#### THE IMPROVEMENT OF BUSINESS EFFICIENCY THROUGH BUSINESS PROCESS MANAGEMENT

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# ABSTRACT

Business Process Management (BPM) represents a constant process in which employees of the BPM department, constantly analyze company's business processes and enhance the same, improve or change them using Business Process Improvement (BPI) and Business Process Reengineering (BPR). The main goal of every company is the maximization of investment. However, other stakeholders of the company have also become increasingly important. Because of this, increasing business efficiency does not only mean cost reduction and profit increase for investors or owners of the company. Under the term increasing business efficiency, we mean the overall increase in the performance of business operations, including those elements that do not have direct connection with company's profit. Besides costs reduction and profits increase, increasing business efficiency includes the increase in the utilization of company resources, improvement of working conditions and customer satisfaction, as well as reduction of the negative impact of company's business on the environment. This study examines the possibility of increasing the efficiency and effectiveness of domestic companies, the improvement of business processes through BPM, BPI, and BPR. The research results point to the conclusion that domestic companies do not have enough knowledge related to this field, that companies do not devote enough attention to BPM, BPI, and BPR, and that there is an opportunity to increase the competitiveness of domestic companies by improving business processes.

**Keywords:** Business Process Management, Business Efficiency, BPM in BiH companies, continuouslyimprove, Business Process Reengineering, Business Process Improvement

#### **1. INTRODUCTION**

Today's ever more competitive and demanding business environment urges all companies and even non-profit organizations to improve their business constantly. The key reasons which led to an increase in demand and competitiveness are primarily: the process of globalization, the application of modern information and telecommunication technology, a higher level of education, access to a larger number of markets (primarily online purchases/sales), and the impact of bargaining power of users (Porter's Five Forces Model (Hanlon 2016)).

Inadequate management of business processes and the lack of systematic approach create unnecessary processes, increase inefficiency, and reduce competitiveness, which ultimately affects the company's ability for successful operating, both in the short and in the long-term. Some of the most significant changes in the company's life-cycle are business process automation and a shift from functional organizational structure to process oriented organizational structure. Business process automation represents an indispensable phase in the life cycle of a company, which in most cases means the introduction of certain information systems (IS) or integration of existing information systems. The automation of inefficient business processes increases business inefficiency. For these reasons, before the introduction of IS or business process automation, it is necessary for companies to make an improvement or optimization of business processes. Business processes allow all the different parts of an organization to efficiently and effectively work together toward their common goal of serving customers better (IBM 2018). Only 37% of organizations have digitized their business processes and have

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seen significant benefits (Rtinsights 2017). Unfortunately, a significant number of companies enter the automation process without improving or redesigning business processes, which is primarily a consequence of the lack of systematic approach to business process management.

# **2. LITERATURE REVIEW**

Business process management as a discipline for improving business results becomes a more important focus of CEOs worldwide. In the 1990s, companies were focused on business process (BP) redesign projects (using information technology and automating business processes) at process level. However, as of, the 2010s focus has shifted to strategy or enterprise level (development of business process architecture, process standardization for customers' satisfaction, etc.), which means that managers have become aware that without proper BPM, BPI or BPR it is not possible to achieve business goals. This has led to the creation of Business Process Management Systems (BPMS) at the implementation level, combining processes, employee skills and IT system in one entity (Batenburg & Ravesteyn 2010, p. 5-10). Business Process Management (BPM) strives for the improvement of how companies conduct crossfunctional work and ensures that companywide capabilities are available that enable the effective management of the entire business process life cycle (Kerpedzhiev, König, Röglinger, & Rosemann 2017).

A business strategy, as the main business guideline and road to success, should be carefully devised. Every successful company devotes great attention to setting an effective business strategy and determining the main business objectives and roles and how they should be achieved. Unfortunately, many employees are not familiar with either the company's vision and mission, or with the strategic and operational objectives and strategy. Therefore, it is very important when devising business strategy (both in the long and short term), to create appropriate communication channels with lower levels, respectively, i.e. a mechanism to inform all employees about the company's objectives and vision. It is well known that employees involved in activities, accept tasks and objectives as "personal", causing greater involvement and engagement and therefore accomplishing the goals. Strategy creators need to create a measuring mechanism for monitoring the strategy implementation, both in the short and in the long run, in order to correct mistakes and achieve the desired results.

Recent studies have shown that combining BPM techniques with some of the IS proves to be an effective solution. The reason is the basic need of companies to perform their job effectively and efficiently, company can only be as flexible, efficient and agile as its business processes interacting with each other (Rubens 2017). In order to do that, companies need to determine their business objectives, map their business processes in alignment with business strategy, and most importantly to execute their business plans in a desired way. The most important business drivers for adopting BPM and Enterprise Resource Planning (ERP), as stated in the research, were the following: Lack of innovation and outdated business processes (45%); Improvement of quality and consistency of products and services (41%); Simplification and removal of risks from business processes (33%); Maximization of return on assets (28%) (Castellina 2013, p. 5). BPM is a way to capture a model of how an organisation works (the AS-IS). Once this is in place, improvements can be modelled (the TO-BE options) and once the best one is determined, the improvements can be made (Harris 2017). The three areas in which businesses anticipate BPM and in which it could have the greatest impact are: maximizing cost-efficiency (55.8%), optimizing time-to-market (38.8%), and facilitating customer self-service (29.7%) (Capgemini 2012). According to BPM industry research, 94% of the firms surveyed have already implemented BPM or have plans to implement BPM initiatives within the next three to five years. Only 6% of the firms interviewed had neither implemented nor planned to implement BPM initiatives (Thakral 2011, p. 4). New information technology keeps on emerging and new concepts and algorithms are developed to work with process-related data. These will shape the way how business processes are managed in the future in a smarter way as we know it today (Mendlinga, Baesens, Bernstein, & Fellmann 2012, p.9).

BPM becomes even more important for companies in their day-to-day operations that

require an unprecedented dynamism, where innovation must be continuous in order to be competitive, where the analysis of information is crucial, and where it is necessary to act with agility and flexibility to meet the needs of customers (Robledo 2018).

# **3. RESEARCH METHOD**

The survey was created according to the BPTrends survey (Harmon, P., 2016), modified in accordance with the subject of the research. The survey was conducted in the period from June, 1st to September 1st, 2016 and it included the respondents who filled the survey online. Out of the total of 500 distributed questionnaires, only 90 of them were filled in full. The collected data was then statistically analyzed in Excel by using basic statistical methods. The complexity and specificity of the survey primarily relates to the field of research, unknown to a larger number of respondents, as proved in the end, which caused a significant number of unfilled questionnaires. Only 18% of the respondents completed the survey out of the total number of distributed questionnaires (Handžić 2016, p. 57-79). The same or similar research results were presented in the documents: "The State of Business Process Management 2014" by Harmon P. and Wolf C., "The State of Business Process Management 2016" and "The State of Business Process Management 2018" by Harmon P.

The goals of the research are given as follows: Identification of the impact of BPM, BPI, and BPR on company's business efficiency; The research on conversance of BPM, BPI and BPR's basics among managers and employees; Identification of the needs of domestic companies for BPM, BPI, and BPR; Suggestions for improving the efficiency of operations in domestic companies.

The hypotheses was postulated as follows: Companies in BiH are not sufficiently familiar with BPM, BPI and BPR and a large number of companies in BiH do not have departments or employees that map the business processes and monitor external and internal changes in order to change, improve or redesign business process, which directly affects efficiency of the companies.

#### 4. RESULTS AND DISCUSSION

#### 4.1. Information about the respondent

On the basis of the survey results, about 67% of the respondents belonged to the age group from 26-35. This indicates that the respondents had enough business experience in order to be able to objectively and impartially complete the survey questions. The educational structure of the respondents is extremely important to obtain the objective data, because the field of the topic is narrowly specialized and relatively new in our region. The research results demonstrated that about 80% of the respondents were highly educated, respectively, 47% of them had a master's degree.

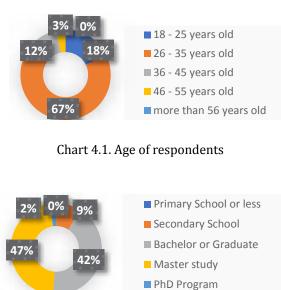


Chart 4.2. Educational structure of the respondents

Source: Authors' analysis.

Analyzing the position of the respondents in a company, we can conclude that the majority of them were economists, engineers and lawyers. Their operations were primarily related to the positions of administrators, clerks, assistants, managers, marketing chiefs, lawyers, professors, accountants, directors, and others.

# 4.2. Information about the company

Most respondents belonged to the branch of services, followed by production and education. A significant number of respondents belonged to



large companies, primarily due to the focus of research on BPM, BPR and BPI. The research results showed that 67% of the respondents stated that their company mapped the main business processes as well as the sub- processes of the company. These results are a positive example of company's operations. However, it should be noted that most of the respondents were from the larger companies in BiH, which have a certain number of certificates, primarily ISO certificates, whose obtaining depends on the mapped and clearly defined business processes. A detailed analysis revealed that the companies with smaller number of employees mapped business processes partially or not at all. In other surveys, documenting and mapping processes were reported at a low degree: Never (0%) - no data; Occasionally (1-30%) -52%; Frequently (31-60%) - 27%; Most Times (61-99%) - 18%; Always (100%) - 2% (Harmon 2018, p. 19). The majority of the respondents answered positively to the question of knowing the organizational structure of the company, while the insignificant number of the respondents were not familiar with the organizational structure of the company.

#### 4.3. Familiarity with the concepts

More than a half of the respondents did not know or only partially knew the meaning of BPM and when it is used. In particular, a total of 12 respondents stated that they did not know what BPM is, and when it is used. A more detailed analysis of negative responses established that one fourth of the respondents who did not know the meaning of BPM had a master's degree, while one half had a bachelor's or graduate degree. Similar results are found in other studies (Capgemini 2012, p. 38): I do not have much knowledge or practical experience of Business Process Management (15.9%), I have some knowledge of Business Process Management but no practical experience of it (19.5%), I have some knowledge of Business Process Management and limited practical experience of it (28.3%), I know a lot about Business Process Management and have plenty of practical experience of it (31.9%), Do not know (4.4%).

Unfortunately, one fifth of the respondents (authors' survey) believe that none of the answers matches the description of BPM in their company. Similar results are found in other studies (Harmon & Wolf 2014, p. 11, Harmon 2016, p. 11): A top-down methodology designed to organize, manage, and measure the organization based on the organization's core processes (31% in 2013, 33% in 2015); A systematic approach to analyzing, redesigning, improving, and managing a specific process (32% in 2013, 25% in 2015); A set of new software technologies that make it easier for IT to manage and measure the execution of process workflow and process software applications (9% in 2013, 11% in 2015).

A significant number of the respondents stated that their company has an interest in BPM, primarily in the segment of core/key projects in the company. Very few respondents stated that BPM is a strategic commitment of the executive management, which should be the main promoter of BPM in the company. One fourth of the respondents stated that their company does not have interest in BPM, which is devastating. The respondents had slightly less knowledge about BPI and its implementation, in relation to the BPM concept.

The concepts of BPM, BPI and BPR are interconnected, as adequate management of business processes is directly related to the improvement and redesign of business processes. The survey results show that the concept of BPR (39% yes, 26% no, 35% partially) and its use is much less known to the respondents than the concepts of

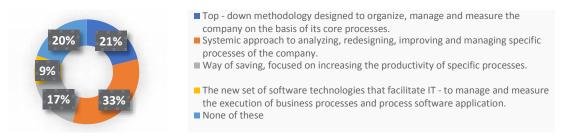


Chart 4.3. Which of the following best describes how your company sees BPM

Source: Authors' analysis.



Chart 4.4. How would you describe the current interest of your company for BPM Source: Authors' analysis.

BPM and BPI. The majority of respondents (2/3) know the concepts related to the organizational structure, and in our region functionally oriented business structure is dominant. However, with the computerization of business process, functional organizational structure takes a different form.

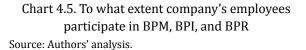
On the basis of the research results we can conclude that the majority of the respondents were familiar with the basic concepts which were the subject of the research. However, it is important to note that only about one half of the respondents were familiar with the basic terminology. They were mainly the respondents who worked in larger companies in Bosnia and Herzegovina Federation (FBiH) and who were highly educated, who should be the leaders of the development of economy in the future and society in general. Insufficient knowledge of the basic terminology may be due to the lack of commitment in the segment of the role and importance of BPM, BPI and BPR in the education system, which unfortunately is not an exception in other areas such as entrepreneurship, which require specific knowledge and skills that future managers and leaders should have. This could mean that the BIH universities have not motivated their students to recognize the entrepreneurial opportunities (Zijad 2014, p. 10) and other ways of improving business operations through BPM, BPI and BPR. The key question that arises is: whether the business philosophy committed to constant improvement is present in the companies in which the respondents were employed?

#### 4.4. The application in the company

The application of the business process management and improvement philosophy, which determine company's business performance, are a part of the survey results, which, unfortunately, are not sufficiently positive. Thus, 60% of the respondents stated that their company does not have departments related to the management of business processes. A significant number of the respondents were employed in large companies, and an interesting fact is that about 10% of the respondents answered that the BPM, BPI and BPR departments are a part of the IT department, 8% of the respondents answered that BPM, BPI and BPR are a part of the Quality Control department, and 18% of the respondents answered that the management, improvement and redesign of business processes are at the executive level department.

If we analyze some companies, especially the larger and more successful ones, then we will probably get the data in which most managers and owners believe that employees are the ones who are the most valuable in the company. However, when we examine employees' involvement in business process management and improvement, we get the data in which over 70% of employees never or occasionally participate in business process management, improvement and redesign. A key aspect of any successful BPM project is the active involvement of business users and stakeholders throughout the length of the project (Arsanjani, Bharade, Borgenstrand, Schume, Wood & Zheltonogov 2015. p. 21).







The largest companies in the world build their business on innovation and improving products or services. At the same time, the most successful companies have "an army" of highly educated employees, whose skills and abilities are used for improving operations to increase profitability as well as efficiency, which in recent times, especially in the conditions of globalization and extremely high competition, is not a luxury but the basic prerequisite for survival in the market (Haračić 2012, p. 28). On the basis of the data presented so far, we can conclude that the respondents who are highly educated, have no or very little active role in management and improvement of business processes.

One of the most important segments for operations improvement are inter-functional business processes, which are particularly evident in large companies, with a large number of employees and key business processes. For this reason, what is extremely important is the concept of process managers, who would be functionally and hierarchically superior managers for the interconnected processes or processes whose beginning depends on the completion of the previous process. Based on the survey results, about 60% (58% -Yes, 14% - No, 28% - Partially) of the respondents stated they are familiar with the concept of process manager, but at the same time over 85% of them stated that the company did not have or they did not know if the company had a process manager responsible for BPM, BPI, and BPR. Business Process Manager lets your process owners and business users engage directly in the improvement of business processes (IBM 2017).

The research results related to the responsibility of managers/chiefs in the segment of business processes, show that the most of the respondents stated that managers are responsible only for certain processes within the organization (37%). The data presented may point to the fact that the managers need significant training and education in the area of their responsibility, role and importance in the management and improvement of business processes, in order to realize that the duties and tasks related to BPM are a part of their duties and responsibilities. Also, the survey results related to the small companies point to the fact that managers do not devote enough attention to business processes, which means that there is much room for improving the efficiency of business processes and company's efficiency through greater involvement of managers in BPM.

The research results related to the use of performance indicators in the management of processes are extremely important. Key performance indicators (KPI) denote how well the company is performing. To actually improve the performance, it is necessary to know what KPIs mean and how to use them (J.D. Associates 2017, p. 2). Only 19% of the respondents stated that their managers "Most times" and "Always" use key performance indicators in managing business processes. There are numerous reasons for this: absence of an adequate reporting system, absence of performance indicators, managers' denial for certain business processes, confidence that they have sufficient knowledge and experience to assess business performance without measurable parameters or companies that do not manage business processes and therefore do not use key performance indicators.



Chart 4.6. Do managers or Process Manager of the company use performance data to manage their processes.

Source: Authors' analysis.

A generally accepted fact is that what cannot be measured cannot be managed as well. It is crucial for managers to understand that their business processes represent company's business and that business process improvement improves the performance of the company as well. If managers do not use performance indicators, especially contemporary performance indicators that are measured on a daily and weekly basis, then they cannot adequately measure the performance of business processes, nor can they get adequate information about the causes of the problems within the business or take corrective actions on time. What is particularly important

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to note is that inadequate management of business processes restrains innovations and improvements, creating an opportunity cost, which most managers are not even aware of.

The basic conditions for high quality management and business improvement include active role of management, professional and competent staff, as well as financial resources. Research results showed that about 65% of the respondents stated that they do not know how much the company invests in BPM, BPI, and BPR. What is also alarming is the fact that 15% of the respondents stated that the company does not invest in BPM, BPI, and BPR at all. In the end, we can conclude that only 20% of the respondents had information as to whether and in what amount the company invests in BPM, BPI, and BPR (the survey did not include the data related to the source of funds).

On the basis of the presented results for financial resources, it is possible to raise the question of whether and to what extent the companies are involved in management and improvement of business processes? Around a half of the respondents believes that the company "Occasionally" performs business process improvement.

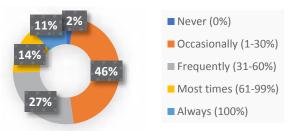


Chart 4.7. Does your company continuously improve business processes? Source: Authors' analysis.

Similar results presented in the documents "The State of Business Process Management 2014" and "The State of Business Process Management 2016" for the questions about the frequency of specific organizational activities that suggest organizational maturity in Process Improvement are: Never (11%, 12%), Occasionally (50%, 54%), Frequently (26%, 18%), Most times (12%, 13%), Always (1%, 4%) (Harmon & Wolf 2014, p. 11, Harmon 2016, p. 11).

The key motives for the companies to improve business processes, according to the survey are: to save money, reduce costs and/or improve productivity. The previously presented data and research results indicate that companies recognize the necessity for management and

	2013	2015	Authors' research results for 2016	2017
Need to save money by reducing costs and/or improving productivity	54%	53%	55.6%	53%
Need to improve existing products, create new products or enter new lines of business to remain competitive	34%	33%	45.6%	28%
One time event (merger or acquisition)	3%	5%	1.1%	7%
Government or business risk management (Sarbanes-Oxley, ISO 9000)	13%	17%	11.1%	21%
Need to improve customer satisfaction to remain competitive	37%	46%	35.6%	42%
Need to improve management coordination or organizational responsiveness	35%	30%	15.6%	36%
Need to improve management of IT resources (ERP applications)	18%	15%	5.6%	26%
Need to reduce cultural resistance to process change	No data	17%	No data	15%
Other, please specify	11%	12%	7.8%	8%

Table 4.1. Business drivers causing organizations to focus on business process change.

Source: Harmon & Wolf 2014, p. 13, Harmon 2016, p. 13, Harmon 2018, p. 11, Authors' analysis

improvement of business processes if they want to survive in the market and achieve other benefits.

The lack of systematic approach to managing and improving business processes causes sporadic improvements, depending on the decisions of managers. On the basis of the research results we can conclude that about 74% of the respondents stated that improvements are not made on the basis of identified problems and weaknesses in the business. In conclusion, we can state that companies have a huge opportunity cost, because they do not have systems and mechanisms for identifying bottlenecks. Consequently, they do not have systematic procedures and steps for eliminating them, which certainly affects their business capacity both in the short and in the long run.

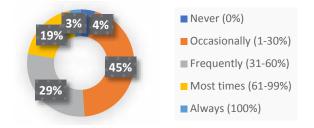


Chart 4.8. Are process improvement programs in place to identify and improve problems and defects of business processes?

Source: Authors' analysis.

Metrics and performance indicators represent one "living" system, which is necessary to change depending on the internal and external changes. For this reason, it is of great importance to collect and process data on the basis of clearly defined parameters of business performance, which should be consistent with the company's goals and strategy. The research results showed that the most of the respondents (43%) stated that the company has only "Frequently" defined performance measures for both the main business processes and sub-processes, while 12% of them stated that the company has not defined performance measures for the main business processes or for the sub-processes. The research results show that a significant number of the respondents believe that business processes are in line with company's information system. The implementation of the information system is a form of business automation and it requires the mapping of business processes and compatibility between information systems and business processes, or organizational structure of the company.

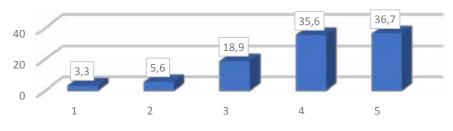
According to the survey, a fifth of the respondents stated that there is no black-box syndrome in their companies. However, about 50% of the respondents stated that the blackbox syndrome is present in their companies, which may indicate that companies have a lot of ways for increasing the efficiency of operations, including the segment of a clear definition of business processes and their procedures and activities. This segment is not possible without the adequate mapping of business processes, as well as appropriate management and improvement (provided that after the improvements, the same are documented and mapped).

In addition to the black-box syndrome and bottlenecks in the company, one of the major problems and inefficiency causes is the lack of clearly defined business process owners, especially in the segment of the cross-functional business processes. According to the survey results, a significant number of the respondents stated that their companies have crossfunctional processes, which do not have clearly defined process owners - managers. This reflects on the company's operations and creates bottlenecks which ultimately contribute to the lower efficiency and effectiveness of company's business. Due to the absence of clearly defined owners of cross-functional business processes, a significant time of company's meetings is spent on finding the causes of the problem, in order to solve the problem of managers' competences and define which managers are responsible for the problem. In this way, the problem is solved, but not its causes, which are often not even recognized, because of the absence of specific owners for these cross-functional business processes.

Based on the presented data, a logical question arises: What are the main obstacles that prevent employees to have an active role in improving the operations which they perform? A part of the answer can be found in the research results, which show that the key obstacles are the lack of motivation, complex organizational structure, and the lack of strategic commitment of the management board/managers of the company. However, the survey results indicate that a third of the respondents stated that there are additional causes and barriers for the employees to suggest improvements at their workplace and company in general. The study did not include whether the process methodology is incorporated into the corporate culture of the company, but on the basis of the research results we can conclude that it is not the case. The methodology of business process improvement is not integrated into company's business and improvements rather occur sporadically in most cases. Most improvements represent some major changes in the company, and very few companies perform constant "step by step" improvement. The positive research results (50% yes, 24% no, 26% partially) are in the field of implementation of some of the business standards (or in the implementation phase). Companies that export their products must have standardized business processes as a pre-requisite of their business quality. According to the research results, most of the respondents stated that their companies are focused on their existing business processes

and their gradual improvement within the departments/functions. However, the key obstacles refer to the fact that most companies do not have a systematic approach, do not perform continuous process improvement or use BPM techniques. Hence, they are not aware of the negative effects, such as bottlenecks, black box syndrome, the problem of interfunctional processes, and the lack of clearly defined process owners and responsibilities.

The largest and most successful companies in the world have "bounty hunters" departments or hire external companies, whose aim is to find above-average employees whose creativity will be directed towards innovation and business improvement. Unfortunately, a significant number of companies in BiH does not use employees' full potential, primarily as a result of under-developed HR (human resources), which is an issue for another kind of research. However, the majority of the respondents agree with the fact that innovation and business process improvement can contribute to company's differentiation and increase its business efficiency.



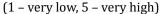


Chart 4.9. To what extent do you believe innovation and improvement in business processes can contribute to differentiation and increase business efficiency over the competition?

Source: Authors' analysis.

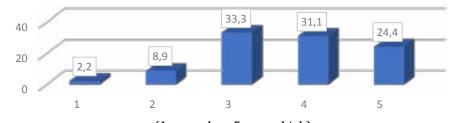


(1 – very low, 5 – very high)

Chart 4.10. To what extent do you believe the management of business processes is important for successful business operations of your company?

Source: Authors' analysis.





(1 – very low, 5 – very high) Chart 4.12. To what extent do you believe the improvement of information systems and business processes (main and cross-functional) is necessary in your company, in order to

increase efficiency and effectiveness of the company?

Source: Authors' analysis.

Referring to the importance of the business process management for the company's performance, the presented results prove the fact that employees are aware of the role and importance of managing business processes, their improvement and innovation. The results of the research can be used by strategic decision-makers in companies in order to improve business, primarily through the change of a corporate culture and the creation of a system of motivating employees and their active role in the process of proposing improvements and their implementation.

Improving the business system should include three parallel processes: improving of information systems in the company, changing the corporate culture of the company, and increasing employees' awareness. Employees who daily perform a specific part of the business process are aware of the ways of improving those operations and increasing company's efficiency.

Based on the research results that are presented, the majority of the respondents believe that it is not necessary to redesign company's business, which involves changing the method of company's operations. Business process redesign basically happens when a company completely changes the way it operates, during a rapid expansion, or when it merges with other companies. Based on the results of the survey, almost 70% of the respondents believe that continuous improvement is necessary for the successful performance of the company and the effective realization of business strategy.

#### 5. DISCUSSION

One of the reasons why companies do not have developed management systems of business

processes, or timely improvement, is the size of the companies in BiH. This indicates that there is a very large number of small companies in BiH, whose employees perform different tasks and functions, which do not have ways or time for systematic solutions in the context of improving and managing business processes. However, based on the interviews with the respondents, it is evident that large companies with a higher number of employees (over 100) lack an adequate system for continuous improvement of business processes across all departments and functions. The companies also do not have developed corporate culture to implement innovations in their business processes as well as the systems in which employees can actively improve their business processes. Another problem is the economic and political situation in the country, which is primarily the result of the war, and the government organizational structure (state-owned companies), which is not viable and efficient.

The research results revealed that a significant number of the respondents possess specific knowledge related to business process management, improvement and redesign, but the knowledge they possess is not sufficient for the proper implementation in their companies.

A significant number of the respondents stated that the companies in which they are employed do not have systematic solutions as a part of corporate culture (regarding business process management, improvement and redesign) as well as the mechanisms that motivate employees to play an active role in making proposals for the improvement of business processes in the company.

The interviews with the respondents who work in large companies revealed that the largest source of improvement is buying ready-made solutions from other companies, mainly foreign, and very few companies allow their employees to actively participate in proposing improvements in business processes, and in implementing changes. A significant number of large companies have complex and slow decision-making systems, which ultimately prevent significant changes and improvements at the operational level of business (Haračić 2012, 84). A significant number of employees at the operational level do not have the authority or the incentive to carry out improvements, while managers at higher levels, in fact, do not have the information or knowledge on how to perform the improvements.

Another problem is the inadequate communication between operational channel and middle management levels, which causes the appearance of "communication errors" in the information flow, resulting in the adoption of insufficiently effective decisions about improving business processes where the problem is observed. However, there are some positive examples of the companies which improve their business processes with the help of their employees or with the assistance of external experts, usually the academic community through specific projects. It is also noted that employee's capacity in large companies is very little used, in terms of employees' level of education and active participation, especially for those employees who do not perform tasks related to business process management and improvement.

The application of BPM, BPI, and BPR in companies should be initiated through the establishment of a system within the company, primarily through higher management's decisions, which would incorporate managing and improving business processes in the strategic part of company's business and create the basic prerequisites for their implementation. Without the active management role, implementation of BPM in domestic companies is not possible, especially considering the fact that most employees create "resistance" to change, especially in large systems such as the companies with a large number of employees and state-owned companies, particularly those which lost the monopoly positions.

Implementing BPM requires financial resources which have to be included in company's budget and it requires a change of certain aspects of company's business and the parts of its organizational and hierarchical structure. For this reason, companies can implement certain elements that do not require any financial investment, but the positive effects can be obtained only after the complete implementation of BPM.

For successful business performance (depending on market and business) companies need to constantly improve their operations, finding new ways, mostly through information technology, to simplify and speed up business processes, and to increase the quality of products/services with the same or lower costs. In order to achieve the aforementioned, companies need to have an active role in the management and improvement of business processes. That is why one of the proposals is to analyze the existing business processes, organizational structure and structure of employees to create a plan of improvement of company's business. However, the improvement of the company should not be based on sporadic one time improvement. In order to achieve customer satisfaction, shorter start-up times, cost savings, satisfied staff, it is necessary to continuously improve business processes and constantly finetune IT and business operations (Nathe, 2017).

We believe that, based on the survey results, theoretical aspects presented in the work, as well as world trends, BPM is no longer a luxury for companies, but rather a means of survival in the market. The key role in implementing and continuous monitoring of BPM is given to managers who will have to accept their new roles and tasks, if not due to internal changes, then due to the external requirements. It is extremely important to apply systematic solutions, which enable continuous improvement and one of these systematic approaches is BPM.

# 6. CONCLUSION

It has been clearly presented that business processes create the business of the company. The goal of any management is to achieve the planned values that are defined and approved by the top management. Due to constant internal and external changes, it is necessary to view a company as a living organism that is constantly changing. In order to control the changes, and harmonize business processes with the new situations, it is necessary to create a systematic solution to improve business process management.



BPM is an increasingly important trend in the future. The question is whether this trend will be recognized in educational institutions. Increasing efficiency through the implementation of BPM is not possible without adequate experts, management support and financial resources. For that reason, additional research is necessary that would focus on monitoring the trend of BPM implementation in domestic companies. The results of the survey point to the fact that a significant number of companies do not have adequate KPIs and their analysis can be the subject of future research. Improving business processes will surely be necessary when implementing information systems in domestic companies. The only question is whether the improvement will be sporadic or implemented through BPM.

Based on the presented research results, it can be concluded that domestic companies have plenty of room for improving the efficiency and effectiveness of companies' operations. The question is whether the company managers will recognize the opportunities presented in the paper and whether they will define in the business strategy the creation of a systematic approach to managing and improving business processes.

#### REFERENCES

- Arsanjani A., Bharade N., Borgenstrand M., Schume P., Wood K.J., Zheltonogov V. (2015). Business Process Management Design Guide: Using IBM Business Process Manager. RedBooks, USA.
- 2. Batenburg R., Ravesteyn P., (2010). Surveying the critical success factors of BPM-systems implementation, Emerald Group Publishing, Netherlands.
- Capgemini (2012). Global Business Process Management Report. [Online]. Available from: https://www.capgemini.com/wp-content/ uploads/2017/07/Global\_Business\_Process\_ Management\_Report.pdf [Accessed: 20/01/2018]
- Castellina, N., (2013). Business Process Management and ERP, Aberdeen Group [Online]. Available from: www.aberden.com [Accessed: 15/10/2017]
- 5. Džafić, Z.,(2015), Entrepreneurship and SME sintransition economies the case of Western Balkan Countries, REDETE, *Conference*

proceedings of the Fourth International Conference: ECONOMIC DEVELOPMENT AND ENTREPRENEURSHIP IN TRANSITION ECONOMIES: Assessment of the last 25 years, going beyond the 'transition', Karl-Franzens-Universität Graz, Faculty of Economcs Banja Luka, Graz Austria, October 22-24, ISBN 978-99938-46-54-3, pp.481-497, (http://www. redete.org/doc/Fourth-REDETE-Conference\_ web.pdf) [Accessed: 16/01/2018].

- Handžić M., (2016). The improvement of business efficiency through business process management, School of Economics and Business, University of Sarajevo, pp. 57-79.
- Haračić M. (2012). Optimization of resources, productivity and business efficiency in intelligent corporation, School of Business and Economics in Sarajevo, Sarajevo pp. 28 and 84.
- Harmon P., Wolf C. (2014). The State of Business Process Management 2014 [Online]. Available from: https://www.bptrends.com/bpt/wpcontent/uploads/BPTrends-State-of-BPM-Survey-Report.pdf [Accessed: 14/02/2018]
- Harmon P. (2016). The State of Business Process Management 2016 [Online]. Available from: https://www.bptrends.com/bpt/wp-content/ uploads/2015-BPT-Survey-Report.pdf [Accessed: 14/02/2018]
- Harmon, P. (2016). The State of Business Process Management 2016, BPTrends report [Online]. Available from: www.bptrends.com [Accessed: 20/10/2017]
- Harmon, P. (2018). The State of Business Process Management 2018, BPTrends report [Online]. Available from: https://www.signavio. com/wp-content/uploads/2018/02/The\_ State\_of\_Business\_Process\_Management\_2018. pdf [Accessed: 20/ 03/ 2018]
- 12. Harris E. (2017). What Problem does Business Process ManagementSolve?, PEX. [Online]. Available from: https://www.processexcellencenetwork. com/business-process-management-bpm/ articles/what-problem-does-business-processmanagement [Accessed: 15/02/2018]
- Hanlon A. (2016). What is Porter's five Forces model? [Online]. Available from: https:// www.smartinsights.com/marketing-planning/ marketing-models/porters-five-forces/ [Accessed: 25/ 12/ 2017]

- 14. IBM (2017). Optimize core business processes with IBM BPM [Online]. Available from: https:// www.ibm.com/us-en/marketplace/businessprocess-manager [Accessed: 05/ 03/ 2018]
- IBM (2018). What is business process management? [Online]. Available from: https:// www.ibm.com/cloud/automation-software/ business-process-management [Accessed: 01/ 04/2018]
- J.D. Associates (2017). Every Retailer Needs a KPI Strategy: Part 1 of 3: The Big Questions Online]. Available from: https://cdn2.hubspot. net/hub/56340/file-14769530-pdf/docs/kpiwhitepaper-rv2.pdf [Accessed: 25/ 03/ 2018]
- Kerpedzhiev G., König U., Röglinger M., Rosemann M. (2017). Business Process Management in the Digital Age, BP Trends [Online]. Availablen from: https://www.bptrends.com/bpt/wpcontent/uploads/07-04-2017-ART-BPTrends\_ BPM\_Capabilities\_in\_the\_age\_of\_digitalization1-Rodlinger-et-al.pdf [Accessed: 10/01/2018]
- Mendlinga J., Baesens B., Bernstein A., Fellmann M. (2012). Challenges of Smart Business Process Management: An Introduction to the Special Issue. [Online]. Available from: https://pdfs.semanticscholar.org/ce99/ ffa1e89369441036f215d68b1964e0a2753b. pdf [Accessed: 25/01/2018]

19. Nathe E. (2017). Systematically improve company performance using Business Process Management [Online]. Available from: https:// www.mid.de/en/solutions/business-processmanagement [Accessed: 26/03/2018]

///

- 20. Robledo P. (2018). BPM 2018: Top 10 BPM Industry Trends This Year [Online]. Available from: http:// blog.triaster.co.uk/blog/bpm-2018-top-10-bpmindustry-trends [Accessed: 10/03/2018]
- RTInsights (2017). Digital Business Process Management: A Transformational Force. Available from:https://www.rtinsights.com/digitalbusiness-process-management-transformationalforce/ [Accessed: 20/ 03/ 2018]
- 22. Rubens P. (2017). What is business process management (BPM)? The key to enterprise agility [Online]. Available from: https://www. cio.com/article/3219064/business-processmanagement/what-is-business-processmanagement-bpm-the-key-to-enterpriseagility.html [Accessed: 10/03/2018]
- 23. Thakral C. (2011). Business Process Management for Insurance: Maintain Market Share and Profitability With a Staged Approach to BPM, Capgemini [Online]. Available from: https://www. capgemini.com/gb-en/wp-content/uploads/ sites/3/2017/07/Business\_Process\_Management\_ for\_Insurance.pdf [Accessed: 21/02/2018]