

**IV INTERNATIONAL
CONFERENCE
QUALITY SYSTEM
CONDITION FOR
SUCCESSFULL BUSINESS
AND COMPETITIVENESS
PROCEEDINGS**



CENTER FOR
QUALITY
Kragujevac



ASSOCIATION FOR
QUALITY AND
STANDARDIZATION
OF SERBIA



CENTER FOR
QUALITY
PODGORICA

KOPAONIK, 30/11.-02/12/2016

**ASSOCIATION FOR QUALITY AND STANDARDIZATION
OF SERBIA**

IV INTERNATIONAL SCIENTIFIC CONFERENCE

**QUALITY SYSTEM CONDITION FOR
SUCCESSFUL BUSINESS AND
COMPETITIVENESS**

PROCEEDINGS

Kopaonik, 30/11 - 02/12/2016

PROCEEDINGS

Publisher:

Association for quality and standardization of Serbia

For publisher :

Professor Zoran Punoševac PhD

Editorial board:

Professor Zoran Punoševac PhD

MSc. Ana Jelenković

Ivan Vesić

Print:

SaTCIP d.o.o ,Vrnjačka Banja *

No. of copies :

50

ISBN 978-86-80164-04-5

SCIENTIFIC COMMITTEE

- Prof. Zoran Punosevac PhD (Serbia)*
Djordje Minkov PhD (Serbia)
Prof. Radomir Radovanović PhD (Serbia)
Prof. Zdravko Krivokapić PhD (Montenegro)
Prof. Slavko Arsovski PhD (Serbia)
Mr Sc Milenko Raguž (Bosnia and Herzegovina)
Prof. Zorana Milosavljevic PhD (Serbia)
Prof. Adolfo Senatore PhD (Italy)
Prof. Aleksandar A. Boljsakov PhD (Russia)
Prof. Ani P. Petkova PhD (Russia)
Prof. Carol Zoller PhD (Romania)
Prof. Jozef Peterka PhD (Slovakia)
Prof. Krešimir Buntak PhD (Croatia)
Sc Miroslav Drljača PhD (Croatia)
Prof. Stanislav Borkovski PhD (Poland)
Prof. Sulejman Meta PhD (Macedonia)
Leon Kos (Slovenia)
Prof. Marianna Kazimierska-Grebosz PhD (Poland)
Prof. Milan J. Perovic PhD (Montenegro)
Prof. Nikolaos Vaxevanidis PhD (Greece)
Dobriła Jakic Dimic PhD (Serbia)
Prof. Ratko Uzunovic PhD (Serbia)
Janez Bencina (Slovenia)
Assoc. Prof. Raycho Ilarionov PhD (Bulgaria)
Prof. Valentin Nedeff PhD (Romania)
Prof. Viktor Vladimirovic Timcenko PhD (Russia)
Prof. ing Jiri Plura Csc (Czech)
Prof. Larisa Gromova (Russia)
Prof. Vladimir A. Fedorinov (Ukraine)

ORGANIZING COMMITTEE

- Prof. Zoran Punoševac PhD, president*
MSc Ana Jelenković, secretary
Ivan Vesić
Milos Punosevac

P R E F A C E

Dear fans of quality,

Association for quality and standardization of Serbia in cooperation with the Center for quality of Faculty of Engineering Kragujevac, Center for Quality Faculty of Mechanical Engineering Podgorica, College of technical studies & technology Krusevac, Middle and South East European countries Quality Initiative, with support of Accreditation Body of Serbia, Serbian Association of employers and Serbian chamber of commerce, this year continues the tradition of improvement quality infrastructure in the Republic of Serbia by organizing the 18th National and 4th international conference Quality system condition for successful business and competitiveness.

At this conference will be discussed about many topics, and the most significant we emphasize improvement of quality infrastructure, development and establishment of IMS - from practice to practice, path to business excellence, knowledge management, quality culture, innovation and quality, quality in the public sector, motivation and quality, audit and certification.

The significance of this meeting will provide organization of round table discussions:

- ☞ The new version of ISO 9001 and ISO 14001 - one year later*
- ☞ The modern world - a world of changes and learning*
- ☞ Our food on the world market*

These roundtables will enable consideration about significant issues of extreme importance for improvement quality infrastructure in Serbia. There is especially significant round table "Our food on the world market", where the experts in this area will point out the easiest way for selling our food on the world market, that is more and more demanding.

Articles published in the Proceedings gives the opportunity to entrepreneurs to find the right strategy, policy, to define objectives in the field of quality management system, environmental management system, and occupational health and safety management system in order to strengthen its competitive position on the market and maximize satisfaction customers / service users

On behalf of the Organizing Committee of the 18th National and 4th International scientific conference to thank to all article authors and co-authors, co-organizers, sponsors, and all those who have supported, participants from Serbia and abroad who have helped to make this conference successfully.

President of the Organizing Committee

Professor Zoran Punoševac PhD

CONTENTS

| | | |
|----|---|-----|
| QR | QUALITY ASSESSMENT OF MULTI-CRITERIA APPROACH IN EVALUATION <i>Rade Grujičić, Branko Anđić, Zdravko Krivokapić, Snežana Grujičić</i> | 11 |
| QR | BUSINESS PROCESS CONTROLLING <i>doc. dr. sc. Krešimir Buntak, Vesna Sesar, univ.spec.oec., MBA, Matija Kovačić bacc.oec</i> | 19 |
| QR | A SURVEY ANALYSIS OF INTEGRATED MANAGEMENT SYSTEMS IN THE REPUBLIC OF SERBIA <i>MSc Jovana Petrović, dr Nedeljko Živković, mr Pavle K. Popović</i> | 29 |
| QR | SOME ISSUES OF INTEGRATION OF MANAGEMENT SYSTEMS <i>Mr Velimir Komadinić, Dr Srećko Manasijević, Radomir Radiša</i> | 41 |
| QR | HIGH LEVEL APPROACH IN ASSESING AND RANKING KNOWLEDGE MANAGER QUALITY WITHIN THE UNCERTAINTIES <i>Dajana Živković, Gordana Todorović, prof. Slavko Arsovski PhD</i> | 47 |
| QR | QUALITY IMPROVEMENTS IN FRUIT PROCESSING & COLD STORAGE INDUSTRY IN TERMS OF INFORMATION SYSTEM UTILIZATION <i>Bojan Milosavljević, PhD, Saša Petrović</i> | 55 |
| QR | CONTEMPORARY TRENDS IN THE PACKAGING AND TRANSPORT OF CONFECTIONERY PRODUCTS <i>Prof. Dr Srećko Ćurčić, Miloš Božić, Milan Matović</i> | 69 |
| QR | INFLUENTIAL PARAMETERS QUALITY PUBLIC PASSENGER TRANSPORT <i>Prof. dr Miloš Arsić,dipl.inž, Prof. dr Milun Kokanović, MSc Vladimir Arsić</i> | 81 |
| QR | TECHNOLOGICAL COMPETENCE IN ORDER TO INCREASE COMPETITIVENESS AND SUSTAINABILITY OF ORGANIZATIONS <i>Dr.sc. Krešimir Buntak, Ivana Martinčević, univ.spec.oec, Fitim Kurti mag. oec</i> | 89 |
| QR | CONTRIBUTION TO FEASIBILITY ANALYSIS OF INVESTMENT IN RENEWABLE ENERGY <i>Prof. Sandra Milunović Koprivica, Prof. Aleksandar Marić</i> | 99 |
| QR | EVALUATION AND RANKING OF COMPACT FLUORESCENT LAMPS IN UNCERTAIN ENVIRONMENTS <i>Momcilo Vujčić, Marko Sucurovic, Marija Blagojevic</i> | 107 |
| QR | NOISE PROTECTION IN INDUSTRIAL PLANTS <i>dr Aleksandra Kokić Arsić, dr Bojan Prlinčević, dr Mladen Radojković, dr Aleksandar Đorđević</i> | 125 |
| QR | RISK MANAGEMENT APPROACH TO FSW PROCESS <i>Ph.D. Nikola Sibalic, Ph.D. Milan Vukcevic, M.Sc. Srdjan Martić</i> | 133 |
| QR | PRÁCTICAL APPLICATION OF QUALITY MANAGEMENT SYSTEM <i>Prof. Slavica Anđelić, Ph.D, Mast. ekon. Marko Trišić, Sociol. Jovana Petrović</i> | 141 |
| QR | DOES BUSINESS INTELLIGENCE AFFECT QUALITY OF EDUCATION: CASE STUDY <i>MSc Zorica Lazic</i> | 151 |



Invitation paper

BUSINESS PROCESS CONTROLLING

doc. dr. sc Krešimir Buntak¹

Vesna Sesar, univ.spec.oec., MBA²

Matija Kovačić bacc.oec³

***Abstract:** Quality management in terms of dynamic turbulent environment in which we exist today are becoming imperative. Increasing the competitiveness of organizations have been improved is possible only through continuous improvement of organizational processes. However, despite the importance of compliance and continuous improvement process, few authors engaged in the development of new models whose implementation organizations to increase their competitiveness, and continuously improve their processes. Combining quality control and controlling an arrangement by which organizations can follow efficiency, effectiveness, and cost-effectiveness of the process. Model controlling of business processes represents a new way of continuous improvement of organizational processes. Using the model of controlling processes in your business, organization reduces costs due to permanent removal of anomalies in the process, which helps reduce the number of non-conforming products. In addition, the organization is fully oriented towards the interested parties and the fulfillment of their demands as the rationalization process orientation*

***Keywords:** Business process management, business process management, quality management, organization*

***JEL Classification:** M190*

¹ Dr.sc. Krešimir Buntak, University North, Koprivnica, Croatia, kresimir.buntak@unin.hr

² Vesna Sesar, univ.spec.oec., MBA, University North, Koprivnica, Croatia, vesna.sesar@unin.hr

³ Matija Kovačić bacc.oec

1. INTRODUCTION

Every organizational goal is to enhance process effectiveness and efficiency in order to be sustainable. To be able to reach that goal, organization has to develop a model for process continuous improvement. The model of business process controlling gives organization an opportunity to find anomalies in a process. By finding them it can incorporate prevention measures at the very beginning of the process, using the PDCA methodology which is the key for process continuous improvement. Before finalization of customer requirements it is necessary to plan complete realization having in mind possible plan deviation. To minimize plan deviations organization has to develop factor of safety. This factor of safety together with referent values provides security to the organization in the process of plan realization. However, organizations have to be cautious in using the factor of safety, since its increase raises unrealized organizational potential.

2. LITERATURE REVIEW

On the international level, among authors who deal with controlling the most notable are Von Brocke, J., and Mixhael Rosemann who started to mention process controlling as important activities (Von Brocke, Rosemann 2010). Also Polyvyanyy, Smirnov and Weske talking about the importance of information about the process for controlling (Polyvyanyy, Smirnov, Weske: 2011). Furthermore Krumeich, Jacobi, Werth and Loos are speaking about the importance of business processes analysis for the organization which wants to develop a competitive market advantage. (Krumeich, Jacobi, Werth, Loos: 2014). Apart from this work, the work of Maximilien Kintz who started to emphasize the importance of business processes controlling and monitoring plan achievement through KPI (Kintz 2012). Authors Potkany and Babiak in their work reflect the main tasks and roles that process controlling has in the organization by observing small and medium organizations (Potkany and Babiak 2013). Authors Knothe, Jakel et al analyzing the importance of input requirements in the process and the need to develop ways in which the organization will control them (Knothe, Jakel and Wintrich 2014). By analysing foreign authors literature, only rare emphasize the importance of controlling in the whole management process. Furthermore, there are almost no authors that analyze business processes through the prism of quality management. From the work of Croatian authors the work of Nidžara Osmanagic Bedenik is dealing with general controlling research which includes number of organizations who implemented controlling as a separate function in their business. Osmanagic Bedenik researches controlling development and concepts of controlling, strategic and operational. (Osmanagic Bedenik: 2015). Authors Ocko and Svirig emphasize controlling as a basis for making good management decisions. In their papers, controlling is viewed through the prism of accounting, which is the base of controlling. But they do not address the mentioned model by means the process can be continuously improved. (Ocko, and Svirig: 2009). Other authors have done a comparative analysis of controlling functions in the organizations, research about the number of organizations that have implemented controlling especially bank sector and research about the relation between planning and controlling. But there are no researches which analyze controlling of business processes through efficiency, effectiveness and process economization. This is necessary for having good quality management in the organization. The link between business process controlling and quality management is very important since it decreases the number of non-conforming products and continuously improves all production processes in the organization. By continuously improving processes, organization decreases non-conforming products which directly affects quality costs that is costs because product non-quality. This research analysis controlling model based on which organization continuously improves processes, meet requirements of all interested parties and through realization of planned activities follows efficiency, effectiveness and in the end economization of business processes.

3. BUSINESS PROCESSES AND PROCESS ORINETATION

Modern environment in which today's organizations operate brings the large number of turbulence as a result of globalization and internationalization of business. Organizations only can adapt to new conditions in the environment in which they operate if they implement process philosophy.

Business processes are a series of actions that organization must realize through the process. The basic classification of business processes is:

- Core business processes
- Support processes
- Management processes

Each of these processes has different tasks in the organization. The main task of the core process is meeting the demands of stakeholders. Support processes and management processes must provide all necessary resources to enable efficient and effective compliance with the requirements of stakeholders. Today are developed number of methods which can improve organizational processes and some of the best known are: lean, lean six sigma, kaizen and TQM.

In order to improve organizational processes all processes must be documented in ccordance with ISO 9001. However, in order to improve business processes, it is necessary for organization to develop a process controlling. Based on the results of measurements on the KPIs, controlling suggest management a possible decision to improve the process. Because of this requirement, developing the model which is shown in figure 2, becomes imperative. Before the explanation of this model, it is important to decompose the business process into its constituent parts, with the aim of better understanding the model. In figure 1 is shown decomposition of business processes.

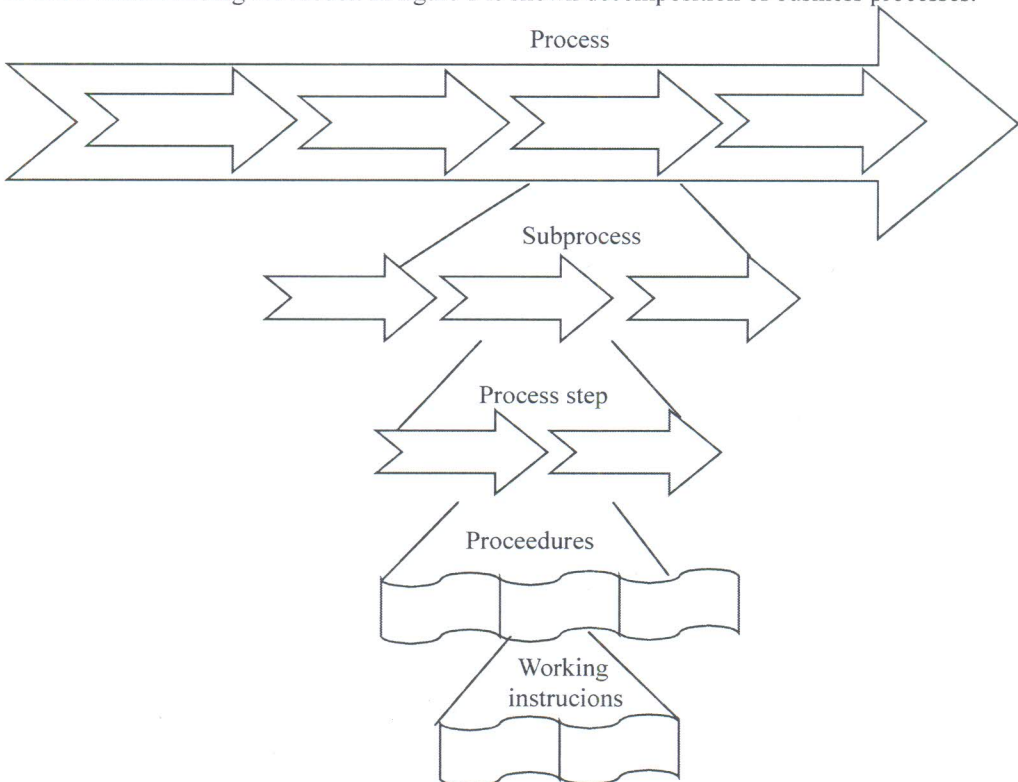


Figure 1: Business process decomposition

Source: Author copyright

Figure 1 shows that every business process can be decomposed to a sub-process. Sub-process further can be decomposed to the process step. To complete the process step, organizations must develop procedures and then create work instructions. Decomposition of business process allows cost observation and optimization of procedures necessary for the production. By eliminating unnecessary procedures, business process is accelerated, and costs are lower. Moreover, the implementation of quality control after the execution of any official possibility of non-conforming product is reduced to a minimum.

4. ISO STANDARD REQUIREMENTS RELATED TO PROCESS APPROACH

One of seven quality principles in new, revised Standard ISO 9001: 2015 is the requirement for implementation of process approach in the organization. With the process approach, ISO 9001: 2015, requires also an organization focus on their customers, which means that organization must collect input requirements of interested parties, and then mentioned requirements meet through the process (ISO 9001: 2015: 2015). Standard depicts that organization must understand interested parties because they are most process affecting. If organization collects all requirements from customers, then the organization is completely customer oriented. Customer should be viewed through the prism of interested parties. Standard in Clause 4.2 states the importance of interested parties in the context of quality management. (ISO 9001: 2015: 2015). However, organizations must understand which interested party requirements are the most important, because there are many different requirements that organization has to meet. In addition, through continuous analysis of interested parties, organizations can develop a model to increase the quality of their products in accordance with information gathered from the analysis. Practicing that philosophy, organization can plan their fulfillment even before the general requirements of interested parties are set. Employee's involvement, as the second requirement of the standard, requires from organization to involve all its employees in promoting quality and process improvement. Accordingly, many models have been developed in which the employees are involved in the improvement, and one of them are circles of quality (ISO 9001: 2015: 2015). After all, employees are the ones who participate in the execution of the plan, and with their work directly affect product quality. Another requirement which Standard sets for the organization is focusing on competent leadership and management. Management makes decisions, manages the entire organization, and in the end brings a management review that is directly related to the proposed controlling model. In addition, controlling proposes guidelines to management in accordance with analysis so they could make the best decisions for the organization. Leadership, in addition, must enable all necessary resources needed to achieve its processes. By providing resources at the same time provides a basis for fulfilling requirements of all interested parties (ISO 9001: 2015: 2015).

On the other hand, competent leadership should be aware of the constant risk that input requirements will not be able to realize. Accordingly, during planning, leadership should plan all organization activities and involve certain level of risk. This risk could be reduced by including the safety factor. In addition, executives should constantly emphasize continuous improvement of all organizational processes and the importance of quality management at lower levels of management. Furthermore, by defining policy of organization quality, organization defines foundation and framework that will be the basis for planning goals that are associated with quality. Quality policy also defines organizational commitment to meet interested party requirements. Standard specifies how leadership must introduce quality policy and make it available to all interested parties and to all employees within the organization so they can met planned goals (ISO 9001: 2015: 2015).

Through already mentioned planning, management must ensure that objective must be measured which is directly related to controlling. Planning approach that involves risks and requirements of interested parties, setting measurable objectives, organization provides possibility of process continuous improvement and sets foundation that organizational processes achieve defined goals. An organization must define a way of evaluating the effectiveness of the plan, and its

fulfillment (ISO 9001: 2015: 2015). With the use of controlling and analyzing the plan effectiveness, controlling can give reasons for possible plan deviations, which is included in proposed model.

In Clause 8, Standards sets requirements for the organization about operational planning and supervision of its realization. Also, the selected Clause defines requirements and the organization itself that the same set at the entrance of the process which continually improves the implementation of planned activities. (ISO 9001: 2015: 2015). In the last phase of the model that is the implementation of planned activities, organization follows a series of process analysis, which are described in Clause nine of ISO Standard. The organization should identify key indicators which will monitor and measure. Special emphasis is placed on customer satisfaction and methods of data collection from customers regarding their satisfaction with the final product or service. Through the analysis provided in the last phase of the model, the organization receives feedback about plan efficiency and effectiveness and customer satisfaction. The results of these analyzes are actually cost-effectiveness of the organization that may be the basis for assessment administration, and planning improvements. With this approach, the organization continuously collects data on the implementation of planned activities and taking steps depending on the results of the analysis which ensures continuous improvement of organizational processes (ISO 9001: 2015: 2015). As an imperative in business, Standard promotes the adoption of a process approach and process philosophy. In addition, the revised Standard emphasizes the need for continuous process improvement, according to the PDCA methodology, which is achieved by using the proposed model. The principle of continuous improvement applies to the processes of quality management system and it can also be applied to a model of controlling and thereby ensure all requirements of Standard. With continuous process improvement organization raises product quality and services in each process cycle. Improvements also need to contribute to better meeting customer requirements, and a better way of measuring the results achieved. Through each new improvement, the organization reduces the possible side effects or anomalies in the process. (ISO 9001: 2015: 2015). The process approach allows the organization to constantly improve their process which is directly correlated with quality increase. In addition, by raising product quality, requirements of interested parties are met and the organization becomes more efficient. With this approach, organization increases the quality of process management, and through process management that are interrelated synergy is achieved (ISO 9001: 2015: 2015).

After all, organizations must define ways to evaluate plan realization. Evaluating the plan, organization evaluate product conformation with customer requirements, planning effectiveness, customer satisfaction with final product and in general whole system of quality management and organizational processes. (ISO 9001: 2015: 2015).

5. THE MODEL OD BUSINESS PROCESS CONTROLLING

The model of business processes controlling starts with customer requirements as an input. Process oriented organization in accordance with its philosophy gathers requirements of all interested parties. Those requirements must be met throughout processes. The number and type of interested party depends on organization type. By defining input requirements of interested parties, organization moves to second phase of model planning. Planning as one of management function and in synergy with the other four functions (organization, human resources management, leadership and control), an organization has to define all necessary resources to achieve requirements of all interested parties. Interested parties expect from an organization to meet their requirements through organization process. Each organization depending on its basic process has different interested parties. However, if interested parties could be generalized and reduced to a common denominator for all organizations, it could be said that there are requirements of customers, employees, shareholder, bankers or creditors, society, partners, suppliers and other interested parties. According to process orientation that is completely customer focused,

organization has to take into account all requirements of interested parties and meet them through the process.

Meeting requirements is directly related to the organization efficiency which will be discussing later in the paper. The basis of controlling is good planning. With planning, organization determines reference values necessary for the next stage in which organization does process efficiency and effectiveness control and ultimately process economization. According to Figure 2, organization has to include safety factor during planning that will allow safety deviation from the reference values given in the plan. However, an increase of security coefficient reduces organization potential, which leads to a lesser quantity of output production. After planning phase organization starts with implementation phase in which monitors process stability, efficiency, effectiveness and ultimately process economization. If during a process flow arises deviation from the reference values then organization has to take into account all interested party requirements, analyze deviations and eliminate them. The result of every deviation is non-compliant product that represents cost for the organization. After analyzing and correcting process anomalies organization starts new planning cycle with implementing solutions of the problem, and taking preventive actions. Prevention costs are lesser than costs of curative actions, correcting anomalies in the process. For the above mentioned analysis of process anomalies, organization has many tools on disposal to use. Some of them are: statistical control charts (which also serve to control process stability), field force, FMEA, affinity diagram, the matrix of priorities, Ishikawa diagram, brainstorm and many others.

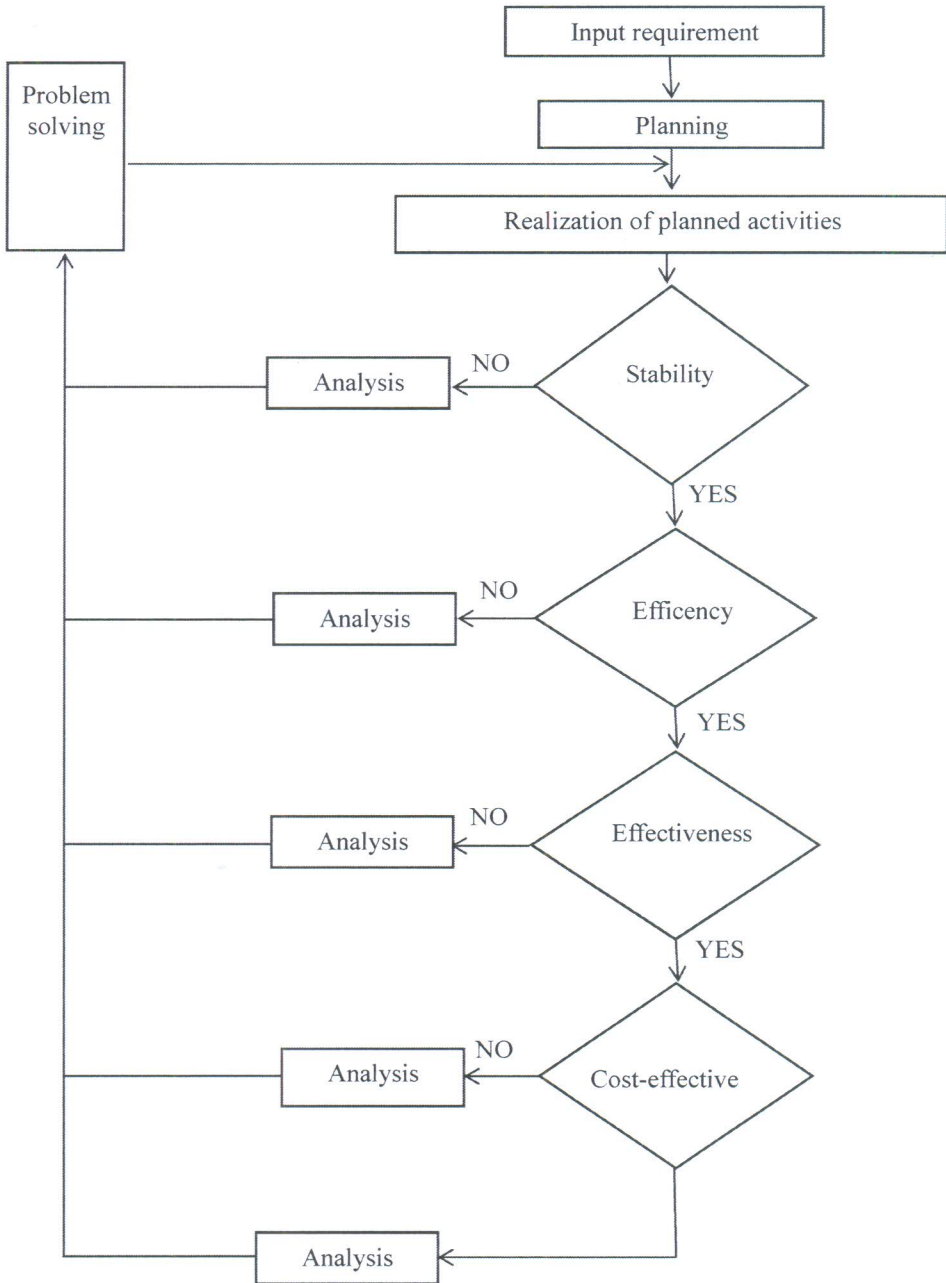


Figure 2: Model of business process controlling

Source: Author copyright

6. PRODUCT QUALITY AND PROCESS EFFICIENCY AND EFFECTIVENESS

Each of the before mentioned requirements can be categorized as shown in Figure 3;

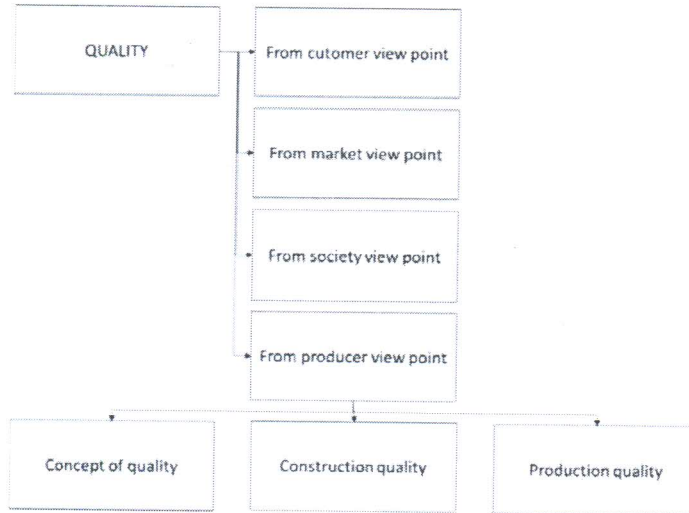


Figure 3: Quality view from the aspect of all interested parties

Source: Andrijanić Ivo, Bunak Krešimir, Bošnjak Mirko. *Upravljanje kvalitetom s poznavanjem robe*, Libertas, Zagreb, 2012. str. 23

Every interested party requirement has its own importance for organization. Also, every interested party claims to have a high quality product if it meets customer requirements. For example, a customer will buy a product that is cheaper from substitutes in the case of product non differentiation, but are completely identical. To enable organization to meet customer requirements related to the price it must optimize its processes to reduce production costs. As efficiency is strictly related with achieving the goal, organization defines in the plan customer price requirements as a goal.

Defining that requirement as a goal, costs are being monitored during the whole process in order to minimize final price of the product as much as possible, and to have a high quality product at the end. If product cost is approximately equal to the cost set as the reference value, the organizational process is efficient, then the goal is achieved. On the other side, if organization takes into account requirements of society to meet the environmental protection requirements, then the organization by implementing the ISO 9001 or ISO 14000 also complies with standards that are associated with the requirements of environmental protection. Accordingly, organization will for a product that meets the before mentioned conditions claim that this product has high quality.

However, one of the most important aspects of product quality is quality defined by manufacturer. After all, the manufacturer is the one upon which depends the product quality. In addition, defined quality that is, realized by manufacturer is directly correlated with efficiency and effectiveness of business process and entire organization. On the other hand, the concept of the product is an indication of how is the idea of the organization in accordance with customer requirements. Thus, the quality concept is directly correlated with the validation or customer feedback. The products that are well designed will be well accepted in the market. Except on efficiency, quality concept is directly linked to effectiveness, and ultimately to process economization. Except quality concept there is also construction quality, which can be evaluated only when the product is on the market at least two generations in terms of same quality concept.

Therefore, the quality concept is the same, but construction quality is different. The degree of product quality is determined by combining quality concept with construction quality (Peric: 2012).

Except before mentioned parameters, quality can be defined through construction quality or quality of conformance. Mentioned components of quality are closely related to quality costs. Quality costs incurred as a direct result of prevention, testing and determining the quality of the product. (Andrijanic, Buntak, Bosnjak: 2012).

It is significant to mention costs of internal deficiencies which are detected before the product is delivered to the customer. Costs of internal deficiencies are primarily related to the cost of non-conforming products or activities that affect analysis (Andrijanić, Buntak, Bošnjak: 2012).

Except internal deficiencies costs, organization is facing with costs of external failures, which are found after delivery to the customers. Accordingly, costs of guarantees or compensation arise. Therefore, the quality of product design and development of same product starts in the phase of product design and development, as opposed to comfort quality which is related on fulfilling customer requirements (Andrijanić, Buntak, Bošnjak: 2012).

Therefore, organization has to be constantly in contact with their interested parties and production in order to have information's about the product performance possibility. (Osmanagic Bedenik: 2015). Construction quality is closely linked to conception quality, therefore its influence on process efficiency and effectiveness.

If quality costs increase it is obvious that process is not optimizes, which means it generates product nonconforming cost therefore process efficiency is lower which is directly linked to lower efficiency.

7. CONCLUSION

Business process controlling represents important activity in conducting the continuous improvement process. In figure 2 organization performs continuous anomaly analysis in the process and by eliminating them, it plans prevention actions in new planning cycle to prevent repetition of the same anomaly. With this approach organization minimizes nonconformity of products witch directly affects business result in reducing the costs. By performing it right organization continuously improves its processes. Controlling efficiency and effectiveness of its processes organization completely orients toward customers and achieves their requirements. Therefore, a described model of business process controlling represents basis for management review which is defined in Standard ISO 9001 and refers to it as an organizational ability to carry out the activities in order to meet the requirements of all interested parties. Management review can be given on the basis of information's collected through internal and external audit. However, if the organization implements the model described in this paper, management can make its review on the basis of information gathered from controlling. Since this is a proactive approach to controlling and control, corrective actions can be done immediately after detecting the beginning of products nonconformity. Recommendations for further research and contributions to this model would be in researching the cost of workplace and making a model for calculating the workplace potential in the organization. After calculating it, business processes are being planned based on that potential. At the end of the cycle, organization determents actual realization of the potential, and its unrealized potential.

LITERATURE

- [1] Rosemann, M., & vom Brocke, J. (2015). Handbook on Busniess Process Management 2Springer Berlin Heidelberg.
- [2] Hrvatska Norma. HRN EN ISO 9001:2016 Sustav upravljanja kvalitetom – zahtjevi.
- [3] Nindžara, O. B. (2004). Kontroling, Abeceda poslovnog uspjeha. Zagreb: Školska knjiga.

- [4] Očko, J., & Švigir, A. (2009). *Kontroloing: upravljanje iz backstagea*. Alitus savjetovanje.
- [5] Polyvyanyy, A., Smirnov, S., & Weske, M. (2015). Business process model abstraction. In *Handbook on Business Process Management 1* (pp. 147-165). Springer Berlin Heidelberg.
- [6] Krumeich, J., Jacobi, S., Werth, D., & Loos, P. (2014, May). Towards planning and control of business processes based on event-based predictions. In *International Conference on Business Information Systems* (pp. 38-49). Springer International Publishing.
- [7] Kintz, M. (2012). A semantic dashboard description language for a process-oriented dashboard design methodology. *Proceedings of MODIQUITOUS 2012*.
- [8] Potkány, M., & Babiaková, M. (2013). Management of support processes by means of controlling
- [9] Knothe, T., Jakel, F.W., & Wintrich, N (2014). Controlling zur Einführung und zum betrieb eines geschäftsprozessmanagementsystems. *Controlling*, 26(2), 76-82.