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ANALYSIS OF BUSINESS PROCESSES IN RAILWAYS AND PUBLIC ENTERPRISES OF SERBIA

Filip Marković^{1*}, Snežana Urošević

¹ *Academy of technical and art applied studies Belgrade Department School of Railroad Transport, Serbia*

² *University of Belgrade, Technical faculty in Bor, Serbia*

Abstract: Managing an organization of any kind and achieving its goals, especially in terms of increasing effectiveness, efficiency and realization of set goals and strategies, requires a thorough understanding of its internal functioning and structure. It is crucial to understand that the organization's activities are realized through a series of connected and goal-oriented business processes. Through the review of the conceptual definition of business processes and the consideration of models for their analysis, the specifics of the application of these processes in the context of the railway and the public sector in the Republic of Serbia are explored. The current context of research in the field of business processes in Serbia is analyzed, with a focus on the characteristics of the railway and public sectors.

Keywords: business processes; business process modeling; business process management, railways, public companies

1. INTRODUCTION

When talking about business processes, one should first start from the very meaning of the word "process". Namely, the word process has a number of meanings. In addition to the fact that it can be taken as meaning that it is "flow, action", the word process can also be used in the context of the passage of time, sequence of events, progress and the like.

When talking about processes, it should be said that they are not a new concept and something that is a product of modern language and the world. Processes have been around for a long time and as such have been used in various ways. When viewed historically, the word "process" was used for the first time by Charles Babbage. He was an industrial philosopher in England in the first half of the 19th century. He predicted the determination of time for the processes that would take place in the industry, but also some other techniques in management. During the 20th century, the development of various methods for the rationalization of processes, which are usually called Work Study (Radović et al., 2012).

* Corresponding author: filip.markovic@vzs.edu.rs
Filip Marković, ORCID: 0009-0009-3541-4434
Snežana Urošević, ORCID: 0000-0002-6647-0449

Process engineering in particular begins its development during the middle of the 20th century with the appearance of BDR (Business Process Reengineering). Process engineering continued to develop, the organizational structure became more and more process oriented. Various international standards are emerging. Today, various techniques, software and methods for process modeling are recognized, all with the aim of recording the state, then analysis and certain restructuring of the process (Radović et al., 2012).

Business processes in railways and public enterprises are very specific in Serbia and in other neighboring countries. Namely, it is about large systems that in our country have numerous problems that are part of a broader picture of events in this area in the past decades. All that had certain implications for business processes in these systems.

Business process management is sometimes equated with business process improvement initiatives. Namely, business process improvement initiatives usually refer to various projects, or a set of one-time unique improvements when some processes are redesigned (Dobrosavljević & Urošević, 2019).

2. DEFINING BUSINESS PROCESSES

Throughout the history of development, there have been many definitions of business processes. Accordingly, some definitions of business processes will be highlighted.

Table 1. Definitions of business processes through the literature

Author/s	Year	The paper/book where the definition is given	Definition
Michael Hammer James Champy	1993.	<i>Reinventing the Corporation: A Manifesto for Business Revolution</i>	"A business process is a continuous and repeatable activity that has a clearly defined input and output and that contributes to the creation of value for the client"
Thomas Davenport	1993.	<i>Process Innovation: Reengineering Work Through Information Technology</i>	"A business process is a series of interrelated activities aimed at producing value for the client"
Carlota Perez Robert Freeman	The period during the 90s of the 20th century	* There is no information	"A business process is a structure that defines the way an organization works, integrating people, processes and technologies to achieve business goals"
Robert Johnston Graham Clark	2000.	<i>Service Operations Management: Improving Service Delivery</i>	"A business process is a sequence of activities that an organization performs to create value for its customers"
Roger Burlton	2001.	*There is no information	"A business process is a set of related activities that are performed to create a product or service and deliver it to users".

When all previous definitions are taken into account for the business process, one general definition can be given which reads: "A business process is a structured, analytical cross-functional set of activities that requires constant improvement. It is about activities with a clearly defined beginning and end during which value is created for consumers at more or less constant intervals" (Bosilj Vukšić et al., 2008).

Modern organization management emphasizes the management of its processes because the achievement of the organization's goals directly depends on the success of those processes. The success of the processes, that is, their ability to meet the organization's goals, is measured using defined key performance indicators. In other words, effective management of an organization requires systematic monitoring and evaluation of its processes to ensure that they

contribute to the achievement of goals. Key performance indicators serve as a measure of the success or failure of a process, allowing the organization to identify areas that require improvement or optimization. This enables the organization to focus its resources on the most important aspects of its business and to continuously adapt to changes in the environment (Simeunović, 2015). Based on the available literature, the existence of various models and methods for the analysis of business processes can be observed, and some of the most commonly used are:

1. BPMN - enables the precise definition of activities, data flows, roles and decisions in the process, which facilitates the analysis and optimization of business processes;
2. SIPOC model - this is a tool used to identify key elements of the business process, including suppliers (Supplier), input data (Input), processes themselves (Process), output results (Output) and end users or customers (Customer);
3. Value Stream Mapping – this is a technique often used in manufacturing environments. This model allows mapping the value stream through the entire process, identifying steps that add value and those that do not, identifying potential losses or downtime;
4. Six Sigma DMAIC is a methodology that includes five steps: Defining the problem, Measuring performance, Analyzing the cause of the problem, Improving the process and Controlling new processes;
5. PDCA cycle - is a concept that implies continuous iterative improvement practice. This model encourages organizations to plan their activities (Plan), implement them (Do), check the results (Check) and take actions for improvement (Act).

Modeling of business processes can be reduced to two activities, namely the presentation of the current state on the one hand and the future state of the process on the other. According to Sharp and Dermott, the models can be divided into the following two groups:

1. Iconic that has almost all similarities with a physical object, but is simpler and smaller in appearance (eg a model of a building or complex);
2. Symbolic which consists of different symbols, text and the like and are not similar to the things they describe ie represent (Sharp & MCDermott, 2001).

Some of the criteria that the model should fulfill, regardless of which group it is in, are:

1. To highlight certain facts that are important, and to "remove" some things, i.e. details;
2. It is basically easier to manipulate a model than an object. With the process model, the model enables a better understanding and design of the process without the actual implementation and observation that follows (Radović et al., 2012).

When modeling business processes, there are several basic guidelines to consider:

1. A clearly defined way of defining the process: It is important to have a certain method for defining business processes because it enables consistency and understanding of all participants in the process;
2. Modeling in accordance with the definition of the scope of work: Modeling of the process should correspond to the agreed definition of the scope of work in order to ensure compliance with the goals and requirements;
3. Defining the basic model: It is necessary to have a basic model that clearly shows the structure and elements of business processes;
4. Adherence to naming conventions: Using standardized naming conventions facilitates model understanding and communication among participants;
5. Consistent notation: All models should use the same notation to facilitate communication and understanding among team members;

6. Agreed level of modeling: It is important to agree in advance the level of detail of modeling in order to ensure consistency and efficiency in the modeling process;
7. Defining who, what, when, where, how and why: Every process should have clearly defined elements such as who is responsible, what is done, when it is done, where it is done, how it is done and why it is done;
8. Evaluation of the integrity of process components: It is necessary to evaluate the integrity of all process components (Gudelj, 2021).

There are three basic levels of process modeling. The first and at the same time the highest level are value chains. The middle level is already elaborated value chains by processes at the tactical level. The last level is the one where the processes are elaborated to the level of steps (Gudelj, 2021).



Figure 1. Modeling levels (Gudelj, 2021)

Most organizations approach the analysis of business processes from top to bottom, known as the "top-down" principle. This means that organizations/companies first determine the scope of the process, i.e. the value chain of the company, then identify the processes and their goals, and finally identify the activities and specific steps as the basic elements of those activities (Gudelj, 2021).

3. OVERVIEW OF CURRENT RESEARCH REGARDING THE IMPROVEMENT OF BUSINESS PROCESSES

"Internet technologies in business processes" - This paper presents an innovative model of electronic business that relies on advanced Internet technologies. Basically for the realization of business processes, service users play a key role by initiating e-mails for the procurement of the necessary services, while IT administrators ensure the availability and security of the available capacities in the organization. The model includes entities of business processes such as human resources, applied technology, organizational processes, virtual environment and service/product (Pavlović, 2019).

"Analysis of the performance of business processes to achieve business excellence: a case study of a Croatian insurance company" - In this paper, the authors present an analysis of the performance of business processes with an emphasis on controlling (measurement and evaluation) of business processes, all with the aim of reducing business costs, influencing the acceleration of processes and continuous improvement of service quality and general customer satisfaction (Bosilj Vukšić & Ivandić Vidović, 2009).

"Methodology for Optimizations of Business Processes in Macedonian Railways - Transport in the Republic of Macedonia" - In this paper, the company Macedonian Railways - Transport was analyzed with the aim of determining whether it has an effective quality system by monitoring the way business processes are managed (identification, documentation and

control) and whether documentation for the system's effectiveness has been built in it (Prihoda Mitreva et al., 2016).

"Process-Oriented Changes in the Slovak Railways" - Since 2000, the state-owned Slovak Railways has gradually transformed into a group of modern companies that had to adapt to become competitive in the European transport markets. An analysis was carried out to design a new business structure and new processes for two separate passenger and freight companies that would be spun off from ZSSK (ZSSK — Železničná spoločnosť Slovensko, Slovak Railways Transport Company) (Ondáš et al., 2006).

"The digitalization of business processes of railway transport of the Republic of Uzbekistan" - The data for this paper were purposely collected through secondary sources and analyzed using the content analysis approach. This paper examines Nigerian public enterprises and tries to explain their performance status from the point of view of modern organizational theory, as well as business processes in them (Rakhmanberdiev et al., 2022).

"Determinants of business process reengineering success in small and large enterprises: An empirical study in the Canadian context" - This paper presents research on business process reengineering in 134 Canadian enterprises, including 28 small and medium enterprises and 106 large enterprises. The study confirms that the level of organizational support, compliance with the principles of business process reengineering and the diversity of human resources participating in the project determine the achievement of advantages such as increased productivity, higher quality of offered goods and services and reduced costs (Raymond et al., 1998).

"Optimization of business processes in the context of the implementation of ICT solutions in public administration" - It is emphasized that the optimization of business processes is a key prerequisite for the successful implementation of electronic services. The focus of this work is on the case study entitled "Opening a company account", where it is emphasized that this scenario represents a point of intersection of the work and interests of authorities and institutions, the banking sector and the end user, i.e. the founder of the company (Radinković & Vučić, 2012).

4. ANALYSIS OF BUSINESS PROCESSES ON RAILWAYS AND IN PUBLIC ENTERPRISES

4.1. Business processes on railways

The railway represents a transport system that is capable of meeting transport needs and at the same time adapting to the growth of social productive forces. From its inception until the emergence of road and air traffic, railways played a dominant role in the provision of transport services. In the railway sector, business processes are designed to enable the efficient functioning of all segments of railways and railway traffic. The key roles of business processes in railways include the following:

- optimization of operations, which includes fleet deployment, traffic management, train and track maintenance, as well as efficient handling of cargo and passengers;
- increasing safety where through safety management processes, the railway can identify potential risks and take appropriate measures to minimize incidents and accidents;
- improving the quality of services, which primarily aims to provide high-quality service in the transportation of passengers and goods. Through processes such as reservation management, ticket sales and travel planning, railways can ensure comfort, punctuality and reliability in providing transportation (Stegnajić & Vesković, 2024);

- efficiency in resource management implies the management of human resources, material resources and finances. Through well-defined human resource management processes, railways can recruit, train and motivate their staff to ensure optimal functioning. Also, financial management processes enable the railway to properly allocate its resources and maintain financial stability (Torrington et al., 2004).

Business processes in railways are extremely diverse and complex, but they are essential to ensure the efficient, safe and reliable functioning of this vital transport system.

4.2. Business processes in public enterprises

In today's economy, we encounter a distinction between the public and private sectors. The public sector includes state, provincial and municipal administration, as well as their administrative institutions. In addition, there are public services, in the form of public institutions and public companies. A particularly important place in this structure is occupied by public companies. The definition of public enterprises can be found in the Law on Public Enterprises ("Official Gazette of RS", no. 15/2016 and 88/2019), where in Article 3 of this law there is a definition that reads: *"A public enterprise is an enterprise that performs activities from of general interest, which is established by the Republic of Serbia, an autonomous province or a unit of local self-government."* From the point of view of their wider social importance, public enterprises are understood as *"economic subjects of wider social importance for the normal functioning of the overall economic and social system of society"* (Radovanović, 1995).

Business processes in public companies are an essential part of the efficient functioning of these organizations. These processes include all the steps and activities that a public company carries out in order to achieve its goals and fulfill its tasks. Public companies often have complex business processes due to the specific requirements and regulations they must comply with.

When speaking in the context of management and business processes in public companies in Serbia, it is necessary to mention that there are certain problems that can be classified into four groups: unclearly defined business goals, lack of control over management, non-transparent operations and problems with the composition of supervisory boards. These problems make effective governance difficult and require systematic reforms to overcome them (New Economy, 2014).

The key elements related to business processes in public enterprises, in addition to planning, which is the basis for defining priorities and resource allocation, execution, monitoring and control, is inevitable optimization and improvement, where, based on monitoring and evaluation, public enterprises identify areas in which they can optimize their business processes and achieve better results. Process improvement may include the introduction of new technologies, changes in the organizational structure or adaptation of legal regulations.

It is crucial to emphasize that transparency, responsibility and efficiency are important principles that guide business processes in public companies, because they are responsible to citizens or users of services. Maintaining integrity and trust in the public sector often requires a special focus on transparency in business and openness to the public (Beke-Trivunac & Jeremić, 2023). In order to improve the situation, it is crucial to implement efficient business processes. For example, clearly defined business processes can help in setting and tracking business goals more precisely. Also, the establishment of a process of control and supervision can ensure responsibility and transparency in the work of management. Therefore, the

implementation of efficient business processes can be crucial in solving the problems of managing public enterprises and in creating a transparent, responsible and efficient business environment.

4.3. The context of researching business processes in railways and public enterprises in Serbia

The context of research in the field of business processes in railways and public enterprises in Serbia includes a number of specific factors and characteristics that influence the way of functioning, efficiency and competitiveness of these organizations. The key aspects of this research context are:

- **Industry structure:** The railway industry and public companies in Serbia are often part of a complex regulatory framework and market environment. The research must take into account the market structure, competition, legal regulations and political factors that affect the operations of these organizations;
- **Specificities of the railway sector:** The railway sector is characterized by specific operational characteristics, such as large infrastructural capital, long-term project cycles, high maintenance costs and significant influence of regulatory bodies. Research should focus on understanding these specifics and identifying best practices for business improvement;
- **Technological innovation:** Technological progress plays a key role in the transformation of the railway industry and public enterprises. Research should follow trends in technological innovations, such as digitization, automation, smart infrastructures and management systems, in order to identify opportunities for optimizing business processes;
- **Customer experience:** Service quality and customer experience play a key role in the competitiveness of the railway industry. Research should focus on understanding user needs and preferences, as well as identifying areas for improving user experience through efficient business processes;
- **Sustainability and environmental protection:** Sustainability is an increasingly important topic in the railway sector. Research should analyze the impact of business processes on the environment, identify opportunities to reduce negative impacts and promote sustainable business practices;
- **Organizational culture:** Organizational culture plays a key role in the successful implementation of changes in business processes. Research should analyze organizational culture, leadership and employee engagement to identify obstacles and opportunities for business improvement.

In short, research in the field of business processes in railways and public enterprises in Serbia should focus on understanding the specific context and identifying best practices for improving the efficiency, competitiveness and sustainability of these organizations.

Analysis of business processes in railways and public enterprises of Serbia can provide valuable insight into the efficiency and productivity of these organizations, as well as the identification of key points that require optimization. The research that is being carried out is focused primarily on the identification of the efficiency of the process and its analysis, the identification of challenges such as the lack of technological infrastructure, insufficient automation of the process, lack of experts or capacity, administrative obstacles and proposals for improvement and improvement.

5. CONCLUSION

Business processes are the subject of research in a large number of areas of economy and business and accordingly represent an inseparable part when it comes to business. Analysis of business processes in the railways and public enterprises of Serbia reveals the complexity of operations in these sectors. Many authors in the world and in our country have dealt with business processes in different areas, analyzed them and expanded insight into the complexity, importance and way of functioning of business processes with certain solutions and conclusions that can be effectively implemented.

A number of challenges were identified, including administrative barriers, infrastructure problems and the need for modernization. Through the analysis, key efficiency factors were also observed, such as resource management, optimization of routine operations and implementation of modern technological solutions.

This paper emphasizes the importance of continuous monitoring and improvement of business processes in order to improve services, reduce costs and increase competitiveness and other activities in business. Taking into account the complexity of the railway sector and public companies, further research and implementation of innovative approaches are essential for achieving the long-term goals of sustainable development and efficient business in Serbia.

REFERENCES

- Bosilj Vukšić, V., & Ivandić Vidović, D. (2009). Analiza performansi poslovnih procesa za postizanje poslovne izvrsnosti: studija slučaja hrvatskog osiguravajućeg društva. *Poslovna izvrsnost vol. 3*. 113-130.
- Bosilj Vukšić, V., Hernaus, T., & Kovačić, A. (2008). Upravljanje poslovnim procesima. Zagreb: Školska knjiga.
- Bundalo, Z., & Pavlović, Z. (2020). Utvrđivanje stava korisnika usluga prema modelu e-poslovanja u železničkom transportu. *MENADŽMENT 2020 - ZITEH 2020*. (163-168) Beograd: Poslovni i pravni fakultet.
- Bursać, M., Tričković, G., & Vulović, R. (2016). Projektovanje informacionog Sistema za automatizaciju poslovnih procesa radio lokomotivskih uređaja. U: Krstajić, B. (ured.). XXI međunarodni naučno-stručni skup Informacione tehnologije - sadašnjost i budućnost (61-64). Žabljak.
- Cross Ogohi, D. (2014). Analysis of the Performance of Public Enterprises in Nigeria. *European Journal of Business and Management vol. 6*, 24-32.
- Dobrosavljević, A., & Urošević, S. (2019). Evaluacija usmerenosti na performanse i poboljšanja procesa u proizvodnim organizacijama. *Tehnika – menadžment 69*, 287-294.
- Dobrosavljević, A., & Urošević, S. (2022). Research of the Influence of CSR Dimensions Integration in Business Processes on the Reduction of the Employee Turnover in Apparel Industry Organizations Using AHP and TOPSIS Methods. *Engineering Management Journal*, 34, 394-405. <https://doi.org/10.1080/10429247.2021.1940043>
- Dobrosavljević, A., Urošević, S., Vuković, M., & Štrbac, N. (2021). Modelling factors of influence on business process management in the organizations of the clothing industry. *Industrija tekstila vol. 72*, 477-484. DOI: 10.35530/IT.072.05.1816
- Gudelj, M. (2021) Model upravljanja performansom poslovnih procesa u procesno orijentisanom operativnom menadžmentu (doktorska disertacija). Novi Sad: Fakultet tehničkih nauka.

- Jeremić, N., & Beke-Trivunac, J. (2023). Jedinstvene karakteristike interne revizije u javnom sektoru i globalni standardi revizije. *Revizor*, 23, 83–93.
- Mitreva, E., Nikolov, E., Nikolova, B., Taskov, N., & Dimitrov, N. (2016). Methodology for Optimizations of Business Processes in Macedonian Railways - Transport in the Republic of Macedonia. *Mediterranean Journal of Social Sciences*, 7 (3). 394-402.
- Ondaš, J., Jaborek, A., Glasa, R., L'os, M., & Sirota, J. (2006). Process-Oriented Changes in the Slovak Railways. In: Scheer, AW., Kruppke, H., Jost, W., Kindermann, H. (eds) *AGILITY by ARIS Business Process Management*. Springer, Berlin, Heidelberg. 129-141.
- Pavlović, Z. (2019). Internet tehnologije u poslovnim procesima. U: Slović, D., Stojanović, D. (ured). XII Skup privrednika i naučnika SPIN '19 (189-196). Beograd: Fakultet organizacionih nauka.
- Pavlović, Z. (2020). Model elektronskog poslovanja u železničkom saobraćaju zasnovan na naprednim Internet tehnologijama (doktorska disertacija). Beograd: Fakultet organizacionih nauka.
- Radinković, M., & Vučić, D. (2012). Optimizacija poslovnih procesa u kontekstu implementacije IKT rješenja u javnoj upravi. U: Milojković, S. (ured.) *INFOTEH-JAHORINA Vol. 11, March 2012*. (580-584). Jahorina.
- Radović, M., Tomašević, I., Stojanović, D. & Simeunović, B. (2012). Inženjering procesa. Beograd: Fakultet organizacionih nauka.
- Rakhmanberdiev, R., Gulamov, A., Masharipov, M., & Umarova, D. (2022). The digitalization of business processes of railway transport of the Republic of Uzbekistan. The 1st International conference on problems and perspectives of modern science: ICPPMS-2021. doi: <https://doi.org/10.1063/5.0091195>
- Raymond, L., Bergeron, F., & Rivard, S. (1998). Determinants of business process reengineering success in small and large enterprises: An empirical study in the Canadian context. *Journal of Small Business Management* vol. 36, 72-85.
- Rentzhog, O. (2000). Temelji preduzeća sutrašnjice. Novi Sad: Prometej.
- Sharp, A., & McDermott, P. (2001). Workflow modeling- tools for process improvement and application development, Artech House, London.
- Simeunović, B. (2015). Razvoj modela za merenje performansi procesa (doktorska disertacija). Beograd: Fakultet organizacionih nauka.
- Stegnajić, S., & Vesković, S. (2024). Analiza kvaliteta prevoza putnika na pruzi Beograd-Novi Sad. *Železnice* 2023(2), 64 – 77.
- Varjačić, H. (2019). Analiza poslovnih procesa u event menadžmentu. Zagreb: Fakultet organizacije i informatike, Varaždin.