

ORGANIZATION AND MANAGEMENT OF THE PRODUCTION PROCESS OF THE COMPANY

Jelena Joksić¹; Zoran Nešić², Ph.D.; Stojanče Nusev³, Ph.D.

¹The College of Applied Technology Science, Arandjelovac, SERBIA, jelena.joksic@vsar.edu.rs

²University of Kragujevac, Faculty of Technical Sciences Cacak, SERBIA, zoran.nesic@ftn.kg.ac.rs

³University “St. Kliment Ohridski”, Faculty of Technical Sciences, Bitola, MACEDONIA,
stojance.nusev@tfb.uklo.edu.mk

***Abstract:** In this study the subject matter will be organization and management of the production process of the company. The analysis will include the management processes of companies, the organization of production functions and types of production process. Management processes in the company are based on the adoption and implementation of decisions. The production function is a basic function in the process of making efficient operation of the enterprise and the product, as a result of the production function, is a critical component for the creation of a sustainable competitive advantage. Application of different organizational methods enable successful implementation of the production process. The aim of this paper is to be based on the organization and management of organizational processes show the way for the efficient operation of enterprises.*

***Keywords:** enterprise, production function, efficient operations, efficiency, management*

1. INTRODUCTION

In the broadest sense, organization and management can be defined as a natural or conscious formulation of a state that acquires the features of a whole. In fact, organization is a deliberately induced movement in which the interconnection of certain parts is carried out according to predetermined rules. Therefore, interconnected elements build a state that acquires the properties of a whole. The organization encompasses all events, all actions aimed at interconnecting certain elements into a whole with a goal. The purpose of the organization and management is to create a whole that fits a certain quality that can not be derived from the quality of its parts observed individually [1-9].

The result of organization and management is a certain state that possesses the characteristics of a whole. The organization's practicality is conditioned by its goal. It follows that it is formed and created according to the defined goal and modified with each of its major changes. This is the case that is present in all organizations regardless of their size or type. However, it is not enough that there is only a specific goal for the organization to be created, but it is also necessary for people's readiness to work for that purpose. This ability ensures the purpose of the organization. It is necessary that individuals in such a clearly defined objective recognize the possibility of achieving some of their individual interests and needs. This is extremely understandable, because there is no organization without association and interconnection [9-15].

2. MANAGEMENT PROCESSES

According to [3], management processes are primarily the activities of making management decisions. They relate to the entire enterprise rather than to individual segments of the company. The management process to be done is necessary to plan, organize and control in detail. Improving the process is conditioned by the reduction of time duration, cost reduction, quality improvement, and increased efficiency. It is necessary that all processes and their improvement be in line with the goals of the company. Management processes are in fact processes in charge of planning and controlling the realization of set goals.

In order to achieve a more efficient operation and functioning of the company and to provide an uninterrupted flow of business processes, it is not enough to emphasize the technical improvement of the process, but it is necessary to improve the organization of work by linking the knowledge and skills of the employees.

The most effective measure of the management process is certainly a performance that includes parameters and indicators that relate to [4]:

- an ability of the management process, i.e. volume and quality of the output achieved in relation to the desired, planned or maximum possible output,

- the rationality of the management process, i.e. volume and quality of the achieved input in relation to the desired, planned or maximum possible input,
 - process timing, i.e. the realized time of the process in relation to the desired, planned or maximum possible time.
 The success of the management process relates to the process as a whole, from output to input, and vice versa. The result of the management process is the level of fulfillment of the objectives of the process, and above all, the level of customer satisfaction .

Each enterprise is treated as a network of business processes. Of great importance is knowledge of processes that take place within the company, as this implies getting to know the ways in which the company operates, and in the end, it creates value for the owners and consumers. Organizational processes determine work processes, then behavioral processes and processes of change, which are shown in Table 1.

Table 1: Overview and characteristics of organizational processes [1]

	Working (business) processes	Behavioral processes	Processes of change
Defining	Array of activities that transform inputs into outpaces	Widespread forms of behavior and ways of action and interaction	Arrays of events over time
The role	Performance of the company	Forming a mode of work under the influence of individual and group behavior	Changing the scope, character and identity of the company
Types	Operational and administrative	Individual and interpersonal	Autonomous and induced, incremental and revolutionary
Examples	Development of a new product, execution of orders ...	Decision making, communication, organizational learning	Creation, growth, transformation, decline

Work processes involve the execution of an operational or administrative task so that they can be operational and administrative. Operational processes represent the basic processes that create, produce and market products and services to final costumers. Administrative affairs, on the other hand, serve to formulate information and plans for internal use in an enterprise. Behavioral processes are a special group of processes that are very difficult to identify because they concern all aspects of organizational behavior. They greatly influence the form and character of business processes. Change jobs of transformation processes appear through all aspects of an organization as a system, because everything in the company is subject to minor, gradual or major changes.

3. ORGANIZATION OF THE FUNCTION OF PRODUCTION

The production function involves a number of phase-by-stage activities: production preparation, production execution, and production control [1]. Preparation of production presents technical and organizational measures with the sacrificial creation of favorable conditions for the smooth flow of production. Designing and constructing products presupposes the determination of the technical characteristics of the product, so at this stage, it is necessary for the next step to decide on the following elements that will affect the future product [1]:

1. Combined products;
2. Selection of technical characteristics of the product;
3. Material selection;
4. Creation of material nomenclature;
5. Determination of the technical norms of the material .

When selecting the product itself, it is important to meet the wishes and needs of consumers. The next important factor in product selection is the time required for technical preparation. The choice of technical characteristics of the product is primarily based on features that will provide economical cost-effectiveness. When selecting metric, the type of material that is the most favorable solution is determined, but in each case, a replacement is also specified, if from any reasons the main material is missing. Material nomenclature is compiled on the basis of data on the technical construction of the product. The material standard is the amount of material that is needed when creating a product unit. According to [1], the technological process is a set of actions that change the composition, quality, shape, or size of the materials to be produced in order to obtain the desired product. It is subject to change in situations when one procedure is replaced by other more effective ones. Regarding the measures of organizational preparation, they are closely connected with the execution of the technological process. The correct estimation of the type of production is conditioned by the successful implementation of operational planning in order to select the most optimal method for

developing operational plans. A well-defined operational plan determines which operations, parts, and products need to be done at what time interval, so that the plan is successfully done in a situation where all workplaces are fully loaded. The organization of the technological process depends largely on the production manager who is obliged to distribute the jobs, as well as to ensure the quality of the product. Optimal production rhythm is conditioned by the operational production plan and depends entirely on production planning. The organization of internal transport represents the total movement of the means of production in the process of their creation. Operational production records are aimed at correct and timely observation of the flow of achievement of the planned results, so its task is to constantly monitor production results.

4. PRODUCT TYPES

Specific production task in a specific branch of production can be done using different organizational methods. The most efficient implementation of production will be enabled by the proper selection of a particular organizational method. Types of production are standardized organizational solutions that are in fact typified forms of process and typified production processes [1]. They also affect the economic results and the implementation of organizational principles in production. There are three basic types of production: individual production, serial production, and mass production. This division was made from the standpoint of work in which a finished product is obtained, whereby these three forms distinguish in their economic and organizational characteristics. Individual production assumes that only one product operates in a factory, at a certain time, from the beginning to the end of work on the production of a particular product. It is used in craft production. Individual production is treated as the lowest form of organizational production. It is characteristic that the costs of preparing grow, in relation to the cost of production because, for each operation on the product, special preparation of the workplace are carried out. Then, for each product, a complete technical preparation of the production is carried out, so that the planning capabilities are very limited, and in the end, the supplies of materials are usually much larger than those that would be needed in case of serial or mass production of the same product.

Serial production is the production of a larger number of the same products or parts of products in one production cycle. It can be organized in two production systems. The first is a line system in which the machines are positioned one to the other in the order of the technological process. The second is a cracked serial production system in which the machines are arranged so that a group of similar machines according to technological characteristics are in the same department. In the case of serial production, the costs of technical preparation are even further reduced per product unit and, as is the case with, the cost of preparing the workplace.

Serial production is considered a higher type of organization than the individual production. Mass production is a higher type of production organization than production. It is characterized by jobs that are grouped into classes arranged in the order of the technological process. This ensures the continuity of the technological process as well as the maximum utilization of the working time and capacity of the plant. In mass production planning and production control, then technical control quality is not required by highly skilled staff, they are mostly simple, which contributes to relatively high cost-effectiveness.

Automatic production is the highest form of production organization because the production process is fully automated. Human work is the only one present in cases of occasional control of the work of individual control devices. Automatic production requires large investments, especially with the initial investment.

When it comes to choosing the way of an organization, it must be kept in mind the effects that this choice will have on the implementation of productivity, cost-effectiveness, and profitability. When it comes to profitability, the way of an organization would be the following: automatic, mass, serial, individual, and when it comes to cost-effectiveness, the choice will fall into some of the lower aspects of the production organization.

5. CONCLUSION

Constant improvement of business is definitely the primary task of any organization that imposes competition. As can be concluded, the management process of any company takes place through the adoption of appropriate decisions and their conversion into actions. This is a very complex process. For better planning, it is necessary to manage and control business areas in order to produce as good products as possible in order to satisfy the needs of consumers expressed in the form of market demand. The process of organization and management is conditioned by the demands of consumers. Regarding the organization of the production function, it can be concluded that it is necessary to respect all activities according to the stages of production which involve preparation of production, production execution and control of

production. This creates the conditions for a smooth flow of production. The ultimate goal of a successful organization of the production function is a quality product and its economic profitability. Finally, the most efficient implementation of production will be enabled by a proper selection of the organizational method. This choice also affects the economic results and the implementation of organizational principles in production. When it comes to selecting the type of organization, one has to keep in mind what effects these choices will have on productivity, cost-effectiveness and profitability implementation.

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REFERENCES

- [1] KRSTIĆ, B.: *Elementi i determinante upravljanja poslovnim procesima preduzeća*, Available at: https://www.google.rs/url?sa=t&rct=j&q=&esrc=s&source=web&cd=14&cad=rja&uact=8&ved=0ahUKEwjY1fPuwOHVAhVrAZoKHWYjCvc4ChAWCDQwAw&url=http%3A%2F%2Fbojankrstic.net%2Fwp-content%2Fuploads%2F2013%2Fclanci%2F13%2Felementi%2520i%2520determinante%2520upravljanja%2520poslovnim%2520procesima%2520preduzeca.pdf&usg=AFQjCNHcZLdVFLTXdsikJ9Bu_rTtNE9V
- [2] NADOVEZA, B.; PEŠIĆ, H.: *Ekonomika preduzeća*, Evropski univerzitet Brčko district, Bosna i Hercegovina, 2014.
- [3] RIZNIĆ, D.; UROŠEVIĆ, S.; STAVRIĆ, B.: *Osnovi Organizacije*, Tehnički fakultet Bor, 2015.
- [4] AGARWAL, R. D.: *Organisation and Management*, McGrawhill, New York, 1990.
- [5] BULAT, V.: *Organizacija proizvodnje*, Mašinski fakultet, Beograd, 1995.
- [6] DRUCKER, P.: *Managing in Turbulent Times*, Harper and Brothers, New York, 1980.
- [7] SMITH, J.G.: *Business Strategy*, Basic Blackwell, 1985.
- [8] GRAY, E.R.; SMELTZER, L. R.: *Management*, McMilan, New York, 1989.
- [9] HICKS, H.G.; HERBERT, G.: *Management of Organizations*, Mc Graw-Hill Company, New York, 1964.
- [10] HANDSCOMBE, R.; NORMAN, P.: *Strategic Leadership*, The Missing Links-McGraw-Hill Bokk Company, London, 1989.
- [11] DRUCKER, P. F.: *Management*, Harper and Brothers, New York, 1976.
- [12] DENNING, S.; BASIL, W.: *Organizations Structuring*, Mc Graw-Hill Co., London, 1971.
- [13] COCK, KEMBALL, R. B.: *Organizations-Structure and Behavior*, John Wiley and Sons, INC, New York,
- [14] KOONTZ, H.; O DONELL, C.; SORRELI, L. C.: *Management*, Mc Graw-Hill Co., New York, 1964.
- [15] KOONTZ, H.; O DONELL, C.: *Principles of Management*, Mc Graw-Hill Co., New York, 1968.