# Bojan Krstic<sup>1</sup>, Sonja Jovanovic<sup>2</sup>, Ernad Kahrovic<sup>3</sup> PROCESS-ORIENTED ENTERPRISE MANAGEMENT AS A DETERMINANT OF ORGANIZATIONAL BEHAVIOR IN CONTEMPORARY BUSINESS TERMS

The transformation of an enterprise towards process-oriented enterprise is a determinant of organizational behavior in contemporary business terms. This determinant points out the need to leave vertical organization and functional-structured enterprise, and directs attention of its management to horizontal process-oriented organization. This paper formulates the roles that are supposed to support this organizational transformation. The transformation from functional departments to business processes is not exclusive in the sense that it does not necessarily mean elimination of functional aspects and functional structure of the organization. In the process of transformation towards process orientation, management chooses one form of a so-called horizontal or process organizational structure that favors a specific enterprise. Besides the purely functional orientation or the purely process orientation, in certain situations, when internal organization circumstances permit, it is possible to combine both approaches successfully.

**Keywords:** transformation; process orientation; business processes; process roles; structure.

JEL Classification: D21, L22, M21.

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## ПРОЦЕСНО-ОРІЄНТОВАНЕ УПРАВЛІННЯ ПІДПРИЄМСТВОМ ЯК ДЕТЕРМІНАНТА ОРГАНІЗАЦІЙНОЇ ПОВЕДІНКИ В УМОВАХ СУЧАСНОГО БІЗНЕСУ

У статті доведено, що перетворення підприємства на процесно-орієнтоване є визначальним чинником організаційної поведінки в сучасних умовах бізнесу. Цей фактор вказує на необхідність завершення вертикальної організації і функционально-структурованого підприємства і спрямовує увагу керівництва на горизонтальну організацію процесно-орієнтованого підприємства. Сформульовано ролі, які повинні підтримувати це організаційне перетворення. Перехід від функціональних підрозділів до бізнес-процесів не є виключним в тому сенсі, що це не обов'язково означає усунення функціональних аспектів і функціональної структури організації. У процесі перетворення на процесно-орієнтоване підприємство керівництво обирає одну форму — так звану горизонтальну або процесну організаційну структуру для конкретного підприємства. Окрім суто функціональної або лише процесної орієнтації, в певних ситуаціях, коли дозволяють обставини, можна успішно поєднувати обидва підходи.

**Ключові слова:** трансформація; процесна орієнтація; бізнес-процеси; ролі в процесі; структура.

### Боян Крстич, Соня Йованович, Эрнад Кахрович ПРОЦЕССНО-ОРИЕНТИРОВАННОЕ УПРАВЛЕНИЕ ПРЕДПРИЯТИЕМ КАК ДЕТЕРМИНАНТА ОРГАНИЗАЦИОННОГО ПОВЕДЕНИЯ В УСЛОВИЯХ СОВРЕМЕННОГО БИЗНЕСА

В статье обосновано, что преобразование предприятия в процессно-ориентированное является определяющим фактором организационного поведения в современных условиях

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бизнеса. Данный фактор указывает на необходимость завершения вертикальной организации и функционально-структурированного предприятия и направляет внимание его руководства на горизонтальную организацию и процессно-ориентированное предприятие. Сформулированы роли, которые должны поддерживать данное организационное преобразование. Переход от функциональных подразделений к бизнеспроцессам не является исключающим в том смысле, что это не обязательно означает устранение функциональных аспектов и функциональной структуры организации. В процессе преобразования в процессно-ориентированное предприятие управление выбирает одну форму — так называемую горизонтальную или процессную организационную структуру для конкретного предприятия. Помимо чисто функциональной или чисто процессной ориентации, в определенных ситуациях, когда позволяют обстоятельства организации, можно успешно сочетать оба подхода.

**Ключевые слова:** трансформация; процессная ориентация; бизнес-процессы; роли в процессе; структура.

1. Introduction. Process-oriented enterprise is created by the transformation of functional organizational structure into the process model of organizational structure. So, instead of functional departments, business processes are the basis for grouping jobs at an enterprise. This means that jobs are not grouped according to similarities as it is in the case of functional grouping, but by associations with a process. Thus, instead of traditional units or functional departments, such as procurement, production, sales, finance, one gets process teams in which all those jobs exist that are in a function of a particular process. The enterprise that had hierarchically arranged functional units or departments now becomes flat. In it, autonomous teams parallelly perform specific business processes from their beginning to the end.

Most ways for determination of business processes come from the literature on business process reengineering (BPR) and process management. Rummler and Brache (1995) described business process as a way of managing space on the organizational chart. They wanted to emphasize the horizontal nature of business process, which covers the space between different functional departments in an organization, because numerous problems in everyday operating between functional departments may appear. Another comprehensive definition is given by BPR experts Hammer and Champy (1993). They focused on the external dimension of a business process, pointing out that "it is a set of activities that use one or more inputs and produce outputs at the same time creating value for consumers". Davenport and Short (1990) noted a similar explanation of business process. According to them, it is "a structured, measurable set of activities designed to produce a specific output for a particular customer or market". In other words, business process is a specific order of work activities across time and place, with its beginning and end, and with clearly identified inputs and outputs. Harrington (2006) defines business process as "a series of activities that requires specific inputs, adds value to them, and generates outputs for internal users or external customers".

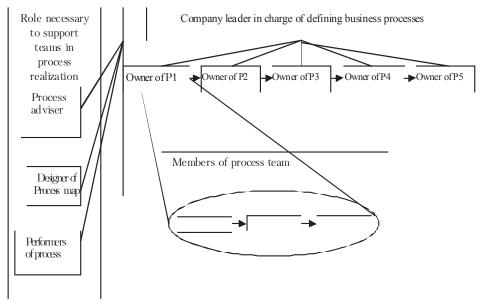
Business processes can be classified into 3 main groups, namely: basic processes (processes that create, produce and deliver products and services that consumers want), supporting processes (processes that do not produce outputs for consumers, but which are necessary to start up a business), and managerial processes. Basic and supporting business processes have several important characteristics. Both types of

processes have a set of related and interdependent activities which transform inputs into outputs. Basic and supporting processes have the beginning and the end, with boundaries which can be defined with reasonable precision and minimal overlap. These processes have users or customers that can be internal or external for an organization.

Besides these two species, the group of business processes includes managerial processes. These processes are a set of activities to direct, coordinate, integrate and control basic and supporting business processes that create value for enterprise consumers and shareholders. Management processes or managerial processes include mainly decision-making activities. They are not tied to just one segment of an organization, but permeate the entire enterprise. Management processes include, for example, the following: strategic management, financial management, management of information technology, human resources management, and image management or business reputation management of an enterprise. For managerial processes it can be said that they constitute a separate and essential subset of supporting processes. They are not essential to consumers, but they are essential for management of an enterprise to provide survival, competitiveness and development of an enterprise. The difference between managerial processes is determined by the specificity of management objects.

- 2. Research Questions. The main objective of this research is to identify approaches to transforming a vertically oriented enterprise into an enterprise that is process-oriented, as well as define the managerial roles necessary for the functioning of this type of enterprise and modeling its organizational structure. An initial base of the research is the review of managerial roles, and the central part of the paper contains the analysis of: (1) the aspects related to transformation of functional organizational structure to process organizational structure, (2) the characteristics of the structure of a process-oriented enterprise, and (3) the hierarchy of roles and positions in an organizational structure of a process-oriented enterprises. The research results are reflected in the form of guidelines for transforming functional structure into a process one. Instead of functional departments, as a basis for grouping of different jobs in an enterprise, business processes are used. The main conclusion to be done is to create a process-oriented enterprise with greater flexibility, with the ability to adapt quickly to consumers' demands, and to ensure a better competitive or strategic position at a market.
- 3. Research Methods. In accordance with the nature of the object of the research and preset research objectives, different methods will be applied to identify assumptions, define the starting positions and come to certain conclusions. The research is primarily based on modern theoretical knowledge arising from the relevant literature. In the first part, which relates to managerial roles necessary for the functioning of a process-oriented enterprise, we will apply the methods of classification and analysis in order to define and explain the role of individual managers in the process management, and other employees in the functioning of process-oriented enterprise. The second part will place a special emphasis on the analysis method of organizational design models and a more precise explanation of transformation of a function-oriented enterprise into a process-oriented one.

**4.** Managerial roles necessary for process-oriented enterprise functioning. The roles that must contain the infrastructure for management of process-oriented enterprises are shown in Figure 1. These include: (1) the role of an enterprise leader in charge of defining and conceptualizing business processes, (2) the role of a responsible person for realization of the process, or so-called process owner, (3) the role of process teams in monitoring processes realization and carrying out the actions on their improvement, (4) the supporting roles of process teams in realization of the processes, such as the process adviser, the designer of map of business processes, and direct performers of activities and tasks within a process.



Source: Results of the authors' research.

Figure 1. Infrastructure of a process-oriented enterprise

(a) The enterprise leader in charge of defining business processes enables formulation, deployment and implementation of the concept of process-oriented enterprise. This leader should be a person (or more than 1 if it is a diversified enterprise) that in hierarchy and according to the level of responsibility, comes below the position of top managers. Top management has a too wide range of responsibilities, so it can't carry out the job of a person whose main task is deploying and implementing a concept of process-oriented enterprise. Workload of top managers in strategic issues prevents them to dedicate to the development and implementation of this concept. For the leaders who are willing to achieve the organizational transformation towards a process-oriented enterprise, one can say that they are charismatic or transformational leaders. These are enthusiastic leaders who have self-confidence and whose personality and actions influence people to behave in certain ways (Robbins, Coulter, 2005, p. 434). 5 key characteristics of charismatic leaders are: creativity, team orientation, respect for others, teaching, and rewarding people by monetary and non-monetary compensations, as well as giving them recognition.

Creativity involves not only taking corrective actions by a transformational leader, but also leaders' openness to creative actions of their followers. Team orientation is a function of the intentions of transformational leaders to create process teams and identify a person responsible for realization of team activities. These people need to make appropriate decisions and solve business or working problems they encounter. Respect for others who are involved in operating processes is an important characteristic of transformational leaders. This shows they appreciate the views and opinions of their followers. This attribute of transformational leadership implies the necessity for two-way communication. Teaching is an attribute of transformational leaders that reflects their ability to educate and train people, to direct them, and correct their activity and behavior. Rewarding and recognition for good individual performance, as well as the characteristics of transformational leaders, enables them to recognize the situations in which followers are to be commended, gives them recognition and/or rewards (Simic, 2007, p. 229).

When one considers the deployment of process-oriented enterprise concept, it is also very important to note the responsibilities of an enterprise leader in charge of defining business processes. The first his or her responsibility is to define precisely the basic processes that the enterprise will place in a function of value creation for consumers. On the other hand, for the defined processes it is necessary to determine the persons who will be responsible for their realization, i.e. business process owners. They will be chosen basing on the personal competencies required for adequate realization of activities and operations within a process. Another important responsibility of an enterprise leader is defining the roles necessary to support teams in everyday realization of business processes. The most important supportive roles in process teams are the following: process advisor, designer of a business process map, and business process performers.

(b) The existence of process owners, i.e. persons responsible for realization of a business process is the most obvious difference between process-oriented and traditional functional enterprises (Kohlbacher, Gruenwald, 2011, p. 271). The term "owner of the process" is taken from the practice of TQM which can lead to some terminology problems. Process owner is not project manager, but it is a permanent role of one person responsible for realizing a business process. Also, the term "owner" must be interpreted in the traditional sense of having power and authority that comes from organizational hierarchy, as it is the case in the vertical or functional structured enterprise. Process owner is responsible for efficient and effective realization of a process, which he or she manages.

Owner of a process is a person delegated by the leaders of an enterprise with a mission to be responsible for the business process effectiveness and business process efficiency (Harrington, 2006, p. 47). In other words, process owner is responsible for ensuring that realization of a process is well in general. This means that one must develop suitable indicators of business process performance, for different dimensions of process effectiveness and efficiency. The process owner, in order to achieve the delegated responsibility, must realize changes of all in elements in a process. There are two things missing in this definition. First, it is not enough that process owner ensures whether the process is being effective and efficient. The owner of a process must also manage the continuous improvement of process performance. Namely, the task of a

process owner is managing the development of a process oriented at users' (consumers') demands.

(c) After you choose the person responsible for process realization, election of process team members is next. The owners of a process are forming process teams by selecting employees which provide contribution to achieving team goals and organizational objectives. A team can be defined as a group whose members have complementary skills and are grouped around a common purpose or set of tasks, for realization of which they have certain responsibilities (Mohrman et al., 1995, p. 148). Process team means a group that focuses on a single business process to achieve continuous integration of its activities and ensure its realization in the desired way. Process teams are formed as permanent or temporary. Permanent process teams continually participate in the realization of repetitive business processes, and are therefore largely formalized. They mainly focus on processes of the usage of various material and intellectual resources in the enterprise owing to be efficient. For example, process teams involved in providing services to consumers are permanent. Besides them, other process teams are only temporary and are established for special projects within a limited period of realization. For example, the process team which is formed to develop a new product can be treated as temporary.

One process team cannot monitor and implement more than one business process. In the implementation of the concept of business process orientation enterprises will have more process teams. This process team should be composed of fewer members. However, at a process-oriented enterprise, any process team should consist of two groups of people - insiders and outsiders. The first are employed by an enterprise, while the later are not.

When defining process teams for individual business areas, it is necessary to take into account the relations established within a team. In the process teams there no strictly defined relationships between superiors and subordinates. The owner of a process is only primus inter pares within a process team. For this reason, the most appropriate leadership style in process-oriented companies would just be a democratic leadership (Simic, 2007, p. 178). This leadership style involves respect for identity, creativity, innovation and other individual characteristics. Democrate builds the authority by emphasizing his professional competences, but he or she has a respect for competences, initiatives and suggestions of team members. Democratic style includes consultations connected with tasks and working activities, open dialogues, and participations in decision-making. In that way, it improves the quality of decision-making and facilitates the implementation of business decisions and the realization of organizational changes, establishes cooperation between the process owner and members of his/her process team that reflects positively on different process performances.

(d) In order to support process teams, leaders of an enterprise complete infrastructure for process management with a number of supporting roles. Process advisor with knowledge on the whole process provides necessary advices to a process owner and other members of a process team. Responsibility of process advisor is monitoring of process performances that are under his area of responsibility. On the other hand, based on such monitoring, process advisor defines the programs of continuous process (performance) improvement. Designer of business process map is an expert in the field of designing business processes. This person is responsible for making process maps and process documentation, should also know IT fairly well. Performers of a process are responsible for specific tasks and activities (operations) within a process from its beginning to the end.

5. Determinants of enterprise transformation from functional-oriented towards a process-oriented enterprise. Traditionally, business activities are organized into business functions, i.e. functional departments (purchasing, sales, manufacturing, finance, research and development), which provide the achievement of organizational goals. However, this approach has several significant deficiencies, such as managerial rigidity, lack of innovation, slow response to customer needs, poor networks and horizontal communication and many others. It is no coincidence that transition process is becoming increasingly popular at modern enterprises. If a business system is viewed as a set of interrelated processes rather than as a series of separate departments (business functions), then a chain of interrelated business processes cut a series of autonomous, isolated functional departments (Arsovski, 2010, p. 85).

Transformation into process organizational structure is demanding. It is basically a dismantling of functionally oriented (structured) organization and its conceptualization according to the principles of process orientation (Evans, 2004, p. 206). The transformation should not end with aggressive reduction of the organization size in terms of reducing the number of employees, but usually leads to a reduction in number of hierarchical levels of management structure.

If reduction of the number of employees is a necessity in an enterprise, regardless whether this problem occurs due to a business crisis in an industry or poor internal business efficiency, it is necessary to postpone the process of transformation. This is because there may be a negative attitude of employees to new organizational solutions and accepting new business and organizational transformations. Before deciding to turn to process-oriented organization, managers should answer two relevant questions (Dutta, Manzoni, 1999, p. 397):

- (1) Is there really a need for explicit process organizational structure? In fact, every organization, including a rigid functional hierarchy, can identify the set of business processes, and apply the process orientation parallel with the functional orientation.
- (2) To what extent is it necessary to incorporate a process orientation in organizational design? This is because that the practice of modern enterprise faces two extremely distant solutions from the rigid functional hierarchy to a consistent process-based organizational structure. The answer to this question is determined by specific needs of certain organizations, which will decide on the way of organizing various business activities based on considering these needs.

In this regard, there are two approaches in creating a process-oriented organization. The first approach assumes that organizational structure is immediately and completely focused on business processes. Organizational units are designed according to the key processes directed on users. Another approach is to gradually add to the existing business processes that already exist in current organizational structure, until the entire business operating is settled on the process base.

The authors (Stalk, Blacke, 1994) recommended the use of 4 models of organization design in the continuum between the functional and process organizational struc-

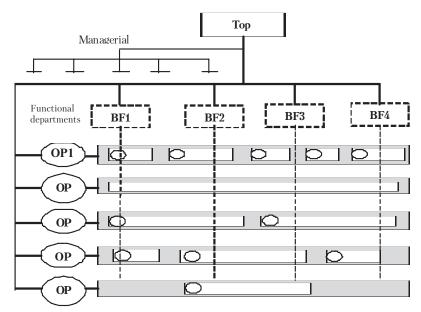
ture: vertical functional organizational structure; functional organizational structure with horizontal processes; process organizational structure with functional units; and process organizational structure. To understand better the differences between these models, on the one hand, there is organizational design in which most employees work in teams, so there is a weak, minimal vertical hierarchy which exists only in managerial processes. On the other hand, diametrically opposed organizational design includes a completely vertically-oriented management or process-oriented organization.

The management of an enterprise, after a detailed analysis of their abilities, skills and ways of creating value, will choose the form for organizational design that is positioned between these two extremes. Such hybrid functional and process forms of organizational structure are the best solution for the classical functional-oriented management of an enterprise, and for the modern process-oriented management. The functional organizational structures can hold their own specialized expertise of partial departments, while a flatter process organizational structure can be applied in situations of possibility of the business processes delineation.

If enterprises want to implement process-oriented organizational forms, they must respect the principles for organizational transformation (Crosetti, Macazaga, 2005, p. 70):

- (a) The transformation should follow the strategy of the enterprise. For this purpose, it is required to create a clear plan of transition in which organizational structure follows strategy.
- (b) Scanning external environment for consumer needs. The transformation should focus on key processes and identify key customer requirements.
- (c) Implementation of process organizational design in both top-down and bottom-up directions. It is necessary to ensure that top management will be willing to share information. Although sharing information can reduce the power of managers, it is essential to encourage organizational learning and implementation of change and innovation activities at all levels.
- (d) Building trust between members of an organization. In this regard, we should promote the organizational culture driven by changes and continuous improvements, and design the reward system that stimulates teamwork.
- (e) The efficient usage of IT in order to integrate business processes with technological structures and systems, human resources and overall management system.
- (f) Ensure understanding of the process approach by top management, its orientation to changes, and effective leadership. It is necessary to encourage leadership from the future perspectives of the enterprise as an open business system, which is dedicated to continuous innovation and increasing flexibility.

The goal of a process-oriented enterprise is to become a process-structured enterprise, i.e. an organization that recognizes its focus on processes in the aim of increasing business success. This finding directs enterprises to manage processes and efficient realization of business processes as important intangible assets (Chang, 2006, p. 42-43). The structure of process-oriented enterprise can be presented as shown in Figure 2.



Source: Results of the authors' research.

Figure 2. Process model of organizational structure

Process organization, shown in Figure 2, consists of: a) Top management of an enterprise that oversees the functioning of the whole enterprise; b) Managerial business processes that are in the zone of responsibility of top management of an enterprise; c) The departments or business functions (BF) that serve as support for performing all of the identified business processes; d) 5 basic process headed by the owners of process (OP), e) Process teams, and process performers within them, working on direct realization of the activities and operations of a process.

The presented process model of organizational structure is similar to Mintzberg's concept of organizational structure (Petkovic et al., 2006, 43) and its elements: a) the operational part, which comprises all the workers or perpetrators, b) a strategic part, comprising senior management; c) the middle part, which consists of middle-level managers; d) techno structure, which consists of specialists with large real authority, because of their high professional level of experience and knowledge, even if they are outside the formal management structure of an organization, d) the staff, which has the task of assisting line management.

In addition, it is important to emphasize that the elements of H. Mintzberg termed "techno structure" (centers of excellence) and partly "the staff" (business support functions), need to be separated because while employees of staff functions are unique, formal organizational units, the centers of excellence are more conceptual in nature, connecting people solely because of the creation, accumulation and dissemination of knowledge (Petkovic et al., 2006, 43).

Figure 3 shows the hierarchy of process roles and positions in a process-oriented enterprise. The hierarchy of roles necessary for the functioning of the process-oriented enterprises can be specified as follows:

- The dominant role certainly belongs to top management of an enterprise which is responsible for management of a process-oriented enterprise;
- Next in line is definitely the role of 5 dominant business management processes in a process-oriented enterprise (such as the business process of supplying the necessary inputs, the process of creating and producing products and services, the sale of products/services and other marketing activities, the process of delivering products/services, process of providing after-sale and other services to consumers);
- On the top of an enterprise there will be the leader of an enterprise who will work on developing the concept of process oriented enterprise i.e. leader of a process;
- Afterwards there are owners of basic business processes creating their process teams:
- Each process team will consist of the members who will have 3 key roles necessary to support the team in the implementation process (process advisor, designer of process maps and direct perpetrators of activities and operations within a process).

With respect to the need of adequate functioning of a process, the connection of process teams and functional managers is required. Managers of functional departments have the ability to direct the perpetrators to accomplish tasks and activities within process teams (Hammer, Stanton, 1999, p. 108).

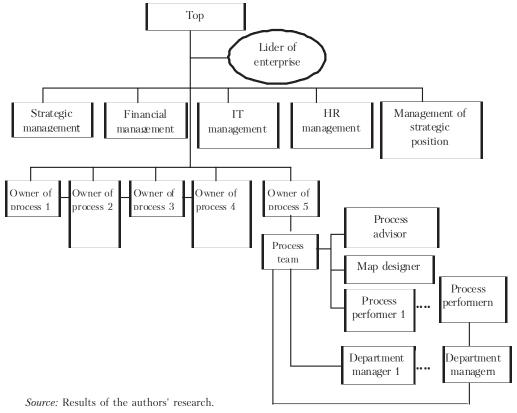


Figure 3. Hierarchy of process roles and positions

In relation to traditional functionally structured enterprise, it is clear that introduction of process owners and redistribution of responsibilities of functional departments' managers in a process-oriented enterprise bring a completely different role to top management and owners of business processes. Within the traditional management paradigm in which top management has a strategy to implement according to the strict principle of "top-down", there is a number of managers' levels that cannot be emphasized in a process-oriented enterprise. Top management in a process-oriented enterprise and process owners, which give their support to the effective realization of basic business processes, encourage integration of technological knowledge and market knowledge. This provides faster response of enterprise management to new market demands, complexity of doing business, and dynamic business environment. In this way, process-oriented enterprises become more flexible in comparison to traditionally structured enterprises.

**6. Conclusion.** Advantages of the process model of organizational structure compared to the functional model of organizational structure are reflected in performing business activities with higher level of efficiency. It dramatically increases the flexibility of an enterprise, capacity for innovation and speed of innovation process according to consumers' demands. Because there are no boundaries between functional departments, employees increasingly recognize organizational objectives as their personal objectives, which ultimately results in their larger contribution to competitive strategy and its faster realization. The process model of organizational structure promotes and emphasizes teamwork and cooperation. Process-oriented enterprise focuses all its attention on consumers, which leads to their greater satisfaction, improved work productivity, volume of sales, and profitability.

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