

Implementation of Business Process Reengineering in Human Resource Management

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The whole business of an organization is carried out through business processes. The process is a set of interconnected activities with interactions, which are transforming the object (as its input) into a result (as its output), where employees are adding a certain procedural values, using the resources of the organization. There are permanent requirements for the changes in performances, innovations, increasing flexibility and improving the economic performance of the company through the process orientation.

The main objective of this paper was to explore possibilities for improvement of important business processes, such as human resource management, in petroleum industry with the technique of business process reengineering and business process improvement. In this paper the authors presented the improvement process of one of the most important function in each organization – human resources function, by using management tools of BPR supported with the lean tools such as value stream mapping VSM. Methodology used in this paper included step approach in line with the Harvard Business School Business (HBS, 2010) process improvement supported with value stream mapping (VSM) lean tools.

In the first part of the paper, the authors presented a theoretical review of the literature of business process reengineering and human resource management (HRM), with a special focus on the function of human resources in large companies where the research was done. After the theoretical review, business process improvement (BPI) of HRM in specific company was presented through comparison of the state of HR function before restructuring and the state of the performances of the HR function after the BPI implementation with all the characteristics and efficiency indicators.

Based on the obtained results, it can be concluded that the combination of HBS methodology and VSM tools can contribute to the improvement in the form of the reductions of hierarchical levels in organization within the company and in the form of advancement of work processes within the company. This was primarily reflected in the increase of the effectiveness and efficiency, in reducing of the time required for the execution of the processes, and saving resources.

This paper presents one year case study, where the research was made to point out the significance of BPR of HR function in large companies. The authors tried to explain the main areas of HR process in a large production companies so as the improvements could be achieved by using BPR techniques supported by VSM lean tools.

Keywords: *business process reengineering, human resource management, VSM tool, process improvement.*

Introduction

The whole business of an organization is carried out through business processes. The process is a set of interconnected activities with interactions, which are transforming the object (as its input) into a result (as its output), on the way that employees (people) are adding a certain procedural values, using the resources of the organization. The goals of the organizational system are implemented through the following business processes:

- profit increase;
- sales increase;

- reduction of production costs;
- increase of quality of products/services;
- market share increase and etc.

Business Process Management (BPM) is an important area of management practice because it allows the organization to increase competitiveness and sustainability in times that are accompanied with uncertainties in the market, increasing globalization and business conditions, which are continuously changing. BPM is a management approach focused on processes, originating from the theory

of business process reengineering (BPR) and total quality management (TQM) (Armistead & Machin, 1998, p. 323).

Some researchers found that business processes represent a group of related activities that provide satisfaction of the needs and providing value to the user. Since all the processes in an organization are directed towards strategic goals, it is necessary to manage properly all activities and tasks so they can meet operational objectives (Berber *et al.*, 2011).

Over the last decades, BPR approach was represented as a very popular strategy used for the improvement of business processes. BPR is important management tool used for business processes examination and redesign to improve the cost efficiency and service effectiveness (Lindsay *et al.*, 2003, Abdolvand *et al.*, 2008). This strategy was introduced for the first time by the authors Hammer and Champy (1993) as a radical approach to redefining business processes in order of achieving significant improvements, increasing the effectiveness and efficiency of the process and performance improvement regarding the prices of the final products or services, quality. BPR is positioned as important management practice because it provides organizations with the means of increasing competitiveness and sustainability during the time of increasing competition, economic instability, the changes, which are reflected in the globalization and internationalization (Magutu *et al.*, 2010).

The main objective of this paper was to explore the possibilities for improvement of important business processes, such as human resource management, in petroleum industry, with the technique of business process reengineering and business process improvement. In this paper the authors presented the improvement process of one of the most important function in each organization – human resources function, by using management tools of BPR supported with the lean tools such as value stream mapping (VSM). The secondary objective of this paper was a confirmation of a good practice through the integration of HBS methodology and VSM - lean tools.

Methodology used in this paper included step approach in line with the Harvard Business School Business (HBS, 2010) process improvement supported with value stream mapping (VSM) lean tools.

In the first part of the paper the authors presented a theoretical review of the literature sources of business process reengineering and human resources, with a special focus on the functions of human resource management in big companies (where the research was done). After the theoretical review, business process improvement (BPI) of HRM was presented. Beside, the state of the HR function before restructuring, implementation of BPI and improvement of the performances of HR function after the BPI implementation with all the characteristics are also presented, as well as the company's indicators of efficiency.

This paper presents one year case study, in which the research was made to point out the significance of BPR in HR function in large companies. The authors presented the main areas of HR process in a large production companies so as the improvements could be achieved by using BPR techniques.

Theoretical Review

Business Process Reengineering

In order to improve their business, enterprises have to perform successful business process management. Labor productivity, the speed of information flow, quality, flexibility and reliability will characterize next generation of business systems which will reach performance level that cannot be achieved by current conventional concept of setting, managing and organizing of processes. Operating systems will become a harmonious synthesis of modern technological methods, information-management systems, and automated monitoring of work process.

Some authors emphasize a well known fact that there are companies whose production or service systems are still designed according to traditional approach and where changes are very difficult to introduce, primarily referring to the management and initiating the awareness about the needs to upgrade the system by using new approaches (Bozickovic *et al.*, 2012). One of those approaches is also a business process reengineering (BPR). There are many definitions of business process. As it was mentioned before, one of the first definitions was the one by Hammer & Champy (1993), and according to them business process is a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer. A business process has a goal and is affected by events occurring in the external world or in other processes. Tumbas *et al.* say that business processes represent the specification of sequential series of activities towards the realization of the goal. They are considered as an important element, because they put aside the logic of process from the applications. This separation allows greater flexibility, as components of the application can be designed more freely. The general model of the process is defined in a way that includes the constitutive parts of modeling of different aspects of all types of business processes (Tumbas *et al.*, 2003, p. 266).

In their book, authors Kravcenko & Mesalkin (2011) describe business processes as well as the arranged totality of related works in time and space (operations or subprocesses), directed at obtaining a specific result, pointing to the beginning and the end, with the exact definition of "input" and "output", and also with the criteria of efficiency in achieving a specified goal. Among the other definitions of business processes, a few more can be singled out: –a structured, measured set of activities designed to produce a specified output for a particular customer or market. It implies a strong emphasis on how work is done within an organization, in contrast to a product focus's emphasis on what. A process is thus a specific ordering of work activities across time and place, with a beginning, end, and clearly identified inputs and outputs: a structure for action" Davenport (1993), –business process is a series of steps designed to produce a product or service" Rummler & Brache (1995), etc. Summing up all above mentioned definitions of business processes, the authors define business processes as a set of activities necessary and sufficient for transformation of inputs (input resources) into the output values (final product or service)

that will meet the needs of the final consumers or organizations.

In order to ensure that all business processes will bring the increasing of business activities, productivity and flexibility of work processes, a continuous improvement of processes is necessary. This set of ideas, practices and principles, during early 90s of the last century, was included in the concept of business process reengineering (Business Process Reengineering – BPR) and involved such procedures in the organization and design of business processes that will bring fundamental, quantitative and rapid changes. Reengineering of the business process implies a systematic approach in order to gain a radical improvement of the main business processes of the organization (core business) and key processes of support (Pokrajac, 2010). The same author also emphasizes an optimization of efficiency and effectiveness as a main goal. In that context, there are four dimensions of reengineering:

- decreasing of costs,
- quality improvement,
- increasing of production volume and
- increasing of speed of work (operations).

Scekic *et al.*, (2011) consider that reengineering represent the radical redesign of technological processes in order to improve economic efficiency. Radical redesign means starting from the beginning instead of changing or modifying the existing modes. On the other side, some researchers support the view of reengineering as a process of redesign with the aim of improvement in the key areas of business followed by positive transformation of performances such as quality, cost, and speed (Altinkemer *et al.*, 2011). The creators of reengineering Hammer and Champy have defined reengineering as fundamental rethinking and radical redesign of business processes in

order to achieve dramatic improvements in critical contemporary standards of success such as costs, quality, service and speed (Hammer & Champy, 1993). In their definition, they emphasize four key elements of reengineering of process:

- thoroughness,
- radicalism (radical)
- dramatics and
- process.

In fact, according to them, the essence of reengineering is to change the current rules of behavior in the organization, and not in a better or more consistent implementation of existing ones. Instead of the established procedures, reengineering seeks to design and build completely new, inventive solutions that require a different approach and completely encompass the key processes in the company. Reengineering implies:

- changes in work cells,
- changes in work content,
- changes in staff role,
- changes in preparation for the work,
- changes in the measurement of work performance and compensations,
- changes in the criteria for promotion,
- changes in system of values and in corporate culture,
- changes in the role of manager: from supervisor to trainer and mentor;
- changes in organizational structure,
- changes in responsibilities of executives (Hammer & Champy, 1993, p. 65 – 79).

The authors have also developed a methodology for the implementation of business process reengineering shown in Figure 1.

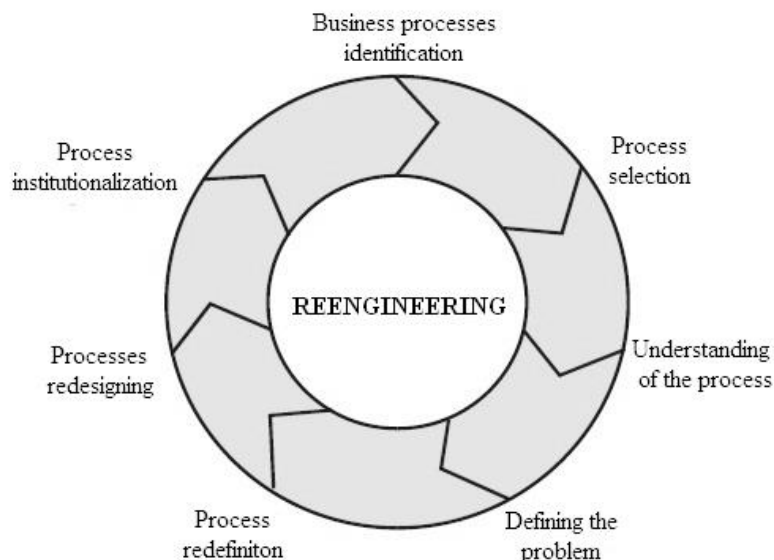


Figure 1. Methodology for implementation of business processes reengineering
Source: (Hammer & Champy, 1993).

It is important to note that the subject of reengineering is a process, not an organization. Companies do not redesign their sales or production departments; they are redesigning business processes that people perform in these departments. Confusion over organizational units and

process as objects of reengineering occurs because departments, divisions and groups are known to the people but processes are not. Reengineering is not:

- Automation,
- Reduce of non-active parts of the organization,

- Reduce the scope of the organization,
- Reorganization,
- Making marginal changes. (Radosevic *et al.*, 2013)

The objective of this paper is reengineering of HR processes, and it is explained in more details below.

Human Resource Management

Tomas Stuart (1996), who until recently was the editor of Harvard Business Journal, in his paper for the Fortune magazine supported the view that human resources function is bureaucratic and inefficient and that it should be "destroyed" (Burkholder *et al.*, 2007). Nine years later, in 2005, the same author has led a selection of the best professionals in that field at a conference organized by the Society of Human Resources Management (SHRM). The attitude of the author was not criticizing the initial view or later changed view of before mentioned, but pointing out the impact, role and growing importance of human resource function in a relatively short period of time. Surveys conducted by Watson Wyatt companies in more than 600 companies all around the world suggest that good management of human resources results in increase of up to 25 % of returns to shareholders. The importance of human resources increases with the increasing of the company. The reason lies in the fact that the growth of the company expands the geographic market of business, socio-economic impact of the environment in which company operates (influence over employment and the labor market), increase of the level of hierarchy in the company and information flows, etc.

High quality human resource management can provide significant improvements of the operations of companies that are primarily reflected in the increased performance and efficiency of the system as well as the competitive advantage on more and more turbulent market during the time (Wall & Wood, 2005; Collins & Clark, 2003; Brockbank, 1999; Wright, McMahan & McWilliams, 1994; Bolcas & Popovici, 2012). Apart from the improvement in company's operations, there is an improvement of the

employees as the owners of that processes. Employees with their knowledge, expertise, motivation, loyalty and dedication to the company essentially determine the performances and market position of a company; they have the ability to create other forms of intellectual capital that will have a growing strategic importance for the company in a long run (Berber *et al.*, 2012).

One of the most important authors in the field of human resources, Dave Ulrich, defined human resources as a function not in terms of what they perform, but in terms of the persons who are performing. His central focus was the results that are adding value to the organization, but viewed from the perspective of its employees, customers and investors. The same author also emphasized that good management of human resources function can raise the efficiency of cost management and could strengthen the company's competitiveness in the domestic and international markets. The author gave a detailed presentation of evolution of HR competency models during period from 1987 to 2002 (Figure 2). Apart from the overview of the evolution of the model, the same author in his book gave an overview of 6 stages, defined by Arthur Yeung which should be the steps of reengineering of the HR function:

1. define the target process,
2. develop „as is—model,
3. challenge underlying assumption,
4. develop „should be—models,
5. implement, roll out, market and
6. measure business impact. (Ulrich, 1997)

Besides the Ulrich's model of human resources, it is important to note that there are many other models that explore and analyze human resources within the organization at a different levels of business (see Tyson 1995, Beer *et al.*, 1984, Hendry & Pettigrew 1990, Ackermann 1986, Fombrun *et al.*, 1984), as well as models that deal with competency of human resources and job positions (Kearns, 2001, ASTD 1988, Ulrich *et al.*, 2008, Chen *et al.*, 2005).

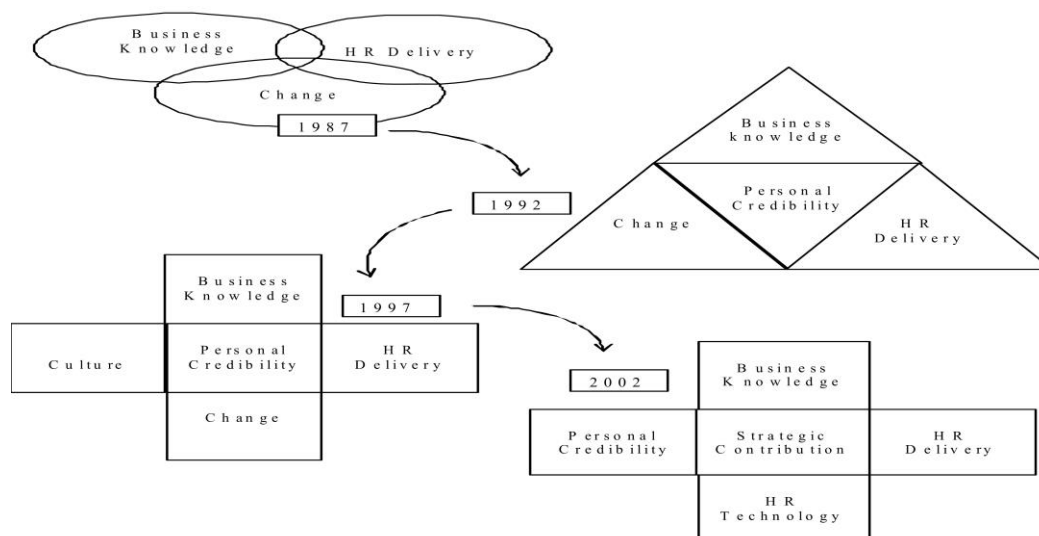


Figure 2. Evolution of HR competency models during the period 1987-2002
 Source: (Ulrich *et al.*, 2008).

Besides these general models, it is important to mention some previous researches related to the implementation of reengineering and human resources (see Willmott, 1994; Willmott, 1995; Willcocks & Smith, 1995; Zucchi & Edwards, 1999). Authors from UK examined the relationship between business process reengineering (BPR) and human resource management. A number of propositions relating to aspects of human resource management are derived from the literature, and examined by interviewing senior managers in UK organizations where business process reengineering projects had either been completed or were still in progress. The propositions were analysed under four major headings: structure and culture, the role of managers, team working, and reward system. The conclusion was that BPR principles on the management of human resources as stated in the literature seem to find a full application in most of the organisations investigated (Zucchi & Edwards, 1999). In the article of Willmott (1994) it has been reviewed the Business Process Reengineering (BPR) vision of radical business process change, focusing upon the use of information technology to facilitate a shift away from linear – sequential work organization towards parallel processing and multidisciplinary team working. It highlighted BPR’s treatment of the human dimension of its programme for radical organizational change and raised the question of how HRM specialists are to respond to its trivialization of the complexities and dilemmas associated with the reengineering of work processes.

Methodology

–The concept of reengineering - because it sets the question of what the company has to do in the first step, and then how, and ignoring –what is” and concentrating on –what needs to be” – contains a significant part of "strategic fundamentalism", which includes a radical redesign of all existing structures and procedures, as well

as finding and implementing entirely new ways of performing all the functions of the company, from production to sales and after-sales services (Pokrajac, 1996, p. 213). By reviewing the literature sources, it can be concluded that there are different approaches and models of reengineering (see Hammer & Champy, 1993; Guha *et al.*, 1993; Kettinger *et al.*, 1997; Miladinović & Adamović, 2010; HBS, 2010; Strugar, 2012). In this paper, through the reengineering of HR processes in the processing industry, the methodology of the Harvard Business School was used (Harvard Business School, HBS, 2010). According to Harvard Business School, methodology for BPI consists of six mutually conditioned phases for reengineering of the business processes:

1. Planning of reengineering;
2. Analysis of indentified process;
3. Redesign of process;
4. Obtaining resources;
5. Implementation;
6. Continuous process improvement (HBS, 2010).

A study of the process of reengineering of HR is made in a vertically integrated company for exploitation, production, distribution and sale of products and services intended primarily for automotive and aerospace industries. According to the agreement with the top management of the company TM, the company name is protected and in this paper will be named as RS & Co. Company RS&Co is doing business in Republic of Serbia over 60 years. Today the company employs over 8,500 employees and operates under the quality management system ISO 9001, ISO 14001, OHSAS 18001, and in December 2009 the company became part of a multinational company. In order to display the positive performance of the company or business efficiency indicators, the table of the author’s calculations based on available financial indicators is presented below (Table 1).

Table 1

Indicators of efficiency of the RS&Co Company’s business for 2012

INDICATORS	FORMULA	UNIT	VALUE	
BEP (breakeven point)	$BEP = \frac{TF}{\%Mp} = \frac{TF}{(R-TV)/R}$	€	506,324,131.87	Where: TF – total fixed costs; TV – total variable costs; R – revenue; E – equity; TC – total costs; %Mp – % of marginal profit; L – Liquidity; WA – working assets; STL – short term liabilities; S – Solvency; BA – Business assets; TD – total short term and long term debt;
ROE (return on equity)	$ROE = \frac{P}{Equity}$	%	36,09	
ROA (return on assets)	$ROA = \frac{P}{BA}$	%	16,74	
EPS (earning per share)	$EPS = \frac{P}{Num_Of_Shares}$	ratio	303,30	
Liquidity	$L = \frac{WA}{STL}$	ratio	1,6856	
Solvency	$S = \frac{BA}{TD}$	ratio	1,3539	

Source: Analysis of the authors

HR process reengineering in the Company

In order to get more precise insight into the flow of human resources function in the company, such as flow of

information, flow of means of work etc., the mapping of the entire process was made. Mapping “represents one of the starting foundations in data gathering and system analysis that, next to the vision of the top management and

staff training, represents the foundation for successful reengineering process” (Radosevic *et al.*, 2011). For mapping process is used the Value Stream Mapping tool (VSM) (Lasa *et al.*, 2008; Seht & Gupta, 2005; Rother & Shook, 2003; Abdulmalek & Rajgapol, 2007; Hines *et al.*, 1999), as one of many management tools like DTP-flow diagrams, AS2, IDEF and many others. The implementation of this tool in the integration with the HBS methodology, so far according to some authors, proved to be very practical and effective (see Radosevic *et al.*, 2013). That's why one of the goals in this paper, but not the primary one, is a review of possible quality integration of certain reengineering methodology and some management tools. After the mapping process, because of the

complexity of mapping using VSM tools and ensuring privacy and data security of the company, in Figure 3 there is shown a simplified hierarchy of human resources management in the company.

In the picture, we can see that human resources function, managed by director and labor law managers (lawsuits, legal opinions, disciplinary proceedings, resolutions), has three main functions: section of personnel administration (hiring, internal reassignment, termination, leasing, various personal requests), section for HR services support in a different company blocks and section for payroll accounting (payroll, motivation, per diem payments, reporting).

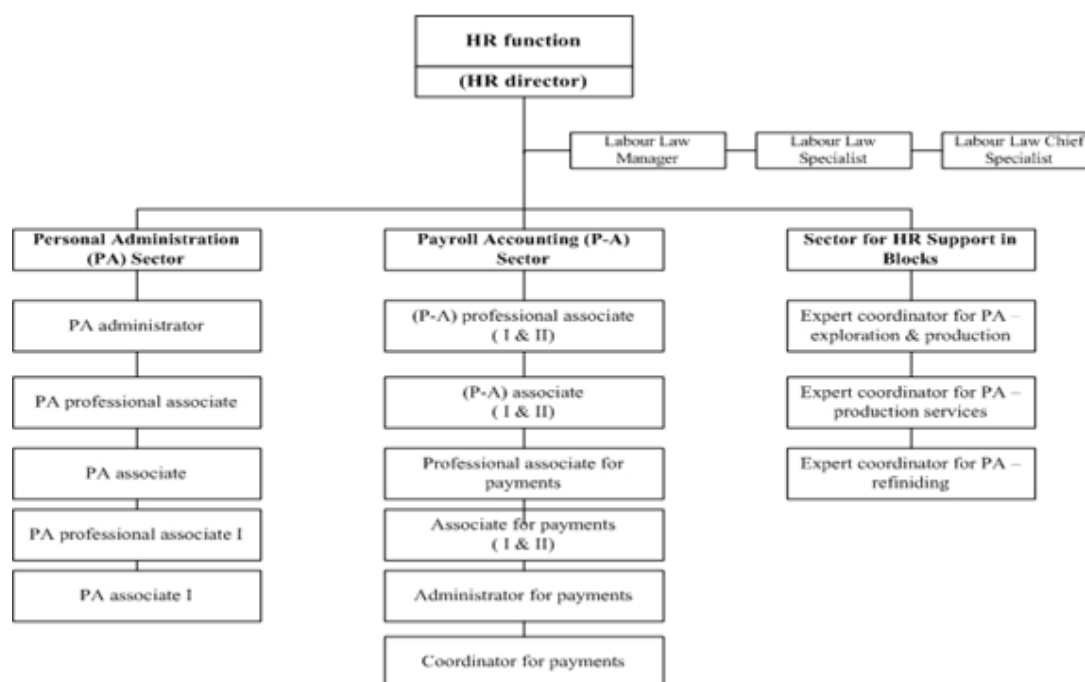


Figure 3. Company's HR before BPI implementation

Source: Display by the company on the basis of VSM mapping, documents and interviews with HR managers

In the initial stage of analysis the following gaps were identified by sections. In the section for support noticed:

- Narrow span of control,
- Unnecessary fragmentation of responsibility between Personnel Administration (PA) and HR Services Support in Blocks (HRSSB),
- Complicated lines of reporting and communication.

In personnel administration section noticed:

- Highly centralized responsibilities, with evident lack of trust in HR administration,
- Inconsistent lines of communications and reporting,
- No adequate information on current workload conducted for each employee,
- Approximately 30 % of administrators are not utilized because of uneven distribution of workload,
- Section for HR Services Support in Blocks is not according to Organization Design Standard in terms of number of employees and span of control,

- Head of Section for HR Services Support in Blocks is not managing Account managers – mostly dealing with Promet administration.

Shortcomings in the administration section of payment:

- Overload of payroll technical support team,
- Head of Payroll Accounting Section is overly evolved in operational work,
- Numerous different payroll runs are performed per month,
- Inadequate workload of payroll administrators,
- Many data are not precise enough and not in alignment with SAP (system incompatibility); manual data preparation which is time consuming,
- Payroll process is consistent,
- As a result of two different payrolls, there are two sets of legal reports at the end of each payroll runs which have to be coupled into one (legal requirement is: for one company there is one legal report). This is an obstacle which uses one employee to finish this process.

Shortcomings in the section of labor law:

- Rulebook regarding disciplinary proceeding which was delaying the process was withdrawn from procedure on HRSSC initiative,
- Lasting process because of variety of legal requirements that are time consuming (document asserting by employee, syndicate, bulleting board)
- Necessity to deliver disciplinary documents to employee in person is one of major reasons for lasting procedure,
- Around 90% of all disciplinary proceedings are in Retail – no assistance from regional retail managers in delivering documentation to their employees.

One of the goals of reengineering certainly is an answer to the question whether the change in strategy and the correct choice of strategy are actually able to beat the

competition. On this basis, it can be found that it is necessary to connect all company's functions into one integrative „line—in order to improve performances inside the company. In order to improve the observed process and to eliminate or reduce disadvantages, with the idea of tracking integrative line shown in Figure 4, it has been proposed the human resource function with "targets" which are possible to improve, such as: additional SLA reduction in HR processes through empowerment (delegation of responsibilities), improvement of team spirit and cross-functional communication, better distribution of workload via process optimization, additional automation opportunities (for example Contract & Annex printing), increased quality of work through transparent key performance indicator (KPI) measuring and human capital (HC) optimization as a result of aforementioned.

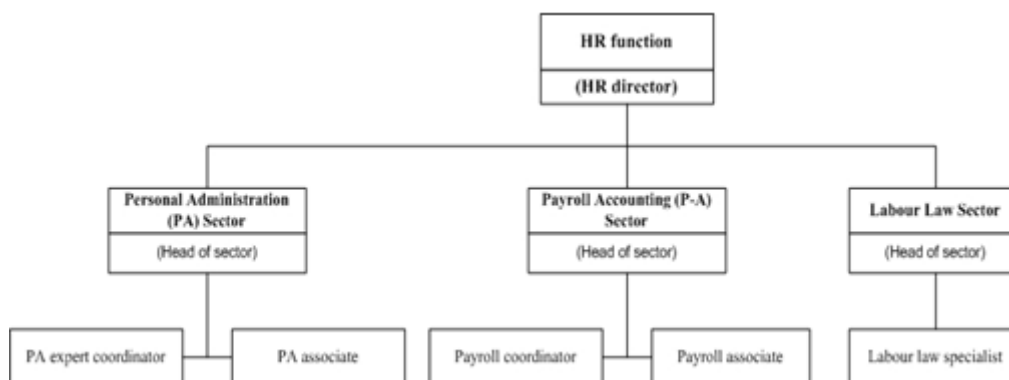


Figure 4. HR process after BPI implementation
Source: Suggestions of the authors for new process

In Figure 4 we can see that new proposal resulted in the way that the section for HR services support for blocks was abolished. Namely, except functions, the company also has blocks: exploration and production (EP), sales and distribution (SP), production services (PS) and refunding (REF) and each of the blocks actually represents a separate business. HR service support represented a link between personnel administration and service center and also a link between payroll and the blocks. Inside HR function this service represented a single contact. By reviewing the communication lines it was noticed that the director of HR function had a direct communication over a personnel administration by „skipping—the HR support and that the final function of support section was confined on administration and on payroll, which was absolutely unnecessary so this section was abolished.

When it comes to the personnel administration, the creation of two divisions was proposed on „front end—and „back end— *Back end* represents employees who are entering data in the SAP, while *front end* represents administrative expert coordinators who are client oriented toward each function and each block. Their clients are line managers according to functions and blocks and they should be aware of any changes performed by the function of organizational changes. Thus, experts are enabled to know better the system, to whom and how to communicate in different situations, which automatically increases the efficiency and effectiveness of completed jobs.

A division on *front end* and *back end* was also proposed in a payroll section. The role of back end is the same as in the section of personnel administration where associates are completing documentation while payroll coordinators are preparing and entering arranged lists in the SAP. There, they are making the payment of wages from function's and blocks' accounts on the accounts of 30 banks by using 42 calculations. Detailed improvements obtained in each section will be further explained in the discussion.

Section of labour law is defined in the way that should solve all claims raised by employees and everything related to labor law. Such organization of this section opens the possibility of further reorganization of the corporate legal function in the company where rough analysis detected an excessive employment, an excessive flow of information and the waste of resources.

The success of the reengineering of HR processes in the observed company was certainly largely depended on the acceptance of those changes by their employees. Some managers of a lower level were disapproving changes because they, at different stages, did not understand the essence and they had a narrow and superficial view regarding the improvement of the human resources function. Because the reengineering was implemented on processes, it was necessary to change the understanding of business concepts and only then to initiate major changes. On the other side, quality presentation of reengineering to employees resulted in better acceptance of changes,

however, with suspicion and fears of possible job loss (Guimaraes, 1999; Crowe *et al.*, 2002, Palmer, 2004; Schniederjans & Kim, 2003). Miladinović & Adamović (2010, p. 344) noticed that, apart from the problem of non-acceptance of changes by employees during the process of reengineering, many different obstacles should be avoided: lack of vision (redesigning is not occurring by chance or fate, it's a result of hard work and precisely directed action), inefficient reengineering team (most internal forces do not have enough tools, experience and the ability to efficiently access the creative design), exclusive reliance on information technology, inadequate training and authorization (advancement of employees is necessary in order to affect the current status), failures in the creation of reengineering process and its applications (expectations are often too high, and the effort and participation are underestimated).

Discussion

The main objective of this paper was to present the improvement of efficiency and effectiveness at all the levels of HRM function in specific company. In addition to the presentation of the reduction of the hierarchical structure of organization while increasing the effectiveness and efficiency of the work processes, a table with the most important results of improvement of human resources function in observed company (Table 2) has been

presented, achieved by using Hardvar Business School methodology supported with VSM tools.

The most significant improvements were obtained in the section of personnel administration, where for example awaiting for signature of documents by the manager of the directorate was reduced, the number of contacts was also reduced when it comes to recruitment control, and the process of creating and printing contracts and annexes was accelerated.

Besides the reduction of the steps within the process, there was a reduction of the time needed for certain work processes, on the way that:

- time needed for hiring was reduced for 50 %;
- reassignment process was reduced for 3 days or 30 %;
- termination process was reduced for 26,66 %;
- time needed for waiting for certain documents was reduced for 83,33 % etc.

In labour law section it has been enabled a reduction of time for about 13,88 - 14,7 % for certain work processes. There was also a reduction in numbers of steps regarding the process of signing the documentation, the time for waiting was reduced, and also increased responsibility was provided in the operations of individual structures. When looking at the entire structure of payroll section, with adequate workload distribution of payroll administrators, optimization of work processes was enabled for 20 %.

Table 2

Effects of BPI on HR sections

Personnel Administration Section	
Before BPI	After BPI
2 documents out of each need to be signed by different Directors	Both documents will be signed by HRSSC Director
When Employee have electronic identification card, he/she needs to have printed ID document to support address data	In case when Employee has electronic ID card, HR Administrator will be able to print ID document at the spot
Every email from Recruitment is sent to HRSSC Head of PA for distribution to HR Administrator,	Instead of HR Administrator, Account Managers will be single point of contact for Recruitment for Contract generation and control
Work Place automation document is a part of original set of documentation forwarded by Recruitment	Work Place automation document will be a responsibility of Line Manager as once the Contract is created, e-mail with SAP ID and Cost Center will be sent to LM for this document generation
Manual creation of Employment Contract, Confidentiality Contract and anti/mobbing Contract	Once the data are in SAP, printing will be automated from system. After generation Account Manager will put short signature on document
Payroll Administrator waits for Contract Creation and Offer so she/he can insert Salary data into SAP	Account Manager will insert Salary data when SAP Profile is create
Complexity and SLA for Hiring process - 6 working days	Reduced complexity and SLA for Hiring process from 6 to 3 working days (reduced for 3 days)
IT waits 6 days for Employee information from Recruitment	IT will receive information on SAP ID of Employee (needed for IT equipment delivery) only one day after documentation is received from Recruitment, instead of 6 days (reduced for 5 days)
Complexity and SLA for Internal Reassignment process - 15 working days	Reduced complexity and SLA for Internal Reassignment process from 15 to 12 working days (reduction for 3 days)
Complexity and SLA for Termination process - 15 working days	Reduced complexity and SLA for Termination process from 15 to 11 working days (reduction for 4 days)
Labour Law Section	
Before BPI	After BPI
HRSSC Director is initialing Warning Act and FOA Director is signing document	HRSSC Director is signing document
Every Contract is controlled by Labour Law Manager before sent to HRSSC Director	Labour Law Specialist (as highly profiled expert) will have greater responsibility in preparation of disciplinary documents.
Complexity and SLA for Warning - 34 working days	Reduced complexity and SLA for Warning from 34 to 29 working days (reduced for 5 days)
Complexity and SLA for Dismissal - 72 working days	Reduced complexity and SLA for Dismissal from 72 to 62 working days (reduced for 10 days)

Source: Calculation of the authors

Conclusion

Companies today have to respond to more complex consumer's demands. They need to shorten the time for production and delivery, to reduce costs, to raise efficiency and effectiveness, flexibility and responsiveness to the growing and changing preferences. The reasons why companies are losing money and have high costs and collapsing are not bad managers and lazy workers but rather business processes which companies conduct, their way of working and their attitudes towards that work. It is necessary to increase the effectiveness and efficiency of management, to improve the operations of all functions within the company through continuous improvement of work processes. One of the approaches for improving work processes is reengineering. Reengineering in the initial stage of its formation was glorified. After that, reengineering was shown as a tool for layoffs and reducing the number of employees in companies. Today interest in reengineering is growing again and this concept is seen as an opportunity that can improve the performance and increase the efficiency of business in general.

Based on the obtained results, it can be concluded that combination of HBS methodology and VSM tools can contribute to the improvement in the form of reductions of hierarchical levels in organization within the company and in the form of advancement of work processes within the company. This was primarily reflected in the increase of the effectiveness and efficiency, in reducing of the time required for execution of the processes, and saving resources.

In this paper the authors have managed to set up two objectives. The primary objective was the possibility for researching the improvements in business processes of HRM in a large company by using HBS methodology of reengineering. The improvements obtained by using this methodology are reflected in:

- reduction of unnecessary steps within the work processes,
- employees who are getting a greater responsibility,
- shortening of time of working processes up to 50%,
- reduction of the waiting time within a particular work process up to 83,33%,
- reducing of the time that is not adding value to the process,
- increasing of the time that is adding value to the process.

One of the most important findings is that there haven't been layoffs, but conversely, reorganization of employees was done. Employees got more responsibility at workplaces; the time that wasn't adding value to the process - non value added time (NVA) was eliminated or reduced to the smallest possible amount. Therefore, employees can direct their work on the time that is adding value to the process - value added times (VAT). While increasing the effectiveness and efficiency of operations, planned goals of the company are also achieved.

The secondary objective of this paper was a confirmation of a good practice through the integration of HBS methodology and VSM - lean tools. Authors support the attitude that the mapping of the processes, by using VSM tool, might be the most reliable tool for displaying of all flows of work process, feedbacks and irreversible flows within the enterprise, communication flows, time that is adding or not adding value to the process, etc. All this allows easier insight into the complete picture of the processes and provides significant support to understanding the processes and also an irreplaceable database for management decision making during the changes within the company. Further studies about the implementation of the integration package of methodology and management tools of improving a different work processes in large, medium and small companies will be a challenge for some future researches.

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Verslo procesų reorganizavimas žmogiškųjų resursų valdymo srityje

Santrauka

Pagrindinis šio darbo tikslas buvo ištirti tokių svarbių verslo procesų, kaip *žmogiškųjų resursų valdymas* gerinimo galimybes naftos pramonėje, tam panaudojant verslo proceso reorganizavimo ir tobulinimo metodus. Šiame darbe autoriai pateikė vienos (pačios svarbiausios kiekvienoje organizacijoje), *žmogiškųjų išteklių funkcijos* patobulinimą, tam panaudojami verslo proceso reorganizavimą (VPR), paremtą tokiais *Lean* įrankiais kaip vertės srauto žemėlapis (VSM – *plg. angl. value stream mapping*). Be šio pagrindinio tikslo, antrasis šio darbo tikslas buvo patvirtinti Harvardo Verslo mokyklos (HBS – *plg. angl. Harvard Business School*) metodą, VSM ir *Lean* įrankių integracijos gerą praktiką reorganizacijos projektuose. Šiame darbe naudotasi metodu, kurį sudarė žingsnių metodas ir *Harvardo Verslo mokyklos* verslo (HBS, 2010) proceso tobulinimas, paremtas vertės srauto žemėlapio (VSM), *Lean* įrankiais.

Pirmojoje šio darbo dalyje autoriai pateikė teorinę literatūrą apie verslo proceso reorganizavimą ir žmogiškųjų išteklių valdymo aptį valgą. Didelis dėmesys buvo kreipiamas į žmogiškųjų išteklių funkciją didelėse kompanijose, nes jose buvo atliktas tyrimas.

Kadangi visi procesai organizacijoje yra nukreipti į strateginius tikslus, būtina tinkamai valdyti visas veiklas ir užduotis taip, kad jos atitiktų operacinius tikslus (Berber ir kt., 2011). *Verslo proceso reorganizavimas* (VPR) yra laikomas svarbia valdymo praktika, nes jis aprūpina organizacijos konkurencingumą ir patvarumą didinančiomis priemonėmis (Magutu ir kt., 2010) rinkų svyravimo laikotarpiu vykstant globalizacijai ir nuolat kintant verslo sąlygoms. Reorganizacija yra pertvarkymo procesas, kurio tikslas yra pagerinti svarbiausias verslo sritis, po kurio eina teigiama kokybės, kaštų ir greičio transformacija (Altinkemer ir kt., 2011). Reorganizacija yra radikalus technologinio proceso pertvarkymas norint pagerinti ekonominį efektyvumą. Radikalus pertvarkymas reiškia, kad pradėdama viską keisti iš pat pradžių, nors galėtų būti keičiami arba pertvarkomi tik jau esami metodai (Ščekić ir kt., 2011). Siekiant tyrimo tikslo, taip pat yra svarbu apibūdinti žmogiškųjų išteklių procesus valdymo metu.

Išanalizavus literatūros šaltinius, galima daryti išvadą, kad egzistuoja skirtingi reorganizavimo būdai ir metodai (Hammer ir Champy, 1993; Guha ir kt., 1993; Kettinger ir kt., 1997; Miladinovič ir Adamovič, 2010; HBS, 2010; Strugar, 2012). Šiame darbe, per TR proceso reorganizavimą apdirbimo pramonėje, buvo panaudotas *Harvardo Verslo mokyklos* metodas (*Harvard Business School, HBS, 2010*). Harvardo Verslo mokyklos metodą, kuris skirtas VPP, sudaro šešios, darančios įtaką verslo proceso reorganizavimui fazės.

TR reorganizavimo proceso tyrimas buvo atliktas vertikalios integracijos kompanijoje, eksploatuojančioje, gaminančioje, platinančioje ir parduodančioje gaminius ir paslaugas, skirtas pirmiausia automobilių ir aviacijos pramonei. Pagal susitarimą su kompanijos TM aukščiausia vadovybe, kompanijos pavadinimas yra saugomas ir šiame darbe ji bus pavadinta RS&Co. Kompanija RS&Co vykdo veiklą Serbijos respublikoje daugiau nei 60 metų. Šiandien kompanijoje dirba daugiau nei 8500 darbuotojų, ir ji dirba pagal kokybės valdymo sistemą ISO 9001, ISO 14001, OHSAS 18001, o 2009 metų gruodžio mėnesį kompanija tapo daugianacionalinės kompanijos dalimi. Kaip rodo kompanijos efektyvumo rodikliai, ši įmonė dirba sėkmingai, gaudama didelę grąžą iš aktyvų bei akcijų. Tačiau nepaisant šių bendrų rodiklių, kompanijos vadovai suprato turintys ir problemų: yra švaistomi resursai žmogiškųjų išteklių valdymo srityje. Šiuo atveju, buvo atlikta verslo procesų, svarbių TRV, analizė. Ji buvo atlikta siekiant nustatyti tam tikras sritis, kuriose galima būtų padaryti pakeitimų, kad būtų pagerinti svarbūs verslo rodikliai.

VPR metu buvo panaikinta skyriaus TR paslaugų parama blokams. TR paslaugų parama atstovavo ryšį tarp personalo administravimo ir paslaugų centro, taip pat ryšį tarp darbo užmokesčio ir blokų. TR funkcijoje ši paslauga reiškė atskirą kontaktą. Peržiūrint komunikacijos linijas, buvo pastebėta, kad TR funkcijos direktorius turėjo tiesioginį ryšį su personalo administracija, „prašokdamas—TR paramą, o galutinė paramos skyriaus funkcija apsiribojo administravimu ir algalapiais. Tai buvo visiškai nebūtina, todėl skyrius buvo panaikintas. Analizuojant personalo administravimą, reikia pabrėžti, kad buvo pasiūlytas skyriaus padalijimas į „*priekinį*“ ir „*galinį*“—„*Galinis*“ skyrius atstovauja darbuotojams, kurie suveda duomenis į programinę įrangą SAP, o „*priekinis*“ skyrius atstovauja administraciniams ekspertams, koordinatoriams, kurie nukreipia į klientą kiekvieną funkciją ir kiekvieną bloką. Jų klientai yra tiesioginiai vadovai pagal funkcijas ir blokus, ir jie turėtų būti tikri dėl bet kokių pokyčių, kuriuos atlieka organizacinių pokyčių funkcija. Tokiu būdu, ekspertai gali geriau suprasti sistemą, žinoti su kuo ir kaip bendrauti įvairiose situacijose. Tai leidžia pasiekti užduotų efektyvumą ir našumą. Skyriaus padalijimas į „*priekinį*“ ir „*galinį*“ buvo pasiūlytas darbo užmokesčio skyriaus. „*Galinio*“ skyriaus vaidmuo yra toks pat kaip ir personalo skyriaus, kur kolegos dirba pildydami dokumentus, o darbo užmokesčio koordinatoriai ruošia ir įtraukia sutvarkytus sąrašus į SAP. Darbo teisės skyriaus paskirtis buvo spręsti bet kokias pretenzijas, susijusias su darbuotojais ir klausimus, susijusius su darbo teise. Šio skyriaus darbas atveria galimybę toliau reorganizuoti kolektyvines teisine funkcijas kompanijoje, nes jau pirminės analizės metu buvo nustatytas per didelis darbuotojų skaičius, informacijos srautas ir resursų švaistymas.

Šie pakeitimai organizacijoje buvo ypač svarbūs personalo administravimo skyriuje, nes sutrumpėjo laikas laukiant, kol direktijos vadovas pasirašys dokumentus, greičiau buvo spausdinamos sutartys ir įvairūs priedai.

Atlikus šiuos pakeitimus taip pat sutrumpėjo laikas, kurio reikėjo tam tikroms operacijoms:

- laikas reikalingas samdymui sutrumpėjo 50%;
- pakeitimo procesas sutrumpėjo 3 dienomis arba 30%;
- nutraukimo procesas sutrumpėjo 26,66%;
- trukmė, reikalinga laukiant tam tikrų dokumentų, sutrumpėjo 83,33% ir t.t.

Darbo teisės skyriuje operacijų laiką taip pat galima sumažinti maždaug 13,88 - 14,7%. Buvo mažiau laiko sugaištama pasirašant dokumentus, laikas laukiant taip pat sutrumpėjo. Padidėjo atsakomybė atskirų struktūrų atliekant tam tikras operacijas. Tvelgiant į visą darbo užmokesčio skyriaus struktūrą ir įvertinus darbo užmokesčio administratorių darbo krūvį, buvo nuspręsta, kad darbo procesą galima optimizuoti 20%. Remiantis šiuo metodu nustatyta ir daugiau teigiamų dalykų:

- nebūtinų žingsnių darbo procesuose sumažinimas;
- didesnė darbuotojų atsakomybė;
- sutrumpėjo laikas, kuris nesuteikia pridėtinės vertės procesui;
- pailgėjo laikas, kuris suteikia procesui pridėtinę vertę;

Remiantis gautais rezultatai galima daryti išvadą, kad HBS metodo ir VSM įrankių derinys yra labai svarbus gerinant organizacijos hierarchinių lygių mažinimą kompanijos viduje ir tobulinant darbo procesus kompanijoje. Pirmiausia tai matyti iš to, kad padidėjo efektyvumas ir našumas, sutrumpėjo procesų atlikimo laikas ir buvo taupomi ištekliai.

Raktažodžiai: *verslo proceso reorganizacija, žmogiškųjų resursų valdymas, VSM įrankis, proceso pagerinimas.*

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