,33 and that fits *agreement*. Also, mod (the most common answer) is 5 (*absolute agreement*). Standard deviation represents average statistical distance of every answer from average value, which, in this case means, that standard deviation is small (0,73).

QUESTION	AVERAGE OF ANSWERS INDIVIDUAL	AVERAGE OF ANSWERS TOTAL
Total Quality Management as managerial accounting instrument is not enough adequately used in management of large enterprises in Federation of Bosnia and Herzegovina.	4,083333	4,3333333
Appliance of instruments of managerial accounting can assist large companies in Federation of Bosnia and Herzegovina in achieving larger market competitiveness.	4,25	
Increasing quality of products and services directly affects level of competitiveness of company.	4,666667	

3. CONCLUSION

Statistical analysis confirmed hypothesis of this paper stated: „Level of appliance of Total Quality Management as instrument of Management and Managerial Accounting, for increasing competitiveness of large enterprises in Federation of Bosnia and Herzegovina is insufficient.“. This research was conducted on a sample of large successful enterprises in Federation of Bosnia and Herzegovina. From collected answers and given analysis we concluded that TQM is not enough used in Federation of Bosnia and Herzegovina, that instruments of managerial accounting for increasing quality and competitiveness are not used enough, although there is awareness of importance of quality of products and services as of overall modes of running business and their impact on competitiveness of companies on domestic and foreign markets regardless of industry sectors.

4. REFERENCES

- [1] Malinić, D., Milićević, V., Stevanović, N., Upravljačko računovodstvo, Centar za izdavačku delatnost fakulteta u Beogradu, 2012., str 6
- [2] <http://what-when-how.com/metrology/why-tqm-metrology/>; accessed 12.01.2013.
- [3] http://en.wikipedia.org/wiki/Performance_management; accessed 26.01.2013.