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INTEGRATED PERFORMANCE MANAGEMENT FROM A UNIVERSITY PERSPECTIVE

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Abstract: *This paper takes a strategic perspective on performance management and discusses the integration challenges that most organizational continuously face. This is done by relating an integrated performance management framework to Swedish university organizations way of managing overall performance.*

Keywords*: integrated performance management, university governance, strategic relevance, evaluation*

1. INTRODUCTION

In the higher education discourse and literature, especially in the last decade, one might find terms like globalization, competitiveness, market forces and strategic management (Foskett and Lumby, 2003, Hoffman, 2000, Shattock, 2006). Internationalization and globalization of higher education are topics that have occupied the discourse for many years now and have been a driving force for change, adaptation and improved management of performance and outcomes. The ever-growing need to be competitive, in both the economic and academic sense of the word, affects every aspect of management and leadership as well as the staff and their performance within an education institution. This poses very tough challenges at every management level of the institutions but also affects the teaching and learning processes (Macfarlane, 2004). The shift of the late 20th century towards operational and strategic planning and coordination as well as the accountability movement brought about changes in perspectives on management in general and performance management and measurement more specifically (Foskett and Lumby, 2003, Hoffman, 2000 Skoog&Johansson, 2015).

Different types of stakeholder focuses, given that universities are in most cases and to a large extent state funded, sustainability movements of the last decades, all have influenced governance issues in higher education as well. Being an important part of the society, higher education is now facing challenges of disseminating research results for the sake of performance for its own existence (Skoog&Johansson, 2015).

Higher education institutions (HEIs) have broadened their role from teaching and research to becoming complex, many-sided organizations greatly involved in achieving social inclusion and building the knowledge economy (Shattock 2003). The challenges which HEIs have to face come in various forms and are quite multipart: the new competition created by market forces, financial/funding issues, changing demographics in both student and professional bodies and ever growing concerns and demands from the business sector regarding skills necessary for the work life (Hoffman, 2000).

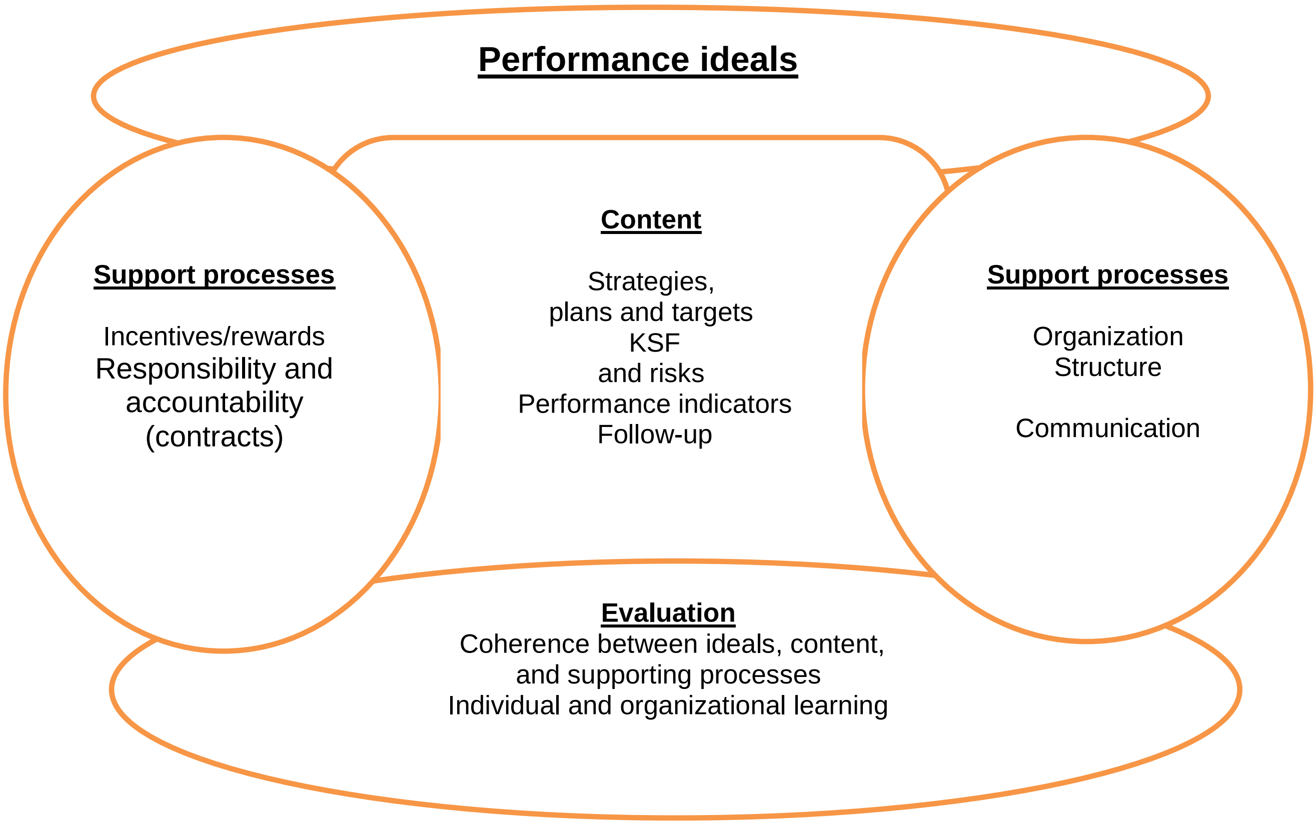
The terms *human resources* and *human resource management* have surfaced in the 1990s as interchangeable alternatives for *personnel* and *personnel management* respectively, with the idea of presenting the human component as much more complex and demanding than before in terms of satisfaction, continuity, stability and performance at work (Orlic, 2005, Armstrong, 2006, Salaman, Storey and Billsberry 2005).

An educational institution is generally no different to a business organization, when it comes to the leadership issues. Furthermore, it is said that it is even more complex and difficult to manage since there are complications in leading academics who, given their professional status, have certain discretionary authorities in their respective areas of work which are in some cases even guaranteed by the legislations in terms of freedom to form one's own research and teaching (Skoog&Johansson, 2015). Today's university lecturers and professors still have the unchanged basic responsibilities and tasks such as teaching, mentoring, evaluating, assessing and counseling students throughout their learning life at the university level and participating and leading research and projects, however, the context has changed significantly in the past decade or so (Macfarlane, 2004). In addition to these tasks there are also responsibilities of evaluation and assessment of internal management and administration, as well as self-evaluation and reporting to higher instances, various committee duties, consultancy and interaction with the society and media, i.e. the performance landscape for academics has been at least partly transformed.

When it comes to management of HEIs there used to be a tendency to look for the step-by-step model, a linear (bureaucratic) model of management and decision making which has in the past decade or so been regarded as “slow-to-react” and inflexible, even too simplistic in relation to contemporary educational issues (Hoffman, 2000). In the last part of the 1990s there was a shift towards more coherent and strategic performance approach which includes more planning than reflection, meaning more prediction of influencing factors rather than just analyzing decisions after they are already made (Hoffman, 2000, Skoog&Johansson, 2015). New models of governance, originating from business organizations, have made their way in the public sector arena. New Public Management, managerial accounting focusing on decision makers, budget steering and control, balanced scorecard, integrated reporting, are merely examples of theoretical models converted to praxis in the business world that have found their way in the public sector. Being a part of the public sector, higher education is not immune to these new influences. It is safe to say that, in the beginning, strategic planning of physical, financial and human resources became the embraced model in management of HEIs with the center notion of accounting for all the possible variables which could influence the achievement of a more successful overall strategic plan for educational performance and outcomes.

2. APPROACHES AND MODELS

Different approaches are constantly being investigated, analyzed and implemented in order to find the winning combination of administrative and academic management which will, consequently, be capable of achieving good results when it comes to educational outcomes, performance and the overall image of the institution. Furthermore, the desired model of management would have to be able to motivate the academic staff to keep the quality levels high, on one hand, and on the other keep the administrative staff active and stimulated for higher performance and effectiveness. All having in mind the stakeholders and accountability towards the tax payers. Management has become more businesslike with management processes such as strategic planning, resource allocation and performance management that includes physical resources (buildings and teaching spaces), learning support resources (for example, IT support) and human resources (teaching staff, managerial other support staff) and how these interact in producing decent teaching and research performance (Foskett and Lumby, 2003, p. 129). There is probably no *best practice* when it comes to organize management of an academic organization, especially in today’s unforgiving conditions of market forces and competition for students and research funding. Educational management systems have been undertaking changes in structure, introducing some business views and models, such as human resource management, strategic planning, New Public Management, etc. But, there is however improvement possibilities for most institutions when it comes to integrating different aspects of performance into the actual management and measurement processes. (Johanson & Skoog, 2015). These improvement possibilities can be identified by using the framework presented below:



In university organizations, as well as in many other organizations, there is a constant challenge to integrate long term ambitions (visions) with more short term targets and operational needs. In order to gain relevance and acceptance in for example the performance evaluation processes organizations needs to not only take a number of supporting processes into account, but also identify and discuss different performance ideas that exists within the organization. Meaning that, performance can be interpreted in various ways, especially within university organizations that needs to perform pedagogically, research oriented and financially to a certain degree at the same time. In order to reach long term acceptance and understanding in relation to different performance processes and targets the supporting processes also seem to play an important role. (Johanson et al, 2001, Johanson & Skoog, 2007, Johanson and Skoog, 2015, and Skoog, 2015 in Lövstedt edt).

3. THE CASE OF INTEGRATED PERFORMANCE MANAGEMENT AT SWEDISH UNIVERSITIES

New models of governance and management of public institutions have, as stated, reached the universities. Being organizations of strongly individualistic character in terms of performance and results, universities' organizational model and structure are difficult to identify in terms of theoretical models. Universities in Sweden are strongly influenced by the bureaucratic and functional models given that they belong to the public service sector, alongside National Tax Office, hospitals and Social Services. The duality of such a system as well as the parallel processes in terms of research and education on one hand, and administration on the other, that occur and steer the universities in different aspects, are a significant challenge to address by the university administration. Many universities have, on top of this, decided to decentralize the decision making process, turning the university central administration into a control unit following up on the operations of the departments. Such a complex organization and context needs a complex, yet implementable and context-oriented governance model which takes into consideration the *soft values* of the organization, such as collegiality in decision making, health and satisfaction at work, stakeholder satisfaction, etc. A model where parts are mutually interactive, processes are formed to support the vision in order to achieve results and evaluation of operations is conducted in each part of the organization for the sake of improvement and learning (Skoog&Johansson, 2015) would be of great support for such an organization. The developed analytical framework for evaluation of governance models, mentioned above, is depicting the importance of integrating visions, content, processes and evaluation. By analyzing different organization from different sectors shown in Skoog&Johansson, 2015, one might conclude that the higher level of integration between these parts of an organization, the higher results it will achieve, both in the terms of financial numbers and the more "soft", non-financial ones. Decentralized organization of Swedish universities poses a challenge for such a governance model. This is not to say that more centralized systems should be in place; it is rather a reminder that the organizational models applied to universities should be contextualized, both in terms of actual implementation, but even more importantly in the terminology used. The, so called, autonomy reform conducted several years ago in the Swedish higher education system reiterated the academic freedom of universities and dropped the micro management approach the government had for many years.

Integrating different governance processes on a departmental level in such conditions, having in mind the constant rise of administrative tasks that educators in general, including higher education faculty are expected to conduct, imply a need of high coordination and high efficiency of internal processes without raising expenditures – do more with what you have.

In analyzing how integrated the different governance processes actually are in a university, we will discuss the aspects crucial to implement in order to achieve higher levels of integration between vision and governance in practice. Discussion is based on experiences in the higher education sector. In the analysis we will be using a model of integrated governance processes as described in Johansson & Skoog (2015) where elements such as governance vision, strategies, goals, critical factors, etc. are described.

An excerpt from Stockholm University Strategies 2015-2018 shows the *vision* for the University:

> *All research at the University should strive to be nationally leading and internationally prominent. Stockholm University should focus on education with close ties to research. The operations should be based on collegial work in strong, independent departments that develop in close collaboration with the University's management functions. The courses and programmes will be reviewed continuously in a strategic effort to achieve the highest possible quality and meet societal needs. The University should actively carry out pedagogical development work and provide an attractive study environment to all students.*

Structurally, the operative part of implementing the strategies lies with the departments, which by decentralized structure consequently have relatively wide independence. *Goals* and *critical factors* are also identified and are, based on experience, applicable across the University regardless of the area of study and research. Issues such as funding of research, internal and external, lack of research and education infrastructure, global competition, drop-out rates and new educational challenges in the classroom are raised among others as challenges the University is facing. Importance of follow up is stressed, however without a clear indication as to the ways this process is to be carried out. This might be a consequence (or a challenge) coming from the decentralized organization, given that the operations are conducted at the department level.

The different nature of the departments has led to different ways of resource distribution. Despite the different nature of the departments, the process of *reward* for achievements is more or less the same for all departments and it is based on the outreach and number of publications for the research part of the resources and the throughput of students, for the teaching part of the resources. In terms of correspondence between reward system and vision, one could say that it is rather high. On the departmental level, the governance models look different depending on the size, area of study and/or other factors, which leads also to differences in implementing the reward system both in terms of teaching and research. Given the collegial model of governance in terms of choosing the administrative and academic leader of a department, the legitimacy that a leader of a department has offers the opportunity of deciding the direction of the departmental research and teaching. These decisions are often conducted in a collegial process; however, there are also cases of one-sided decisions which are inevitably leading to resource distribution that might not always be in line with the University or even department strategies. How does a reward systems' next of kin, the penalty system, works in these cases is unclear; it is even unspoken of, since it unequivocally goes against the core of the Universities – the academic freedom where all researchers are free to choose and conduct their own research. If there are no consequences linked to the research activities that differ dramatically from the ambition (vison), the risk is that the vision becomes an "empty formulation" even if it is formulated based on collegial agreement and has an interdisciplinary orientation. On the other hand, the teaching part suffers often direct penalties which are implemented in the same way across the University – by reclaiming the funding that has not been used in terms of educating the number of students the resources were for or by not transferring extra funding in case the number of students exceeded the budget prognosis. At the same time, reward system is not exactly clear, some would say even existing, when it comes to teaching. Here we have an example of lack of integration of governance processes. Scarce stimulation of the departments' teaching improvement processes, together with complete transfer of responsibility and accountability to the department level in terms of teaching leads inevitably to disparate pedagogy across the University. This is, of course, not to say that diversity in teaching is wrong, rather pointing out an important aspect of integration of leading and management processes.

Another important aspect of integrated governance processes is *responsibility* for the content and follow-up of the results (performance). In the university world, the division of responsibility is clear, at first glance. However, this does not imply that the heads of departments share the vision of the university governing bodies or rectors, simply because they have been given the responsibility of a head of department. Although, it is easy to share the vision of *nationally leading and internationally prominent* research and education, the implementation of different processes if quite different in praxis. The departments are entirely responsible for and are leading the operations in teaching and research, while the University central administration takes on a controller roll. It is only in recent years that the importance of in service training of both academic and administrative heads gained more attention, aimed at supporting the vision spreading, supporting decision making, communication and bearing of decentralized responsibility by the heads of departments.

One very important aspect in achieving synergy between vision and results in any organization, public or private, is attaining and sustaining an overall view of the operations. Having an integrative approach to University governance processes in terms of collegial knowledge and value sharing, and collective leadership processes on one side and administrative procedures, the bureaucratic nature of public organizations on the other, is critical for making sure that the governance and support processes are in line with the responsibility sharing, decision making and follow up of results. Integrating governance processes should include even the *soft, non-material, values* of the organization such as health of all the employees, competence level of the faculty as well as stakeholder satisfaction. How these processes of integration of vision, support processes and evaluation of results can be implemented in a widely decentralized organization is a key challenge. It is significantly more difficult to integrate operations between units of an organization that are individualistic both in terms of how faculty views themselves, but also in the way units are run. Control mechanisms from central administration are viewed as an outside attempt of interfering with the operations, rather than evaluation of results.

4. CONCLUSION

In an organization such as a decentralized university, strategic processes should be initiated from the top with a wide department-based acceptability and accountability in order to achieve the goals set up in the vision. At the same time, the operations at the department level should, in the strategic sense (both short and long term), be in line with the vision, while respecting the academic freedom of the faculty. Transferring the governance and leadership models from other sectors into higher education, without the contextual translation of such models and adaptation to the specific nature of academia, would only create more obstacles in the governance processes. Stakeholders are asking for more practical use of the produced knowledge and research results, as well as higher levels of practical, work related benefits of the education provided to students. Demands from the stakeholders and the society as a whole, on one hand, and balancing state resources between administration, teaching and research on the other, are putting forward the importance of integrating governance, management and measurement processes at the university level.

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FRAMEWORK FOR STRATEGIC PERFORMANCE MANAGEMENT IN THE MEDIA INDUSTRY

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Abstract: *Performance management become crucial for all media companies which do business in highly competitive market and whose goal is not just to survive, but also to progress in these conditions. Today, media companies in Serbia are aware of the fact that performance management is important part of doing business properly, but still, most of them has performance management implemented partially, not integrated in a whole company. Additional specificity of the media is that performance must be considered from two different, but related perspectives. The first is the perspective of the viewer/reader/listener and the other is perspective of the client/advertiser. The purpose of this paper is to provide guidelines that include useful instructions for setting strategic direction of a company, using specific techniques, creating action, operational and annual plans, properly implementing tracking, reporting and awarding systems all in order to ensure better business results.*

Keywords*: performance, management, media, strategy, plan, technique*

1. INTRODUCTION

Performance management represents a highly used concept which has a major influence on company development and prosperity, all in order to achieve company goals. Performance management can be defined as a result of work of individual employee as well as a work of organizational unit or company in general (Hale, 2003). According to the same author, set of values and principles for performance management includes: focus on a results, systematical approach, having in mind wider picture including process of identifying ways to work efficiently in order to achieve competitive goals, providing added value for the customers, employees and organization, always having in mind that their prosperity is crucial for achieving company goals, cooperation with target groups and individuals that has a major influence on company prosperity, work discipline, fact analysis, participation of future challenges, testing ideas and alternatives as well. Performance as an indicator should have several main characteristics (Woolum, 2011), it should be relevant, time limited, understandable, comparable, measurable, and reliable.

Due to increased competition in business environment, performance management become crucial for all companies whose basic goal is not just to survive, but also to grow. Today, media companies which do business in Serbia are aware of the fact that performance management is important part of doing business properly, but still, most of them has performance management implemented only on highest hierarchy levels, and not integrated in whole company. Additional specificity in the media is that performance must be considered from two different, but still related perspectives. The first is the perspective of a viewer/reader/listener and the other is the perspective of a client/advertiser. The purpose of this paper is to provide guidelines for implementing performance management in media companies. It could be useful not only for top managers of media companies in Serbia, but also for marketing and advertising managers, editors, writers, other company employees and all individuals interested in implementing strategic performance management.

Strategic performance management is an approach that has been elaborated in theory and accepted in the practice. However, to the best of authors' knowledge, its implementation in the media industry, especially in Serbia, has not been examined enough. As one of the author works in a media company in Serbia, the framework presented in this paper is based not only on theoretical background, but also on practical experience. The paper provides several examples that are developed for the purpose of better understanding.

After the introduction, second section presents the framework for performance management. As we focused on the very process, as a part of performance management system, in particular, this section covers setting the strategic direction of a company, plans that have to be prepared, techniques that should be used and evaluation systems that should be implemented. The final section presents concluding remarks.

2. FRAMEWORK FOR IMPLEMENTING PERFORMANCE MANAGEMENT PROCESS IN MEDIA COMPANY

In this paper, authors focused on the process of performance management, as process that helps organization in creating, implementing and changing strategy in order to fulfill stakeholders needs (Verweire & Van den Berghe, 2004). This section follows steps of the process, by presenting the strategic direction of company at the beginning and techniques usually used for transforming strategies into plans. Furthermore, basic plans are presented, as well as systems for evaluation and measurement that should be implemented. Every step is elaborated and supported by examples of media company.

2.1. Setting the strategic direction of a company

At the beginning of the process of performance management, company sets its strategic direction, through defining of mission, vision, values, corporate and business strategies and goals.

According to Obradović V. Petrović D., Mihić M., and Mitrovic Z., (2015) mission statement defines what an organization is, why it exists, and its reason for being. Although there are differences among companies from the media industry, general mission of the media company should be to provide truthful and timely information which can have entertaining, educational and/or informative character. Furthermore, according to Murray and Richardson (2002) vision statement provides a key stakeholders with a picture of what the company corporation ultimately intends to become in the period of five, ten or fifteen years in the future. For media company, vision could be to become absolute leader on local market in next five years.

According to Lencioni (2002) core values are the deeply ingrained principles that guide all of a company's actions and serve as its cultural cornerstones, such as teamwork, trust, professionalism, timely and truthful information and others.

One of the commonly used strategies in media is growth strategy, and company can opt for one of the following: Vertical integration which occurs when a firm takes on activities that were formally done by others on its behalf. In a way, vertical integration is just a special case of diversification, a firm is diversifying into either its suppliers' or its buyers' industries. When a company starts making components for its products or starts distributing products directly to customers, it is a sort of a vertical integration. One example could be when publisher buy its own printing machines or cooperates with distributors and, in that way, has influence on whole process from creating content to the process of selling the final product. Horizontal integration can be defined as a strategy when company cooperate or buy competitor’s company. Some examples of horizontal integration in our market can be fined. The first occurred in December 2012 when Kurir bought Adria Media Group and in that way made its portfolio wider. The other example is cooperation between two major televisions with national frequency – Prva TV and B92.

When choosing strategy, company should also consider diversification strategy. Diversification can be either related or unrelated. The key issue here is if the operations of the firm in the new industry share some link with the firm's existing value chain. For example, is there some value-adding activity that can be shared, such as a distribution network, or a marketing competence that both can use. Historically it was thought that related diversification would be better than unrelated diversification. However, the coordination costs of related diversification appear to consume a lot of the expected benefits. Therefore, while most firms seem to engage in related diversification its benefits are only slightly, if at all, better than unrelated (Palich et al., 2000).

After determining the strategy, corporate goals, for a period longer than five years, should be set. Some examples of media company corporate goals should be: 20% revenue increase until 2023 (for printed media and Cable TV such as HBO); placing all TV channels/newspapers/magazines and websites as the best in its market segment until 2023; making portfolio which will be wide enough to satisfy needs of its readers/listeners/spectators in next 7 years; or 25% revenue increase until the end of 2020.

Further step in setting the strategic direction of a company is defining a business strategy. It comprises a set of guiding principles that, when communicated and adopted in the organization, generates a desired pattern of decision making, and according to (Miller, D., 1988)it was shown that strategies must be matched with complementary environments and structures to promote success. In that way company ensures realization of global strategy and achieving company goals.

One of the common used approaches in defining business strategy is by using Ansoff's matrix (Watts, G., Cope, J., & Hulme, M., 1998), that defines possible choices on the basis of two dimensions, products and customers. Combining the existing of new products with existing or new customers, Ansoff proposes market penetration, or product development, and market development or diversification. Another approach in defining business strategy is provided by Porter (1980), who identified three generic strategies. Cost leadership strategy represents a strategy when company lowers its cost in order to place product on a market with lower cost than competitors. In the time of the crisis, media tried to implement this strategy by cutting printing cost and start making low budget shows and series. In the beginning that had major effect on profitability and cash flow, but on a long distance it could negatively affect customers' (viewers/readers/listeners) loyalty, rating and income as well. Second strategy tha can be implement is a differentiation strategy that is mainly used when focusing on customers that are not price sensitive. This strategy should be implemented when company has premium product and when a projected difference between profit before and after differentiation is greater than amount of money spend on a process of differentiating. The third option is focus strategy that can be implemented by both, major and small companies when niche segment is spotted. When they find a niche segment, they must decide, according to the customer needs, to focus on lowering cost or to differentiate. The main idea is to fulfill needs of niche customers by focusing on one or two small segments. The main goal of this strategy is to create that kind of products that practically have no competition.

After defining business strategies, media company should define goals. Business goals are usually set for a less than a five years, and have to be in line with corporate goals. For example, the media company can set following business goals: 10% sale increase of print media in next 3 years (goal for print media industry), 10% increase number of viewers (television with national frequency), or strengthen the position on the market in next 3 years (online and premium cable televisions).

Financial goal for all media is to increase the revenue from the clients' campaigns, and by achieving these goals media company will fulfill strategic goal.

2.2. Techniques

In this paragraph three crucial techniques for implementing strategic performance management and translating strategic direction of a company into plans will be explained. These techniques include Balanced Scorecard, creating strategic and map of processes. The balanced scorecard, BSC, (Kaplan & Norton, 2005) allows managers to look at the business from four important perspectives. It provides answers to four basic questions: How do customers see us? (customer perspective), What must we excel at? (internal business perspective),Can we continue to improve and create value? (innovation and learning perspective) and How do we look to shareholders? (financial perspective)

Media companies usually consider customers perspective as the most important one, but the complexity here comes from the fact that media has two different categories of customers. The first one includes readers/viewers/listeners, while the second includes the clients/advertisers who place their campaigns in media. Because of this complexity, considering customers perspective may be crucial for companies' survival and prosperity.

Usually, media companies in Serbia have more than one "product". For example, one publishing house can have newspaper, weekly and monthly magazines, as well as web sites. Each of these products has its own market share and internal value for the company. Having in mind the whole portfolio of product, media company should manage it. For example, a company should identify the product which has highest future potential and then build business and corporate strategy according to that. In the media industry, one of innovative products with high potential in our market might be YouTube shows, and companies should consider the idea of introducing it in their product portfolio. If media company respects both categories of customers, rise market share with its most profitable product, and at the same time invest in new product which has highest potential, that would lead to better business results.

Strategic map is technique considered as an upgrade of BSC. Main characteristics of strategic map are (Kaplan & Norton, 1992): through integration of crucial processes companies plan the activities in that manner that every employee understands its contribution, it is a pattern that can be used for describing main strategies and it enables organizations to describe its tasks and initiatives that are the foundation of a general strategy. One example of strategic map in the media industry isl be presented in the next table.

Table 1: Example of strategic map of media company

Goals (business strategies)	**10% average sale increase in next 3 years**	**10% rating increase in next 3 years**	**Strengthen the position on the market in next 3 years**
Financial perspective (tasks)	Positive cash flow (advertising revenue)	Positive cash flow (advertising revenue)	Positive cash flow (advertising revenue)
Customers perspective (tasks)	1. High quality of information for customers 2. Reach of a client's campaign 3. Satisfied price/quality ratio		1. High-quality program for which clients are prepared to pay more than average 2. Clients satisfaction of the placed campaign
Internal processes perspective (task)	1. Tracking rating and customers opinion 2. Adequate positioning of a client's campaign 3. Events which have purpose to acquaint clients with brand		
Learning and development perspective (tasks)	1. Employees development 2. Creating knowledge base for the organized events 3. Create knowledge base for all clients		

After creating strategic map, next step is creating processes map. For each of the crucial processes in the company should be created process list.

Every process consists of materials, information and resources entering the process and the output. Next step is defining all process parameters such as target values, place, authorities and all resources needed. For performance management, it is crucial to determine place where activity should be processed and the person who will be responsible for it (Obradović V. Petrović D., Mihić M., and Mitrovic Z., 2015).

2.3. Strategy implementation plan

Stakeholders are essential for a business development. For that reason, it is crucial to observe their impact on business and to permanently plan interactions with them.

When we define our stakeholders, there are a few crucial questions for company management to answer on:

- Where are they now – answering this question we can see how stakeholders see the company, and what is their opinion about it;
- Where we want them to be – one of the goals of project management is to change the state of mind of the stakeholders, from the one it was on the beginning to the one it suits the company best;
- Communication – how do the company communicate with stakeholders?
- Goals – what is the main company goal?

- Activities – What the company should do to reach the target?
- Communication frequency – It is crucial to determine the right frequency. For example, contacting shareholders too often can make them irritated, but on the other hand if we do not communicate with them it can be interpreted as company's indifference;
- Responsibility – As we mentioned in paragraph concerning performance management, it is crucial to have a responsible person in the company for communication with groups of shareholder

  In the next table the example of communication plan with customers as a stakeholder is presented. The example shows how we can position customers in print media (magazines).

Table 2: The example of communication plan with customers

Stakeholder	**Where are they now**	**Where we want them to be**	**Communication**	**Goals**	**Activities**	**Communication frequency**	**Responsibility**
Customers	Stable readership	To maintain loyal readers but also to attract new ones	Placing campaign in other magazines and newspapers	Increase of the number of readers	Better quality Promotional campaigns	5 times a month	Publisher

2.4. Action, operational and annual plan of performance

The most complex phase in implementing strategic performance management is the process of transforming strategy to initiatives and actions. The process of transforming has its own path according to Obradović et al. (2015) and it includes defining program, project and program activities, and defining annual performance plans. Programs/projects must be defined in that way that every task/action has the person responsible for executing it, suitable resources and person responsible for a whole program/project. According to same authors, process of planning has two main phases, identification and planning phase. During identification phase, top management decides whether the project will be realized or not, according to the ratio between needed resources and predicted results. In this phase it is essential to enclose the budget calculation. Planning phase starts after positive decision in identification phase and include next steps, identification and mapping all program/project benefits, choosing the right tasks that will lead to the fulfillment of individual goals and the goal of the company, business changes that will bring the company desired benefits, and profiling the benefits - description and the type of the benefits, link with the program/project mission, a list of outputs and identified risks.

Table 3 presents the example of an action plan of the project which goal is to increase the revenue from selling media space.

Table 3: Example of an action plan

Action plan

Specific goal: Increase revenue (from selling media space)

Project : Organizing events and product presentations for a clients

Description: Organizing an event/presentation during which every brand manager will have an opportunity to present issue/television show/online possibilities, focus groups and all other important information for a clients.

Date: yearly

Project results:

10% revenue increase, 90% right positioned ads, 30% increase results for a clients, all because after listening about the media brands advertiser can better choose the right communication channel to promote their product or service

Responsible: Brand and advertising managers

Financing: Company invest money

Budget: 10.000€ per presentation

R.B.	Activities	Responsibilities	Duration	Resources	Cost	Result
1	Creating presentation	Brand manager	3 days	Human resources – brand manager, research manager and designer	Uses resources in the company, no additional costs	Final presentation

An operational plan can be defined as a plan prepared by a component of an organization that clearly defines actions it will take to support the strategic objectives and plans of upper management, according to operational plans further develop from strategic initiatives and determine which activities are required. Also, operational plans indicate costs, performance measures and expected results. To ensure that company activities will be carried out properly, it is crucial to assign responsibility to the one person for all activities (Obradović et al., 2015) For easier understanding, next table presents an operational plan for one initiative that is further developed through several activities.

Table 4: Example of an operational plan

Initiative	Activities	Costs	Expected results after 3 years	What will be measured	target	Responsibility
Events for clients	Creating presentation	Depends on various factors, but approximately it is 10.000€	10% revenue increase	% revenue increase	+3%	Brand and advertising managers
			90% right positioned ads	% right positioned ads	+50%	
			30% increase results for a clients	% increase results for a clients	+25%	

Annual plan consists of yearly performance targets and person responsible for achieving them (Obradović et al., 2015). As the most common elements of annual plan, these authors define: strategic targets and tasks, strategies, measures (depending on the level at which we want to show) and the person responsible for the tasks, Key Performance Indicators – KPI, performance measures, targets and baseline values, and responsible persons.

Next table describes example of one of the target goals in annual plan.

Table 5: Example of an annual plan

Strategic goal				
10% Sale increase in next 3 years, 10% viewers increase in the next 3 years, Better brand position on the market achieved in the next 3 years				
Strategic task				
Positive financial result				
Responsible	Manager of the distribution			
Performance measures	Baseline	N	n+1	n+2
% of sale increase	0%	3%	5%	10%

2.5. Responsibilities and awarding system

After developing plans of activates according to the strategic direction of a company, the rest of the performance management process includes defining the responsibility and awarding system, as well as tracking and reporting system (Obradović V. Petrović D., Mihić M., and Mitrovic Z., 2015).

The employees, depending on their position in a company, have the tasks and obligations they are responsible for. In the media company, responsibilities of employees vary from entire business (CEO and top management), over operations at the level of division (Division Manager), operations at the level of the organizational unit (functional or project managers) to the individual level. For each of these levels it is necessary to define expectations, responsibilities, as well as benefits that employees will receive if they exceed set of the expectations and consequences for the performance below expectations. Some of the performance indicators in the media industry includes readership/viewership/number of visits, or a level of income and the number of campaigns that client's customers book. At the individual level, the most optimal is to do precisely defined job description with the expectations and requirements.

One example of job description is in the next table:

Table 6: Example of the job description with responsibilities

Responsibility – personal responsibility				
No.	Employee	Manager	Duties	Responsibilities
1	Journalist	Editor	Creating content that will be interesting enough to the viewers / readers / listeners, in accordance with the issue policy, agreement with the editor and in accordance with the annual plan.	Personal integrity , ethics , morality , trustworthiness and honesty

The system of responsibilities and reward system in the company are two almost inseparable systems. Reward system should be determined and introduced for each part of the business process. Large media companies' goal is to place adequate content to viewers/readers/listeners in order to be competitive in the market and achieve best possible ratings, because ratings are directly connected with client investment.

Generally, in media company structure one can roughly identify two parts, one that includes, editorial and creative staff, and business part. The editorial and creative part of the company consists of editors, journalist, designers and photo and video crew. They are responsible for creating the content that will be interesting to viewers/readers/listeners, and their performance parameters are viewership/readership/listenership and general ratings of the company. Goals are set on annual basis but monitored daily, weekly or monthly. Thus, for example, viewing TV programs can be monitored on a daily basis, but the average pulls in a week, and once a month. If there is deviations from the plan, manager needs to take corrective actions that include changing the content and implementation of marketing campaigns in order to further promote the show/program. Creative people generally have their own system of performance measurement and reward.

On the other side, the business team is responsible for the coordination of all segments of the company and communication with clients. Media companies are funded by sales of media space. The objectives for the advertising are to cover all operational costs and achieve positive financial balance. The rewards should be determined and introduced in this part as well..

2.6. Tracking and reporting system

Operational monitoring and reporting systems are set to monitor key performance indicators, strength and weaknesses, target area of potential development and check whether the performance is achieved and set out the measures to be taken in the case that there has been a plan deviation (Ammonos, 2007.). As a part of the operating reporting system there should be some resources planned for getting plan on a track. The following table shows one example of reporting system.

Table 7: Example of tracking and reporting system

Tracking and reporting system						
KPI	**Performance measure**	**Target**	**Current status**	**Deviation**	**Measures when deviations occur**	**Using resources**
Readership increase	5%	5%	6%	1%	Bonus for editorial team	% of money advertising team earned more because od the deviation

Generally, in media two systems must be followed, sales and advertising. All viewership/readership data are permanently monitored in R&D sector in the form of daily and weekly reports. Regarding print media, it is also important to monitor sales in different locations, and react on time if any deviation occurs. For example, monitoring can show that in some cities all distributed magazines are sold out, just in a few days, while in some other cities, stores sell only small percent of distributed magazines. In that case, distribution manager can redistribute printed magazines and increase sales with the same costs. Regarding advertising system, when campaign is to be realized in media, the client must send campaign order, which is processed in finances. Tracking financial report on daily basis, which includes reserved media space and comparison with a target is crucial for fulfilling the company’s goal.

3. CONCLUSION

Having in mind the very business of media company, we can identify two key stakeholder groups. The first one includes viewers/readers/listeners, to whom companies from the media industry placed the contents in order to attract their attention. Attracting greater attention will have an effect on the overall rating. The second includes clients who place their campaigns and invest money in media.

This paper presents guidelines for introducing a system for managing performance in the media industry with a purpose to show how through all the steps, form setting strategic direction of a company, creating strategic maps, operational plans, systems of responsibility, and monitoring and reporting as well, company always must have in mind its stakeholders. In the case of media company, by implementing performance management it always will have in mind the customers who are the ones who decide where the clients’ campaign will be positioned and how much money client will invest in it. This guidelines might be useful not only for top managers of media companies in Serbia, but also for marketing and advertising managers, editors, writers, other company employees and all individuals interested in implementing strategic performance management.

We can conclude that in contemporary environment, which is characterized by strong competition, the media themselves cannot afford to stagnate, but must constantly develop their business and improve overall business performance. These guidelines for proper performance management can lead media company to meet the needs of the viewer/reader/listener and consequently attract clients to invest their money, through placing their campaigns.

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DEVELOPMENT AND TRENDS IN THE MANAGEMENT CONSULTING INDUSTRY

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Abstract: *This paper will introduce the importance of management consulting, its development, as well as the current trends in this industry. A review of the literature and official statistical reports indicates that organizations, due to the lack of necessary expertise, increasingly use consulting services in order to improve their performances, so consulting, both globally and locally is becoming very important concept in the modern business world. Following trends, this industry has changed its face throughout history, and it has especially experienced some turbulent changes in the last hundred years. Today, consulting is most widely used in the field of improving operational performances and financial counselling, but its constant growth in other business areas should also be emphasized.*

Keywords*: management consulting, history, development, current trends*

1. INTRODUCTION

Management consulting has found application in various business activities. It can be said that there is no area without experts who have specialized in providing assistance to those who fail to cope with everyday pressures and difficulties (Florzak, 1999). Even many strong companies no longer consider the option of performing businesses without a help of consultants (O'Mahoney & Markham, 2013), regardless the fact that the price of their involvement is often extremely high. Considering all the benefits that could be gained, the price of such agreements is acceptable.

Having that in mind, the term "*consulting*" can be observed in many ways, from different aspects. There are views that the consultants are all those who are trying to change or improve business processes or situations, although they have no control during the implementation, so it might be noted that there is large number of them in organizations, though not explicitly under that name (Kubr, 2002). A help that is expected of them is most often in the form of providing important information or advices and recommendations concerning the activities that should be performed in order to achieve those objectives, while the client can be both an individual and another organization. Accordingly, it can be said that consulting is "*a process by which an individual or organization assists the client to achieve a stated outcome"* (Biech, 2011). In practice, however, this term is usually narrowly observed, and it can be defined as "*knowledge-intensive service which independent business professionals provide to managers of client organizations, and consists of objective advice on management's decisions regarding the solutions to the client organization's problems and opportunities"* (Baaij, 2013). Just like the other services, consulting does not have tangible outputs (Haksever & Render, 2013), but the effects of this kind of cooperation can be both observed and measured (Phillips, Trotter, & Phillips, 2015). However, it is not an easy task. Specific problem arises when there is a number of factors that influence the results gained by the client after the implementation of the proposed solutions (Baaij, 2013), so sometimes it cannot be said with certainty that the consultants' solutions led to the observed changes.

Despite the fact that the current trends point to increased usage of consulting services, it can be said that the proper significance of consulting was not fully recognized until the last decades of the twentieth century. A review of the relevant literature indicates that up to a few decades ago a small number of researchers have pointed out the potentials of consulting industry (Armbrüster, 2006). Since then, the situation has changed significantly, and this statement might be supported through the analysis of the growth of this industry, which indicates that the total revenues in this field has increased more than one hundred times in the last thirty years (O'Mahoney & Markham, 2013).

2. A BRIEF HISTORY OF MANAGEMENT CONSULTING

Consulting is a very old industry, but through the history its role was significantly different from the concept as we know it in the twenty-first century. Initially, the role of consultants was mainly in the provision of specific advices and recommendations to the rulers and members of the higher social classes. However, with the growing complexity of relationships in the markets, this role has changed and evolved significantly, so that in the last few centuries, following the significant improvement of the economy, consulting gets real contours of what it represents now.

Radical changes in consulting activities have occurred after the industrial revolution, especially at the end of the nineteenth century, with the advent of scientific management. Many organizations have decided to hire experts whose task was to improve the existing methods of work, and therefore provide a more rational use of resources. Frederick Taylor, his associates and other followers who modified and improved his ideas had special importance in the development of consulting services in this period. They have written a large number of professional articles and have performed many practical experiments with the idea to improve operational processes, which laid the foundations of modern consulting. These principles of management and organization have found extensive application in industrial companies throughout the United States and Europe, so the workers had the opportunity to increase their earnings, if they were able to produce much more than they did before (Jaško, Čudanov, Jevtić, & Krivokapić, 2013).

Due to a certain degree of exploitation of the employees, following decades have brought many analysis on their needs and behaviors in the workplace, in order to discover main factors that influence their commitment and motivation. Studies from this period pointed to the importance of the human factor, thus creating conditions for the development of the behavioral management. Numerous studies have shown that various intangible incentives have a significant impact on productivity (Cropf, 2008), thus causing the change of previous attitudes about the nature of business management. Organizations were increasingly focused on the analysis of the factors that affect the motivation of employees, their commitment, job satisfaction, and the results they achieve (Jaško, Čudanov, Jevtić, & Krivokapić, 2013), which led to the review of the management but also of the consultancy focus. Consequently, it resulted in large differences in the characteristics of consulting based on these two concepts, with more attention devoted to the strategic consulting. Comparative review of these perspectives is shown in the following table.

Table 1: Historical Management Perspectives (Stryker, 2011)

Period	**Perspective**	
	Scientific Management	**Behavioral Management**
Early (1890 – 1920)	▪ Few consulting firms ▪ Use of scientific method ▪ Emphasize on efficiency ▪ Principles of management articulated ▪ Time-motion studies ▪ Accent on material incentives	▪ No consulting firms ▪ Based on scientific method ▪ Emphasize on effectiveness ▪ Accent on employee education
Middle (1920 – 1940)	▪ Private sector consulting ▪ Extended scientific method ▪ Emphasize on efficiency ▪ Principles of management extended ▪ Work simplification ▪ Accent on material and individual incentives	▪ Consulting institutes ▪ Based on behavior studies ▪ Emphasize on effectiveness ▪ Employee-centered management ▪ Accent on personnel department
Modern (1940 - ?)	▪ Public-private sector consulting ▪ Based on Operations Research methods and techniques ▪ Emphasize on efficiency ▪ Generalized management principles ▪ Methods analysis ▪ Accent on material and individual incentives ▪ International consulting	▪ Public-private sector consulting ▪ Based on Organization Development methods and techniques ▪ Emphasize on effectiveness ▪ Participative management ▪ Accent on personnel training and counselling

In the mid-twentieth century, and especially in the years following the World War II, consulting services have begun to appear in almost all developed countries. It was believed that many organizations were unable to recover after years of war and crisis, so it was necessary to seek the assistance of external experts (Biggs, 2010). This is the period marked with the geographic expansion of consulting, and this growth was followed by significant changes that were reflected in (Kubr, 2002):

- Wider and more diversified service offerings,
- Growing competition in consulting,
- Internationalization of these services,
- Progress in the methodology of consulting,
- Progress in the technology that was used,
- Increased client competence in using consultants' services,
- Emergence of large consulting organizations,
- Internal consulting.

Figure 1: The emergence of management consulting fields (Baaij, 2013)

At the end of the twentieth century, the IT revolution predominantly shaped the nature of consulting (McKenna, 2006). This period is considered to be the golden era of consulting, since the annual growth of the industry ranged from 15 to 20% (Poulfelt, Greiner, & Bhambri, 2010). This growth has stagnated during the first years of twenty-first century, but it achieved stability again at a bit lower rate during the current decade (O'Mahoney & Markham, 2013).

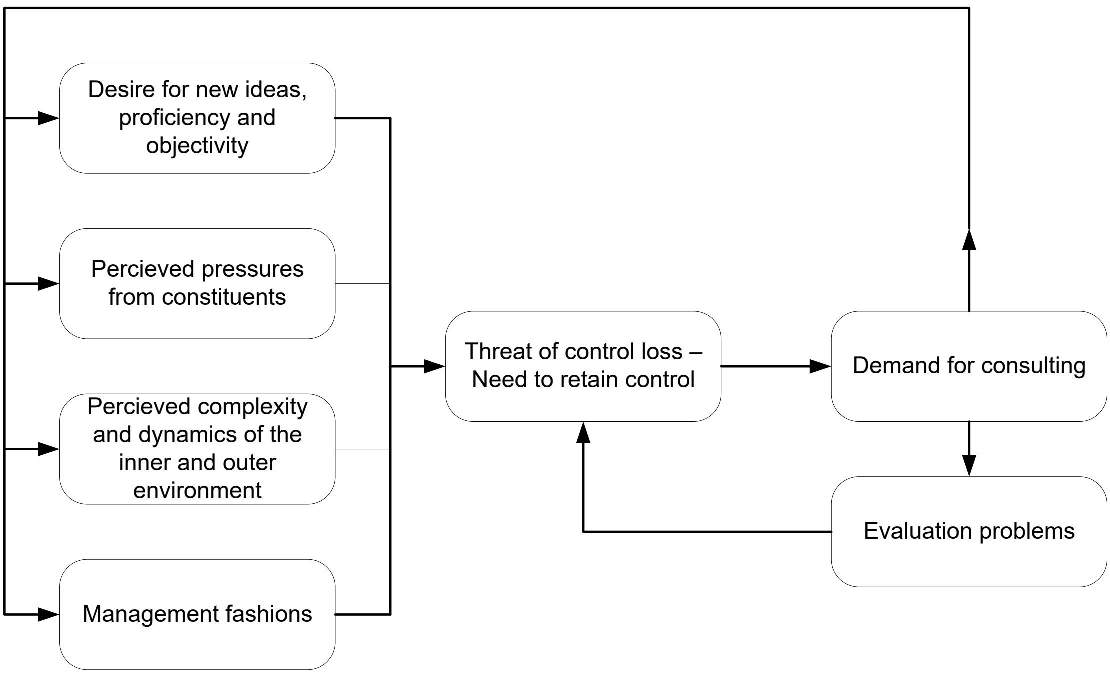

Figure 2: Factors leading to the growth in demand for consultants (Orr & Orr, 2013)

It should be noted that in recent decades the consulting industry was developing faster than the economies of many western countries (Kipping & Clark, 2012). Many large consulting companies decided to expand their offer, following some new problems that have emerged, but it is also interesting that many organizations which previously have not been engaged in consulting started to provide specialized services in a search of new business opportunities (Kubr, 2002). The previous illustration shows a set of factors that influence the demand for consulting services.

3. CURRENT TRENDS IN MANAGEMENT CONSULTING

Many authors point out that the consulting industry is now more focused on providing expertise in terms of organizational and strategic planning rather than making recommendations in order to increase efficiency at the lower level (Wright & Kipping, 2012). Through the analyses of the statistical data on consulting, it can be concluded that there are different views on its wideness, which sets the stage for discussion on the actual size of the consulting industry. Widely observed, the value of this market is over $330 billion (O'Mahoney & Markham, 2013). However, according to the reports of Kennedy Information LLC, leading information source on management consulting, the total value of this market is a little less than $250 billion (Consultancy.uk, 2016). In any case, estimations of this market value it higher than five-fold GDP of Republic of Serbia in the year of 2014th. These reports also confirm that there is a constant growth of this value during the second decade of the twenty-first century, while dominant consulting fields are related to operational improvement and financial consulting.

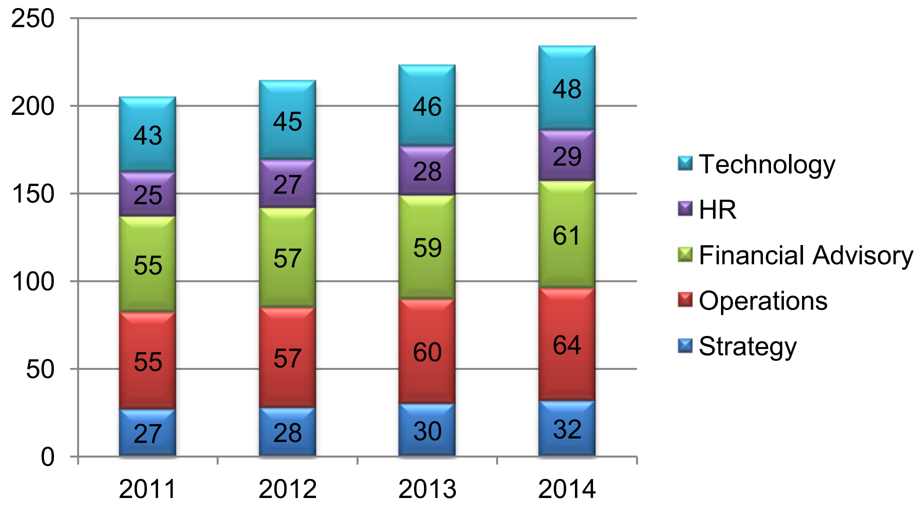

Figure 3: Size of the global consulting industry in $ billion (Consultancy.uk, 2016)

When it comes to the distribution of these values by regions, it can be concluded that this industry is especially developed in Europe, Middle East and Africa (EMEA) as well as in the countries that belong to the North America.

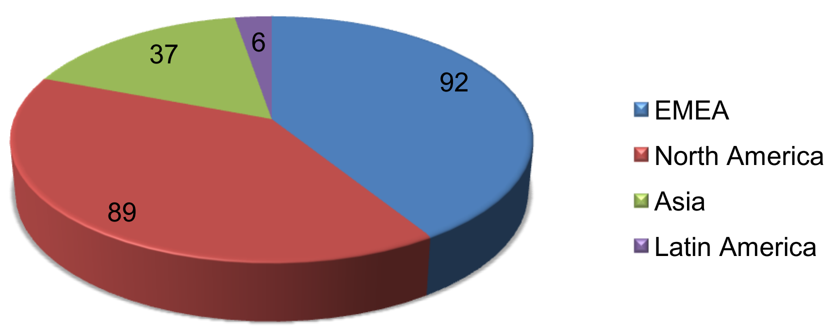

Figure 4: Global consulting market by regions in $ billion (Consultancy.uk, 2016)

The analysis of the European consulting market shows that the most of transactions in this region is conducted in Germany, Austria and Switzerland, but also that consulting services are quite popular in the United Kingdom and the Republic of Ireland. Countries in the Balkans, on the other hand, do not have a large share on this market. It should also be noted that in Europe, as well as at the global level, the highest percentage of the value of provided services is related to the operational, financial and IT consulting, while the strategic and HR consulting appear to be less represented. Concrete values vary among regions, which is not unexpected when it's known that there are differences in the level of economic development among them.

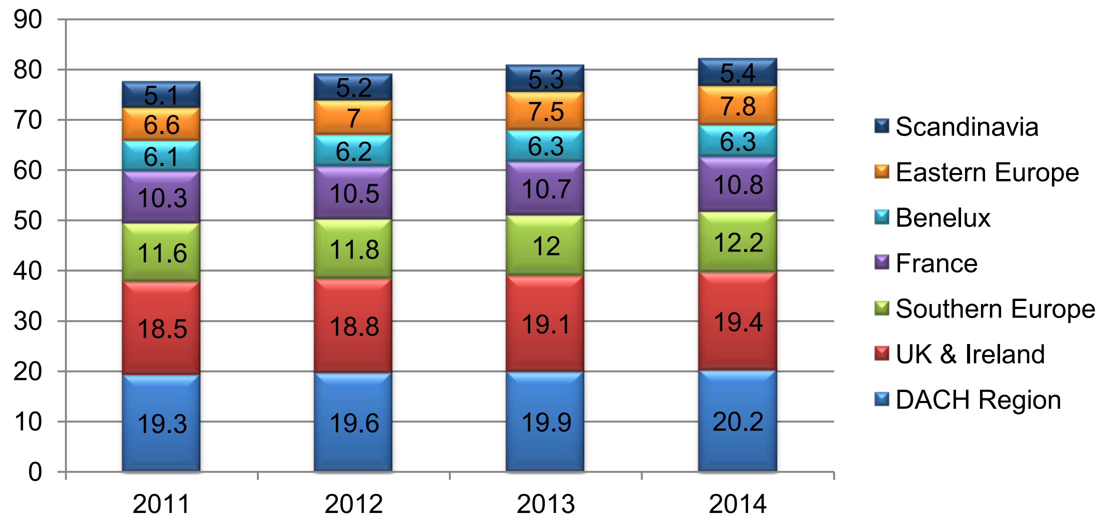

Figure 5: European consulting market in $ billion (Consultancy.uk, 2016)

Nowadays there is a large number of consulting firms that perform their businesses in several countries. The most famous consulting companies are so-called "*The Big Four*" consisting of "*KPMG*", "*PricewaterhouseCoopers*", "*Ernst & Young*" and "*Deloitte*" (WetFeet, 2008). It is interesting that these companies have started businesses by providing consulting services in the field of accounting and auditing, but during the years they have spread spectrum on the management consulting.

Observing modern trends it can be said that consulting organizations could be classified in several categories, such as (Kubr, 2002):

- Large multifunctional consulting firms,
- Strategy and general management consultancies,
- Information technology and e-business consultancies,
- Employee benefits consultancies,
- Medium-sized generalist and specialist firms,
- Sole practitioners and small partnerships,
- The consulting professors,
- Consulting services of management schools and productivity centres,
- Non-traditional suppliers of consulting services,
- Consulting networks.

Having that in mind, the client organizations have options of hiring (Armbrüster, 2006):

1. *External consultants* who can provide services (Werr & Linnarsson, 2002):
   1.1. Temporarily, in order to solve some specific problems for client;
   1.2. On the long term, to help directing the organization constantly towards its goals; and
2. *Internal consultants* who can:
   2.1. Coordinate the efforts of external consultants during the implementation of their projects;
   2.2. Be employed permanently in providing advices and assistance with the critical issues to the management of the organization.

It is interesting that the practice, especially in developed countries, shows a growing trend of engagement of internal consultants (O'Mahoney & Markham, 2013). Their responsibilities are different but mostly related to the issues with the organizational structure and its development, management processes within the organization, new technology and its application, development and training of employees, and so on.

Advantages of hiring internal consultants are numerous (Scott, 2003), as they are very familiar with the organization and therefore they can get better insight into the problems that occur. Also, when the organization has internal consultants, the fear that there will be a spread of confidential information is reduced, and it is very likely that it would be easier to implement changes appropriately, having in mind that employees know these people and trust them more than they trust experts who come from outside.

However, in addition to unquestionable benefits that internal consultants can bring, the fact is that, unlike external consultants, they generally do not have much experience in different situations, and their knowledge and competences are mainly limited to a certain number of problems, which can be a big disadvantage. In addition, the question of their objectivity arises, given the fact that they know other employees and they have established relationships with them, so sometimes it is more difficult for them to decide to make some unpopular moves, although they are aware that that should be the best solution. External consultants do not have this kind of dilemma, and their recommendations are objective and more realistic (Anderson, 2012), but also accompanied by higher resistance in the organization.

4. CONCLUSION

Although consulting practically exists as much as the society does, its role gains in special importance in last hundred years. This industry has been changing its face through the history in order to adapt to the current, mainly economic standings. The analysis of current trends in this field shows that this industry has rapid growth in the last couple of decades and that at this moment its value reaches about $330 billion. It is indicative that the consulting is in general mostly popular in the developed countries, especially in Europe and North America, but there is much space for the improvement in countries in the Balkans.

Regardless of the type of the consulting, it should be noted that nowadays the clients expect not only a recommendation, but more and more some concrete results and improvements. Consultants are no longer seen as advisers but as professionals who need to ensure achievement of the targets, so they have more autonomy and more resources in order to succeed in that. The width of their work is also changing, so the business consulting takes the position of management consulting, which can lead the organization to the complete transformation and change of portfolio activity.

Further research on consulting can develop in several directions. Different practices between "The Big Four", aimed mostly at consultancy, and strategic, creative consulting practices such as exercised by other large consulting companies, e.g. Bain, McKinsey and BCG can be elaborated by formalizing description of the consulting process and goals. Also, network nature of all observed large organizations can be researched as a specific form of organizational structure, with specific attention to correlations between network parameters (centrality, degree, neighbors, average paths) and performance of the company. Performance of the consulting companies can also be benchmarked, and further research has one large challenge – common benchmark for consultant's performance, in order to regulate and formalize this industry.

Related to performance measurement in consulting, a huge field of transaction costs, which yielded research of three Nobel-prize winners is also interesting direction. Large fraction of costs services which are hard to specify are transaction costs (Jaško, Jovanović, & Čudanov, 2015) and that fraction does not directly create any value. Two different threads of research can be joined, because regulation and diminishing of opportunism by common formal benchmark standards would diminish transaction costs by theory. It can be concluded that the consulting industry is still evolving, in line with the trends and developments in the global market. Organizations clearly recognize the importance of the assistance they can get from the experts, and in accordance with their ability they decide to use this help in order to improve their business and keep pace with the growing competition.

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APPLYING A GENERAL MORPHOLOGICAL ANALYSIS IN LONG-TERM DEFENCE PLANNING PROCESS

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Abstract: *Long-term defence planning process is of huge importance for defence system development. In the process there are many uncertainties and non-quantifiable issues. Defence planners should assess environment as well as describe possible solutions and scenarios for military force engagement. There is no unique approach to a scenario building as a main tool of long-term defence planning. One of the possible models to identify and describe conditions and solutions is applying a general morphological analysis. This paper presents possible ways of applying a general morphological analysis to solving the problems and solutions as an authors' vision for continuous long-term defence planning process improvement. This paper could be useful for the development of military science, as well as practical solutions for management in public sector organizations and other organizations.*

Keywords*: defence, planning, scenario, general morphological analysis, development*

1. INTRODUCTION

Contemporary organizations operate and achieve their activity in different political, economic, security, social, demographic, technological and other conditions. Dynamic changes in these conditions raise new and complex demands to organization management. Results achieved in a short period of time become obsolete and unusable. The management is faced with the problem of constantly increasing demands of stakeholders, as well as maintaining the quality of general interest activities.

For defence system, as a specific public sector organization, an activity of general interest is the protection of the defence interests. In this regard, the defence system develops capabilities necessary to fulfill that mission..Long-term defence planning process enables determination of necessary capabilities in accordance with political requests, conditions of complex environment and resources constraints.

Defence planners are faced with many different problems in the long-term defence planning process. These problems more often are multi-dimensional and they are not quantifiable. One of the possible modes to solving such problems is applying a general morphological analysis (hereinafter: GMA).

General morphological analysis enables consideration of problems link to parameters and structuring, as well as of multi-dimensional and non-quantifiable issues analysis. Also, GMA enables determination of relationship between their issue parameters and selection of issue parameters based on internal consistency. In long-term defence planning process GMA enables consideration of environment condition parameters and specific parameters of possible force engagement scenarios.

2. LONG-TERM DEFENCE PLANNING

In relation to the time planning period there are three main time horizons: long-term, middle-term and short-term planning (Stojković & Dahl, 2007). In management theory there is no accepted time span for long-term planning period, but usually one considers a time horizon of fife years or more.

Also, in management theory there is no accepted long-term defence planning definition. Long-term defence planning could be defined as „a process that investigates possible future operating environments and develops a force structure development plan to best adapt the defence organization to these environments given a host of constraints – including financial ones" (RTO/NATO, 2003). In other hand, (Stojković & Dahl, 2007) was defined long-term defence planning as „a process of defining long-term defence objectives and a strategy for their fulfillment".

Long-term defence planning relies on many different approaches usually used in complementary not singly way. In his discussion Faber (Faber, 2016) claims there are at least six types of approaches: top-down planning, resources-constrained planning, incremental planning, capability-based planning, scenario-based planning and threat-based planning.

Process of long-term defence planning shown on Figure 1 includes the following phases: political guidance analysis, environment assessment, mission analysis, scenarios development, capability requirements, capability assessment, options development and solution choice (Stojković & Dahl, 2007).

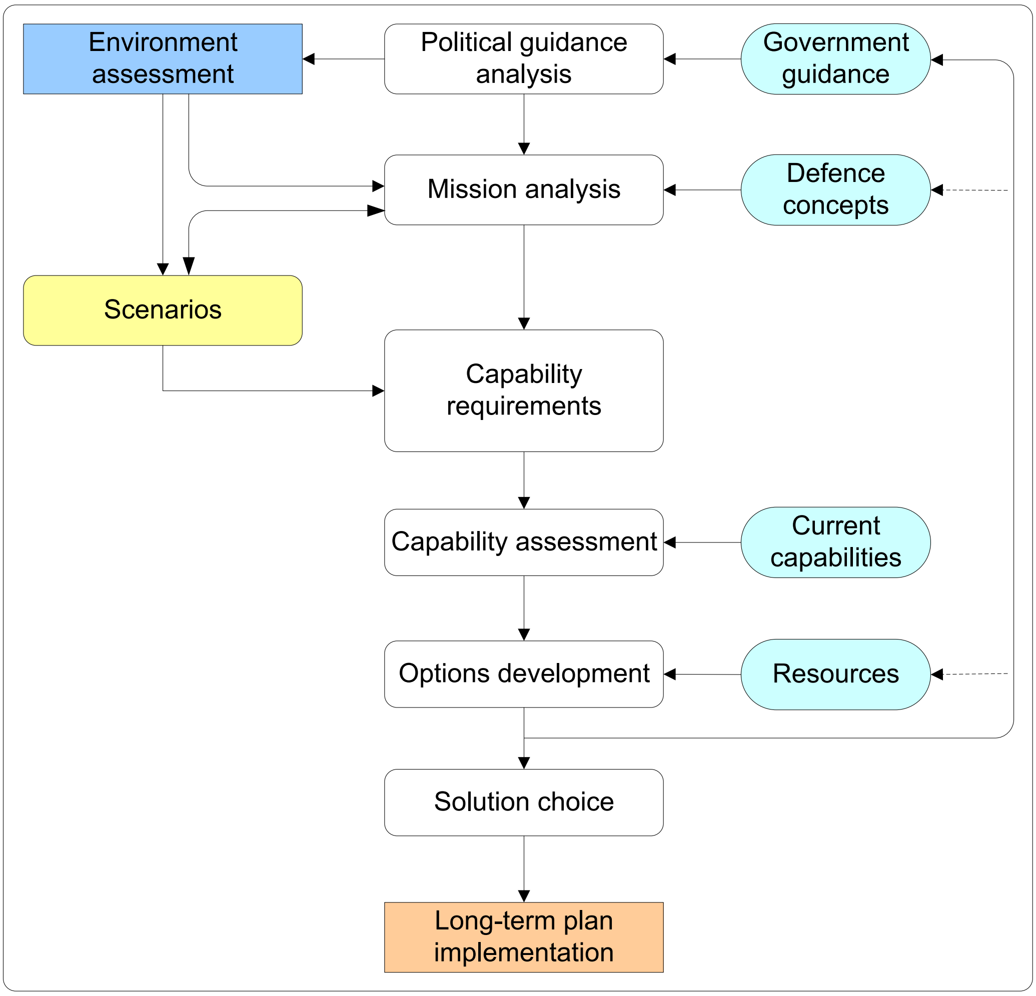

Figure 1: Process of long-term defence planning (Stojković & Dahl, 2007)

The process starts by asking question *what defence system should do.* Answer to this question is given by political guidance analysis. The second stage of this process is environment assessment. In this stage planners need to realize future security, political, economical, social and technological issues.

Mission analysis is the third phase of the long-term defence planning process, and its purpose is to identify what should be done in order to achieve determined political requests. In this stage defence planners identify main missions, their objectives, mission tasks and tasks decomposition. In accordance with the political requests, and based on defence concepts, result of this stage is a task structure.

Scenario development is the next stage in this process, and main end of this stage is a creation of future situation or conditions for military force engagement. Based on possible scenarios defence planners can determine future capabilities as a capability requirements. In accordance with the current capabilities and capability requirements, capability assessment is conducted. Result of capability assessment stage is the capability gaps.

Different modes can be used to solve capability gaps. Defence planners develop different approaches to solve capability gaps, assess feasibility of each approach and define some possible and realistic options. The last stage of long-term defence planning process is a solution choice. Purpose of this stage is to analyse the options and select optimal one. Result of this stage and long-term defence planning process as whole is long-term defence plan.

3. MORPHOLOGICAL ANALYSIS

In the process of long-term defence planning there are many political, social, economical and other factors affects the process, and it is necessary to solve many multi-dimensional problems. One of the available methods is general morphological analysis.

Ritchey (2011) points out that GMA „is a method for systematically structuring and analyzing the total set of relationships contained in multi-dimensional, non-quantifiable problem complexes". The method enables investigation of problem complex by developing a discrete parameter space, and determination of the relationship between the parameters on basis of internal consistency. Such an internally banded parameter space is called a morphological field.

The purpose of GMA is identifying and investigating the total set of possible relationship contained in a problem complex. These possible relationships are called configurations. Determining the configurations is accomplished through two phases of GMA: analysis and synthesis. Bearing in mind the foregoing it is possible to conclude that morphological analysis is a specific process of analysis-sinthesis.

General morphological analysis starts by identifying the most important parameters of the problem complex. In the next step is determination of values or conditions for every determined parameter. In that manner is constructed morphological field (Ritchey, General Morphological Analysis (GMA), 2011). Morphological field represents a set of parameters against each other in order to create an n-dimensional configuration space (Table 1).

Table 1: Morphological field

Parameter 1	Parameter 2	Parameter 3	Parameter 4	Parameter 5	Parameter 6
Value or condition 1-1	Value or condition 2-1	Value or condition 3-1	Value or condition 4-1	Value or condition 5-1	Value or condition 6-1
Value or condition 1-2	Value or condition 2-2	Value or condition 3-2	Value or condition 4-2	Value or condition 5-2	Value or condition 6-2
Value or condition 1-3	Value or condition 2-3	Value or condition 3-3	Value or condition 4-3	Value or condition 5-3	Value or condition 6-3
Value or condition 1-4	Value or condition 2-4		Value or condition 4-4	Value or condition 5-4	Value or condition 6-4
	Value or condition 2-5		Value or condition 4-5	Value or condition 5-5	

Every morphological field can contain many possible configurations, and it depends on number parameters and their values or conditions. Number of possible configuration is calculated as product of the number of values or conditions for every parameter. Morphological field in Table 1 contains 6000 possible configurations (4x5x3x5x5x4).

As it is shown, there are many possible configurations. However, there are some inconsistent configurations. Inconsistent configurations are determined in the GMA's next step – cross-consistency assessment (Ritchey, Modeling Alternative Futures with General Morphological Analysis, 2011).In this step all of the parameter values or conditions are compared whit one another. The comparison is realized in a cross-impact matrix (Table 2).

Table 2: Cross-impact matrix (Ritchey, General Morphological Analysis (GMA), 2011)

Parameter	Value or conditions	Parameter 1				Parameter 2					Parameter 3		
		1-1	1-2	1-3	1-4	2-1	2-2	2-3	2-4	2-5	3-1	3-1	3-3
Parameter 1	1-1												
	1-2												
	1-3												
	1-4												

Parameter	Value or conditions	Parameter 1				Parameter 2				Parameter 3			
		1-1	1-2	1-3	1-4	2-1	2-2	2-3	2-4	2-5	3-1	3-1	3-3
Parameter 2	2-1												
	2-2												
	2-3												
	2-4												
	2-5												
Parameter 3	3-1												
	3-2												
	3-3												

In the cross-impact matrix every pair of parameter values or conditions is examined..The purpose of this step is to determine consistent relationship, i.e. the pair can coexist. This purpose is achieved by comparing every parameter value or condition parameter value or condition with another in the morphological field. The judgment is mainly based on morphologists' individual expertise, knowledge and experience. It is necessary to find logical contradictoriness, and take to account empirical and legislative limitation which could relay on some ethical or even political issues.

After pair-wise consistency assessment inconsistent configurations are discarded, and in the morphological field remain only consistent configurations. Using this technique a morphological field can be reduced by more than 90% depending on problem structure. One of the consistent configurations is shown in the Table 1 (the darkened cells).

General morphological analysis is used to solve different multi-dimensional and non-quantifiable problem complexes in contemporary organizations. Also, GMA can be used to solve problems in the process of long-term defence planning especially in scenario development stage.

3. APPLAYING MORPHOLOGICAL ANALYSIS

General morphological analysis can be used for analysis of all kind of complex issues and finding alternative options for the future (Ritchey, Modeling Alternative Futures with General Morphological Analysis, 2011) like:

- developing scenarios and scenario modelling laboratories;
- developing strategy alternatives;
- analyzing risk;
- relating means and ends in complex policy spaces;
- developing models for positional or stakeholder analysis;
- evaluating organizational structures for different tasks;
- presenting highly complex relationships in the form of comprehensible, visual models.

In the process of long-term defence planning there are many uncertainty, multi-dimensional and non-quantifiable problems. They have an effect on all stages in the process, especially on outcome of the process – the long-term plan. As we mentioned before, GMA is one of the solutions for such a problems, especially in two phases of long-term defence planning: environment assessment and scenario development.

During the environment assessment stage defence planners identify future conditions in security, political, economic, social, technological, and other areas of interest. Also, it is necessary to define some possible values or indicators for every area. That requires knowledge and experience, as well as engagement of experts for certain areas.

In this phase GMA can be applied in different ways. One of possible ways enables an equalizing areas and parameters. In this case environment assessment makes a morphological field, and each area becomes a parameter for itself. An example of environment assessment as morphological field is shown in Table 3.

Table 3: Possible environment assessment morphological field

Security area	Political area	Social area	Environment area	Technological area
S-1	P-1	So-1	E-1	T-1
S-2	P-2	So-2	E-2	T-2
S-3	P-3	So-3	E-3	T-3
S-4	P-4	So-4	E-4	T-4
S-5			E-5	T-5

Because of complexity of environment it is necessary to conduct thorough assessment. Other mode of applying GMA enables an equalizing parameters values or conditions and parameters. The area of assessment makes a morphological field. Each value or condition becomes one parameter, and defence planners define value or conditions for every parameter. In this case it would be made five different morphological fields (Table 4).

Table 4: Possible security area morphological field

S-1	S-2	S-3	S-4	S-5
S-1-1	S-2-1	S-3-1	S-4-1	S-5-1
S-1-2	S-2-2	S-3-2	S-4-2	S-5-2
S-1-3	S-2-3	S-3-3	S-4-3	S-5-3
S-1-4	S-2-4	S-3-4	S-4-4	S-5-4
	S-2-5			S-5-5

Possible configurations total set reduction enabled selection of possible environment assessment configurations and description of each area conditions.

More often GMA is used in scenario development phase. This phase enables future consideration of state. Scenario can be defined as a future situations or conditions..It is not prediction or prognostic set of issues rather what could possibly happen. Also, scenario is hypothetical set of situations for military force engagement (Kovač & Stojković, 2009).

Scenario development stage begins with identification of scenario parameters. That parameters should be the best description in details of a possible situations. Later on, every parameter must be fragmented in a number of values or conditions. Joining parameters and values we establish a certain number of configurations. Defence planners should reduce the total set of possible configurations to set of internal consistent configurations in the next step. And last but not least, planners should select possible situations and create some possible scenarios.

Practically, a creation of possible scenarios is similar to GMA procedure. Each scenario represents a possible situation for military forces engagement, and a certain morphological field. Morphological field contains scenario parameters and their values or conditions, and after reduction of total set of possible configurations defence planners can select possible scenarios. An example of scenario as morphological field is shown in
Table 5.

Table 5: Possible scenario morphological field

Scenario parameter 1	Scenario parameter 2	Scenario parameter 3	Scenario parameter 4
1-1	2-1	3-1	4-1
1-2	2-2	3-2	4-2
1-3	2-3	3-3	4-3
1-4		3-4	4-4
1-5		3-5	

As it is shown, GMA can be applied in different ways depending on needs and projected outcomes. General morphological analysis enables solving multi-dimensional and non-quantifiable problems and generates phases of long-term defence planning process. Ministry of Defence of the Republic of Serbia has created software for conduction GMA. Applying the software enables significantly shorter time for GMA conduction and completely reliable products of process.

4. CONCLUSION

Long-term defence planning is very important for defence development and enables determination of future capabilities and risks. In the process defence planners are faced with many uncertainty and non-quantifiable issues. One of the possible modes to solving such problems is applying general morphological analysis.

General morphological analysis enables consideration of problem parameters, structuring and analyzing multi-dimensional and non-quantifiable issues. In long-term defence planning process GMA enables consideration of environment condition parameters and specific parameters of possible force engagement scenarios.

Based on the previous general morphological analysis can be useful for long-term defence planning process and enables achieving different effects:

- consideration of different problems;
- structuring and analyzing multi-dimensional and non-quantifiable problems;
- determination of relationship between problem parameters (possible configurations);
- selection of problem parameters ob basis internal consistency;
- selection of consistent configurations and
- solving problem.

The presented mode of applying GMA may be applied in defence sector, as well as in public sector organizations and other organizations. Application of GMA in other organizations does not require an adjustment, just determination of issues, their parameters and parameter values or conditions. In further, researchers should address the improvement of this method, and its wider application.

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PROGNOSTIC RESEARCH IN THE FUNCTION OF STRATEGIC DEFENSE PLANNING

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Abstract: *As the defense and security are some of the most important functions of the political system, jobs in defense planning should be approached cautiously and responsibly. The rapid development processes important segments of human society are calling for the important political action based on the results of strategic planning. This means the necessity of a well-planned in advance of decisions based on the results of modern science. Given that scientific forecast is one of the possible important scientific objectives and the highest level of scientific knowledge, prognostic research deserve an important place and role in creating a defense system based on strategic planning. In the present study, the prognostic role of research in the complex process of strategic defense planning.*

Keywords*: scientific prognosis, prognostic research, defence system development, strategic planning*

1. INTRODUCTION

Strategic defence planning requires the need for the necessary application of prognostic research. Prognostic studies are carried out in various stages of the process with the goal of more efficient planning for defence purposes. They are primarily aimed at anticipating of possible threatening conditions and methods, and ways of circumvention, prevention and reduction of the effects of the attack, which represents a social action to overthrow the state.

Possible sources, forms and processes of compromising modern states are very numerous and varied. Just an estimation is not only enough for their determination, due to the fact that any evaluation represents the most intuitive form of measurement. Therefore, the development of the defence system should not be based on the intuition of individuals and groups of people who are currently in positions of making major political decisions, but exclusively on the strategic defence planning based on prognostic studies.

As such, a reasearch may be exploratory or formulative, descriptive, diagnostic or hypothesis testing, etc. In Saho (2003) opinion „research can be oriented to explore new things or new solutions and new insights in a particular phenomenon. This type of research can lead to the formulation of new things.“ Scientific prognostic represents one of the possible important scientific objectives and the highest level of scientific knowledge. A research think she prognostic studies that aim to predict future events based on known parameters. (P.3). Well known forecasters in the field of social sciences are Huntington Fukuyama and Brzezinski. Prognostic research are different from other types of research, in two important characteristics. The first one concerns on their case studies that can represent not only likely but also possible, and preferred future events. Another characteristic is reflected in the need to present a complete holistically view of the current reality and its impact on future events.

In our deliberations, we will not deal with the problems of research projecting. Our presentation will refer to the importance of these research in the complex process of strategic defence planning and emphasizing the necessity of application of their results in the development of defence plans.

2. THE CONCEPT AND IMPORTANCE OF STRATEGIC DEFENSE PLANNING

In order to adequately explain the concept and importance of strategic defence planning, it is necessary at the beginning, to dedicate a little attention to the importance of planning in general. Shortly, planning is the process of making decisions about the organization's goals and strategies for their implementation. It is connected with all the other functions of managing the organization, and performance of all other functions is conditioned by the planning. Danilovic N, Gordic M. and S. Blagojevic (2015) considered that "the strategic defence concept is determined with basic human and material resources in society and developed to a comprehensive and complex system of defence" (p 145).

Defence is an organized counter action in terms of thwarting, preventing and reducing effects of the attack which is the social action to overthrow the state. The final result of planning should be a defence system that is tailored to the needs and capabilities of the state, and which is able to contribute to the protection of vital national interests.

Based on the mentioned, we can conclude that the defence planning represents continuous control activity and specific planning discipline, which is implemented by the state administration and the armed forces in the area of defence. As part of this activity, targets are determined, subjects - holders of certain activities are established, as well as ways how to achieve these goals. Therefore, defence planning includes the development of a number of concepts, strategies, plans and subplans which are necessary for the implementation of the process of harmonization of policies and the system of defence, and for the coordination and integration of activities and actions that are in the responsibility of the defence system.

According to Davis (1993), defence planning in a broader sense include: strategic planning, operational planning and planning of deployment. (P.3.). Such clasification is conditional, and it is made according to the nature of the problem which is solved through the process of planning and the decisions made meanwhile.

Strategic planning is a part of defence planning in which the competent national authorities through the highest level documents, determine the strategic objectives in the field of defence and establish ways of their realization. Strategic planning aims to ensure compliance of state of the defence system with its environment, and to allow the defence system to rationally and timely react to the changes in the environment. The outcomes of strategic planning are: national security strategy, defense strategy, military strategy, Strategic Defence Review, the long-term plan for the development of the defence system and the like.

Operational planning is a part of defence planning where strategic orientations are translated into concrete activities to achieve certain results, and strategic goals are implemented and the tasks of the defence system are carried out. Within operational planning, strategic goals of the defence system are associated with the resources necessary for their realization. The outcomes of operational planning are: medium-term plans and programs of development of the defence system, the instructions for making medium-term plans and programs, ministerial guidance, financial and other plans, etc.

As with business planning, strategic and operational planning of defence are closely linked and interdependent. The operational planning comes from the strategic planning of defence, in the sense that the strategic destinations of the defense system are concretized and operationalized through it. On the other hand, strategic defence planning precedes, or knowingly includes operational planning activities that will demonstrate the validity of the strategic ideas.

Planning the use of force is a specific part of defence planning which determines the mode of operation of the armed forces and other defence forces, in order to achieve the stated objectives in war and emergency. Within planning the use of forces, the obligations and duties of all subjects of defence in terms of organization and preparation of forces, resources and procedures in war and emergency, or crisis, are defined. The outcomes of the planning process of deployment are: plan of use of the armed forces, mobilization plan, a plan of engagement of the state organs and the like.

3. LONG-TERM DEFENSE PLANNING

In our work we accept thinking of Tagar (2015), who is considering a long-term defense planning a time horizon of 10-30 years (p.9). Do the fact that long-term plans in many countries, both NATO members and partners, as well as in other countries is considered a time period longer than 10 years, has led us to this commitment.

Long-term planning of development of the defence system is one of the important factors of strategic defence planning, which has a significant impact on the future efficiency and effectiveness of the defence system. It aims to ensure that the defence system possesses the necessary power and resources, or the ability to execute future missions and tasks. It is oriented toward the relatively distant future. Therefore, in the process of long-term planning, we are facing with the numerous difficulties which are the result of uncertainty and ambiguity in the future. In the opinion of Kovac and Stojkovic (2009) "The uncertainty and ambiguity pose a major challenge for planners in the defence system, as well as for policy makers." (P.425).

Long-term planning of development of the defence system is an interdisciplinary process that includes a number of interdependent but different actions and activities. In their implementation, a lot of adjustments and reconciliation between political and military elite, planners, military commanders and other subjects of the defence system are required.

In the NATO publication "Handbook for long-term defense planning" (2003), long-term planning of development is defined as "a process that considers the future operating environment, and create a plan for the development of force structure for optimal adjustment of the organization of the defence system to that environment, considering the constraints, including financial ". (P.3.). Thus defined, the term indicates that the purpose of long-term development planning is a model of the defence system, that will be developed based on identified needs and available resources, on the basis of precision tailored plans of development.

Long-term planning of development of the defence system is a complex process that first predicts the possible future environment and then create a plan of development so that the defence system could in the best way adapt to that environment, regardless of the existing and possible limitations (normative constraints, resource constraints, financial and other constraints) . Based on the above facts, the long-term development planning of the defence system can be briefly defined as the process of determining the long-term development goals of the defence system and strategies to achieve them.

Stojkovic and Dahl (2007) considered that "Long term defense planning is never just a technical procedure. It is also a highly political process that needs to be discussed in political terms (i.e., good and continual dialogue must exist between long-term planners and policy makers). At the same time, if care is not taken to Ensure objectivity and LTDP, it risks being dismissed as a politically biased process. (P.31.)". It is important to emphasize the importance of the dialogue approach to research because it is a matter of effective communication of all relevant stakeholders who are interested in the process of defense planning. It includes external stakeholders, ie the entire public that is sensitive regarding questions of security and defense. In the opinion of Flyvbjerg (2012) "Highly specialized media such as scientific journals and monographs are suitable for addressing academic audiences. But they are utterly inadequate when we need to reach out to groups that are relevant in the practical world of politics, administration and planning. Public dialogue that includes communication through daily media is necessary (p.214)".

4. THE PLACE AND ROLE OF PROGNOSTIC RESEARCH IN CERTAIN PHASES OF THE PROCESS OF LONG-TERM PLANNING OF THE DEFENCE SYSTEM

The process of long-term planning of development of the defence system essentially consists of the following essential phases, namely:

1. Harmonization and coordination of political and defence objectives,
2. Adoption and consideration of policy guidelines,
3. Analysis of the security environment,
4. Analysis of the missions,
5. Anticipating changes in the security environment,
6. Development of possible scenarios,
7. Determination of the necessary abilities,
8. Determining the difference between the required and actual abilities,
9. Developing options and
10. The choice of solutions.

In each of these mentioned phases, subjects of alignment of the politics and the defence system fulfil their important role. In our case, political and military leaders can be considered as subjects. With due respect to the above facts, we can conclude that the long-term planning of the defence system according to this model, represents a dynamic social and political process in which the degree of compliance depends not only on the general social and political circumstances, but also on the capacity and personal prestige and influence of the military and political leaders. Attitudes based on experience, professional knowledge, but also on valuable scientific prognosis can raise the credibility of military elites, which are not in an equal position in this process.

In any political process, and therefore in the long-term defense planning, political behavior occupies an important role. In this regard, Blakvel (2003) argues that "political behavior can and must be scientifically studied, especially by quantitative method", in order to plan future actions based on empirical data (p.44.).That is why, a great attention is given to researching global strategic trends for a longer period, by modern armies of the world. A typical example is the research conducted by the British Ministry of Defence. The results of a recent survey which aimed to provide a strategic context to identify long-term threats and opportunities by 2045, was published the fifth edition of the publication Global strategic trend GST (2014). It was pointed out that the aim of their research was not to predict the future. Instead, it describes those phenomena that can have a significant impact on the future and combines different perspectives to create multiple image possible outcomes. "Global Strategic Trends (GST) describe a broader strategic context aimed at those in the Ministry of Defence (MoD), the Government and beyond, who are involved in the development of long-term plans, policies and capabilities. Without this strategic context, there is a risk that planners, policy makers and creators of the development capabilities assume the future based on already preconceived thoughts and assumptions. "(P.3.). Of course, an important role in this process is communication with the public and the timely and adequate information, and information operations doctrine in which Great Britain has a hundred years of experience. Principles and concrete examples of British news operations described in his work Richard L. (2015) with special end view on the current experiment Rainbow in the dark (41-66).

In the view of Termiz (2014) "security activities are specific activities, so their research also necessarily occur as research into specific conditions, and the methodology of their research as a special methodology applied" (p.96.). Results of the prognostic research should be considered in each of the preceding phase of long-term planning, but their significance is particularly highlighted in certain phases. In our further work, we will make special reference to only those phases where scientific prognosis has highlighted character.

5. PREDICTION OF CHANGES IN THE SECURITY ENVIRONMENT

Consideration of policy approaches to their own and other countries, the analysis of the current security environment, as well as historical trends and events must precede the quality prediction of possible changes in the security environment. Basic entering at this phase are the analysis of national interests and objectives, strategy of national security, the defence strategy of potential opponents and allies, their future role, the role of international organizations and alliances and more.

The first step involves a detailed study of the basic documents relating to national security, defence and foreign affairs to determine the political intentions of other countries, as well as the political implications on the defence system. Thus, the results of this phase are forecasts of the political ambitions of neighboring countries and the important countries on the world political scene, as well as their political priorities in the field of defence. We are often faced with the fact that in the available documents of many countries all the security and defense objectives and interests are not explicitly formulated, and the key role of prognostic research at this stage is that they are timely detected.

By this, we can identify national interests, which can be influenced by future events, developments and trends in the security environment.

In order to reach a good prognosis, it is necessary to carry out the four important steps:

- collect the necessary data,
- analysis, sorting and processing of data,
- identification of opportunities, risks and threats and
- prognosis of the required number of strategic situations.

In the first step, the data needed for further work on the prognosis of the future environment is collected. Of particular importance are the data relating to future security, political, economic and social issues, as well as the technological development and the environment. Data sources can be different, from the intelligence services to scientific institutions.

The second step requires a good understanding of scientific methodology, analytical knowledge and experience. To obtain reliable results. Subjects of the development of the defence system can use the services of methodologists and other scientists trained in the application of scientific methods in the fields of politics, economy, technology, defence, security, etc.

In the third step, the results of the analysis are used for the consideration of the future impact of environment on the national interests and objectives. At this stage, the aim is to identify future opportunities, but also risks and threats to national interests and objectives.

The final step in forecasting future security environment is the development of an adequate number of possible strategic situations which represent future developments of events in various fields.

6. THE ROLE OF PROGNOSTIC RESEARCH IN DEVELOPING OPTIONS AND SELECTING SOLUTIONS

The development of options and choice of solutions represent some of the last phases of a long-term development planning of the defence system in which prognostic researchs can achieve an extremely important role. At this phase, we determine the possible approaches for overcoming or reducing the difference between the required and existing abilities that have been identified in the previous phase of the planning process. Therefore, it is extremely important that in previous phases, scientific prognosis has produced good results. If the prognosis were incorrect, it is likely that they will develop a wrong option, e some of the bad solutions can be chosen, which can have unforeseeable consequences for the system of defence of the country.

Basic enters in this phase of the planning process are the differences in capabilities and available resources, while the basic result of the realization of this phase is a list of potential options based on resources. The results of prognostic research at this phase should answer the question of whether changes in capacity factors (doctrine, organization, training, leadership, human resources, etc.) and / or operating concepts can overcome the established difference in the ability of the existing defence system that needs to be achieved in order to provide defence system ability respond to future threats.

The development of more realistic options is an essential step in overcoming the differences between existing and required abilities. One of the most complex issues in the course of scientific prognosis is obtaining the realistic costs, particularly for options that include a long-term period of time or involving development of new abilities. Prognosis of costs should be precise and comprehensive in order to enable comparison of different options and a selection of the most suitable.

The result of the previous phase of long-term development of the defence system is a list of options for resolving differences between existing and required abilities. The purpose of the last phase of the process of long-term development planning is the selection of an appropriate solution. The first step in this phase involves consideration of options for every difference in abilities. If the options do not allow overcoming the differences, defence planners will describe the potential risk. Options that allow overcoming the differences will be tested in order to choose the one that is optimal. The test will be a combination of cost-benefit analysis and risk analysis. Finally, the selected option for overcoming the differences in capabilities and the risks will be included in long-term planning documents relating to the development of the defence system.

7. CONCLUSION

In practice, it happens very often that short-term views dominate, when considering issues related to defence, They are based on a superficial analysis of the challenges and threats to security, the costs of the defence system, and the superficial assessments of subjects currently in the role of decision makers. In such situations, the argument that if there is no risk, there is no need to invest in defense, dominates. However, experience shows that the strategic situation could change relatively quickly while much more time and resources are needed to build defense capabilities. In order to avoid this, it is essential that the development of the defence system is based on long-term planning and long-term planning should be based on quality planned and implemented prognostic research.

Given that the activities of the security system, and thus the defence system as its important subsystem, are preventing and disabling systematic and permanent threat to individuals and society, we agree with the opinion of Professor Termiz that defence activity essentially consists of two major components: research and taking measures of intervention.

We particularly emphasize the importance of scientific research because the facts speak in favour of that many long-term development plans were not realized, respectively they were not of much use for defence systems in a changing and uncertain environment, just because that during the planning process the scientific method was not applied and the results of the planning were not based on the principles of the methodology of scientific research.

Long-term planning of development of the defence system, based on scientific prediction of future risks, increase the likelihood of achieving political and defense objectives. Also, long-term planning based on prognostic research improves understanding of the strengths and weaknesses of the defence system to operate in a changing environment. By using valid scientific prognosis, we create conditions for careful consideration of the abilities of the defence system and the allocation of resources, which is based on the priorities. Also, long-term planning establishes a connection with the long-term financial and political challenges.

Such an approach provides the State an opportunity of dealing with all security needs and problems in a coherent, comprehensive and reliable way. The development of the defense system based on prognostic research represents a pledge for the future in an ever changing world, because it is the long-term investment that we need to keep alive our freedom of action, to defend our values and to preserve our liberties

All these reasons indicate the need of each country to develop its long-term development planning model defense system that is tailored to its needs. Important subject of this model are certainly people in the vocation and science, who are specialized for solving technical and scientific problems. It is therefore important that in this complex process, in addition to participation of the political and military leaders, there is also participation of the experts in certain fields, and the group of experts. Also there is need for participation of the entire institutes that are dedicated to the realization of the defence studies but also other institutes that perform all other scientific studies that can and are used for defense and security. This prevents the political elite to make important political decisions alone and without access to the findings of science and vocation, which may be fatal, both for the security of states and regions, and for the security of all humanity. Only valid prognostic based on the application of the scientific method ensures the proper development of the system of defense and security and the achievement of its important social role.

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ON METHODOLOGICAL APPROACHES TO DEFENCE SECTOR REFORM

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Abstract: *Public sector reform became a permanent challenge in many countries and subject of studies for many researchers. At the same time it attracts attention of business companies who have interest in doing business with the public sector. Specific part of the public sector is the defence branch -that is Ministry of Defence and Armed Forces. Reforming organizations that are large, specific, complex and hierarchically organized as the military, is a big challenge. Besides defence reform is clearly a unique process –specific for each country and each epoch, it could be very useful to know experiences of different countries. This paper presents few examples of defence reform efforts. From the research point of view, one of the most interesting findings are similarities in problems identified in different armed forces, as well as a general methodological approach applied in the reform process..*

Keywords*: defence, military, organization, reform, transformation, management*

1. INTRODUCTION

Reforms in public sector administration are an actual issue in many countries today. In spite of the opinion that the problem of public sector reforms exists mainly in transitional societies, it is present in developed and stable countries, as well. Due to the size, structure and associated functions to the public sector organization, reform plans and actions are characterized by complexity, uncertainty and continuance. Reforms in public sector produce and induce many direct and indirect consequences (financial, economic, social, political, psychological, technical, organizational, etc), and that is additional reason for comprehensive designing, balanced planning, sensitive corrections and agile remaining on the main course of the reform.

This paper deals with approaches to the reform process in the defence branch (ministry of defence and armed forces) as a part of the public sector. Lessons learned and experience gained from the reforms of the defence sector and military transformations process in foreign countries (like those presented by Catignani (2004), Leslie (2011), Peever (2014), and domestic as well) could be helpful for future reform's endeavors as well as for other public sector branches. In the military context, transparency and the exchange of knowledge and experiences at the international level have become usual activity and applied even by the biggest ones and considered as the most advanced military organizations. It is particularly the case regarding some specific reform questions that modern militaries face today, like issues on the following topics: reserve forces, Keene (2015), Sedivy (2013); wartime army structure and composition, Petrovic (2007); funding questions, Alock (2014); motivation for military service, Taylor et all (2015), Wiggins et all (2014), Nikolic (2015); suspension of conscription system Szvircsev (2014), and so on.

Due to characteristics of security sector and defence branch particularly, special care is added to the comprehensive defence reforms. The term "Defence reform" is related to all reform process and activities undertaken towards changing the two essential components: (1) structure, functions and processes inside the ministry of defence administration including all its underling organizations and units; and (2) all changes of the military units and commands in the armed forces, including changes of missions, doctrines. From the aspect of the Management Science, there are many possibilities and challenging opportunities for inventive application and use of different methods and tools from the organizational sciences. Problem structuring methods is useful for setting clear perception of actual situation as well as for creating reasonable vision of the desired end state. Strategic decision making contributes to producing sound and realistic strategic documents with clear and sustainable relations among fundamental ends (goals), available means (resources) and possible ways (methods). Application of multi-criteria decision making methods and other sub-disciplines of the Operational Research are almost regular in considering organizational challenges in the military branch and defence business. Problem of creating appropriate organizational design, Anand and Daft (2007), continues to occupy researchers and managers in the field of defence and military issues besides other branches in the ongoing epoch, Miles et all (2010).

2. APPROACHES TO DEFENCE REFORM

It could be identified more different methodological approaches to the defence reform process. Reforms itself could be caused by different sources: political decisions, changes in strategic environment, changes in orientation in external politics, alliances, social changes, canceling conscription, economical-financial pressure, technological change-modernization, downsizing, reduction, etc.). Organizational entity that could be tasked to prepare and conduct transformational change in defence organization (perpetrator) could be composed in various ways: interdepartmental working groups, transformation teams or commands, external agent-consultation companies, external top-managers, etc. Fields of change can be different: security perceptions and reevaluations; budgeting system reform; transformation of organizational structure; advancement for military capabilities; improvements of acquisitions processes, etc. Here, it will be presented three examples of methodological approach related to the very beginning of the reform that is, determining the entity those who will create the reform agenda:

- Reform entity is an interdepartmental working group composed from representatives of internal organizational units from the Ministry of Defence (MoD) and armed forces, but possibly open to external experts.
- Main reform entity is an internal organization of the Ministry of Defence or of the armed forces which already deals with a long term organizational development (known also as Transformation command, in some armed forces).
- Reform entity is some external organization or a team of external experts (external means not MoD and not armed forces members).

2.1. Interdepartmental Teams in Defence Reform

Methodological approach marked here as “Interdepartmental Teams in Defence Reform” means that some interdepartmental groups are formed and tasked to analyze situations and make proposals for changes. Members of the teams come from different departments of the ministry of defence (MoD) as well as form different military units including the highest commands.

In the Serbian case there has been created “Defence Reform Group Serbia-NATO” (DRG) in 2006, with a general mission to provide advice and assistance to the state’s authorities towards implementation of modern reforms in a defence sector. Use of “DRG” mechanism was additionally supported after December 2006 when Serbia has joined the Partnership for Peace programme (PfP). DRG was established with intention to contribute to the following goals: to support and accelerate then ongoing reform of the military forces; to advance and promote cooperation and communication among departments; to stimulate project-oriented approach in reform; to effectively use foreign experiences; and to prepare participation in the “Partnership for Peace” program. DRG’s teams were complex and layered, with international and political leaders at the top of the group structure. At the lower level there were numerous specialized interdepartmental working groups entitled as “Working Tables” (WT) which were dedicated to some narrow problems already identified.

The Defence Reform Group in 2006 was consisted of 16 different working teams formed on temporary bases with participants from different departments and organizations from MoD and military units and commands. Those teams were called “Working Tables” (ISAC Fund, 2006) and each of them had gotten titles and numerical codes, as it is presented in Table 1, column two. In order to have better insight in the general orientation of each of those 16 working teams, column one in Table 1 presents general subjects to whom some specific working team is dedicated.

Table 1: Working Tables in DRG Serbia-NATO 2006

Topic	Working Table
Defence policy	WT-6 -“Drafting a Presentation document for PFP”
	WT-7 -“Development of system for effective and efficient defence planning”
	WT-1 -“Development of procedures for defence cost and analysis”
Intelligence and security	WT-13 -“Democratic control and reform of intelligence and security system”
Human resources management	WT-2 -“Development of system for human resources management”
	WT-8 -“Making a project of military professionalization”
Military education and training	WT-3 -“Reform of military education system”
	WT-14 -“Reform of the military training system”
Capability	WT-12 -“Development of mid-term and long-term equipping plans”

development	WT-15 -“Development of command and communication systems”
	WT-16 -“Development of system for emergency management”
Civil-military issues and public relations	WT-4 -“Development of public relation strategy”
	WT-9 -“Development of civil-military cooperation”
Defence infrastructure	WT-5 -“Military bases conversion”
	WT-10 -“Development a model for housing issues”
	WT-11 -“Conversion of military material”

Main topics of all “Working Tables” were very different and covered very broad scope of issues and problems: from public relation strategy, across military training and education, towards human resources management and military infrastructure conversion. Output results and achievements of all groups had been different and specific according to the difference of the main subjects. Similarities among working groups were mainly of methodological nature: teams were composed in a similar way, with similar tasks and mandates, with almost the same main deadlines and with similar general structure of the report which had to be offered to higher authorities. This kind of approach to the reform process contributed without a doubt that decision making at the strategic level became more informed. Also, DRG contribute to the exchange of ideas, information, customs and other, among different departments with accompanying relaxation spirit, which is immanent to the horizontal level of hierarchies.

Besides DRG type of working teams, there are other kinds of working groups as well. Those are formed on a temporary base and dedicated to some specific issues, like: managing emergency situation, drafting proposals for new normative and strategic documents, issues connected to the international military and defence cooperation in some specific fields (European integration, professional military education, emergency management, gender issues, organizational development, terminology unification, standardization, language training, interoperability issues, etc). As military reforms and transformations are almost a constant in many countries, so the research efforts are always actual (Clarke, 2013) and similar modes of engagement are possible in the future. Due to the specificity of the defence and the military issues compared to other public services, there are a lot of opportunities for exchange of experience at an international level. Particularly in regard of transformational process flow, empowered organizational authorities that lead the change, chose among approaches towards organizational transformation, issues of resourcing, measuring of the change progress, etc.

2.2. Internal Transformation Team Approach

Internal transformation team approach is the case when leading members of the team come from an internal organizational entity that is dedicated to transformational and organizational developments of the MoD and armed forces. In favor of this approach is a logical expectation that professionals that already have worked for MoD and armed forces for a respective number of years and having respectable experience gained from different appointments will have enough knowledge about missions, visions, organizational structures, problems, limitations, possibilities and opportunities for MoD and armed forces. Also, it is expected that those “insiders” will have a wide perspective of possible options for organizational change.

On the other side, weakness of this approach (Internal transformation team) in general, could be: unbalanced approach to reform changes (preference towards one organizational unit against other ones); induced resistance to change efforts offered by other organizations; lack of authoritative power, questionable transparency; possibility to be impacted by superior command; lack of the sense of the role and place of the organization in a wider context of the state and society; etc. This approach has huge potential for both general cases: positive and negative. On one hand, referential knowledge about the system under study may offer excellent proposals for relevant changes. On the other hand, fear of consequences and unfair over-control from superiors might produce only false picture of the current state (which has to be, of course, almost ideal) and illusive proposals for “transformation”.

This approach could be ilustrated by the recent efforts in Canadian defence structures towards undertaking reform of the military and defence system. In the Canadian case there were more transformation and reform cycles in the longer period. Here it will be presented, in short, only the last one known as the „Report on Transfromation 2011“. Transformation team for Canadian Forces (CF) and the Department of National Defence (DND) was established in 2010 and was consisted of military and civilian professionals and was lead by highly ranked general Andrew Leslie (a respected and experienced soldier with impresive professional biography). The team worked hard and in the summer of 2011 they released a comprehensive, evidence based detailed analysis of the current state and main problems as well as detailed proposal for transformation of the CF and DND. Their proposal actally consisted of 43 detailed suggestions and measures that sholud be taken in order to conduct a real transformation. However, it seems that this report on transformation was too radical for the taste of some stakeholders, and somehow, by the end of the year (2011) the leader of the transformation team has been retired.

Findings of the Transformation Report showed that defence budget has a growth of 51% over the period from 2006 to 2010. Having in mind that was a period of intensive military deployment abroad (Afganistan, Iraq, etc), defence budget enlragement is a logical consequence. However, growth rate was not the same for the whole defence structure institutions. For example, inside a total defence personnel growth of 18%, distribution of personnel growth for different categories was variabile (and surprising):

- Regular force grow was 11%, reserve force growth was 23%, while growth of civilians in defence organization was even 33%.
- Operational units growth was 10%, senior executive growth was 25%, while Headquartiers and Static jobs growth was even 40%.

Those numbers ilustrate a surprising direction of organizational growth for a defence organization that is put in a state of a high level of military engagement at a distant area and hostile environment. Main conclusion of the report was that „teets“ (meaning units and resources for engagement at the operational level –at the area of engagement) have to be strenghten instead of strenghting the „tail“ (backward organizations and supporting elements of the defence organization).

Sharp, but clear and effective approach that was profiled by the Report on Transformation 2011, made an influence on many stkeholders and wider community. Notwithstanding that the leader of the transformation team was retired, it is recognized that serious changes are needed. As a result, in 2013 it was issued a new document related to the transformation issues but under the new name: Defence Renewal Charter. It was a joint institutional product of the Department of National Defence (the same as MoD) and the Canadian Armed Forces, DoD&CAF (2013). In spite of some contraversials and discusions initiated after the issuing this transformational document, later events confirm that many findings of the Report on Transformation 2011 were valid and found its way towards implementation. According to De Kerckhove (2015), in the following years after famous Report (2011), 35% of the Reports' recommendations have been implemented while another 35% are still considered for future implementations and remaining 30% were rejected.

2.3. External Experts Team in Defence Reform

In some cases of the reforms of the national defence system external expertize was used. Under term "external expertize" it is considered engagement of some external (out of the ministries of defence and out of armed forces) resources that have credible and appropriate level and capacity to enable proposals for reforms of defence system. Entity that will provide external expertize may appear in different forms:

- Expert teams formed on temporary base and consisting of outstanding professionals in their fields (managers, businessmen, university professors, consultants, prominent public servants, statesmen, etc.). They may be domestic, international or mixed. Usually, teams are interdisciplinary.
- External expert support could be provided as well, as a contractual service. In this case, Ministry of defence does hire by contract a consultation agency in order to make a professional and an unbiased plan for performing defence reform.

Each of these approaches to obtaining external expertize for defence reform have pro and con aspects. Which way is better often depends on many factors. Above all, main problems that external team may be faced with are the following: a referential knowledge about system under study (Ministry of defence and the armed forces), its purpose, mandate, organizational structure, operational and functional procedures, as well as strengths and weakness, bottlenecks, etc. However, external experts' team has to be clearly informed about organizational strategical vision and what is a desired state in a prospective future, as well as what are available resources, limitations and time to achieve desired end state.

The main contemporary document for the defence sector reform in Australia was released by the Department of Defence (DoD) on April 2015. This document was commissioned in August 2014, when Minister of Defence has engaged a team of external experts (called the Review Team). Those experts were already well-known and proved in their fields of expertise and willing to make their contribution to the public service. Their task was to scan the situation in defence sector, to identify problems and make proposals for solutions in order to answer the main question: is the Defence ready to fit its mission defined by its strategy in an efficient way. The Review Team has done its task and offered a document entitled "The First Principle Review: Creating One Defence".

The members of the Review Team were all recognized experts and managers with very respective experience and achievements in different organizations and branches. Chairman of the team was David

Peever, former managing director of famous multinational mining company Rio Tinto and has a number of other high appointments in business, industry, academia and society. The team members were also respective experts: Peter Leahy is former Army general with 37-year military career, and Director of the University of Canberra's National Security Institute; Jim McDowell has been Deputy Chair of Australian Nuclear Science & Technology Organization, and Chief Executive in a defence industry company (famous BAE Systems); Robert Hill was a minister in a few mandates in different branches including DoD, and barrister and solicitor before entering politics; Lindsay Tanner is a professor at Victoria University, special adviser in a financial consultancy company, former minister of finance and member of parliament.

This team made extensive work including wide circle of consultation with relevant subjects (parliament, government agencies and departments, military, academia, society, foreign experts, industry and union, and a number of public hearing) for defence issues, and they precisely reported about those consultation in their final document. General findings of the team are expressed through a short list of dominant principles that should be followed by the DoD and ADF in the upcoming reform and future work (Peever, 2014):

- Clear authorities and accountabilities aligned with resources
- Outcome orientation (making results that are required and relevant to the Defence)
- Simplicity (eliminating complicated and unnecessary structures, processes, systems and tools)
- Focus on core business (doing only for itself what no one else can do more effectively and efficiently)
- Professionalism (committed people with right skills in appropriate jobs)
- Timely, constable advice (professional support to decision makers)
- Transparency (honest and open behavior enables insight in what the Defence is doing and why).

Besides above general principles and other findings, the team has offered a list of a seventy detailed and more concrete proposals for making the reform. Also, this transformation document offered a data about growth of senior leadership, similarly as in the Canadian case, but for a different time frame (it was compared following years: 1998 and 2014). The document states that the growth of a senior military leadership including generals was 75-80%, while all other (lower) ranks growth was only 3%. Level of growth of a senior civilians in defence sector was 86-108%, while all other lower positioned civilian growth was 18%. In spite of evident domination of the growth in senior positions, the document does not prefere quatification in advance for „Teeth-to-Tail“ ratio, but suggests carefull analysis. It will be interesting to follow future reports about the level of realization of a given transformational proposal as well as about associated implementation problems and obstacles.

3. CONCLUSION

Defence sector reforms are a specific but an important part of the public sector reforms in general. Experiences from reforms of military organization as a highly organized and very complex entity may be useful in considering reform efforts in other branches of public sector. Also, reform experiences and lessons learned from different countries could be very useful in profiling our own reform process. According to up-to-date findings from defence reforms efforts in presented countries, it could be concluded that the sharp cuts and huge changes in a short time are not probable to be completely successful. But, success in defence reform could be expected in a longer period with detailed, comprehensive and resilient planning and engagement of an dedicated reform team with associated mandate for doing reform.

Future research will be related on analyzing reports about ongoing defence reforms in presented countries, as well as in some other states. Besides the issues on reform content and reform team composition, of particular research importance will be methodological questions and issues related to gathering, analyzing and using of data of different kind and types but related to defence and military organization.

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STRATEGIC PERFORMANCE MANAGEMENT SYSTEM IN PUBLIC SECTOR: THE ROLE OF KNOWLEDGE MANAGEMENT

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Abstract: *The aim of this paper is to argue the introduction of knowledge management as a building pillar for strategic performance management in Serbian public administration. First, the practice of developed countries already confirmed that strategic performance management system is a key for increasing efficiency and effectiveness of public sector organizations. This paper provides the theoretical background for considering the importance of establishing a strategic performance management system to enable public sector bodies to move forward with the reform process. Second, the knowledge management is confirmed to be a crucial element of organizations capability to achieve high organizational performances. The success of the concept in the private sector led to its introduction in public sector organizations. This paper provides a rationale for considering the knowledge management as an integral part of the strategic performance management system. Finally, the paper recommends the further research in this field and promotion of such idea among both scholars and practitioners.*

Key words: *knowledge management, performance management, strategic management, management system, public sector*

1. INTRODUCTION

Strategic performance management system is a key for increasing efficiency and effectiveness of public sector organizations (Mitrović, Todorović, & Bjelica, 2013). Even though there is no widely accepted definition, the most authors define it as an umbrella concept that provides integrated application of different methodologies including Strategic Management, Performance Management, Knowledge Management, Total Quality Management, Six Sigma, etc.

The first driver for the introduction of performance-based management was the wave of reforms in a public administration known as New Public Management (NPM). The performance-based management was introduced in the 1990s as an NPM initiative. It represented result-based management practice and one of the basic doctrines of NPM. As a concept, the NPM represented a wide range of reform programs and the step forward from narrow debates that were normal in the area of public policy administration and management most of the 20th century (Hood, 1991). It emerged in the 1980s in Great Britain during the mandate of Prime Minister Margaret Thatcher. Even though the idea already existed, Margaret Thatcher was the first to successfully made culture, size and cost of the British public service as a political issue. After that, the changes were made in the policy of public sector in the field of organization and methods, public services and employment, expenditure planning and financial management, audit and evaluation, and supply (Brazelay, 2001) (Mitrović, Todorović, & Bjelica, 2013). Further, the issue of public sector management was high on the agenda of the Conservative government too. Agenda included initiatives such as the *“Next Step Initiative”, “Citizen Charter Initiative”*, *„Competing for Quality“*, *„Resource Accounting and Budgeting“* and *„Private Finance Initiative“* (Brazelay, 2001). Similar initiatives emerged in the United States. One of the most significance were *“National Performance Review”* and its transformation in the Law *“Government Performance and Results Act”* (Brazelay, 2001). During this period, the issue of public sector management has become a very popular area of policy in many other countries, such as New Zealand, Australia, Sweden, Canada, etc. As a result of these changes in developed countries all around the world, the Organization for Economic Cooperation and Development (OECD) established Public Management Committee and Secretariat (PUMA) to help its members to address the challenges. Following the path, the developing countries started with an application of the wide-ranging public administration reforms. The NPM provided standardized, Western approach to public administration reform with the principles such as citizen-centric governments, decentralization, the split between policy making and policy implementation, etc.

The second driver for the introduction of performance-based management as a part of the public administration reform process in developing countries were Structural adjustment reforms mainly initiated by International Financial Institutions. Structural adjustment programs were targeting cost reduction of the government. Finally, the third driver was the transition from central planning to market economy what initiated the change in orientation of the system of public administration.

All three drivers influenced the public administration reform in Serbia. The following chapter provides the background for public administration reform and the roots of establishing strategic performance system in Serbian public sector. Also, it provides the rationale for considering the knowledge management as a next step for improving the performance of Serbian public sector.

2. PUBLIC ADMINISTRATION REFORM AND THE STRATEGIC PERFORMANCE MANAGEMENT SYSTEM IN SERBIA

The reform process of Serbian public administration started in 2004. The main objectives that Government of Serbia (GOS) planned to achieve through the reform was the creation of democratic state and citizen-centric public administration. The reform process started with the adoption of two main documents The Public Administration Reform Strategy (PAR Strategy) and an Action Plan (AP) for implementation of the PAR Strategy. With these documents, GOS set a goal to build efficient, responsive, transparent and accountable public administration. On the other hand, PAR was developed as a very comprehensive framework, that included regulatory reform, public finance reform, but also targeted reforms in specific areas. With the aim to harmonize Serbian public administration with the principles of the European public administration space the five principles of decentralization, de-politicizication, professionalization, rationalization and modernization were adopted.

Since 2004, a wide range of actions has been undertaken in different public sector institutions, including ministries, public agencies, special organizations, local self-governments and public companies. The aim of the whole range of actions was to provide efficient management and efficient state functioning at all management levels. For example, in the field of planning, budgeting, monitoring and reporting, the process started in 2005 when the Government of Serbia launched the project *Joint Project - Towards the More Effective Implementation of Reforms: Improving Planning, Budgeting, Monitoring, and Reporting.* The aim was to improve the efficiency and the effectiveness of the central public administration.

The implementation of extension projects followed from 2007-2012 under different names and financed by different donors, but with the same objectives. As a result, the policy-making and co-ordination system was improved. The legal framework was revised including a revised Rules of Procedure, Regulation on the General Secretariat of the Government, and Regulation on the Cabinet of the Prime Minister. Further, there were legally established committees of ministers to discuss items before their reaching the government session, all supported by the General Secretariat of the Government.

The new Rules of Procedure enabled the introduction of the government’s collective responsibility, requiring that in all public communications members of the government should support its decisions regardless of their views or of how they voted in the government sessions (Obradović, Mihić, & Mitrović, 2011). Also, it provided with basic requirements for policy preparation in ministries, including appropriate procedures for inter-ministerial consultations, public debate, certification of harmonization with the *acqui*s, assessment of alternative approaches, assessment of financial consequences, and a full regulatory impact assessment (RIA) (Obradović, Mihić, & Mitrović, 2011). A new Budget System Law introduced a more policy-driven budget process and the middle term planning methodology as a key element of policy and budget planning. From 2013-2015, major efforts were put in the implementation of budget programming at central government level, but also on local self-government level.

To summarize from 2005-2015 in the field of planning, budgeting, monitoring and reporting, reform process included building and developing capacities firstly for annual planning, upgrading to middle-term planning and program budgeting. This included building capacities for result based management by the introduction of elements of strategic performance management such as setting strategic direction within budget plans and the introduction of performance measures. Also, the reform process included building the accountability system and monitoring and reporting system. But to close the management loop the reform process need to build capacities to use performance information and knowledge to drive the improvement. This paper advocates that knowledge management is the missing piece of the strategic performance management in public sector organizations.

The rationale is that all high-performance organizations are in need for effective strategic performance management systems since it is the only way that enables them to remain high-performance organizations. The building pillars of such system are strategic planning, performance measurement, accountability system and knowledge management system (Mitrovic, Todorovic, & Bjelica, 2015). Further, the knowledge management system has a significant impact on improving the performance of the organization (Ahn & Chang, 2004; Al Mashari, Zairi, & AlAthari 2002; Choi Poon, & Davis, 2008; Fugate, Stank, & Mentzer, 2009; Syed-Ikhsan & Rowland, 2004). Since the Serbian public sector is under pressure to improve performance the knowledge management system could be the solution to the problem. Establishing a knowledge management system requires the definition of the process of knowledge management, the necessary data, tools, and organization. This knowledge management system should integrate monitoring and reporting system to include data collection and the process of analyzing, reviewing and reporting, but also to use the information to create the knowledge and use it to improve performance. In the context of Serbia, the big challenge is to understand what the knowledge management is and experiences of developed countries to define the possible role in the strategic performance management system in Serbian public sector. The following chapters provide the theoretical considerations of the concept of knowledge management and the application of knowledge management in public sector mostly in developed countries.

3. THE CONCEPT OF KNOWLEDGE MANAGEMENT

The contemporary theory of management promotes Knowledge management (KM) as prominent and an important management topic in organizations all around the world. Companies that recognize the importance of knowledge management shape their business strategy and appoint chief knowledge officers for knowledge creation, diffusion, and utilization and establish knowledge management systems (Noh, Kim, & Jang, 2014).

In the context of the knowledge-based economy, the concept of knowledge management is a building block of the new integrated value chain where knowledge is both product and resource that enables organizations to achieve success in the struggle with complexity in a highly competitive environment. Further, the competitive advantage is not guaranteed with the process of generating knowledge, but rather with knowledge value as a factor that represents the potential of an organization to create additional value (Tisen, Andriesen, & Depre, 2006).

The importance of knowledge is recognized by the various scholars who perceive the need for managing the knowledge as an ultimatum of contemporary business (Riege & Lindsay, 2006). For example, the theory of resource-based view highlights the knowledge as the most important strategic resource, and a means to achieve competitive advantage (Pee & Kankanhalli, 2015). Peter Drucker states that knowledge is a basic resource in the post-capitalist society, where capital, natural resources and labor take a second place (Drucker, 1993). However, the knowledge as a resource gets its practical value only with the implementation of knowledge management system, which transforms knowledge into an added value and as a result enables improving organizational performance (Drucker, 1993) (Nonaka & Takeuchi, 1995).

The idea of knowledge as the value of the organization is articulated in the early 1980s when organizations started to use expert systems. However, the first discussions about the role of knowledge in shaping the organizations future as well as the term «knowledge worker» is defined back in the 1950s in Peter Drucker's work *"The Landmarks of Tomorrow"* (Drucker, 1954). The very own term «knowledge managment» originated in the 1980s, characterizing the way that value is created for customers with the unique offer of products and services (Porter, 1985). Besides authors like Drucker, Porter, Nonaka and Takeuchi-a, the outstanding contribution to the development of the doctrine of knowledge management had Peter Senge by developing the theory of "learning organization" (Senge, 1990).

However, the momentum of development of the knowledge management theory was in the early 1990s. Firstly in the corporate world, and the decade later the interest was gradually transferred to public sector organizations. The complexity of the environment of public sector organizations and the role they have indicated the need for the implementation of interdisciplinary business model based on knowledge, which will enable them to stand at the forefront of changes that shape society, not chasing for the changes that the corporate world imposes.

Knowledge management is a complex concept. There were various attempts of researchers to define the knowledge management and still there are many different definitions, and each of them is widely accepted. Fore example, Nicolas (2004) describes KM as a systematic process of creating, acquiring, disseminating, leveraging and using knowledge to achieve competitive advantage. Similarly, the knowledge could be defined in various ways. One of the widely accepted definitions is by Davenport and Prusak (2000): *"Knowledge is a combination of experiences, values, contextual information and expert insights that enable organizations to evaluate and absorb new experiences and information."* Further, there are two types of knowledge, explicit and tacit. Tacit knowledge is difficult to articulate or communicate, and typically resides in a human mind, it is deeply rooted in action, commitment, and involvement in a particular context (Nonaka, 1994). Explicit knowledge refers to knowledge that has been captured in some tangible forms, and the knowledge that is transmittable in formal, systematic language (Nonaka, 1994). The knowledge is created via conversion between tacit and explicit knowledge, through processes of combination, internalization, socialization, and externalization.

To utilize created knowledge, organizations need to build knowledge capabilities that will enable them to achieve superior performances and competitive advantage. The knowledge capabilities are based on the level of development of knowledge infrastructure that some authors refer as infrastructure capabilities (Wu and Hu, 2012) or knowledge enablers (Noh, Kim, and Jang, 2014). Regardless the term, this infrastructure refers to technology, structure, and culture (Gold, Malhotra, and Segars, 2001) and people. The other element of knowledge capabilities of organizations is knowledge process. The four primary organizational knowledge management processes: knowledge creation, knowledge storage and retrieval, knowledge distribution, and knowledge application (Alavi & Leidner, 2001).

Various researchers investigated the relationship between knowledge infrastructure, knowledge management process and performances of organizations (Adeoti, 2002) (Noh, Kim, and Jang, 2014) (Pee and Kankanhalli, 2015). The authors agreed that knowledge management capabilities are determinant of organizations performance (Murray, 2002) (Marques and Simon, 2006) (Choi, Poon, and Davis, 2008) (Akdere, 2009) (Ho, 2009) (Gholami, Asli, NazariShirkouhi, and Noruzy, 2013) (Todorovic, Petrovic, Mihic et. al, 2015). On the other hand, the organizations need a systematic approach to knowledge management to enable full use of created knowledge. The knowledge management system has to be integrated as a building pillar of the management system.

Successful application of knowledge management concept in private sector organizations led to increasing interest in public sector organizations. The interests came with pursuing greater efficiency and effectiveness in public sector institutions at all levels including the central level (ministries, public agencies, and special organizations), local self-government institutions and public companies.

4. KNOWLEDGE MANAGEMENT IN PUBLIC SECTOR

Knowledge management in public sector organizations is not a new idea. However, many factors have influenced to become an important topic of discussion and the topic of numerous discussions. Globalization, the impacts of the information society, demographic changes and a constant high level of unemployment have created unprecedented pressure to improve the competitiveness of the public sector organizations (Sotirakou & Zeppou, 2004). The pressure is even higher with the role that public sector organizations have in the creation of the necessary conditions and infrastructure for achieving competitiveness and efficiency of the private sector at national, regional and local level (Hartley & Skelcher, 2008). With the increasing importance of knowledge as a source of competitive advantage and the critical resource used to create value, public sector organizations are beginning to pay more attention to the implementation of strategies, policies, and programs for the knowledge management (King & Zeithaml, 2003).

The wave of reforms that started in the 1980s made significant changes in the way public sector organizations were functioning before. The pressure was even higher when the new stream of analysis what public administration do and how does it, started back in the 1990s. In the context of modernization running the government as an enterprise become imperative (Sotirakou & Zeppou, 2004). And public sector organizations adopted the new principles of management such as efficiency, effectiveness, economy, transparency, and accountability (Flynn, 2005). At the same time, the public administration institutions recognized the benefits of knowledge management practice in improving efficiency and effectiveness (Yao, Kam, & Chan, 2007) (Riege & Lindsay, 2006) (McAdams & Reid, 2001). For example, connecting the silos of information across different level of the state administration ensured the improvement of the efficiency and effectiveness of the process of public services provision (Riege & Lindsay, 2006). Similarly, improving accountability through the faster decision-making process and solving the problems enabled access to integrated, transparent information beyond organizational boundaries (Riege & Lindsay, 2006).

Further, the reform initiated the promotion of service design and the citizen-customer orientation (Flynn, 2005). That created the need for organizations to improve the quality of service (McAdams & Reid, 2001), what was done through constantly learning and innovating to satisfy the requirements of end-users, but also the other levels of government, various stakeholders and complex inter-organizational structures (Rashman, Withers, & Hartley, 2009). Furthermore, the NPM has promoted collaboration, arguing that it is needed in the service area as well as in the area of policy-making (Flynn, 2005). With public sector organizations increasingly use information technology for collaboration, there was an increasing need to develop the capacity of organizations to support these processes (Pee & Kankanhalli, 2015). One of the creations for the improvement of collaboration were so-called "public sector knowledge networks".

These networks emerged with the implementation of advanced networking technologies and the development of e-government, representing socio-technological systems in which the human, organizational and institutional factors exist in interdependent connection with processes, software and other information technology (Dawes, Cresswell, & Prado, 2009). Depending on the function that should be carried out, the focus of the network is to provide a solution to the problem or to provide the support to the certain processes by creating system capacities to share knowledge and information within the organization. Examples of such networks are the national information system for the distribution of geodetic information and expertise, or the network that supports the distribution of data on public health, environmental data, etc.

The concept of knowledge management has been and still is instrumental in modernizing the public sector. Over the past two decades, it was present in the different parts of the public sector and influenced the changes that have taken place over this period. In these circumstances, the strategic knowledge management becomes the key to the success of the transformation process of public sector organizations (Sotirakou & Zeppou, 2004) (Edge, 2005). At the same time, the knowledge management was defined as an eclectic body of knowledge that includes knowledge management in a systematic manner, including all kinds of knowledge within all levels and types of organizations (McAdams & Reid, 2001).

Not only that the knowledge is necessary for transformation, but it is also central to policy making and public service delivery (Blackman, Kennedy, Burford, & Ferguson, 2013) (Kim & Lee, 2006). Both politicians and civil servants use knowledge to shape the environment in an attempt to create additional value (Bridgman & Davis, 2004). In the case of public sector organizations, additional value is not profit, but the public value that is in many cases perceived as the way the citizens' needs are satisfied (Moore, 1995). Regarding, the public administration has an important role in public policy that will affect the successful creation of value for the whole community (Riege & Lindsay, 2006). This responsibility for the delivery of public policies that bring public good increases the importance and role of effective knowledge management in the public administration (Wiig, 2002).

On the other hand, it seems that good public policy occurs when the knowledge owned by the society is effectively transform into public administration knowledge and when the different policy options are in return tested by appropriate transfer of knowledge between the government and the stakeholders, through the publication of policy monitoring and review (Bridgman & Davis, 2004). Knowledge management in the public sector includes the different roles of stakeholders in policy development, through the process of creating knowledge, design skills, knowledge dissemination and application of knowledge (Riege & Lindsay, 2006).

Knowledge management enables organizations to deliver the right information to the right person at the right time, helping organizations to make right decisions. In this process creation and transfer of knowledge becomes a critical factor in competitiveness and organizational success (Chawla & Joshi, 2010). The way the knowledge is managed determines the decisions that will be made and actions to be taken. Therefore, it is clear that improving the quality of the knowledge management process, determines the quality of the decision-making process and resulting activities of the organization (Chawla & Joshi, 2010).

Wiig (2002) proposes following areas of knowledge management application: improving the decision-making process within the public sector organizations, the help to the public to effectively participate in decision-making in the public sector, the construction of a competitive society intellectual capital and competitive development of the workforce, whose competitiveness is based on knowledge.

Further, Pee & Kankanhalli (2015) identifies two trends: the human capital crisis due to downsizing, resignation, or retirement calls for more effective capturing of knowledge to minimize knowledge loss; and increasingly use of information technology in public sector organizations to collaborate with one another. For instance, McAdams & Reid (2001) noticed that knowledge management is especially important in the public sector if we take into account that civil servants have long been identified as key knowledge depository. And the organization itself as a knowledge-based organization (Khan, 2009). The problem is caused by the perception of knowledge as the private property of employees in the public sector (Kim & Lee, 2004). Therefore, one of the critical issues and big challenges, since 2000 was how to retain critical skills in organizations and how to make the transfer of knowledge - especially tacit knowledge – to the younger generation to ensure institutional memory (Aija, 2001).

This increasing interest in the use of knowledge management in the public sector was related improved efficiency, cost reduction and improved quality (McAdams and Reid, 2000). On the other hand, (Wiig, 2002) studied the role of knowledge management in building society’s intellectual capital to improve the effectiveness of public decision-making and situation handling. More recently, (Pee and Kankanhalli, 2015) literature review showed that knowledge management found to be instrumental in policy development, law enforcement, crisis and disaster management, health and human services, and electronic government. There are, however, some challenges associated with successful implementation of knowledge management practice in the public sector. Lastly, public administration tasks and services are being perceived as knowledge-intensive in nature and excelling in KM can potentially enhance public organizations' effectiveness. Further, examples of knowledge management practices include the application in different sectors such as education (Edge, 2005), police (Seba and Rowley, 2010), health sector (Van Beveren, 2003), etc. Efforts also included the research on specific aspects of knowledge management framework such as collaboration and networking (Dawes, Cresswell, and Prado, 2009), organizational learning and knowledge sharing (Rashman, Withers, and Hartley, 2009) (Yao, Kam, and Chan, 2007) (Amayah, 2013), and relation between KM and organizational performance (Pee and Kankanhalli, 2015).

The importance of the topic gains the attention of the OECD, which in 2002 launched an international survey regarding the practice of knowledge management in the ministries, agencies, central governments of OECD countries. The key findings of the survey were following:

- KM ranks high on the management agenda of a good majority of central government organizations across OECD member countries.
- Central government organizations are making concrete efforts to improve their KM practices increasingly using.
- Cultural change is taking place.
- Increased openness, transparency policies, as well as investments in ICTs, have resulted in a perceived increased efficiency, transparency and outward focus.
- The improved competitiveness of the public employer, a more horizontal and less silo type of hierarchical structure, a better make up for the loss of knowledge and the promotion of life-long learning.
- The improvement of KM practices requires time and long-term efforts to change behavior, and to impact on the culture of the organization. Good KM practices are best enhanced by long-term behavior reflecting trust among civil servants, team spirit, and selflessness and best supported by a relatively stable organizational and cultural environment.
- Finally, improved KM practices come with an added cost regarding information overload and wasted time in consultation for a majority of organizations and a dilution of responsibilities for a large minority of organizations.

European Union also initiated the actions regarding knowledge management practice in public sector organizations, recognizing that organizational innovation and the creation of knowledge-empowered e-government will lead to better and more efficient services and empower civil servants in his / her task, supporting the complexity of decision-making and collaboration (Butler, Feller, Pope, Emerson, & Murphy, 2008).

This literature review showed the various roles that knowledge management has in improving the performances of public administration at all levels.

6. CONCLUSION

The paper argued that knowledge management should be integrated as a building pillar for strategic performance management in Serbian public administration. The argumentation is based on experiences of developed countries that strongly suggested that strategic performance management system is a key for increasing efficiency and effectiveness of public sector organizations. This paper provides the theoretical background for considering the importance of establishing a strategic performance management system to enable public sector bodies in Serbia to move forward with the reform process. The rationale is based on three drivers. The first driver for the introduction of performance-based management was the wave of reforms in a public administration known as New Public Management (NPM). The second driver for the introduction of performance-based management as a part of the public administration reform process in developing countries were Structural adjustment reforms mainly initiated by International Financial Institutions. Finally, the third driver was the transition from central planning to market economy what initiated the change in orientation of the system of public administration. As a result from 2005-2015 in the field of planning, budgeting, monitoring and reporting, reform process included building and developing capacities firstly for annual planning, upgrading to middle-term planning and program budgeting. This included building capacities for result based management by the introduction of elements of strategic performance management such as setting strategic direction within budget plans and the introduction of performance measures. Also, the reform process included building the accountability system and monitoring and reporting system. But to close the management loop the reform process need to build capacities to use performance information and knowledge to drive the improvement. To further support the discussion the knowledge management concept, as well as its application in public sector organizations is discussed. The argumentation presented in this paper strongly recommends the further research in this field and asks for full cooperation politicians and scholars.

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THE SIGNIFICANCE OF THE PARADIGM OF GRADUAL EVOLUTION FOR THE DEVELOPMENT OF THE DEFENCE SYSTEM

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Abstract: *The development of the defence system, in a certain way, represents the creation of the system's future that is appropriate to the environmental conditions, and the current and future needs. It is a process or procedure of selection and implementation of optimal goals whose achievement is the best way of dealing with a particular situation. If the state and politics do not develop strong defence, then they have a very limited ability to conduct certain policies. The development of the defense system necessarily is characterized by paradigmatic foundation. Although in the Systems Theory many paradigms are known, regarding the specificity of the defense system and its permanent character, the paradigm of gradual evolution is the most important. The paper gives a description of the importance of paradigm of the gradual evolution for the development of the defence system.*

Keywords*: defence system, development, paradigm, evolution*

1. INTRODUCTION

Modern defence system must be dynamic due to the dynamism of external and internal factors that determine it and must have a permanent feature of the system with regard to the sustainability of the reasons for his constitution.

However, to provide accuracy of the defence system of a certain country at any moment and time, it is necessary for the state to plan and implement its ongoing development. Development, as a term, is nothing more than adding certain positive features to the system, and corresponding changes in the existing situation of a certain system.

Developing power of the system is its ability to survive and develop in a modern society. Survival of the defence system is not treated as a mere possibility of its maintenance, but its ability to respond to current challenges and trends and to achieve the intended function.

Contemporary approaches to the development of the defence system are based on the theory of the system, which enables a comprehensive science-based knowledge of military organizations, as well as specific social entities. As a general systems theory represents scientific discipline that studies the different phenomena in the system, ignoring the specific nature of particular system, there is a need to consider the defence system constantly bearing in mind its specificity. Systems theory explores the formal interconnections between different factors over which manifests appear, and the nature of changes of these interconnections under the influence of external factors and the influence of the environment in general. The focus of the study of the systems are mutual influences of their factors.

As the consequences of bad decisions regarding the development of the defence system could have unforeseeable consequences for the state and society, there can not be place for approaches based on trials and errors and hope that the resultant of this process will be positive. Considering all known paradigms which treat organizational change in general, the paradigm of gradual evolution has the greatest significance for the development of military organizational system.

2. SPECIFICS OF THE DEFENCE SYSTEM AS AN ORGANIZATIONAL SYSTEM

The defence system is a complex organizational system. A precondition of its effective and efficient functioning and the development also, is an appropriate management. In theory, there are numerous attempts to define the concept of managing organizational system in general. This is done in different ways, depending on the point of observation of the problem which needs to be analyzed and depending on the characteristics that want to be highlighted.

From our point, definition offered by Stoner (2000) looks quite acceptable. According to which the management of organizational system is defined as: "the process of planning, organizing, leading and controlling the efforts of all members of the organization and the use of all organizational resources to achieve the objectives of the organization (P. 66). By using this definition, it is possible to identify the key characteristics of this complex process.

We consider planning, organizing, leading and controlling as essential functions of the process of managing the organizational system. Management of the organizational system is aimed at achieving predetermined goals. Managers, as a key drivers of process of managing of the organizational system, decide on the allocation and use of the organizational resources.

However, when it comes to the defence system management, there are certain differences between the defence system management and management of other organizational systems. Objectives and tasks of the defence system are determined by the competent national authorities (Assembly, President, Government, etc.). Managers in the defence system can participate in nomination of its objectives and tasks, but they are solely responsible for their implementation. The purpose of the existence of the defence system is not to make profit but to meet certain state and social needs.

The competent state authorities provide the necessary resources for the realization of the objectives and tasks of the defence system. The jurisdiction of the defence system is purely in efficient use of resources used to achieve the identified goals and objectives. These facts show us that the direction and course of development of the defence system largely depends on the decisions of state authorities. Although all management functions play an important role in ensuring the appropriate functioning of the defence system, the most important one is the function of planning, because it creates the preconditions for the successful implementation of all other functions.

There are certain boundaries between defence system and other social systems. They have a role to prevent many types of interaction between people in the organization and beyond. They are selectively permeable and human, material and information flows that are essential for the normal functioning of organizational systems, freely pass through them.

Hierarchical structure is important trait of the military organizational system. A hierarchical division is not unique to organizations only, but this is the general and common feature of all complex systems. In addition to the hierarchical arrangement that is characteristic for other forms of social organization, subordination constitutes itself as one of the essential specifics of military organizational system.

The defence system is a system of dynamic balance which is very important from the aspect of military organizational system and environment that is not static. For military organizational system's existence under conditions of dynamic environment, it also must be very dynamic and to be able to establish a balance while walking forward, namely to balance in the progressive movement. Feedback mechanism enables defence system to notice the consequences of its activities and activities of the environment and to use these information for appropriate regulation, coordination and adjustments. This mechanism is important for internal-internal relations but also for internal- external relations.

Mechanisms for adaptation and maintenance are very significant and very often they might be in conflict. The mechanism for adaptation's task is to make internal changes on the basis of changes in the environment, in order to adapt the defence system with the external environment, and thus to ensure a dynamic balance. This adjustments cause internal changes that are aimed for a higher level of organization. The mechanism for maintenance's task is to establish an internal balance between organizational subsystems and elements of the defence system. As adaptation mechanism operates continuously and causes changes in order to maintain dynamic balance, then mechanism for internal maintenance is constantly active, too. Given all the specifics of the defence system reported in the previous paragraphs, it is important to state that the changes are necessary in the defence system, but the defence system itself is slow and cumbersome and that is why the dynamics of change must be systematically designed and planned according to social needs.

3. POSSIBLE EFFECTS OF THE DEVELOPMENT OF THE DEFENCE SYSTEM

The effects of the development of the defence system are multiple and can be graded from highest to lowest proportion, according to the goal achieved. The maximum effect is confirmed by the creation of current and future defence system that are appropriate to environmental conditions, current and future needs, which provide permanent deterrence of actual and potential holders of threats and their intents. In order to provide that the defence system of a state is up-to-date at any moment and time, it is necessary for the state to plan and implement its ongoing development.

The effects of the development of the defence system are multiple, since they mean the highest level of contribution to the vital social interests and goals. In order to give as many as a possible contribution to achieving the vital social interests and objectives, it is necessary to know the exact content and the objective actuality of security. Above all, it is necessary to know the origins of contemporary threats to security and the ability to build a defence system that allow preventive action.

If we observe that the most positive effect of the development of the defence system is compliance with current and future requirements, then our general provision would be defined as follows: The highest level of development of the defence system is reached when it is achieved:

- compliance of defence system with the external policy objectives;
- compliance of defence system with the constitutional provisions;
- harmonization of defence concepts with the strategy of foreign policy.

Accordingly, we can examine the differences among countries relating to these important questions, from which arise different directions of development of the defence systems. In fact, some countries tend to develop as an independent state with full international independence, without entering into alliances and international organizations. To achieve that they need to develop a defence system based on the development of independent forces that are capable of ensuring the country's self-defence against potential risks and threats to its security.

Spheres and the necessity of harmonization, as well as the performance of this complex process are changing the character of the alliances and international organizations. A number of countries decided to enter into an international organization, on condition of maintaining their full sovereignty and the satisfaction of certain conditions which they set themselves before entering a particular organization. There are a large number of countries entering into certain organizations and alliances, and consequently lose their full and receive some limited sovereignty, which is in practice being imposed by the alliance, an organization to which it belongs. Depending on the status of the state and its development aspirations, desired effects depend too.

The effects of the development of the defence system can be considered through achieved agreement that reflects the strength of the defence system, through the directions of its development focused on building the capabilities needed to support certain political decisions relating to the defence of the country. Also one important effect of the development is defined character of the armed forces.

The effect of the development of the defence system is the prominent role of the armed forces in the conduction of foreign policy. Armed forces can be a prominent factor of peace also. Here is a characteristic of omission of aspirations for superiority over the armed forces of other states and the existence of desire to maintain balance and develop trust. In such cases, the effects are achieved by appointing or omission naming enemies and balanced development of cooperation between the two countries with the aim of preserving peace. Full focus of the state on achieving these effects of harmonizing policy and state defence system, will protect state against excessive consumption of state energy in the state financing costly armed forces. However, total reliance on a common accepted peace, and lack or insufficient developmentin the spirit of modern military, may produce tragic consequences for the state.

The effect of development can promote a defence system as a major factor in the offensive policy, too. Strong armed forces and defence system as a whole, provide to the country ability to conduct offensive foreign policy based on the factor of power. As an argument for this is the fact that countries that have a strong military force and nuclear potential, have not been attacked by other countries in recent history. On territories of such states, there were not any international military missions conducted. The pursuit of nuclear powers to suspend the creation of new nuclear powers is only one of the forms of political action to limit the sovereignty of individual states. Conflict of impacts in this area never stops. The effects of the development of the defence system, therefore, can always be shown through military force, the economy and the de facto international relations.

4. PARADIGMATIC AND THE THEORETICAL FOUNDATION OF DEVELOPMENT

A comprehensive planning process of development of the defence system, in addition to reliance on significant diagnostic research requires the need for the necessary application of prognostic research. Prognostic research are carried out in various stages of the process, with the goal of more efficient planning for defensive purposes. They are primarily aimed at anticipating possible threatening conditions and methods, and ways of circumvention, the prevention and reduction of the effects of the attack which is a social action to overthrow the state. Termiz (2014) believes that "Research methodology of safety occurrences and safety activities is not possible without fundamental understanding of those phenomena and that there are two major difficulties in determining the role and functions of security activities. The first concerns its connection with the state government and the other is conditioned by the characteristics of social power and force, whose main characteristic is versatility". (P.25)

In order to develop a defence system, and to fully present findings that have been reached on some phenomena, it is necessary to know paradigms, theories, concepts, and practical programs developed by the theory and practice. According to Milosavljevic, Radosavljevic (2014) the first action after the observance of the problem which is the reason and a possible general object of the research, is to gain insight into the existing research fund. "Theories and knowledge contained in scientific fund, as a rule belong to certain scientific directions, and are associated with certain paradigms that are in the paradigmatic system." (P. 414). Perhaps this is the key reason why the historian of the development of science Thomas Kuhn, puts scientific paradigm in the center of his theory of the science development, in his book The structure of scientific revolutions (1970). In his view, normal or mature sciences differ from the others in fact that they have a paradigm. The paradigm is not determined by the theory. It is a framework that determines the way of thinking about a phenomenon. The paradigm does this by defining three kinds of assumptions: ontological (about the nature of the phenomenon being studied), epistemological (knowledge about the nature of this phenomenon) and methodological (methods of acquiring this knowledge). It is a framework in which are theories developed, while in the theory are framework of concepts and programs developed, for the practical exploration of the phenomenon. An important feature of the paradigm is that they are not checked. They are composed of axioms, that are impossible to be verified, but only to accept them or not. Therefore, one could say that the paradigm is a kind of religion or ideology for scientists.

But the paradigms tend to developmental changes. So Lida (2004), looking at possible changes in the paradigm that can be a base for the the development of an organizational system, states: "Even if this is minor change within a major paradigm, because it affects corporate and consumer behavior to significant extent, it causes a great concern to policy makers. (P.42.)."

According to their degree of development, sciences can be found in a paradigmatic or preparadigmatic stage. The sciences that are in paradigmatic stage are mature, because in one time they have only one paradigm, to which all valid theories of that time belong. Unlike them, the sciences of the preparadigmatic stage are characterized by the existence of multiple paradigms, and the existence of multiple mutually exclusive picture of reality that is being investigated.

Research of the organizations and organizational change is in the preparadigmati stage. Masic (2001) has considered that in the area of organizational change, three paradigms can be identified (p. 303), as follows:

- The paradigm of gradual evolution;
- Paradigm of interrupted balance;
- The paradigm of revolutionary changes.

5. THE PARADIGM OF GRADUAL EVOLUTION IN THE DEVELOPMENT OF THE DEFENCE SYSTEM

Due to the above specifics of the defence system, its enormous size, the strict hierarchical structure and subordination, the stiffness of the system, changes directed to achieving the development goals are necessarily slow and gradual. It is impossible to develop abilities of the defence system in a short period of time, because it is a complex process that takes some time, and also is determined by need to maintain balance of the system. The defence system cannot be developed when there is a certain crisis that Boin (2010) considered as unexpected and undesirable situation (p 12). That's why we decided to subject to our review would be only paradigm of gradual evolution, while the other two paradigms will not be discussed.

According to the paradigm of gradual evolution, an environment of the organization is relatively stable, and changes are slow, predictable and occur gradually, step by step. By the Kovac and others opinion (2006), the entire organization development takes place through a process of constant change, which gradually changes its appearance and character. (Page 71) According to the paradigm of gradual evolution, the organization adapts to the demands of the environment. These changes have partial character, and they are being implemented gradually and with low intensity. They are also called first order changes or alpha changes.

This setting may impose a number of questions regarding the development of the security environment changes which we have witnessed in recent years. Perhaps many will disagree with our conclusion that the paradigm of gradual evolution has primary application in the development of the defence system and to express argument of rapid and radical changes in the security environment, starting with the Arab Spring, the war in Ukraine, a new cold war cry in Syria and the refugee crisis. However, if you carefully analyze the important factors that led to these changes, it can be concluded that the number of a occurrences have developed much earlier than the events themselves. This confirms the fact that many events could properly and timely predict using the prognostic research based on the paradigm of gradual evolution and which would allow the identification of the necessary directions of development of the defence system.

Given that according to the paradigm of gradual evolution, the changes of environment are slow and predictable (based on trends from the past), the management is able to design appropriate changes in the organization, with minimal time lag. Through implementation of organizational changes, management successfully and continuously maintain the organization in a dynamic equilibrium with its environment.

The development of the defence system is constant, evolutionary process which is determined by the strategic orientations, stimulated by technological advances and a limited economic and political factors. The aim is to maintain the necessary defence capabilities in the era of cuts in public expenditure and increasing demands for efficiency and effectiveness. The paradigm of gradual evolution presupposes the development. According to her, the gradual change of the defence system always lead to a development, or progress to a higher level of organization. The state of defence system after the change will be in some ways and always better than it was I previous situation. The development includes qualitative changes, and they happen according to this paradigm as accumulation of incremental changes, or changes that may be fixed or variable, but they are always positive and developmental.

It is especially important to plan long-term development of the defence system. Long-term planning of the defence system development is an interdisciplinary process that includes a number of different actions and activities which are interdependent and a lot of adjustments and reconciliation between political and military elite, planners, military commanders and other subjects of the defense system are required in their implementation. In connection with long-term defence planning, Kovač and Stojković (2009) argue that "uncertainty and ambiguity pose a major challenge for planners in the defence system, as well as for policy makers." (P.425).

That is why, the great attention is given to researching global strategic trends for a longer period, by the modern armies of the world. A typical example is the research conducted by the British Ministry of Defence. The results of a recent survey which aimed to provide a strategic context and to identify long-term threats and opportunities by 2045, they have published in the fifth edition of the publication Global strategic trend GST (2014). "Global Strategic Trends (GST) describe a broader strategic context which is aimed at those in the Ministry of Defence (MoD), the Government and beyond, who are involved in long-term development plans, policies and capabilities. Without this strategic context, there is a risk that planners and creators of policy and development capabilities assume the future based on already preconceived thoughts and assumptions."(P.3.). Of course, an important role in this process is communication with the public and the timely and adequate informing, and information operations doctrines in which Britain has a hundred years of experience. Principles and concrete examples of British information operations were described in Richard L. (2015) work, with special turn to the current experiment Rainbow in the dark (41-66).

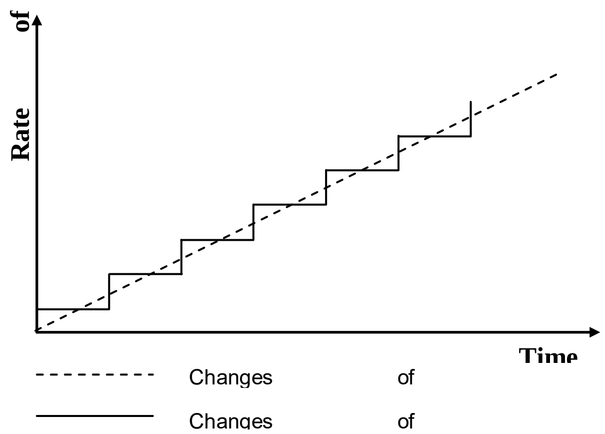

Figure 1: Incremental changes, Kovač and others (2006: 71)

In addition to assuming progress, the paradigm of gradual evolution also includes the assumption on which all subjects experience changes in the same way and they all have the same development path. Such an assumption has led to the creation of the concept of the life cycle of the organization as an instrument for evaluating the performance of management and development of the organization. In the context of the defense system, these development cycles can pose certain planning cycle, from long-term, over the medium and short term.

Therefore, process of changes based on the paradigm of gradual evolution has planned and rational character.

Consideration of policy approaches of own and other countries, analysis of the current security environment, as well as historical trends and events must precede the quality prediction of possible changes in the security environment. Basic entering at this stage are the analysis of national interests and objectives, strategy of national security, the defence strategy for potential opponents and allies, their future role, the role of international organizations and alliances and more.

The first step involves a detailed study of the basic documents relating to national security, defence and foreign affairs to determine the political intentions of other countries, as well as the political implications on the defence system. Thus, the results of this phase are prognosis of political ambitions of neighboring countries and the countries that are the important factors on the world political scene, as well as their political priorities in the field of defence. We are often facing here with the fact that in the available documents of many countries, security and defence objectives and interests are not explicitly formulated, so the key role of prognostic research at this stage should be that they are timely detected.

By this, we can identify national interests that could be impacted by future events, developments and trends in the security environment.

In order to reach a good prognosis, it is necessary to carry out the four essential steps:

- collect the necessary data,
- analysis, sorting and processing of data
- identification of opportunities, risks and threats and
- prognosis of the required number of strategic situations.

In the first step, we will collect the data needed for further work on the prognosis of the future environment. Of particular importance are the data relating to future security, political, economic and social issues, as well as the technological development and the environment. Data sources can be different from the intelligence services to scientific institutions.

The second step requires a good understanding of scientific methodology and analytical knowledge and experience. To obtain reliable results the development of the defence system, operators can use the services of other methodologists and scientists trained in the application of scientific methods in the fields of politics, economy, technology, defence, security, etc.

In the third step, the analysis results are used for the consideration of the impact of future environment on national interests and objectives. At this stage the aim is to identify future opportunities, but also risks and threats to national interests and objectives.

The final step in forecasting future security environment is the development of an adequate number of possible strategic situations which represent future developments in various fields.

It is important to emphasize the importance of the dialogue approach to research and development because it is a matter of effective communication of all relevant stakeholders who are interested in the process of developing the defence system. It includes external stakeholders, respectively the entire public that is sensitive to the issues of development of security and defence. According to the opinion of Flyvbjerg (2012) "Highly specialized media such as scientific journals and monographs are suitable for addressing academic audiences. But they are utterly inadequate when we need to reach out to groups that are relevant in the practical world of politics, administration and planning. Public dialogue that includes communication through daily media is necessary (p.214)". This provides support from the wider public in order to take concrete development steps.

The paradigm of gradual evolution also includes adaptive learning about the possible forms, dynamics and intensity of the security environment changes. However, in addition to the adaptive learning, generative learning is also important for the organization. Adaptive learning or learning in one round (single loop learning), is based on the knowledge and understanding of changes in the security environment and adaptation to these changes, while generative learning or learning in a double round (double loop learning) is creating and exploring new areas for development of the system. Generative learning does not improve the existing knowledge, but create entirely new competences. Unlike adaptive, generative learning involves another round of referring to the review of the basic premises on which the existing knowledge is based and creating new knowledge, competencies and strategies. However, the strategy itself has no value if it is not implemented properly. Dess, Lumpkin and Isner (2007) nice noted the importance of implementing strategies to achieve the final effect, considering that "the organization must have adequate control and strategic organizational design, but still leadership has a central role in this business." (17)

7. CONCLUSION

By choosing to handle these issues, we were aware of the fact that due to the complexity of the defence system, and the complexity and importance of the process of its development, we cannot expose all aspects of the position and role of the paradigm of gradual evolution in defence research. Therefore, we limited ourselves to only those essential aspects.

Important components of power that are able to directly determine the system of defence can be considered: technical and technological, intelligence and communication, the appropriate number and qualifications. The development of these components will be conditioned by the functioning of various factors whose development, the scope and intensity of the operation cannot always be reliably predicted. Factors that determine the development of the defence system are certainly political, economic, material and energy, social, technological and others. The development of the defence system can be affected by many other factors, but the impact of these specified, primary and fully determines the direction and dynamics of its development.

To perceive these factors in proper perspective and to take advantage of their potential benefits and opportunities created for the defence system, it is necessary to pay special attention to scientific research. As any research is necessary based on a particular paradigm, that requires special emphasis on the types of paradigms which are known in the theory of the systems.

If we consider that the development of abilities and capacities of the defence system is a process that requires some time, because they cannot be built in a short period of time, it is necessary to conclude that the paradigm of gradual evolution is the most important paradigm of development of the defence system. Establishing development without relying on this paradigm, could lead to the situation in practice that some developing countries are caught / surprised by socio-political situation in the country or region. It happens that the defence systems of some countries in certain situations sometimes do not have the ability to meet the requirements that policy puts in front of them, and stay unprepared to respond to a specific attack or other forms of threats that can be applied by compromising entities. This is a manifestation of non-compliance, which can cost a state lack of realization of their vital interests and the objectives, and weakening its overall power, and in worst cases can sometimes lead to state's disappearance.

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ANALYSIS OF POSTAL MARKET AS A PRECONDITION DEFINING THE MODEL ACCESS TO POSTAL NETWORK IN REPUBLIC OF SERBIA[1]

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Abstract: *The Strategy for accessing the public postal operator (PPO) network is one of the planned Strategies for achieving the objectives of the development of postal services in the Republic of Serbia for the period from 2013 to 2016. The implementation of the Strategy is done through several activities. Some of these activities have already been implemented since the end of 2014. National regulatory authority (NRA) has adopted an „Ordinance on the methods and conditions of access to the postal network of the public postal operator“, and in March 2016 the Post of Serbia has adopted the "Ordinance on special conditions for access to the postal network". Certain planned activities are yet to be realized. Full liberalization of the postal services has not been achieved. There is still a reserved area on the PE Post of Serbia market that hinders the further course of liberalization itself. The final result is to define a model approach with strictly defined conditions of access (access points, the price of access, quantity of items with which to access the postal network). One of the steps in the implementation of these activities is the analysis of the postal services market, which will provide a review of the current state of market liberalization and basic directions for further research in defining the model approach*

Keywords: universal service obligation*, postal market, access, the postal network, the public postal operator*

1. INTRODUCTION

The Universal Service Obligation (USO) is one of the main achievements of civilization, which is why each country shall take appropriate steps that should ensure its general availability. In the last twenty years many factors have caused the postal sector in Europe and beyond to review its role on the communication market. The impact of competition, privatization, liberalization, the demand of users for a better and more reliable services, and new technologies have had a major impact on the postal sector and particularlyon designated postal operators. Each state has assigned the obligation to provide universal postal services to designated postal operators, giving them the right and obligation, and on the other hand the ability to secure further existence.

The postal services market in the European Union is still in the process of gradual liberalization. The Directives of European Parliament and Council on the liberalization of the postal market limit the postal monopoly and harmonize the obligations of its members towards the common universal service. The adoption of Directive 2008 (Directive 2008/6/EC) the European Commission has stipulated the need to create a legal framework in the Member States to the full opening of the postal market. On the other hand, the basic objective is the sustainability of the universal service so that all citizens have the possibility of using these services, and the possible appointment of one or more providers USO.

One of the recommendations of Directive 2008, in order to achieve sustainability of the USO, was that *“Member states of the European Union have to adopt measures to ensure access to postal network under transparent, proportionate and non-discriminatory terms, whenever this is necessary in order to protect the interests of users and/or promote effective competition“****,*** in order to protect the interests of users and ensure continuous, quality and sustainable provision of a universal postal service “ (Directive 2008/6/EC, article 11a).

Access to the postal network implies that the access user shall receive postal items from postal services users, then give them in at an agreed point of access to the postal network for further routing, transport and delivery to the addresses of the recipients, or to act in the same way with their own items, or to use postal network in which the access user delivers mail to the addressee.

The analysis of past experiences in a number of countries that have already defined access to the postal network has showed that the model access differ and are specific for each country, so there is no

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transparent methodology for defining the value of certain criteria that define the very model access. Each country defines its own model of access depending on the characteristics of the postal network of the public postal operator as well as of the many characteristics of the postal services market. There is no typical model of approach which could be applied to a particular country or group of countries. For these reasons, each country, based on their characteristics (demographic, social, political, etc.), primarily on the basis of an analysis of the market, creates such a model approach that will protect the interests of all access users, and at the same time ensure the sustainability of USO.

2. RESEARCH METHODOLOGY

For the purposes of work, in order to develop a doctoral dissertation on the topic "Development of a model of access to the postal network," an analysis of the state of the postal market and overall postal infrastructure in the Republic of Serbia was done. The survey was conducted over a period of six months (from November 2014 to April 2015), and the participants were the National regulatory authority - RATEL and 39 postal operators on the territory of the Republic of Serbia. The results obtained in this paper are useful for defining the mode of access and access points on the network public postal operator (PE Post of Serbia).

The main objective of the research was to use the analysis of the postal services market to determine:

- Communication way between postal operators and users of postal services;
- Methods of cooperation and partnership existing among postal operators;
- The level of infrastructure development and means of the network used by postal operators to perform postal activities;
- Future directions of development of infrastructure and the need to increase the availability of services and networks;
- The current situation and plans regarding an expansion of the range of services;
- Problems that exist in the provision of postal services and quality of services.

3. NETWORK ACCESS IN EUROPEAN COUNTRIES

Postal network of the public postal operator has a significant role in a liberalized postal market. The public postal operator has high network maintenance costs and does not use its postal network enough. In the paper (Miletić, 2013) it is specifically stated that the increasing competition is very important to encourage current operators to become more efficient in order to maintain a high level of quality of services from the scope of universal services. The paper also states that increasing competition may directly endanger the existence of the public poslal operator. Therefore, regulators must take into account the different views and create such a model access that will be functional for both the public postal operator and other access users i.e. postal operators, consolidators and users who only submit their shipments (Ordinance, 2014; 2016).

According to relevant papers (Miletić, 2013; Dieke et al., 2013; Jaag, 2014; ERGP, 2012; ERGP, 2013) it can be concluded that on a fully liberalized postal market postal operators can use two basic models of access: upstream and downstream access. Downstream activities imply local network for delivery of postal items, while everything else is considered as upstream activities. Upstream activities are often referred to as "worksharing" and include activities of acceptance, grouping, sorting and stamping, before accessing the public postal network. Accessing the public postal operator network, access users are given an opportunity to fully or partially use the public postal operator network (Jaag, 2014).

Crew and Kleindorfer (2002; 2003), Panzar (2002), Moriarty and Smith (2005) discussed the advantages and disadvantages of downstream access. All the authors agree that regulation of downstream access may facilitate the entry of postal operators on the market, but also most agree that such a policy could have additional costs.

According (HR Strategy, 2014), upstream activities include working operations of collection, sorting and transport of items, while downstream activities include working operation of delivery of items (Figure 1).

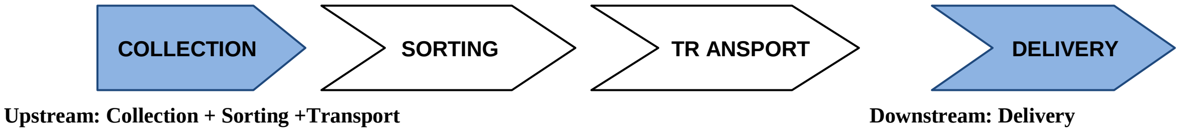

Figure 1: Upstream and downstream activities in the chain of transmission of postal items

In addition to these authors who have described and discussed models of approach, in Republic of Serbia there were a number of analyses and discussions regarding the access to the postal network. Thus, for example, in the paper (Kujačić et al., 2013) it is pointed out that access should be a balance in terms of providing the universal postal service, since the public postal operator has an obligation to provide it, unlike its competitors. It also states that operators entering the market need to have a network access (especially in rural areas). According to (Gezović Trubint, 2011) regulation of access is one of the important steps in the process of market liberalization which should protect users' interests an densure the provision of universal postal services throughout the territory of the Republic of Serbia, under the same conditions and affordable prices and required standards of quality. The paper (Unterberger et al., 2015) describes various models of access in the Danube region, with the analysis of the efficiency of the public postal operators that provide access to the postal network.

As can be seen in Table 1, which shows the extent of access in European countries after the date of liberalization, Germany, United Kingdom and Slovenia are the only countries that have more than 5% of access to the postal network. The speed of liberalization of the postal market has varied: since January 1st 2011, 13 Member States (Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Ireland, Slovenia, Spain, Sweden and the UK) have fully liberalized their postal markets. Switzerland has maintained a reserved area up to 50 g, while the Republic of Serbia has maintained a reserved area up to 100g (ERGP, 2012).

Table 1: Dates of liberalization and scope of access in European countries.
(ERGP, 2013; Postal Regulatory Database, 2013)

Liberalized their market before EU deadline	Liberalized their market by the deadline, in 2011.	Liberalized their market between 2011 to 2013.	Did not fully liberalized their markets to 2015.
More than 5% competition access			
Germany (10 %) **United Kingdom (44 %)**	**Slovenia (7,6 %)**		Cyprus Norway **Serbia** Šwitzerland Italy
Less than5% competition access			
Estonia Finland The Netherlands Šweden	Austria Belgium Bulgaria Denmark France Ireland	Čzech Republic Greece Hungary Latvia Lithuania Malta Poland Portugal Romania Slovakia Croatia	

Italy is a member of the EU, but until 2015 the access was not regulated. In Switzerland, the Access to post office boxes in the destination post office and to database with addresses was provided. **In Serbia**, at the end of 2014 the *„Ordinance on the methods and conditions of access to the postal network of the public postal operator“ was adopted, and* the *„Ordinance on special conditions for access to postal network " was adopted* in March 2016. **Cyprus** provides the access to the public postal operator through: units for providing customer service (post offices), post office-boxes and letter-boxes, although the market is not yet fully liberalized (ERGP, 2013). **In Norway**, the Law regulates the access (ERGP, 2013), although there is no information whether and to what extent is the access to the postal network implemented (Postal Regulatory Database, 2013).

In Slovenia, full liberalization happened in 2011 and it has led to the emergence of competition on this market with the entry of four access users. Currently, the main job of these oparators is printing and preparation of accounts. On the Access market, about 7.6% of the total number of letters addressed is handled byAccess users, while the remaining 92.4% is handled bythe public postal operator. **In Germany**, there are numerous active companies on the market, which mainly operate as consolidators and postal operators, which conclude agreementson access to postal centers for sorting items. There are five postal operators (Access users), which handle 10% of the total volume of letters on the postal market.

More than half of the countries included have a legal requirement for access to the postal network (in postal centers), but most countries have a legal requirement for access to the postal infrastructure (eg. The system of postal address code, database for shipments routing,data on change of address, letter-boxes) (Miletić, 2013). All the three countries in which there is more than 5% of competition havea legal obligation of access to the postal network, while Slovenia and the United Kingdom have a legal obligation to provide conditions for access to the postal infrastructure to varying degrees.

Only the three countries that have opened their markets within or before the deadline of the EU, have a greater scope of access than the countries that have opened up their markets after 2011.

3. ANALYSIS OF THE CURRENT SITUATION ON THE POSTAL SERVICES MARKET

Postal services have a key role in the economic and social development of each country, being a priority due to their multiple benefits for businesses and citizens. According to the data, in 2014, the postal sector had 17,630 employees, which is approximately 1% of the total number of all employees in the Republic of Serbia (RATEL, 2015b). Since the National regulatory authority (NRA) was formed in 2010, until 2014 there is a constant growth the number of postal operators in the market of the Republic of Serbia, as well as the growth the number of employees in this sector. This growth is as high as 50%, as shown in Table 2.

Table 2: Number of staff in the postal sector in the Republic of Serbia (RATEL, 2015b**)**

	2010.	**2011.**	**2012.**	**2013.**	**2014.**
Public postal operator	14981	14939	15068	15155	15015
Postal operators	1747	2048	2618	2464	2615
TOTAL	16728	16987	17686	17579	17630

Analyzing the public postal operator in Serbia, based on available data of the Universal Postal Union (http://www.upu.int/en/resources/postal-statistics/query-the-database.html), brings forward the following conclusions:

- If we look at **the resources** available to the PE Post of Serbia, there is a decline in the number of staff and number of post offices, with a higher decline in staff than the number of post ofices, which is a characteristic of the postal market in other European countries. There is also a large decrease in the number of mail-boxes (by 49.45%) and a small increase in the number of post office-boxes (2.68%);
- Looking at the number of different **postal services**, the analysis showed that in Serbia there is a 6% drop in the number of letters. It is important to note that the number of items of direct mail (addressed and unaddressed) is three times bigger, the number of express items five times and the number of ordinary money orders is two times bigger than it was;
- **Financial indicators** recorded a decrease in net revenue and revenue from letters and financial services;
- **Quality parameters**, expressed for example: *„Average area covered by a permanent office* (km²)“, „*The percentage of the population having mail delivered at home“, „Percentage of items delivered through post office boxes“* and *„Average number of letter-post items posted per inhabitant*“, on an annual basis. *Percentage of items delivered through post office boxes*drops every year. In 2014 it was 16.2%, which represents a 22.85% less coverage than in 2005. *The percentage of the population having mail deliverred at home*in the last few years is without significant changes, as a quality parameter has a satisfactory value of 98.5% (according to the quality parameters shown in RATEL, 2015a).

Analysis of the postal services market was carried out in cooperation with the NRA - RATEL. Postal operators have submitted a survey / questionnaire containing three groups of questions, with a total of 21 questions:

- The first group of questions was related to general information about the postal operators, customers and business partnerships of postal operators and consisted of 7 questions;
- The second group of questions was related to infrastructure and access to services and networks, and consisted of 6 questions;
- The third group of questions was related to the range and quality of services (8 questions).

The questionnaire distributed to postal operators electronically is shown in Table 3.

Table 3: The structure of the questionnaire for postal operators

Parts of the questionnaire	Asked Questions
I **General data, users and business partnerships**	1. Postal services as a main activity 2. Total annual turnover - "VAT system" 3. Cooperation with other operators 4. Percentage of the provision of services of another operator 5. The most common way to communicate with customers 6. Availability of "Special Conditions for the provision of postal services" 7. Method of communication with customers
II **Infrastructure and access to services and networks**	1. The number and type of vehicle 2. Equipped means for receiving items 3. Territory operation ie. provision of services of postal operators 4. Places that may not be covered for that there was a need 5. The number of items that operators cannot collect from the user, as well as reasons for failing to collect them (if any) 6. Planned investments for the future
III **Range and quality of services**	1. Expanding the range of services 2. Planning of new services 3. The territory that operators can not cover the need to have 4. Reasons for not collecting items from the sender 5. The percentage of delivered items within the guaranteed delivery date 6. Number of complaints 7. The average time for solving complaints 8. Average compensation paid in dinars

4. RESEARCH RESULTS

Out of the 39 postal operators who participated in the survey, only 13 operators submitted the answers, which is 33.33% of the total number of registered postal operators in Republic of Serbia. Based on their analysis, the following conclusions were made:

- Main business activity of majority of postal operators is postal services (61.53%);
- Majority of postal operators is located within VAT system (the VAT system in Republic of Serbia are those operators that have an annual turnover in excess of 8 million dinars);
- Communication with users is established in many ways. The most common way to communicate with customers is by using Mobile or landline (34%), followed by the use of electronic e-mail messages (26%), call center (24%) and direct contact (16%) (Figure 2);
- Majority of operators cooperate with the public postal operator (PE Post of Serbia);
- Only 3 postal operators achieve more than 30% of their business by using other postal operators, mostly the public postal operator;
- With 92.30% of postal operators “Special conditions for the provision of postal services" are available to all users;

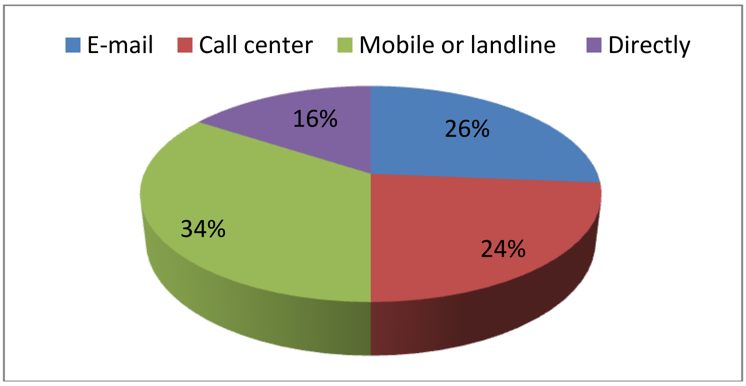

Figure 2: Way communication of postal operators with the users

- Trucks over 3.5t, cars and mopeds are mostly used for transport of items, while trucks over 12t and buses are less used (Figure 3).

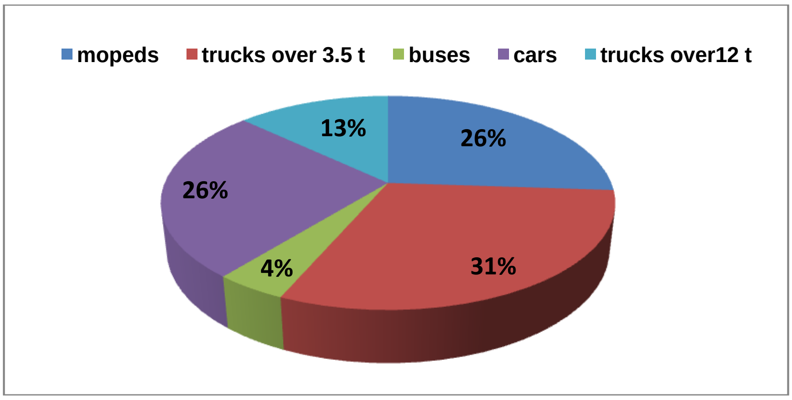

Figure 3: The structure of the fleet of postal operators

- Other means of postal network include scanners and scales, and rarely means of internal transport (forklifts, conveyors, belt conveyors);
- 5 postal operators conduct their business in the whole territory of Serbia, 5 conduct their business in the the territory of Vojvodina (22%), while the others operate on the territory of Belgrade (48%) and Europe (8%) (Figure 4);

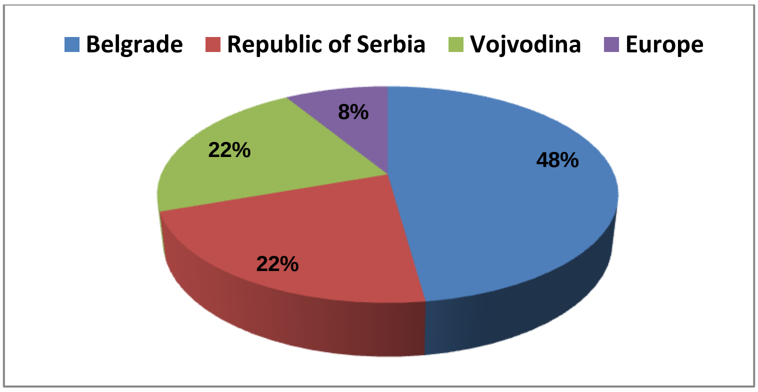

Figure 4: The territory of operation of postal operators

- 92.30% postal operators responded that there is no need to increase the availability of their services and networks;
- Majority of investments by postal operators is spent on the equipment and less is designated for employee training;
- Majority of postal operators do not plan to increase the range of services, and none of the operators plans to provide universal postal services;
- The level of service quality is satisfactory, which is shown by the percentage of delivered items in a guaranteed period of time, and the number of complaints.
  If we observe the delivery of the consignment to a guaranteed period of time, as one of the main indicators of the quality of postal services (Figure 5), the largest number of operators realized delivery of 100% - 37% of postal operators, and the lowest percentage of delivery (90%) occurred in 26% of operators.

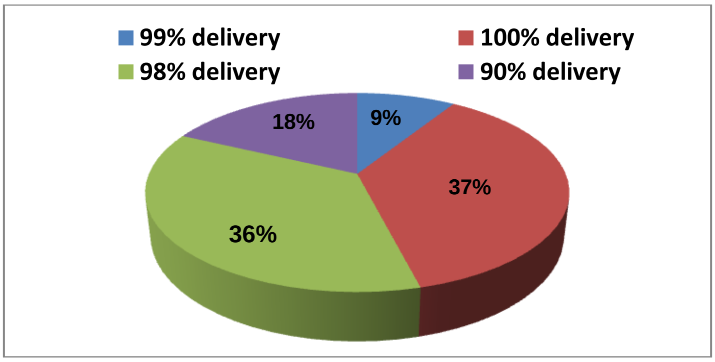

Figure 5: Percentage of delivery of items within the guaranteed period

- The average time for solving complaints is 2.33 days, while the average paid compensation is 4,923.00 dinars.

Operators who did not give answers were contacted by telephone.They mentioned several important reasons why they had failed to submit their responses. The most common reasons why operators did not submit their answers are shown in Figure 6. It is noted:

- that 21% of postal operators are dissatisfied with their position on the existing public operators monopoly market;
- 8% of the operators state that the main reason why they did not provide answers is that the market is not yet fully regulated, and it is precisely these operators who have focused their operations on the transfer of consignments in international traffic;
- 18% of operators believe that they have insufficient cooperation with the regulator, and as many as 20% are of the opinion that "access to the postal network will not significantly impact on their business" (the reason for such an opinion could be attributed to lack of information by the Regulator).

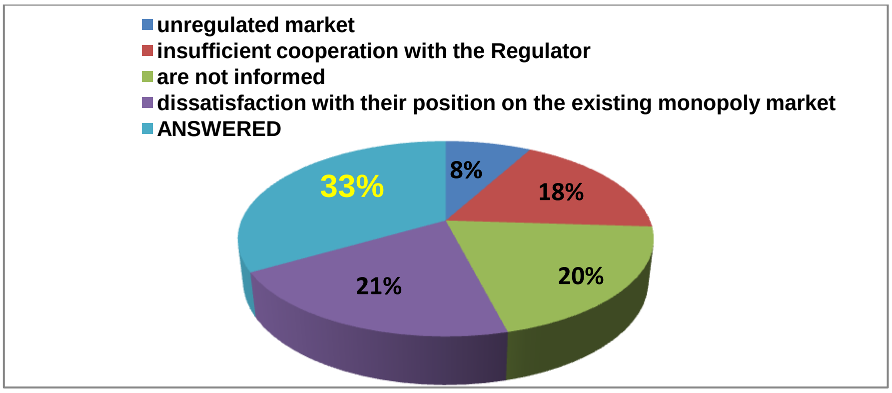

Figure 6: The most common reasons for not receiving appropriate by the postal operators

5. CONCLUSION

In Republic of Serbia, the access to the postal network, based on two key documents, namely*„Ordinance on the methods and conditions of access to the postal network of the public postal operator“, and "Ordinance on special conditions for access to postal network".* Analysis of the research results points to the fact that few postal operators plan to increase their services and network availability. Consequently, there are operators interested in providing a set of postal services in the domain of universal postal services. Studies have shown that in 61.53% of operators main business activity of majority of postal operators is postal services

A small number of postal operators have cooperation with other operators. Only few operators have collaboration with PE Post of Serbia, in the field of commercial services. Postal operators are able to transfer items, as confirmed by the structure of their vehicle fleet, which indicates that most operators have trucksup to 3.5 t and cars. This creates a possibility for downstream access to the postal network in units to provide customer service (post offices) and in units for sorting items (postal centers). When it comes to quality of execution services, it is pointed out that 82% of the analyzed postal operators have more than 97% of the guaranteed delivery of items within the delivery date.

The analysis of the postal services market haspointed out the following factors which directly influence the market of postal services.:

- **The existence of a reserved area** for letter-post items up to 100 grams, which provokes the question: Does the existence of the reserved areas affect market development in the Republic of Serbia?
- **Uncertain regulation**, as well as a partial regulation of the market. In connection to this, it is necessary to reduce the impact of uncertainty through coordinating the dates for full liberalization of the market, and the adoption of other important documents, in addition to the already passed Ordinancesin 2014 and 2016.
- **Insufficiently informed postal operators**, insufficient cooperation with NRA - RATEL, as well as operators'**dissatisfaction** with their position on the existing monopoly market.

Identified factors are just the basic factors that can be of great influence on the access to the postal network, and whose impact needs to be further explored in order to be able to define an adequate model of access to the postal network in the Republic of Serbia.

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MEASURING SECURITY MANAGEMENT PERFORMANCE

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Abstract: *Performance management is at the heart of most modern organizations, whatever their purpose and irrespective of whether they are privately or publically owned. It is only through the measurement of performance that an organization can demonstrate to itself and its stakeholders that it is achieving its goals, which most commonly include financial, operational, safety security and environmental performance. The crucial role within management and control of security systems should be played by top management, i.e. the key element in this process is the responsibility of security and safety management system.*

Keywords: *security, management system, performance, measurement, efficacy*

1. INTRODUCTION

Preventing and mitigating the effects of external and internal threats are always current problems in almost every organizational system. Therefore, if not all, but most of organizational systems must be designed to include safety in their plans. In fact, people who are working to develop a security management must take into account other objectives of the system, or to choose dual alternatives that offer additional benefits for business owners. It is therefore of great importance that security is viewed in the context of the broader system.

Many organizations in developed countries apply a systematic approach in solving security problems. In most of such companies, a security management system has been introduced and it protects the organization from their own mistakes. However, methods for determining the performance of the security management system, or to measure its effectiveness and efficiency, are not sufficiently developed. The main problem, lies in the fact that in many countries, safety standards which organizations must adhere to, are still not equally and clearly defined, and they should represent a landmark for identifying the safety targets. Therefore, different methods are used for determining the deviation from the norm. In addition, there is a problem that relates to the "profitability" of security management. If security is not set as a strategic, general and basic goals of the organization, its importance cannot be explicitly expressed. The goal of security management actually is that "nothing happens". Although it is difficult to measure the safety and sometimes even seems impossible, yet it is the only reliable way to answer the question of whether an organization is able to solve security problems, and to successfully cope with security risks.

2. THE TERM AND SYSTEM OF SECURITY MANAGEMENT

The term "security management" is relatively recent, so we can say that there is still no definitive definition. The very concept of security management in a broader sense means Dragišić (2007) "determination of the safety objectives of the organizational system, on ways and means to avoid the adverse impacts that come from the environment or the organizational system, or to mitigate their adverse impact" (p. 14), while the Italian and Slavković (2011) defined it as "guiding activity of the industry leaders in the field of security, which leads security forces in the process and towards achieving security goals and tasks" (p.298). A more detailed definition is given by Borodzicz (2005) 'security management includes management of safety and health in the workplace, audits, crisis management and planning for emergency situations, video surveillance, harassment in the workplace and mobbing, track employees, equipment and people for physical security in fact everything that can affect the functioning of the organization, its profitability and vitality. "(p.50).

Various challenges, risks and threats that organizations exposed to, and organization's responsibility towards the environment in terms of safety, have a crucial impact on security management, and the way in which decisions regarding security will be made. In addition, Fowler and Pierce (2012) say that "security in itself is not an attribute, but it is a trait of systems that depend on other attributes and the context in which the system is used" (p.115).

According to Trivan (2012) security management system in the company, in addition to the physical and technical protection of persons, property and operations, must involve in itself: data collection and risk assessment, protection from fire, explosions and accidents, protection and safety in the workplace, but also it forms the basis for management decision-making, providing access to confidential information to top management and establish processes and procedures for the protection and security of data (p. 227-236.). Thus, this system has to integrate all aspects of security and protection.

System security management can be understood as a set of policies, strategies, processes, procedures, roles and functions related to safety. This is a mechanism that is integrated into the organization and aims to control hazards that may affect the health and safety of employees, products and services, but also on the environment and the survival of the company. At the same time, this system allows the organization to adapt more easily to the legislation. In order for the security management system to be efficient and effective, it must be accepted and fully applied by employees. Therefore, the system must promote the positive security climate, or culture. Therefore it is necessary that all levels of management, and in particular top management, support and promote a system of security management

3. PERFORMANCE OF SECURITY MANAGEMENT SYSTEM

Working in a complex environment requires substantial resources and may affect the profitability of the organization. Protection of the financial condition and stability of the organization is one of the main issues tackled by management. All this leads to great challenges for many activities within the organization, especially for security management. Costs directly affect the organization's operations, and therefore they receive great attention. Given the dynamic changes in the modern environment, it is clear that every organization that wants to survive, must think in along term about way of investing the funds. To be able to monitor the efficiency of investments, according to Christophers, Carino, and Ferson, (2009), the organization introduced performance management processes and control operations, and for this there must be clearly defined indicators (p. 5). According Dochy, Segers and Wijen (1990) indicators are empirical data of qualitative and quantitative nature. These data become indicators of performance if the participants express the intended targets in a process (p. 135). This gives them the contextual and temporal character..

Performance are mainly monitored over the following six basic criteria: effectiveness, efficiency, quality, timeliness, productivity and security. However, every organization shapes these measures according to their own needs. Therefore, in the performance measurement of the system security management, we have decided on the efficiency and effectiveness as such basic indicators of successful operation of the system. The biggest problem in this regard is the lack of an accepted and measurable indicators which would indicate a return on investment. It's little of what the organization can do in this area. Measurements are often made in the context of avoiding incidents or influence of perceived risk (for example, the impact would be less than the cost of controls and therefore provides a positive rate of return.

Performance of organization indicate the effectiveness of its operations, and for this reason, measurement of its performance is performed. Thus, the performance of the process can be translated as the effect or success of the process, but it must express some size. Measuring performance literally means the process of quantifying past activities, or a set of criteria that are used to quantify the efficiency and effectiveness of activities. From the point of this work, I decided to show performance measurements by quantifying the effectiveness of the action.

4. MODEL FOR ASSESSING THE EFFICIENCY OF SECURITY MANAGEMENT

The purpose of an organization is reflected in her mission, through which one could recognize the core business, and it contained all the requirements of all stakeholders. The mission is translated into goals and then processes and activities are defined that are necessary to achieve them. The degree to which the objectives are met, and thus the mission itself, shall be determined by measuring and comparing with the set target. Comparison of actual and established performance values of a process or the organization itself with the desired value can lead to a change in the mission of the organization.

There are four basic steps to establish a performance measurement system (figure 1):
- Security objectives of the organization are converted to the desired standards,
- Development of the criteria that allow the comparison of the desired safety standards with the achievement of the security situation,
- Determination of the deviations,
- Taking corrective action.

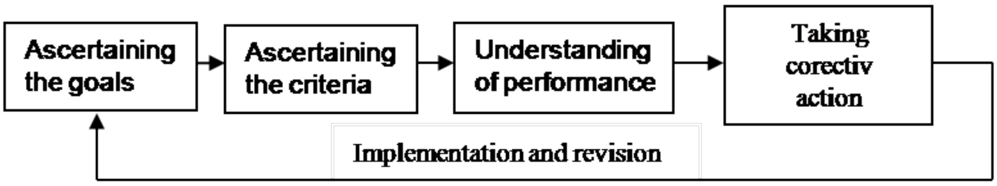

Figure 1. Steps in measuring performance

Measurement is a set of actions with a view to determining the value of a size. Definition of measurement given by Milosavljević, Radosavljević (2013) suggest that the measurement is procedure of systematic determination of the quantitative properties of a phenomenon by defined and appropriate measures and standards (p.571). Performance measurement process, therefore, may relate to determining the value or performance of the process. If the process is defined as a set of interrelated activities that transform inputs into output, then the output of the key elements of process are safety reports and assessments, and the input are plans, objectives, funds invested. The measure of performance is always in relation to the objective, which is the desired state, and the desired value performance. The value of performance can be expressed through a one dimensional measurement unit (time, the dollar, the number of reports, the number of errors and the like.), which typically represent the basic criteria of a process. The measurement process of the safety performances can't be conceived as a simple collection of data, but must be viewed solely as the overall management system that is focused on meeting the demands of all stakeholders and continuous improvement.

Model should provide to any manager, especially to security managers, the kind of information necessary to make high quality and timely decisions. In addition, this model should be a system that should enable the organization to accumulate knowledge about their customers, processes and resources and implement continuous improvements in security, ensuring the survival, growth and development of the organization.

4.1The algorithm for measuring the effectiveness of protection in systems security management

Based on the models which are set by prof. Petrović L. and Z. Petrović, we present an algorithm that looks at the effectiveness of protective measures in security management systems. According to the model that Petrović and Petrović gave (2002) "state of the organizational system can be represented by a matrix sheet [S_{rs}], the situation at the entrance to the system can be represented by a matrix of input [X_{ij}], and at the exit, matrix output states [Y_{pq}]. On the organizational system is operating activities endangering that can present matrix compromising [U_{mn}]. The elements of this matrix represent the demonstrated effects compromising ***m*** acting on n elements of the organizational system. After compromising effects manifested in the system apply certain safeguards, which are represented by a matrix of protection [Zk_n]. The elements of this matrix represent the number of protection measures (k) applied to the n elements of the organizational system" (p.2-6).

In the proposed model, the state of the system is best represented as follows:

1. The set of elements of the organizational system consists of a number of organizational units, jobs and the final number of participants end (1),

$$[S]=[S_{od}, S_{rm}, S_{ku}] \tag{1}$$

wherein:
S- set of elements of the organizational system
S_{od} - the total number of organizational units,
S_{rm} - the total number of working places,
S_{ku} - final number of final participants

2. Environment operates with **m** different forms of threat on organizational system. A set of expressed compromising effects presents a matrix of endangering [U_{ij}]. The set of expressed endangering effects are:

$$[U] = [FU, U_{žs}, P, UI] \tag{2}$$

wherein:
U - a collection of expressed compromising effects,
FU - physical endangerment of the organizational system,
$U_{žs}$ - endangering the environment,

P - fires
UI - endangering information system in the organizational system. Matrix effects manifested compromising $[U_{mn}]$ can be written as:

$$[U_{mn}] = \begin{pmatrix} u_{11} & u_{12} & - & - & - & u_{1n} \\ u_{21} & u_{22} & \cdot & \cdot & \cdot & u_{2n} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ u_{m1} & u_{m2} & \cdot & \cdot & \cdot & u_{mn} \end{pmatrix} \tag{3}$$

Elements of matrices u_{ij} be zero if the j -th element system u_{ij} manifested i-th effect compromising, otherwise it is equal to one.

3. In the organizational system, safeguards were applied that can be presented matrix applied measures of protection $[Z_{kn}]$, which can be written as:

$$[Z_{kn}] = \begin{pmatrix} z_{11} & z_{12} & - & - & - & z_{1n} \\ z_{21} & z_{22} & \cdot & \cdot & \cdot & z_{2n} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ z_{k1} & z_{k2} & \cdot & \cdot & \cdot & z_{kn} \end{pmatrix} \tag{4}$$

Element matrix applied measures of protection z_{ij} is equal to zero if the j-th element of the system has not been implemented i-protection measures, otherwise it is equal to one.

4.The state of the system at the exit of the system [Y] is determined by the parameters of forming the [X] and the current state of the system [S]. Current status depends on the threat to [U] and the measures of protection that are defined matrix of protection [Z].

5. Matrix System status [S] can be determined as the product of a matrix of endangerment and protection of dies (4):

$$[S_{mk}]=[U_{mn}]x\ [U_{kn}] \tag{5}$$

Respectively

$$[S_{mk}] = \begin{pmatrix} s_{11} & s_{12} & \cdot & \cdot & \cdot & s_{1k} \\ s_{21} & s_{22} & \cdot & \cdot & \cdot & s_{2n} \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\ s_{m1} & s_{m2} & \cdot & \cdot & \cdot & s_{mk} \end{pmatrix} \tag{6}$$

It is the glow of <S, and if they did not neutralized the effect of compromising the j-th measure of protection and $s_{ij}>S_u$ otherwise S is the mean value obtained by the matrix elements of the system status.

If the amount of the matrix sheet is less than the mean value obtained by the matrix elements of the system status, it means that the effect of compromising, which is manifested in any element of the organizational system, it is not neutralized by the application of protective measures in a given element of the organizational system. If the amount of the matrix sheet is greater than the mean value obtained by the matrix elements of the system status, it means that the effect is manifested compromising on any of the elements of the organizational system neutralized by applying protective measures in a given element of the organizational system.

In a real situation, the manager can form a matrix compromising on the basis of data obtained from security assessments, as well as the matrix of protection based on the knowledge of the security system, and implementation measures. Using this algorithm, it is possible to quickly reach the information that applied protection measures can counteract the effect of the manifest danger or not.

5. CONCLUSION

Models for assessing the effectiveness of security activities in organizations in Serbia have not been developed, and the only indicator that executives use the service cost is the price of safety. That is, the top management in most organizations decide on how to organize the security system on the basis of costs involved in its organization and functioning. Very rarely take into account the costs that would be incurred in the event of an incident. Therefore, it is necessary to determine the method for determining the effectiveness of the security management in order to point in the clear way to the essence of its existence, but it is actually its main goal, and that is, survival, smooth functioning, growth and development of the organization itself.

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MILLENNIALS AS A FUTURE DOMINANT WORKFORCE - STRATEGIC FRAMEWORK FOR UNDERSTANDING AND CREATING CHALLENGING ENVIRONMENT

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Abstract: *The purpose of this research was to explore and define key characteristics that distinguish the generation of Millennials, workforce that will represent 50% of the global workforce by 2020 and to define strategic framework for creating an organization which is desirable employer. The paper presents evaluating results on key elements that constitute challenging and enriching workplace environment, according to Millennials, which encourages them to thrive and give their best. This paper presents theoretical and practical overview and comparison of Millennials' expectations, both in Serbia and worldwide. The research showed that in order to attract and retain Millennials at workplace, employers should create a flexible work culture, build a sense of a community through teamwork and provide a constant feedback. In addition, organizations should embrace new technologies and social networks, encourage learning and allow faster advancement. Foundationally, it is essential to understand the Millennials' mindset and reshape the world of work in accordance with the expectations of this new workforce entering the employment.*

Keywords*: strategic management, Millennials, Millennials' traits, shaping organization, workplace, workplace engagement, research*

1. INTRODUCTION: MILLENNIALS. WHO ARE THEY?

The Millennial generation, also known as Generation Y, Net Generation or Generation Next, is generation that follows Generation X. Millennials are, according to the PwC survey (Millennials at work – Reshaping the workplace, 2011), those born between 1980 and 2000. They are now entering the workplace and reshaping it toward their needs. Their career objectives, ambitions, attitudes about work and, in general, their mindsets will have a huge influence on the working world in the future years.

Millennials were identified as "digital natives" in the Pew Research Center's survey *Millennials in Adulthood* (2014). As Bannon, Ford and Meltzer (2011) point out Millennials are more technologically savvy and better educated than the previous generations. The PwC survey (2011) suggest that "they have grown up with broadband, smartphones, laptops and social media being the norm and expect instant access to information", which implies that "one of the defining characteristics of the Millennial generation is their affinity with the digital world".

Besides being tech-savvy, there are other characteristics that are defining the Millennial generation. As DeVaney (2015) puts it "traits attributed to the Millennials include: entitled, optimistic, civic minded, close parental involvement, values work-life balance, impatient, multitasking, and team oriented. As found in many surveys, Millennials are also described as sociable, talented, well-educated, collaborative, open-minded, influential, and achievement-oriented (Raines, 2002). What also distinguishes Millennials from the previous generations is their desire "to feel like they are a part of something and that they can make a difference in the world and workplace" (Spano, 2015).

Millennials are also described as "selfish generation" by some; and as we can see from the PwC survey (2011), they have "ambition and desire to keep learning and move quickly upwards through an organization", "they want to feel their work is worthwhile and that their efforts are being recognized", but are willing to "move on quickly if their expectations are not being met". Wasley (2015) agrees by saying that Millennials have "unrealistic expectations about the workplace and a propensity to job-hop rather than settle for a career they find unfulfilling", and adding that they "value creativity and a flexible work environment over stability".

Influenced by the global Economic crisis, Millennials tend to value their personal needs more than those of the organization, as the PwC survey (2011) suggests. The PwC survey also shows that Millennials expect rapid progression, an interesting career, constant feedback, encouragement, but in the same time, they also want flexible approach to work.

We have conducted a survey among Serbian students, which will be presented hereafter, in order to see what they are looking for in an employer. The results we got are similar to those shown above. Namely, among most important criteria, when choosing an employer, are opportunities for advancement and learning, good working conditions (working hours, work-life balance etc.) and work environment (atmosphere at the workplace, collaboration, recreation opportunities etc.).

As found in Pew Research Center's article by Bruce Stokes (2015), Millennials represented 24% of the adult population in the European Union in 2013, and, on the other hand, they formed about 27% of the adult population in the United States in 2014. According to the PwC survey (2011), Millennials will represent half of the global workforce, by 2020.

It is clear that Millennials will have a huge impact on the organizations and on the way they operate. They will certainly influence many changes in the workplace, thus becoming one of the major challenges that employers need to deal with. That is why it is really important for companies to understand Millennials and to attract the best among them. The key is not to specifically target Millennials, but rather create work environment appealing to this generation.

2. THE MAIN TRAITS OF THE MILLENNIAL GENERATION

Combining the key findings from different surveys, we have identified a few distinct characteristics of the Millennial generation. These traits include their advanced technological skills, as well as their attitudes toward work and life balance, loyalty, social responsibility, development, collaboration, and diversity.

2.1. Tech-savvy

Millennials, the first generation to experience globalizing world, are often referred to as "digital natives". Being tech-savvy is one of the main characteristics of today's youth and that can be seen in many aspects of their lives. As Bannon, Ford and Meltzer (2011) point out "they grew up untethered - with wireless devices, workplace mobility, and texting—and remain connected with friends via social networks". According to the Pew survey (2010), about 75% of Millennials are members of an online social network.

Palmer (2015) states that "employees expect companies to use the latest technology and be committed to improving technology on a frequent basis", because "technology allows employees to work remotely; employees can work smarter, not harder by using technology, and technology allows managers to focus on the results through better data tracking versus the number of hours an employee is sitting in the office".

Employers usually criticize their employees when they are texting or connecting to some of the social networks. But Millenials are actually turning online social networks into business opportunities, observed Lancaster and Stillman (The M-Factor: How the Millennial Generation Is Rocking the Workplace, 2010).

According to the Pew survey (2010), a majority (56%) of Millennials think technology helps people use their time more efficiently. As found in the PwC survey (2011), more than 50% of the respondents use their own technology at work daily and 78% said that access to the technology they like to use makes them more effective at work. This survey (PwC: Millennials at work - Reshaping the workplace, 2011) also suggests that "Millennials will expect a workplace technology ecosystem that includes social networking, instant messaging, video-on-demand, blogs and wikis", because "these social tools will enable this generation to instantly connect, engage, and collaborate with cohorts and managers in ways that are natural to them, leading to better productivity across the enterprise".

2.2. Work-life balance

According to the Pew survey (2010), to Millennials, as well as to all the other groups, family matters the most, while fame and fortune are much less important. Both, the Generation Y and the Generation X place a higher value on family relationships than career goals.

Spano (2015) points out that "Millennials have become accustomed to flexible work styles and want to have a "life" outside of their careers". Moreover, Krupienski (2016) says that work-life balance is generally regarded as more important criteria than the compensation.

In Global Millennial survey (INSEAD, 2014), 58% of respondents said they would spend time with family if given the opportunity to prioritize. Bannon, Ford and Meltzer (2011) noticed that importance of Millennials' life goals such as spending time with family, having a healthy marriage, and being a good parent may cause transformation of the conventional (nine-to-five) working hours into a more elastic time frame; and that is because they are “willing to trade security and stability for the ability to better integrate their professional and personal lives”.

PwC’s NextGen Study (2013) shows that “Millennials want more flexibility, the opportunity to shift hours—to start their work days later, for example, or put in time at night, if necessary”, and not only Millennials want that, but other employees as well. Furthermore, Ludden emphasizes that retention rates have dramatically increased at companies that offer flextime or part-time telecommuting (Jennifer Ludden, *When Employers Make Room for Work-Life Balance*, NPR, 2010). That is why companies must focus on providing more flexible working schedules.

2.3. Loyalty-lite

The PwC survey (2011) shows that over 25% of the Millennial generation expects to have six employers or more, compared to only 10% in 2008. Why is that so? This survey explains: “Millennials have seen that corporate loyalty does not necessarily bring rewards or even long term security in today’s economic environment“. That is the reason why many Millennials are checking out new opportunities, even if they are not actively looking for a new job, which leads to these results: “38% of the Millennials questioned, who are currently working, said they were on the lookout for new opportunities, and a further 43% said they were not actively looking, but would be open to offers“.

Millennials want to work in a workplace that meets their needs, and if it doesn’t, they will not hesitate to leave the current organization. Krupienski (2016) also points out that Millennials are “more apt to move to the next job than older generations would have been“, “if they feel that they are in a place where their personal values are not being satisfied“.

Moreover, Millennials are not only willing to switch employers, i.e. to go to work for competitors, but also many of them have ambitions to create their own businesses, which makes it even harder for organizations to keep them engaged. Therefore, employers certainly need to make an effort to understand Millennials’ needs and desires, in order to attract them, on the one side, and to decrease the turnover rate, on the other side.

2.4. Social responsibility

Although Millennials are often described as selfish generation, that is not completely true. On the contrary, they are eager to help their communities and to feel useful. Pew survey (2010) reveals that many Millennials have a strong desire to contribute to their communities. Data shows that 88% of Millennials seek employers with social responsibility values that reflect their own. Many among the Millennial generation would accept to work for lower wage if their work contributed to the community, i.e. if they feel like they are doing something important and meaningful for the environment they are living in.

2.5. Development

The PwC survey (2011) indicates that „Millennials’ desire to learn and progress is apparent in their view of the benefits offered by employers“. They actually would like to get, as an award, training and development and flexible working opportunities more than financial benefits. This survey also suggests that „Millennials expect to keep on learning as they enter the workplace“, and that opportunities for learning are very important criteria when choosing an employer, but also among the benefits they value the most.

Palmer (2015) says that Millennials are in constant need of getting a feedback on their performance. As found in the PwC survey (2011): “One of the strongest Millennials’ traits is that they welcome and expect detailed, regular feedback and praise for a job well done – 51% of those questioned said feedback should be given very frequently or continually on the job and only 1% said feedback was not important to them”.

Esoda (2013) emphasize that Millennials require immediate recognition for their accomplishments, especially because of the emerging usage of social media. Palmer (2015) points out that Millennials “want to constantly grow in positions, learn more, take on more responsibility, and know they are trusted to make profitable changes”. Lancaster and Stillman (2010) have also mentioned that „whether they expect perks before others think they have earned them or they want to move up the career ladder in record time, Millennials have been labeled as entitled“. The PwC survey (2011) reveals, likewise, that „career progression is the top priority for Millennials who expect to rise rapidly through the organization; 52% said this was the main attraction in an employer, coming ahead of competitive salaries in second place (44%)“.

2.5. Collaboration

Lancaster and Stillman (2010) describe Millennials as generation raised in a time of team projects and group scores. Therefore, they are in need of a pleasant working atmosphere and good professional networks, which will enable them to keep up the team spirit. Krupienski (2016) suggests that Millennials want to have fun. That means that the work environment needs to be lively and positive.

Employers should make an effort in meeting the needs of this generation by creating a positive workplace. But employers also need to listen, meet with the Millennial workforce, seek and give feedback, mentor them, and take what they have to say seriously.

2.7. Diversity

Bannon, Ford and Meltzer (2011) explain that today's workforce is among the most complex, with many generations and cultures working together, and, therefore, business activities have become more globally connected than ever before. That brings a need for having intercultural communication skills. They also label Millennials as a diverse and inclusive generation. Thus, it is easier for the Millennial generation to imagine a world without boundaries: they want global experience and they are connected through social media with different people all over the world. Therefore, they are ideal candidates for international assignments. According to the PwC survey (2008), 80% of Millennials expect to work in other countries and 70% expect to learn and use a foreign language in their careers.

3. RESEARCH METHODOLOGY

Research was conducted in the February 2016, and with the sample of 192 students from the University of Belgrade, in Serbia. Data is collected using online questionnaire, which can be found on https://docs.google.com/forms/d/1By7ddgwL5XyScOETOHrAMOsGfC6zZC14SF_V50MSXxI/viewform, in Serbian language.

The main objective of this survey is to provide practical research about Millennials' view on how business should be performed and what are the main characteristics of employers that they seek and appreciate at work. Considering the fact that the Millennial generation has increasing share of the workforce, employers need to understand what Millennials overwhelmingly believe in - and that is business reset in terms of paying more attention to people and their needs.

Sample consisted of 192 respondents; most of them (59 (30.7%) out of 192) were students from third and (44 (22.9%) out of 192) students from second year of study. Further, 16 (8.3%) respondents were students of Masters and PhD studies, 32 (16.17%) students from first year, 36 (18.8%) students of fourth year of study, and the rest - 5 respondents, were students from fifth and sixth year.

Table 1: Sample characteristics

Characteristics	N (%)
Year of study	
First	32 (16.7%)
Second	44 (22.9%)
Third	59 (30.7%)
Fourth	36 (18.8%)
Fifth	3 (1.6%)
Sixth	2 (1%)
Post-graduate (Masters and PHD studies)	16 (8.3%)
Sex	
Male	66 (34.4%)
Female	126 (65.6%)

Respondents in the target population of Millennials completed a total of 192 surveys, where male comprised 34.4% of the respondents, and female 65.6%.

The research results and discussion are presented in following section.

4. RESULTS AND COMMENTS

A survey and data analysis revealed important elements and criteria that contribute in creating a challenging, productive and motivating work environment for the next future leaders - students belonging the generation of Millennials. Following are the research findings.

Table 2: The most important criteria when choosing an employer

		(%)
Opportunities for learning	(87.4%)	
Opportunities for advancement		(92.1%)
Challenging assignments	(61.2%)	
Working environment (atmosphere at the workplace, collaboration, recreation opportunities etc.)	(81.2%)	
Good working conditions (working hours, work-life balance etc.)		(83.3%)
Team spirit		(52.4%)
Compensation		(83.2%)
Social responsibility		(50.8%)
International company/Prestige		(36.6%)
Organization’s mission		(45.1%)
Springboard		(82.7%)

An analysis of the data collected from online survey, that was conducted among Millennials in Serbia, showed that the most important and respected factor mentioned by majority of respondents is opportunity for advancement with 92.1%.

Millennials in Serbia, as a future dominant workforce, recognize the full worth of opportunities for learning with 87.4%, as one of the leading criteria when choosing future employer or when evaluating existing.

Also, a quite large percentage, even 83.3% representatives of “Me generation”, stressed that good working conditions relating to working hours and work- life balance, are key motivators for them. Following are criteria such as compensation with 83.2%, springboard with 82.7% and work environment with high level of collaboration, various opportunities for recreation and good working atmosphere with 81.2%.
Setting aside the previous chosen criteria, one of the key findings of this survey, that employers in Serbia can use in order to create inspiring work environment for Millennials, is the fact that 61.2% of respondents identified challenging assignments as one of the key drivers at work. This is not surprising since most young workers appreciate working on vitally important projects that allow them to expand their knowledge and use new skills (The Ken Blanchard Companies: Creating A Motivating Work Environment, 2009).
On the other hand, research has shown that young people in Serbia, who belong to this generation, in most cases, ignores international presence and prestige when choosing an employer, where 50.8% of them consider social responsibility more important factor.

5. COMPARATIVE ANALYSIS

To broaden our understanding of Millennials’ expectations from work and how organizations should shape their work environment, we have compared the obtained results with those from Collegefeed Survey,

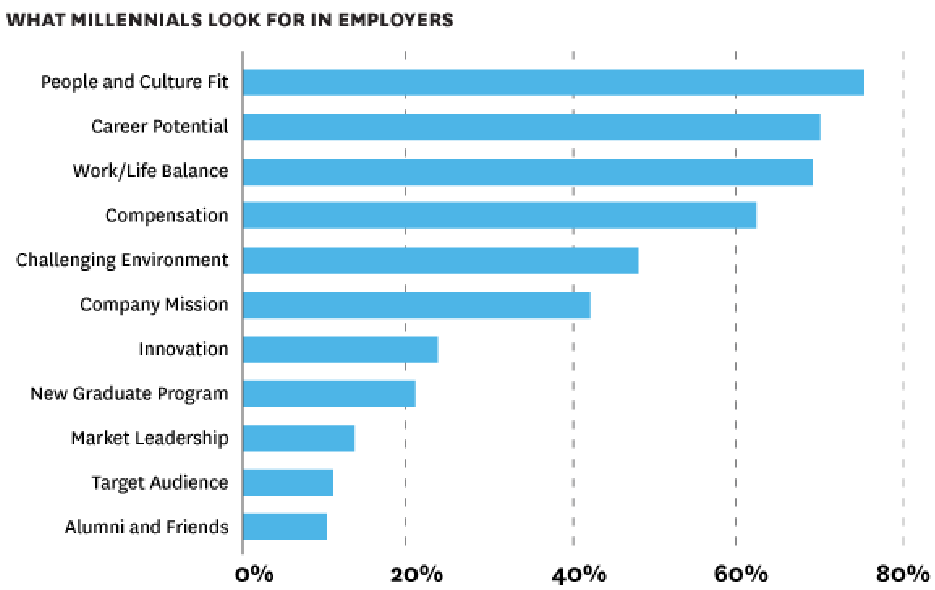

Figure 1: What Millennials look for in employers, HBR

published by Harvard Business Review, which contains answers of 15,000 polled Millennials worldwide. We have found that some assumptions and results are common for Millennials in Serbia, while other are not.

Even if criteria like company mission and market leadership are expected to be on the top of the priorities, people and culture fit and career potential are leading with more than 70%, which is similar to the responses of Serbian Millennials. Both groups of Millennials, in Serbia and worldwide, highly appreciate work-life balance, more than any other generation before.

Respondents in Serbia, 83.2% of them, evaluate compensation, as key criteria, on higher level, than respondents worldwide (about 60%).

Globally, teamwork is ranked fairly high, while among Millennials in Serbia this percentage is much lower. The cause of this probably lies in the education system and the methods used during the years of education, which vary.

6. CONCLUSION

The Millennial generation will represent 50% of the global workforce, by 2020. This generation has many specific characteristic that differentiate it from all the previous generations. This is why organizations find it challenging to create a workplace which is appealing to the Millennial generation. Obradović (2009) also points out that creating a motivating work environment is a great challenge for managers because different types of employees expect different working conditions, depending on the generation belonging.

According to Bannon, Ford and Meltzer (2011) "the challenge for businesses will be to motivate Millennials by playing to their technological strengths, embracing social networking relationships, celebrating their diversity, and helping them balance work and family".

The PwC's NextGen study (2013) suggests that emotional connection drive retention, and emotional connection can be created through providing a work-life balance, engaging work, development, different opportunities, but also through people and teams, and last, but not the least, through competitive pay.

According to this study, employers should create a flexible work culture, build a sense of a community through teamwork and constant feedback, connect with people, embrace the new technologies and social networks, encourage learning and allow faster advancement - in order to attract and retain Millennials.

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