HUMAN RESOURCE MANAGEMENT

E-RECRUITMENT: THE USE OF CONTEMPORARY TECHNOLOGIES FOR MANAGING TALENTS

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Abstract: *Attracting, sourcing and acquiring the right people are main challenges of human resource management. The value and the success of an organization are often connected to hers talent management and the growth of human capital. The new developments and new technologies brought the necessities to implement change in these processes as well, in order to be compatible in this fast changing workforce market. The purpose of this paper is to present e-recruitment as a part of the talent management system of an organization and to depict the current state in recruiting business taking into consideration all the possibilities that the use of social networks are enabling.*

Keywords: *human resources, talent management, technologies, social networks, e-recruitment*

1. INTRODUCTION

The most frequently asked question of modern Human resource management is how to find, attract, recruit and retain talents. In this sense, contemporary literature and research within this field deal with the issues of managing talents very often. It is not possible to avoid mentioning the application of modern technologies through all the functioning processes of an organization, as well as their application in the area of human resources. The influence of contemporary technologies could be seen in human resources management activities and their everyday performance. In this paper, the recruitment process as a first and very important step in talent management will specifically be explained. Focus will be on the influence and change in delivering recruitment using modern technologies and social networks.

The paper will start with the general explanation of the terms human resource management and the talent management, as well as a recruiting process. Following, the influence of the contemporary technologies on recruitment process will be explained, with the special focus on the component of social media and social networks and their use in recruiting and managing talents.

2. TALENT MANAGEMENT

Generally, the term human resource management refers to the policies, practices, and systems that influence employees' behavior, attitudes, and performance. Human resource management includes staffing (recruitment and selection), compensating employees, employee relations, designing work, health and safety, equal employment opportunity, human resource planning as well as employee training and development (Noe, 2010, p. 4).

Talent has become the most critical and significant factor of competitiveness, it must be managed at least as carefully as any physical asset and it should be implemented with contemporary talent management technologies. Talent management could be defined as the ability to expertly attract, recruit, motivate, develop and retain staff; it is the process that brings together all human resource management processes, administration and technologies (Shweyer, 2004). Similarly, CIPD (2015) has described talent management as the systematic attraction, identification, development, engagement, retention and deployment of those individuals who are of particular value to an organization, either in view of their 'high potential' for the future or because they are fulfilling certain critical roles in an organization (CIPD, 2015). The effective talent management is a means of ensuring the right talent at the right time. Effective talent management increases the value of a company; alleviate the risk and encourages workforce productivity and innovation. Talent management system is essential for increasing the value of human capital in organization (Shweyer, 2004)

CIPD (2015) in its Annual Survey Report Learning and Development presented that companies consider as the main objectives in their organization's following talent management activities:

1. Talent management activities are more common in larger organizations,
2. In 50% cases all staff is included in talent management activities,
3. Focus is on developing high-potentials and future leaders,
4. High-potential in-house development activities, coaching, mentoring and buddying schemes are among the most commonly used and most popular and effective talent management activities.

In order to accomplish these talent management activities and result with useful talents in an organization it is our opinion that the special attention should be given to the recruitment process. According to the results of SHRM's Employee Recognition Report (2015) recruitment is in the top four challenges faced by HR organizations today, with the turnover, employee engagement and succession planning (SHRM, 2015).

Tong (2009) explains that in human resource management context, recruitment is a process of sourcing and acquiring the right applicants to an organization. Mostly this process includes searching for and attracting a pool of qualified applicants using all possible recruitment methods. The use of conventional recruitment methods is no longer suffices and timely to attract adequate number of qualified applicants. Many organizations have turned to adopting sophisticated recruitment strategies or combining various recruitment methods to attract them (Tong, 2009). This is where the application of contemporary technologies becomes useful trough different tools of e-recruiting.

3. THE USE OF CONTEMPORATY TECHOLOGIES FOR RECRUITMENT

Nowadays, different Web sites, Internet in general, provide employees with self-assessment tools, salary information for jobs within the company, career management advice, and training resources. Similarly, many companies in the employee recruitment business (such as monster.com) provide similar resources for job seekers and employers (Noe, 2010). As Shweyer (2004) emphasized, today effective talent management is not possible without the right technologies. Web brought the technologies that help employers in finding and managing job candidates. That is when talent management is viewed as a talent management system. Today there are more that hundred talent management systems (TMS) solutions providers (Shweyer, 2004).

Web-based technology is what shapes the talent management system. It is the combination of browsers, search engines, e-mail and database technology that allows talent management data to be gathered, analyzed and measured. Talent management data includes job requirements, source information, workforce plans, resume data, assessment data, contact information, testing results, background/reference data, job application history, performance data, interview results, etc. The goal is to create a talent record that is collecting data across the talent management life cycle, thus creating a more complete picture or profilepf the person's talents, aspiration and performance. Today, nearly every major vendor of e-recruitment solutions and talent management systems advertises a Web-based toolset that users can access easily trough standard browsers (Shweyer, 2004).

As the internet technologies have progressed the conventional recruitment methods have transformed to online recruitment (e-recruitment). This e-recruitment business thrived to become the second most popular online business besides booking airline tickets, in United States and Europe (Tong, 2009).

3.1. Social networks

A specific field in e-recruitment which became the most popular nowadays is e-recruitment using social networks, especially LinkedIn. Social networks will be explained highlighting the ones that are typically used for e-recruiting.

Social networking refers to systems that allow people to be networked (linked) with each other and be able to share resources with each other (Clara & João, 2010). In other words, social networks are virtual or online networks of people or communities. Depending on their purpose they can be classified as sites that are oriented to leisure, entertainment and companionship (such as: MySpace, Facebook, Twitter, etc.) and professional networking sites that focus on business networking (such as: LinkedIn, Ecademy, Yammer, etc.). Applications for social networking sites allow users to create profiles to share information about them and to identify friends or contacts out of other users with whom they share an interest. Networks such as Facebook, LinkedIn, MySpace and Twitter enable users to find and maintain personal and professional relationships with each other (Shelly & Frydenberg, 2011).

Chaka (2010) has introduced multi utility of social networks, from which the features that are most important for e-recruitment will be listed below (Chaka, 2010):

1. The establishment of professional and private contacts (networking)
2. Connecting with experts,
3. The disclosure of commonly shared activities (eg, conferences, vebineri, writing papers / books) and participation in them,
4. Exchange of knowledge, attitudes and opinions,
5. Profiling institutions ans strengthening their image, reputation and identity,
6. Marketing, advertising and promotion of institutional products and services (programs, courses, modules ...)
7. Overall recruitment and consideration of potential candidates, students or partners.

As the basic functionality of social networking from the perspective of individual users are the following: the ability to get to know people online and the ability to share and update personal and professional data about themselves. From the companies perspective social networks are mostly used to contact with their employees internally as well as externally with customers. They create communication channels that allow employees to cooperate with each other but also the consumers to express their opinion about product and services. All applications for social networking have similar characteristics of such as the ability to create profiles, the ability to determine other members of friends or contacts, and the ability to find friends of their friends. You can ask the person that shares some interests to be friends (the term used in personal networks such as Facebook and Twitter) or to connect (the term used in the professional networks like LinkedIn). Your collection of friends or contacts forms your social network. Creating a profile is also a common feature of most social networks, with the difference such as for example that the profile on Facebook mostly contains information about you and your interests, while at LinkedIn the information about persons education, current and previous job - work experience and recommendations of colleagues are posted. (Shelly & Frydenberg, 2011). Nowadays, these differences are not so distinguished since the LinkedIn has evolved and have lot of Facebook characteristics such as status massages, like/dislike and commenting of different kind, and Facebook has in professional sense so that every acknowledged company has a Facebook company profile.

3.2. The use of social networks for e-recruitment

According to SHRM Survey Findings - Using Social Media for Talent Acquisition – Recruitment and Screening (2016) HR professionals with the job function of employment or recruitment have given their opinion regarding the use of social media for talent acquisition. It is shown that (SHRM, 2016):

- Two-thirds of organizations (66%) have taken steps to leverage mobile recruiting—to target smartphone users, meaning that in most cases companies have optimized their career websites (39%), job postings (36%) and application processes (36%) for mobile users. Most major job search websites, such as Indeed, LinkedIn and Monster, have free applications for mobile user.
- Recruiting via social media is growing with 84% of organizations using it currently and 9% planning to use it - 81% of organizations reported that social media is their one recruiting tool among others and 5% of organizations reported that it is their primary recruiting tool.
- The top reason that organizations use social media for recruitment is in order to recruit passive job candidates (82%) – persons that are not actively looking for a new employment.
- Overall, 43% of organizations confirmed that the use of social media or online search engines to screen job candidates.
- Over 36% of organizations have disqualified a job candidate in the past year because of concerning information found on a public social media profile or trough an online search.

Buhalis (2016) provides a basis for understanding the impact of online and social media recruitment trends and issues emphasizing that the relationship is changed based on multiple direction of communication and inclusion of others. Social networks afford opportunities for the long-term engagement of past, current and future employees in the development and sustainability of the organization and its reputation. Relationships with all of the categories of employees can be facilitated through social media, recognizing that at different times each may play the role of promoter, recruiter, customer or ambassador. Websites, Facebook, Blogs and Twitter can build a social and professional community that is a continuous loop which outlasts one particular role or place in time. The role of the human resources department in facilitating this loop is crucial and an important area for consideration. It may also require new skills related to information technology, and for online media communication strategies to be included as part of human resource management activities (Buhalis, 2016).

In latest years lot of surveys have been conducted in order to explore the use of social media for recruiting and mostly in order to find out what social network are precived as not just as mostly used but as mostly effective as well. Here are some of the results:

- The companies that are using social media for recruiting have answered that they are using LinedIn, Facebook and Twitter for e/recruitment but that they find LinkedIn (73%) as most effective (SHRM, 2016).
- Recruiters' research showed that over 90% of companies use social media to recruit and most of them are using LinkedIn. About two-thirds of recruiters use Facebook, and little more than half are using Twitter to recruit. In most cases different social media is used as a support to traditional hiring channels by searching for candidates, posting jobs, and vetting applicants (Parkins, 2015).
- Alexander Mann Solutions and Social Talent (2016) conducted an online Global Recruiting Survey of about 1,000 sources and recruiters around the world in order to find out how social media was being used in the recruitment space (Ferguson, 2016). The results show that the most used hiring tools were social media in 2015 as it is shown in figure 1.

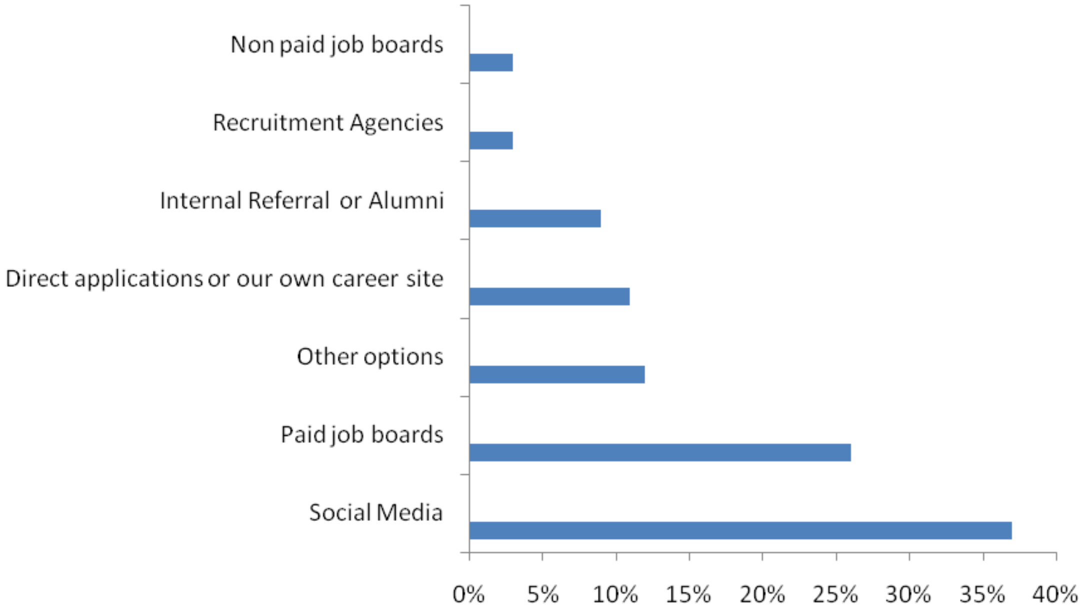

Figure 1: Where are successful hires ultimately found (Social Talent & Alexander Mann Solutions, 2016)?

As it was presented the platform becoming widely used for recruitment purposes is Web 2.0 and Social Networking Sites. Since these networks are mostly use for e-recruitment they will be presented with more details about their users in order to emphases the opportunities and the potential that they offer for finding talent in global market (Tabel 1).

Table 1: Social network characteristics: LinkedIn, Facebook and Twitter

Facebook (Facebook, 2015)	**LinkedIn** (LinkedIn, 2015)	**Twitter** (Twitter, 2015):
• 1.04 billion daily active users on average • 934 million mobile daily active users on average • 1.59 billion monthly active users • 1.44 billion mobile monthly active users • Approximately 83.6% of our daily active users are outside the US and Canada	• LinkedIn operates the world's largest professional network on the Internet with more than 400 million members in over 200 countries and territories. • Professionals are signing up to join LinkedIn at a rate of more than two new members per second. • There are more than 40 million students and recent college graduates on LinkedIn. They are LinkedIn's fastest-growing demographic.	• Twitter has around 320 million monthly active users. • 80% active users are mobile. • 3900 employees around the world, outh of what 40% are employees in technical role. • Professionals are signing up to join LinkedIn at a rate of more than two new members per second.

4. CONCLUSION

At the moment not all HR professionals are using social media for recruitment, although the presented results from a different Surveys conducted in last year has shown that are. Upon the results of SHRM (2016) Survey Findings on Using Social Media for Talent Acquisition it is recommended that HR professionals should use all options that would increase the online presence of their organizations as well as to incorporate the use of contemporary technologies into their talent acquisition strategies in order to broaden the pool of talents that they search for.

The use of social media for recruitment purposes are just beginning to be understood. It is clear that the use of social media for recruiting brought change in human resources with all of its possibilities and challenges. Human resource managers will mostly feel the consequences and they will have to be ready and willing to respond to the issues raised by these emerging practices (Buhalis, 2016). The question remains about the situation in Serbia? In our opinion, these social media tools are used in Serbia as in all other countries, since these are borderless and global trends that need to be followed in order to maintain the company's concurrency on today's market.

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"JOHARI`S BEERGAME": THE EFFECT OF ALTERING COOPERATIVENESS IN SUPPLY CHAIN

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Abstract: *There are a lot of causes of bullwhip effect in supply chains and one of them is lack of cooperability as a personality trait. In this paper, the experiment conducted on students simulating beergame will be presented. The results of the experiment showed that the cooperativeness of participants in supply chain could be, at least partially, susceptible to situational conditions due to the fact that it is possible to change them. That conclusion is based on results showing differential effects of permitting and forbidding cooperativeness in supply chain during the beergame simulation. It was found that allowing cooperativeness during the beergame simulation, among cooperative participants leads to more self disclosure and feedback sensitivity which are similar but less pronounced within noncooperative participants in the same situation. On the other hand, lack of opportunity to cooperate in beergame situation leads to the restriction from self exposure and feedback sensitivity among inherently less cooperative group and less feedback sensitivity among participants with tendency to cooperate but with lack of opportunity to do that.*

Keywords*: supply chain, beergame, cooperability, Johari Window*

1. INTRODUCTION

Lack of information and coordination in the supply chains can cause the bullwhip effect, which implies a distortion of information within the supply chain because different stages in the supply chain have different demand forecasts, so that demand increasingly varies from retailer to manufacturer. Bullwhip effect was first identified by Forrester (1958). Later, the causes of the bullwhip effect were defined as "players' systematic irrational behavior" or as a "misperception of feedback" (Sterman, 1989, Goodwin 1994). Croson et al. (2004) have classified the causes of the bullwhip effect as operational and behavioral. Detailed review of those causes is given in paperworks of Panić et al. (2014) and Panić (2015). Behavioral causes are: coordination risk, distrust, cognitive limitations, underweight the supply line, and personality characteristic. Personality characteristic which causes bullwhip effect are risk taking, ambiguity, self-efficiency, locus of control and cooperability.

Majority of researches proved that collaboration improves performance in the supply chain (Anthony, 2000; Quinn, 2000; Mentzer, Roggin, and Golicic, 2000 according to Poirier, 2002; Chopra and Meindl, 2001; Lapide, Derome, and Radjou, 2002; Barratt, 2004; Nix et al., 2004; Vereecke, Muylle, 2006; Mangan, Lalwani, and Butcher, 2008; Deloitte, 2008; Van de Vijver, 2009; Luo, Jiang, and Hu, 2010; Hudnurkar, Jakhar, and Rathod, 2014). As different authors differently define collaboration within this context, we specify collaboration as cooperative strategy of supply chain partners. Nyaga, Whipple, and Lynch (2010) in their endeavors to find factors that promote collaboration, emphasized trust, dependence, long term relationship, information and resource sharing. In one study (Panić, 2015) it is found that the more cooperative participants in supply chain achieve cost reduction. Also, it was shown that it was possible to organize supply chain consisting of more cooperative participants. In this study we try to prove that it is possible to change cooperability of the participants in the supply chain. For that purpose we use Johari Window model.

2. THE JOHARI WINDOW MODEL

The Johari Window model is a tool for illustrating and improving self-awareness, and mutual understanding between individuals within a group but it can also be used to assess and improve a group's relationship with other groups. The model was invented by psychologists Joseph Luft and Harry Ingham in 1955, while researching group dynamics at the University of California Los Angeles (Johari). Autors called their model 'Johari' after combining their first names, Joe and Harry. Johari Window model is used for understanding and training self-awareness, personal development, behaviour, interpersonal relationships, group dynamics and inter-group development, empathy, cooperation, improving communications, team development and similar 'soft' skills. The Johari Window actually represents feelings, experience, views, attitudes, skills, intentions, motivation, etc - within or about a person - in relation to their group or to represent the same information for a group in relation to other groups.

The Johari Window consists of four perspectives, regions, areas or quadrants (Figure 1) (Johari). Each quadrant represents the information about the person, in terms of whether the information is known or unknown by the person, and whether the information is known or unknown by others in the group. Standard representation of the Johari Window model shows each quadrant the same size. The Johari Window quadrants can be changed - in new groups the open space for each team member is small because shared awareness is relatively small (Figure 1a). As the team member becomes better known the size of the team member's open free area quadrant increases (Figure 1b).

Figure 1: The Johari Window

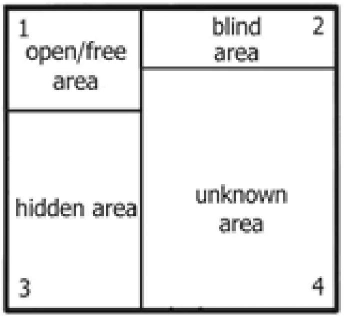

Figure 1.a: The Johari Window of a member of a new team or a person who is new to an existing team

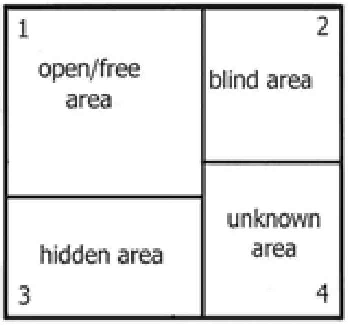

Figure 1.b: The Johari Window of an established member of a team

The Johari window four regions are (Johari; Jalom, 2002):

- what is known by the person about him/herself and is also known by others - open area, open self, free area, free self, or 'the arena'
- what is unknown by the person about him/herself but which others know - blind area, blind self, or 'blindspot'
- what the person knows about him/herself that others do not know - hidden area, hidden self, avoided area, avoided self or 'facade'
- what is unknown by the person about him/herself and is also unknown by others - unknown area or unknown self

2.1. Johari quadrant 1 - 'open/free self/area' or 'public area', or 'arena'

Johari region 1 is also known as the 'area of free activity'. This is the information about the person - behaviour, attitude, feelings, emotion, knowledge, experience, skills, views, etc - known by the person ('the self') and known by the group ('others') (Johari; Jalom, 2002).

The aim in any group should always be to develop the 'open area' for every person, because when we work in this area with others we are at our most effective and productive, and the group is at its most productive too. This is the space of good communications and cooperation.

New team member starts with small open area because relatively little knowledge about the new team member is shared. The size of the open area can be expanded horizontally into the blind space, by seeking and actively listening to feedback from other group members - 'feedback solicitation'. Other group members can help a team member expand their open area by sensitively offering feedback. The size of the open area can also be expanded vertically into the hidden area by the person's disclosure of information, feelings, etc about him/herself to the group and group members. Group members can help a person expand their open area into the hidden area by asking the person about him/herself. Managers and team leaders can facilitate feedback and disclosure among group members or in directly giving feedback to individuals about their own blind areas. Leaders also have a responsibility to promote a culture and expectation for open, honest, positive, constructive communications, and the sharing of knowledge.

2.2. Johari quadrant 2 - 'blind self/area' or 'blindspot'

Johari region 2 is what is known about a person by others in the group, but is unknown by the person him/herself. By seeking or soliciting feedback from others, the aim should be to reduce this area and thereby to increase the self-awareness. This blind area could also be referred to as ignorance about oneself, issues in which one is deluded or issues that others are deliberately withholding from a person (Johari; Jalom, 2002).

Group members and managers can take some responsibility for helping an individual to reduce their blind area - in turn increasing the open area - by giving sensitive feedback and encouraging disclosure. Managers should promote a climate of non-judgemental feedback. The extent to which an individual seeks feedback, and the issues on which feedback is sought, must always be at the individual's own discretion.

2.3. Johari quadrant 3 - 'hidden/avoided self/area' or 'facade'

Johari region 3 is what is known to ourselves but kept hidden from others, and therefore unknown. This self represents anything that a person knows about him/herself, but which is not revealed for whatever reason. The hidden area could include fears, hidden agendas, manipulative intentions... It's natural for very personal information and feelings to remain hidden, but a lot of hidden information is related with work and so is better positioned in the open area. The aim should be to disclose and expose relevant information. By telling others how we feel and other information about ourselves we enable better understanding and cooperation. The extent to which an individual discloses personal feelings and information must be at the individual's own discretion (Johari; Jalom, 2002).

2.4. Johari quadrant - 'unknown self/area' or 'area of unknown activity'

Johari region 4 contains information unknown to the person and to others in the group. Large unknown areas would be expected in younger people, and people who lack experience or self-belief. Examples of unknown factors are as follows, and the first example is particularly relevant and common, especially in typical organizations and teams: an ability that is under-estimated or un-tried through lack of opportunity, encouragement, confidence or training; a natural ability or aptitude that a person doesn't realise they possess; a fear or aversion that a person does not know they have; an unknown illness; repressed or subconscious feelings; conditioned behaviour or attitudes from childhood (Johari; Jalom, 2002).

This information can be uncovered through self-discovery or observation by others. Counselling can also uncover unknown issues, but this would be known to the person. Whether unknown discovered knowledge moves into the hidden, blind or open area depends on who discovers it and what they do with the knowledge. The unknown area could also include repressed or subconscious feelings rooted in formative events and traumatic past experiences, which can stay unknown for a lifetime. In a work or organizational context the Johari Window should not be used to address issues of a clinical nature.

A team which understands itself - that is, each person having a strong mutual understanding with the team - is far more effective than a team which does not understand each other- that is, whose members have large hidden, blind, and/or unknown areas. Team members and leaders should always try to increase open areas and to reduce blind, hidden and unknown areas.

3. BEERGAME

Beer game was created as a part of the research of industrial dynamics in early sixties, by Sloan School of Management in Massachusetts Institute of Technology, to simulate performance of supply chain with one participant in each phase (Sterman, 1992).

Game is built up on the table representing beer manufacturing and distribution. Teams are formed to play game with the objective to minimize the expenses of whole supply chain. The winner is the team that finishes the game with minimal costs. Teams are divided into four sections: Retailer, Wholesaler, Distributor and Factory. Retailer comes to the wholesaler to buy beer. Wholesaler strives to satisfy the retailer`s demands from his supplies. Every unsatisfied order remains for subsequent period of time as backlog. Retailer asks from Wholesaler who orders from distributor, who refers to Manufacturer. Two time units (two iteration of simulation) are required for the product to pass from one participant to the other. Inventory holding costs are 0,50$ per case weekly, and backlog costs are 1$ per case weekly. Game starts from the state of equilibrium, which means that every participant has 12 cases of beer on stock, and initial demand is 4 crates in every phase. In first few weeks, participants learns about mechanisms of fill in the purchase order, creating backlogs and so on, and during that period of time demand is constant – 4 cases weekly. In first three weeks, participants can order only 4 cases per week, which is logical due to the fact that the demand is also 4 cases. At the beginning of the fourth week, participant can obtain unlimited amount of supplies, though it is pointed out that the demand of buyer could vary. One of his tasks is to anticipate the demand and to purchase accordingly. The total duration of the game is 50 weeks of simulation, but the desired effects are evident much earlier. Every participant has correct local information (about his inventory, backlogs, amount of supplies placed from his direct supplier each week and the amount of supplies he provided to other participant), but he has no insight into global information. Furthermore, communication between participants is not allowed.

Two groups (UN, CN) played according to the traditional beer game rule that each participant possesses only local information. Two other groups (UI, CI) were allowed to exchange whatever information they want. Game duration was 23 simulated weeks.

4. JOHARI`S BEERGAME: THE EXPERIMENTAL PROCEDURE

We simulated functioning of supply chain by playing partly modified beer game (Sterman, 1992). Participants in supply chain were 21 students of 3th year of Faculty of Organizational Sciences, voluntarily apply to take part in experiment. Firstly, they filled Social Value Orientation (SVO) questionnaire (Murphy et al., 2011; Murphy and Ackermann, 2012) and they were classified into cooperative or uncooperative subsample. Then, both groups were randomly divided into two subgroups, subjected to two different situational conditions. Consequently, we got four subsamples consisted from two different categories of participants, according to their individual proclivity toward cooperation, submitted to two different game rules, considering the interactional (communicational) circumstances. Those groups were:

- Uncooperative with information exchange not allowed (UN) – 4 participants
- Cooperative with information exchange not allowed (CN) – 5 participants
- Uncooperative with information exchange allowed (UI) – 7 participants
- Cooperative with information exchange allowed (CI) – 5 five participants

Each group represented one team who simulate one supply chain according to the established rules. Due to the fact that sample were students, game was renamed into a water supply game.

Due to the fact that the positions in Johari`s windows are different according to the level of mutual awareneess and familiarity developed during their common activities, there is an idea that it might indicate the behavioral change. So, we tested participants, before and after the experience of game simulation, by Johari`s methodology to see if there were any difference between their position.

In order to verify the hypothesis of possiblity to influence on behavioral change of participants in supply chainDa bi se ispitala hipoteza da je moguće uticati na promenu ponašanja učesnika u lancu snabdevanja u cilju povećanja kooperativnosti studenti su popunjavali Johari Window upitnik pre i posle simulacije.

4.1. Johari`s Beergame: Results of Experiment

There were an idea that the participants would be more ready to open toward each other and to receive feedback information, after the beergame simulation. It should be expressed through enlargement of public (open) self on behalf of blind and hidden self. Nevertheless, results indicate that different groups have different results. Each participant could gain total score between 24 and 120 on questionnaire, from 12 till 60 for self opening, as well as for readiness to accept feedback. Means for self enclosure and feedback sensitivity are given in Table 1.

Table 1. Results of Johari questionnaires before and after the beergame simulation

		CI			**CN**			**UI**			**UN**		
		M	**SD**	**N**	**M**	**SD**	**N**	**M**	**SD**	**N**	**M**	**SD**	**N**
oppenes	pretest	48.71	3.9	7	46.00	6.48	4	42.20	7.86	5	45.50	7.85	4
	retest	49.14	2.67	7	48.50	4.8	4	46.20	7.3	5	44.25	8.4	4
feedback	pretest	51.00	1.16	7	49.75	2.5	4	48.00	6.96	5	53.25	2.63	4
	retest	52.57	2.76	7	47.50	4.36	4	50.20	4.82	5	48.00	8.29	4
total	pretest	99.71	4.68	7	95.75	5.06	4	90.20	13.55	5	98.75	9.74	4
	retest	101.00	5.94	7	94.50	6.66	4	96.40	11.33	5	92.25	16.21	4

Comparative analysis of pretest and posttest effects is also given in Figure 2, 3. and 4.

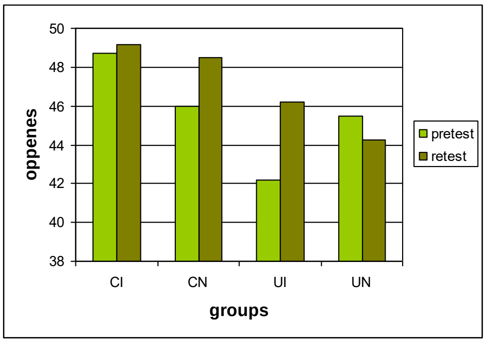

Figure 2: Enclosure before and after the simulation

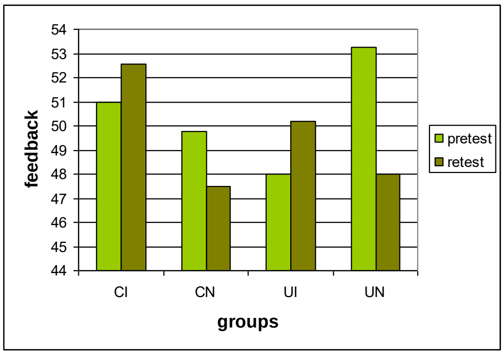

Figure 3: Feedback before and after the simulation

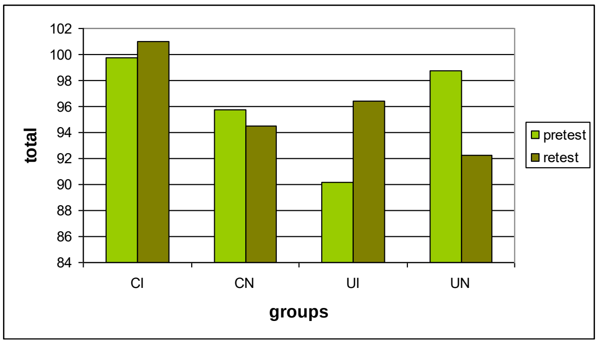

Figure 4: Total results before and after the simulation

Both cooperative groups (that were allowed to share information) (CI and UI), had expected results. That considered higher scores on self enclosure and feedback sensitivity after the simulation. CI group had heightened scores from 48.71 up to 49.14, while feedback sensitivity was increased from 51 to 52.57. UI group had higher self exposure, from 42.2 to 46.2, and more feedback sensitivity 46.2 instead of 42.2 before information sharing during the beergame simulation. Noncooperative group with no information sharing opportunity (UN) showed even reduced self disclosure tendencies (from 45.5. to 44.25), as well as the lack of readiness to receive feedback (from 53.25 to 48). Cooperative group with restriction of information sharing (CN) showed higher self enclosure, from 46, before to 48.5 after the simulation, but there were a lack of feedback sensitivity, that was 49.5 before and 47.5 after the experiment. Additionally, in this group sum of the results for self enclosure and feedback sensitivity after the game were lesser than before the game.

5. CONCLUSION

Significance of cooperativity for successful coordination in supply chain is well known fact. In the previous study of Panić (2015) less costs were found for more cooperative participants in supply chain and it was shown that it is possible to organize supply chain consisting of more cooperative participants. In this study we played beergame once again and we proved that it is possible to change cooperability of the participants in the supply chain. For that purpose Johari Window model were applied. This model gave us theoretical framework and methodological tool for indicating the level of openness and feedback sensitiveness of participants. Although we expected the overall amplification of the cooperative tendencies after the beergame simulation, i.e. after they familiarize with each other and spend some time together, results showed that there were different patterns of behavior among groups. It turned out that the results were dependent on conditions in which the game was played. Groups that were given the opportunity to share information enlarged their public self which is typical for members of well established teams. They also became more cooperative, compared to groups that had no chance to share information which is resulted in even more reduction of public self. There were possibilities that the circumstances in which information were hidden provoke distrust between participants with consequently reducing their willingness to cooperate.

As we could see from figures given in text, differences were rather small and no statistically significant, probably due to the short period of game duration. It might be assumed that the difference would increase and the results might gain on its reliability if only the simulation were last longer.

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HUMAN RESOURCES AS THE INITIATOR OF HIGH VALUE ENVIRONMENTAL PERFORMANCES OF LOCAL GOVERNMENTS OF THE REPUBLIC OF SERBIA

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Abstract: *Human resources represent a significant potential for environmental improvement. Local governments of the Republic of Serbia face environmental problems and the problems of the potential and professional development of existing human resources. Studies in this field indicate that the organizational structure, ie.theimprovement of human resource management and environmental protection largely depends on the size of the local government. The discussed current HR architecture in local governments in the Republic of Serbia points to the necessity of a new strategic approach to environmental protection with human resources as a significant element of maximizing organizational performances in the field of environmental protection.*

Keywords: *human resources, environment, local government*

1. INTRODUCTION

Improving the quality of the environment in terms of local government of the Republic of Serbia is a permanent imperative and implies a strategic change and the necessity of its modeling in order to create an efficient, modern, professional, environmentally-oriented local government. No development-oriented organization can be imagined without quality human resources and their continuous improvement. "Performers of the overall activities of the organization, the people in charge, must be competent individuals with relevant working resources necessary to the organization or its individual businesses. The level of competence of individuals increases with the development of their abilities, skills and experience (Mihailović &Ristić, 2011)."Maximizing organizational and environmental performances involves directing human resources and is achieved by managing human resources.

"Human Resource Management in essence represents a new concept of relations between an organization and its employees and of managing their work and development. Its focus is no longer just employment jobs and labor relations, but also a whole series of activities created in the field of economy, organization and management using information obtained by the organizational sciences, psychology, sociology, communication science, technology, informatics... Human resource management is a subsystem of functioning of the organization, which includes the selection and implementation of goals and policies through planning, organization, management and control of activities related to human resources toward achieving the goals of the organization (Mihailović ,*Human Resource Management,* in press)."The impact of human resource management on organizational and environmental performances is important, but the mechanisms of influence are not sufficiently clear. This suggests additional research effort in the field of environmental protection to propose an operational model of HRM activities with the possibility of its successful implementation in local governmentsof the Republic of Serbia.

Strategic planning of human resource management involves the planning of organizational personnel, their knowledge and skills, training in the field of environmental protection in order to conduct human resources of the organization through a network of social relations, and transfer it into a common interest in protecting the environment and into improving the performances of local government. Strategic management is a broader concept than the strategy itself. This is the process of implementation of the strategic plan by aligning theorganizational opportunities with changes in the environment. The process of strategic management is closely linked with human resources. On the basis of strategic choices, the necessary human resources are defined,the capabilities and actions of which will define the implementation of the strategy and, ultimately, the outcome itself. The importance of human resources strategy for the European Union is clearly seen in the fact that at the request of the French Presidency Ernst & Young conducted a survey that provides the European Union with an overview of current changes in the world of human resources, giving hints about what we might expect in the future. The results are based on replies in a questionnaire issued in September 2008, in which more than 300 executives from 26 countries were surveyed. The research for this report assessedthe contribution to the strategic processes. The results indicate that 3/4 of respondents believe that the management of human resources is associated with the strategic goals of public administration (Student Assessment in Human Resources Management, 2008).

Local governments in Serbia have no clearly defined human resources management strategy and have their compliance with environmental protection at an even lesser degree. Differences in approaches and strategic orientation thereof stem from the size of local governments. The notion that human potential of a local governmentis an integral part to successful strategy of preservingthe environment leads to the necessity of reviewing the general strategy of each local government in terms of its uniqueness and specificity. "Our instructive consideration includes the relationship between the overall organization development strategy,its human resource management subsystem (the intervening variable) and the performance achieved by the organization. This series is already known in theory and current research in this area asthe RBV model (Resource-based view), which is supported by most current and recent research projects. Many researchers (Pertusa-Ortega et al., 2010; Collins and Clark, 2003; Hayton, 2003; Kim and Gong, 2009) have tried to discover a number of specific configurations between strategy, HRM and performances, but the notion pervades that this goal is currently unattainable. The optimal position is that any data configuration of a model has its topicality and is unique at the time of conception, but also that it should be constantly changed and adapted over time. (Mihailović, *Human Resource Management*, in press)."

"Management of human resources in environmental protection, in addition to a direct impact on the improvement of the environment, has significant impact on overall performances of the organization. Studying the cause-and-effect relationships between strategy, HRM and performances (Boseliea, 2001, Combs, 2006; Huselid, 1995), it can be concluded that a HRM unit via influence of human and social capital positively affects the performances of a local government. For this reason, the process of human resource management in environmental protection of the local governments involves the maximization of human capacities with a central tendency of enlarging the capabilities of a local government by strengthening human and social capital. It is important to emphasize that the local governmentsof the Republic of Serbia are to a large extent dormant and sluggish organizations with a significant proportion of unused human resource capacity, which requires revision of human resources. "Harington (2003) brought evidence that many organizations in their functioning only use 20% of the capacity of human resources. This means that in many companies there is 80% of formal potential burdening companies with costs, making them inactive or insufficiently active in the realization of strategic objectives. The implication that we can consider current and topical is that there is significant room for improving human resources. Using a series of derived data, Huselid (1995) argued that improving human resources can positively influence organizational performances. Human Resources (HR) and Human Resource Management (HRM) have a strategic importance being a potential value and having a central position in the creation of an entity's capabilities (organizational capabilities) responsible for their competitive advantage in market competition (Ulrich and Lake, 1999, Tuan and Takahashi, 2009).(Mihailović, *Human Resource Management*, in preparation)."

Bearing in mind human resources as drivers of high environmental performance of local government in Serbia, we have designed research and determined the relationship between variables and influence factors on the organizational peculiarities of local governments in the field of environmental protection.

The subject of the research is to analyze the relationship between organizational characteristics of human resource management and protection of living and working environment in the local self-governments in

Serbia. Key factors of the subjects of investigation are characteristic organizational forms and their dependence on the size on local government.
The aim was to determine the factors and how they affect the processes in living and working environment, human resources and their development in local governments. Based on the set of objects and the research objectives and in compliance with current theoretical platform, a hypothesis was formulated:

H. - 1. Organization of human resources engaged in theoretical conducting of environmental and labor protection in local governments depends on the size of the local communities.

2. RESEARCH PROCEDURE

The research problem is related to a very current area of environmental management at the regional level and its narrower segments - local government units (JLS). Problem focus of the research is oriented towards the respect of key resources - human resources whitch are involved in the environmental management of local self-governments depending on their size.

The collection of data required for checking the hypotheses put forward in the research project, was conducted by the method of testing as the basic method of research, which is a common phenomena of this nature. In this study, such a method was applied as a most commonly used and most effective techniques - interviewing. The research process was conducted is appropriate by an specially designed instrument-questionnaire technique implemented individual interviews respondents. Attitude management of local governments on the issue of internal characteristics and factors of human resource management JLS, was realized using specially designed indoor electronic questionnaire. Questions are classified into groups and administered in the form of „Likert-type scales“, with five offered answers to every question.

The procedure of processing the obtained data was performed using standard procedures and parameters of descriptive statistics and inference. The data are classified and processed using the software package SPSS. For the establishment of the level were used of tested characteristics and their description, descriptive statistical indicators, such as measures of central tendency (mean, median, mode) and measures deviation (standard deviation, and skjunis kurtozis), and frequency response. For testing the connection between the variables, the data in the further processing of the correlation parameters are derived (c coefficient), and tested by standard method of application χ^2 test and its significance DF (with specified threshold of significance, α - usually 0.01 or 0.05).

A research conducted in the Republic of Serbia in the period from March to June 2015, on a sample of the predicted **N = 145** respondents - local governments, reduced to **n = 105** respondents (number of returned questionnaires was 108; the number of respondents who responded to the questionnaire in a very appropriate way was 105; the number of invalid questionnaires was 3). 105 respondents,a number which makes 72.41% of the total number of respondents (N = 145), is sufficient enoughfor processing and drawing valid conclusions of the research process according to statistical postulates. Testing internal factors of human resource management in the units of local governments was realized by using an instrument for data collection in the form of a closed electronic questionnaire, divided by groups of questions.

3. RESEARCH RESULTS

Local governments were classified into five net indicators by numbers of inhabitants a) in municipalities with less than 20 000 inhabitants (the first indicator); b) municipalities with over 20 000 and less than 60 000 inhabitants (the second indicator); c) municipalities with morethan 60 000 and less than 100 000 inhabitants (the third indicator); g) municipalities with more than 100 000 and less than 150 000 inhabitants (the fourth indicator) and d) municipalities with more than 150 000 inhabitants (the fifth indicator). A tabular presentation of the sample is found inTable 1.

Table 1: Overview of the sample-to-population units of local government / municipality

Size of municipality		
	f	**%**
Less than 20 000 inhabitants	47	44,8
From 20 000 to 60 000 inhabitants	36	34,3
From 60 000 to 100 000 inhabitants	7	6,7
From 100 000 to 150 000 inhabitants	10	9,5
More than 150 000 inhabitants	5	4,8
Total	105	100,0

Starting from the assumption that the organizational structure of human resources and environmental protection depends on the size of the local government, by using the χ^2 test we will check the set statement (Table 2).

Table 2: Frequency of responses and the χ^2 local government size and organizational structure of local government test

		Local government size In number of inhabitants								
		Less than 20 000 inhabitants	From 20 000 to 60 000 inhabitants	From 60 000 to 100 000 inhabitants	From 100 000 to 150 000 inhabitants	More than 150 000 inhabitants	Σ Φ	χ^2	df	p
Whether a service for the development of human resources exists at the local level	fyes	3	5	0	3	3	14	15,245	4	0,004*
	fno	44	29	7	6	2	88			
Whether there is a service for planning, development and environmental protection at the local level	fyes	18	16	7	9	5	55	20,955	4	0,000*
	fno	29	19	0	1	0	49			

*significant at the level of significance 0,01 ($p < 0,01$)

The results show that the χ^2 test is statistically significant for the existing organizational structure of the local government ($p < 0.01$) in functional areas of the existence of services for the development of human resources and the services for planning, development and environmental protection. For these reasons we reject the zero hypothesis stating that there are in no way connected with the size of the local government.

Due to this claim, further analyses have been made to determine the correlation between the size of the municipality and the stated characteristics of the organization for which the χ^2 test is statistically significant, whereby the coefficient of contingency (C- coefficient) was used. In Table 3 the χ^2 values and the contingency coefficient values are isolated.

Table 3: χ^2 size contingency coefficient of local government and of the organizational structure of local government

	χ^2	df	p	c
Department of Human Resource Development	15,245	4	0,004	0,36
Department for Planning, Development and Environmental Protection	20,955	4	0,000	0,41

As it is known, the contingency coefficient "moves" ranging from 0 to 1 (the closer to 1 the coefficient value is, the higher the correlation of variables). Since the values of obtained contingency coefficients, the statistical significance of is determined, range from 0.36 to 0.41, one can conclude that the correlation they refer to is moderate.

For a better understanding it is useful to look at the following picture derived from performed analyses.

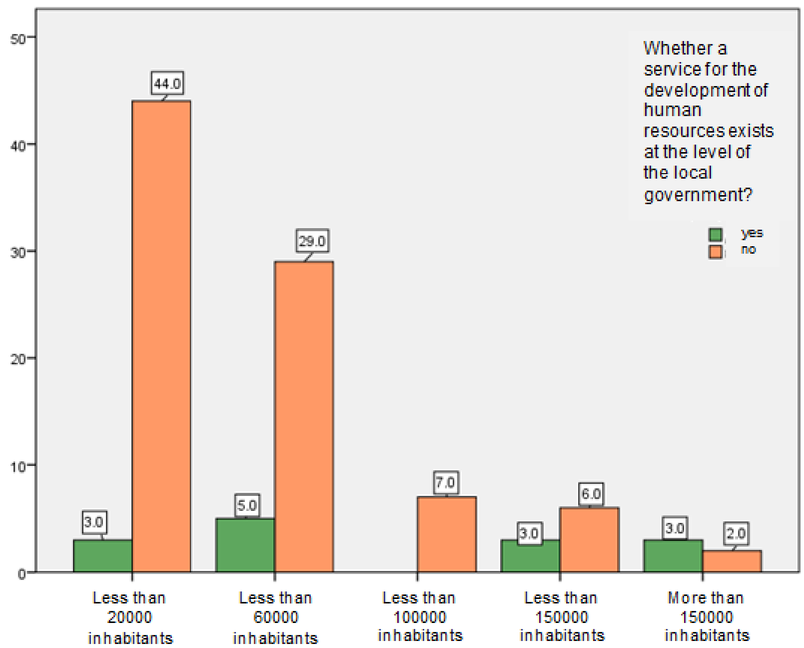

Figure 1: Correlation between the size of local government and the existence of services for human resource development

We see that the lack of services for the development of human resources is more prominent the smaller local governments are. It is necessary to bear in mind that in a total of 73% of local governments in the category of up to 60 000 inhabitants there is no human resource development service. It is interesting to note that none of the local government of 60 000 to 100 000 inhabitants there is no service for the development of human resources. Among local governments of over 150 000 inhabitants there is a higher percentage of those who have established a service for the improvement of human resources.

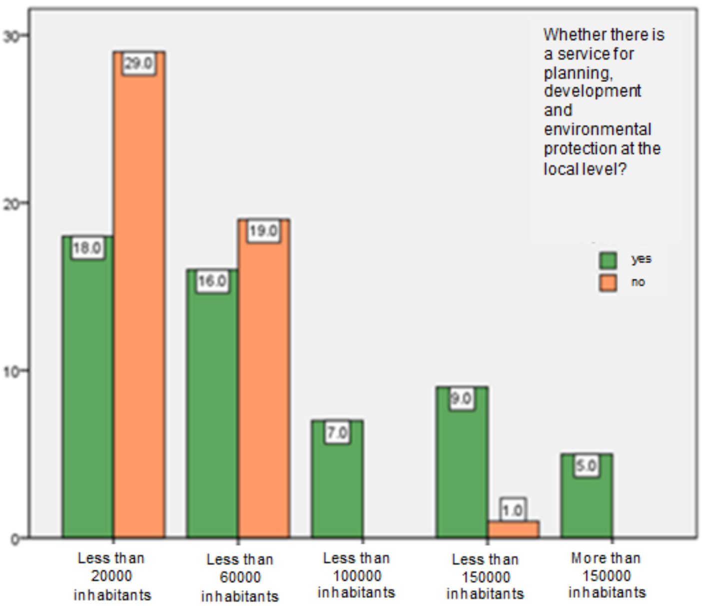

Figure 2: The correlation between the size of local government and the existence of services for planning, development and environmental protection

From the attached graphic it can be seen that in local governments with 60 000 inhabitants or less, a higher percentage of them has no established service which deals with planning, development and environmental protection. It is significant that all local governments of more than 150 000 inhabitants have a service for improving the environment in its organizational structure.

4. CONCLUSION

Human resource management in environmental protection applied with a view to mitigating or eliminating environmental externalities and to supporting the creation of sustainable development with people as the most important factor is the current strategic approach of local governments of the Republic of Serbia. Crucial support of strategic performances that are marked as successful consists of internal analysis and constant review of human resources management in the key success factors of functioning of local government, of which *the factor of environmental protection stands out in its importance*. The size of local government is one of the factors that determine the introduction of the new strategy, organizational structure modeling and business process improvement. The analysis of the results obtained during the verification and inductive set hypotheses implies that the involvement of human resources to preserve and improve the quality of life and working environment within the units of local sef governments depends on the size of local government. For this reason, we conclude that the organization of human resources engaged in the preservation and improvement of living and working environment must be adapted to the size and uniqueness of each local government.

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FORMER SOLDIERS' ATTITUDES TOWARDS ACTIVE RESERVE SERVICE

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Abstract: *Personnel recruitment for armed forces is based on voluntary principle and contractual regulations of mutual obligations between the military organization and citizen who willingly decide to become a member of armed forces. This recruitment approach brings respective level of unpredictability and randomness in the process of man-powering of military units. Concept of Active Reserve is an answer to the challenge of sustainment of military units' readiness. The most desired candidates for Active Reserve positions in military units are former soldiers. That is, those people are already trained and have personal experience of how the military works. One of the most important questions is related to the motivations and propensity to serve in the military. This paper presents some results from conducted empirical research on the issues of motivations and propensity of potential candidates to apply for temporary military service through the mechanism of the Active Reserve.*

Keywords: *military, manpower, organization, motivation, reserve forces, management*

1. INTRODUCTION

Manpower structure of modern armed forces assumes two general categories: active and reserve personnel. Active personnel are those in military service who actually works for the military organization. Reserve personnel are all others who are in the evidence of the appropriate military recruitment bodies. However, they are not in military service at the moment. Military reserve personnel are called to duty only in cases of war, emergency situations or for training purposes. With suspension of conscript recruitment system and transition towards all-volunteer-force concept, military organizations have been faced with the need for additional tools for quick, efficient and effective fulfilment of empty posts in some military units. In order to manage that challenge, military organizations "invented" a specific kind of reserve soldiering status that assumes higher level of readiness, ability and will to respond to the call of duty in a short term. This mode of engagement is called the Active Reserve (in Serbia), while there are another terms in other countries.

Issues of reserve forces are actually in other countries too, particularly in the Europe. The reason for that is fact that majority of European states have made transition from conscript system and mandatory military service towards professional military forces based on voluntary system. It was happened in relatively short period of last decade of 20th century and up to now, Szvircsev (2014). To mention some of that states and date (year) when suspension of mandatory military service was put in charge: Belgium (1993), France (1996), Holland (1996), Slovenia (2002), Hungary (2004), Macedonia (2006), Bosnia and Herzegovina (2006), Romania (2007), Croatia (2007), Bulgaria (2008), Serbia (2010). Few countries which made this conversion of recruitment system much earlier than others and lead the change are the United Kingdom (1960) and the United States of America (1973). Fortunately, they have gained respective experience in dealing with various new challenges related to problems of manning an professional army and made data available, Keene (2015). Lessons learned and experience on the topic from those countries that have started earlier with professionalization and conducted new recruitment methods are very valuable and useful for many newcomers in the problem.

Reserve components itself have respectable importance, particularly when armed forces are engaged in large scale operations, for example USA armed forces in the First Gulf War, Pagonis (1992), or in a long period under high tempo of activity like Israeli Defence Forces, Catignani (2004). Reserve component is inevitable when so called "war army" structure and composition is considered Petrovic (2007); or when armed forces got the pressure from the side of engagements in international mission Sedivy (2013). Besides concept of Active Reserve seams as an efficient solution it also comes under testing towards the cost-benefit analysis Alock et all (2014). Issues about indicating the level of propensity and motivations to serve are of particular importance: Taylor et all (2015), Wiggins et all (2014), Griffit et al (1991), Nikolic (2015).

Concept of the Active Reserve could be perceived as an agility shift of the modern military organization who tend to obtain reliable mechanisms for sustaining manpower strength in a given external circumstances, limitations and available resources. Concept of agility is recognized among researchers in the military but is also popular in the business area. Definition of the Agility Shift as it is proposed by Meyer (2015) is as follows: "The Agility Shift is the intentional development of the competence, capacity, and confidence to learn, adapt, and innovate in changing context for sustainable success."

This definitional perception of agility fits well in the context of concept of the Active Reserve (AR). The AR concept comes from clear intention of the military organization to create additional channel for sustainment of its manpower strength level at desired level. It is adaptation of organization towards ambivalent issues of higher readiness level and limiting costs of it. Also, concept of AR is innovative one in comparison with traditional way of obtaining professional soldiers. It is innovative as well, particularly in changing context of contemporary security threats and challenges and corresponding new roles and missions for the military organizations.

2. ESTABLISHING ACTIVE RESERVE CONCEPT

Concept of Active Reserve is known in domestic defence context for almost a decade, but its full implementation in practice started in the middle of 2014, while during the 2015 started the process of selection of candidates for first contingent of one hundred future active reservists. Also, in the second part of 2014 started an empirical research on the topics of motivation and propensity of the population to serve in the status of Active Reserve. Part of that empirical research was dedicated and oriented towards the population of "former soldiers".

Under term "former soldiers", here we consider those people which already have experienced military organization and military life through the mechanism of mandatory military service that existed in the past before canceling conscription and introducing voluntary principle for military service. In the past, all male citizens have to serve obligatory term in the military organization and after that all of them are considered as potential candidates (reservists, passive reserve) for manning various military units in case of war. Some of those reservists are drafted and scheduled for duties in a so called "war units" that are in their essence reserve military units ("war units" or reserve military units are additional military forces that are formed in a case of war), and they are used to be called from time to time for training purposes and checks.

This kind of reserve personnel is the most desirable to be seen as applicants for the Active Reserve group. The reason is evidently based on perception about their experience in dealing with military organization: they have got basic and advanced military training through mandatory military service, and after that they gained additional experience from their temporary engagement in reserve military units where they are supposed to be called periodically for training and evidence updating. Also, they are expected to be more qualified for some jobs due to their professions and working experience in civilian life. This category will be further marked as: RSDSRU, which stands for: Reserve Soldiers Drafted and Scheduled for Reserve Units. The second group that is considered in this research presents former soldiers who just finished their mandatory military service, but have not been engaged in reserve units. This category will be further marked as: RSWSRU, which stands for: Reserve Soldiers Without Schedule in Reserve Units.

3. RESULTS OF EMPIRICAL RESEARCH

Empirical research has been conducted by researchers of Strategic Research Institute of the Ministry of Defence of the Republic of Serbia (MoD) with grateful support of other parts of MoD. Media support has been offered by Department for Public Relations, while main support in the field came from the Military Duties Department (MDD) which is responsible for tasks related to: defining measures and plans for engagement of citizens, companies, government authorities in a case of emergency and war; as well as to issues of military obligations, work and material obligations, and other tasks (for more see: http://www.mod.gov.rs/). In fact, MDD network of offices across the country were essential for successful interviewing respective number of participants in a very short time.

Questionnaire itself was created under influence of at least three factors. First, it is designed in a way to enable collection of appropriate data that could satisfy requirements that have been given at the very beginning. Second, findings and lessons learned from other similar research have been used and that contribute to efficiency of our efforts. And third, internal revisions of the draft version of the questionnaire have been used in iterative way in order to improve final document. Final form of the questionnaire contains questions grouped as follows: General data -ten questions; Information sources –four questions; Propensity to join the Active Reserve –two questions; Motivations to join the AR –fourteen questions; and Self-assessment -four questions.

Planning and realization of this empirical research was performed with full respect of the following principles: unconditional voluntarily participation and full anonymity of participants. Those two principles are fundamental because they are preconditions for frankly responds of participants. Randomness of the sample is achieved by random choice of time (period of performing empirical research) and territorial determinants (whole territory of the country).

Empirical research was realized and we have got results from 403 participants in total. In this sample there were 113 persons from RSDSRU category (Reserve Soldiers Drafted and Scheduled for Reserve Units), who were willing to fulfill the questionnaire. In conducted empirical research there were 290 persons from RSDSRU category (Reserve Soldiers Without Schedule in Reserve Units), who were willing to fulfill the questionnaire. Comparative views of findings from empirical research for both categories of former soldiers are arranged in the following tables.

Table 1: Age structure of respondents (%)

Category **Age**	**RSDSRU (%)**	**RSWSRU (%)**
Up to 25 years	2	9
26 to 32 years	19	38
33 to 40 years	25	34
41 and above	48	13
Not declare	6	6

Table 1 presents age structure of participants and differences between the two groups are evident. The most frequent age for the RSDSRU is 41 years and older (48%), while in the RSWSRU dominate age from 26 up to 32 years (38%). From data in Table 1, few things are evident. Age structure in category RSDSRU is not promising, because almost half of responders are too old to join the Active Reserve (there is an age limitation for joining the AR), however, their view, motivation and propensity are valuable indicator for some broader analysis because of the most valuable experience they are possessing in comparison to other category. Situation is much better with other category, RSWSRU.

Table 2: Educational level structure of respondents (%)

Category **Ed.level**	**RSDSRU (%)**	**RSWSRU (%)**
Elementary school	2	14
High school	66	68
Higher School (BA)	11	7
Faculty (Graduated)	21	10
Not declare		1

Table 2 gives insight into educational structure of participants. In both categories persons with high school level dominate (66% and 68%), while faculty graduates in the RSDSRU are to times better (21%) then the RSWSRU (10%). However, it is sad that in younger category of RSWSRD there are seven times more people with the elementary school than it is a case in the older one (2% against 14%). Educational indicators are in concordance with findings about employment status: the RSDSRU a group of older, but better educated population (67% employed) wins the RSWSRU a group of younger, but lower educated group (40% employed), Table 3.

Table 3: Employment status of respondents (%)

Category **Age**	**RSDSRU (%)**	**RSWSRU (%)**
Un-employed	31	53
Employed	67	40
Not declare	2	7

Table 4 gives answers on direct questions about propensity to serve in the Active Reserve status for two cases: service in the country, and, service in missions outside the country. Both groups showed relatively low level of interest for joining the Active Reserve military service. Average marks as estimations about level of propensity to join the Active Reserve, on the scale from 1 (absolutely not interested for joining AR) up to 5 (very interested to join), are not encouraging at all (2,83 and 3,47), particularly for the second question ("missions abroad") where results were only 2,48 for older, more educated and more employed population (RSDSRU), while results for the other group are something better but is still far from very good.

Table 4: Propensity to serve in AR

Category Mission	RSDSRU (on the scale 1-no to 5-yes)	RSWSRU (on the scale 1-no to 5- yes)
In the country	2,83	3,47
In missions abroad	2,48	3,20

Finally, empirical findings related to the possible motivational factors for joining the Active Reserve are presented in Table 5. In some sense this findings are expected particularly for the more experienced, more educated and more employed group (RSDSRU). This category of population is more realistic and objective, illusion-free, more informed and so on. The first motive is patriotism, than follows: money, getting new knowledge and earning new qualifications. This motivational constellation is not strange as it look like at the first impression. Possible explanation (at least for the author) could be as follows: this mature group is not too much interested in military service at all (Table 4 results), they realize practical benefits from potential engagement (money, knowledge, qualifications) however, primary factor for potential joining, would be patriotism. In any case, those findings are in favor of the Serbian Army as an entity closely perceived with patriotism, but also as a good employer which is able to offer good knowledge and additional qualifications, as well as to give fair money for work and engagement.

Table 5: Motivations ranks to join the AR

	MOTIVES	RSDSRU	RSWSRU
1.	Patriotism	1	1
2.	Money	2	2
3.	Getting new knowledge	3	5
4.	Earning new qualifications	4	4
5.	Care for peace	5	3
6.	Getting to know new people	6	8
7.	Family tradition	7	6
8.	Arms fan	8	9
9.	Military life fan	9	7
10.	Curiosity	10	11
11.	Oportunity to travel	11	10
12.	Adventurism	12	12
13.	Health insurance	13	13
14.	Opportunity to give orders	14	14

4. CONCLUSION

Modern armed forces are deeply dependent on its reserve personnel. This is particularly true for professional armies whose manpowering is based on the voluntary principle. Motivational issues of the population to join military service, in this case Active Reserve, have very high importance for overall process of obtaining personnel for military units with principle of voluntary recruitment.

Conducted empirical research offers results for one of the most desirable group for recruitment for military Active Reserve and those are former soldiers with more or less additional military experience. Findings on motivation to join the Active Reserve are in favour of the Serbian Army as an entity closely perceived with patriotism, but also as a good employer which is able to offer good knowledge and additional qualifications, as well as to give fair money for work and engagement. Level of propensity to join Active Reserve is better for younger population of the sample, than for the older one.

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THE MAIN MOTIVATING FACTORS FOR SOMEONE TO TAKE UP ENTREPRENEURSHIP

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Abstract: *Managers and entrepreneurs both play an important role in the business community. Many of them share some of the same characteristics, but some differences exist when it comes to the basic traits of each. One of the differences is in the way of their motivation which we try to explaine in this paper through Self-determination theory that include autonomous motivation and controlled motivation.*
The purpose of this paper is also to present relationship between entrepreneurship and motivation and how human motivation might influence the entrepreneurial process. Study of the entrepreneurial process and entrepreneurs motivation is important because it drives innovation and technical change, and therefore generates economic growth. The main point of discussion is motivational differences, variations across people in their perceptions of risk and opportunity which influence entrepreneurial decisions.

Keywords: *Motivation, autonomous motivation, controlled motivation, managers, entrepreneurs, motivating factors*

1. INTRODUCTION

How and why entrepreneurs formulate business ideas and choose their business ventures is a subject of continuing study. We can observe motivation ~~"~~as the inner state that energizes activities or action and directs or channels behavior towards the goal" (Asagwara, 2000). The main question is where do entrepreneurs get so much motivation, where does it come from? What is the difference between people who always seem to have so much motivation and energy, and others who struggle with just getting the first page of a business plan written?

Newly created enterprises increase the dynamism of economies and generate employment. The SME sector in Serbia recruits 53.3 percent of total employment, 60.7 percent of total investments, realizes 77 of exportation and participates with around 61.6 percent of the GDP (Chamber of Commerce and Industry of Serbia). Since they have such a big impact on the economy, they are the object of growing research interest. Focus is on entrepreneurs who form a new company. The first step is to make a decision about forming a new company, which is based on both personal and subjective motives. Founder's motivation represents a commitment to a project or business idea, and affects the development and success of the company in the future (Sánchez, Sahuquillo, 2012).

In this paper, we suggest how human motivation might influence the entrepreneurial process. Through self-determination theory we would like to explain the differences between autonomous motivation and controlled motivation. Our assumption is that autonomous motivation is more pronounced among entrepreneurs and controlled motivation among managers. With this assumption we do not want to exclude the fact that all human actions are the result of both motivational and cognitive factors, and that also includes ability, intelligence, and skills (Locke,2000).

2. SELF-DETERMINATION THEORY (SDT) – AUTONOMOUS AND CONTROLLED MOTIVATION

As a macro theory of human motivation, self-determination theory (SDT) suggests that people are motivated by a need to grow and gain fulfillment. Their activities are directed toward personal development, life goals and aspirations, self-regulation, energy and vitality and need to gain knowledge or independence (Deci, Ryan, 2008).
The self-determination theory identifies three key psychological needs that should be satisfied to raise well-being and health. Also, according to the theory, people need to feel the following in order to achieve psychological growth, but some of these needs may be more salient than others at certain times or expressed differently based on time, experience or culture. These needs can be universally applied.

- **Competence** - Seek to control the outcome and experience Master (White, 1959).
- **Relatedness** - Universal want to interact, be connected to, and experience caring for others

(Baumeister, Leary, 1995).

- **Autonomy** - Need to feel in control of own behaviors and goals. This does not mean to be independent of others (Deci, Vansteenkiste, 2004).

The most important difference in self-determination theory is between autonomous motivation and controlled motivation. Our assumption is that the autonomous motivation is more common with entrepreneurs while controlled motivation is typical for managers.

2.1. Autonomous motivation

Autonomous motivation can be defined as a set of intrinsic motivation and some types of extrinsic motivation in which people integrated a value of an activity into their sense of self (Deci, Ryan, 2008), more specifically as the motivation to work on something because it is interesting and personally challenging. An entrepreneur is a starter, an individual whose main goal is to start a business by setting up an enterprise. He starts the business for his personal gratification, and become the leader responsible for the destiny of the venture.
Intrinsic motivation is form of autonomous motivation. Intrinsically motivated peoples work for passion, pleasure, and interest. Intrinsic motivation correlates with proactive engagement in work (Gagne, Deci, 2005) and high levels of psychological health (Baard, 2004; Deci, 2001).

An entrepreneur is a person in charge with direct financial benefits, but also assumes all risks involved in running the enterprise. One of the most frequently asked questions is “what motivates an entrepreneur to take all the risks and start a new business?” In the most cases, the answer is an “entrepreneurial obsession”. The most successful entrepreneurs are not also the most talented, but the one who have ideas, see an opportunity, and find out what customers want. They have conviction and believe in their ideas. The main reason for an entrepreneur to start a business enterprise is his individual satisfaction and opportunity to create a new environment, create something from scratch, meet new people, build a team and create a jobs.

This theoretical approach of understanding the motivation that drives entrepreneurs can be confirmed through numerous examples from practice. One of the successful entrepreneurs is Robert Mondavi, who felt “reborn” after starting the winery that bears his name. “I was like a kid again, bursting with energy, ready to climb the mountain, conquer the world, go for the gold. Yes, at the unlikely age of fifty-two, the great adventure of my life had finally begun” (GCASE – Global Community for Advancing Studies on Entrepreneurship). This approach and the type of motivation is the opposite of being extrinsically motivated. Extrinsic motivation means being motivated by expected evaluation, external rewards such as money, fame, and praise, and it leads to a decrease in intrinsic motivation. Entrepreneurs do what they love, and they love what they do (GCASE).

2.2. Controlled motivation

Deci and Ryan (2008) defined controlled motivation as a function of external contingencies of reward or punishment. Regulation of action is energized by factors such as an approval motive, avoidance of shame, contingent self-esteem, and ego-involvements (Deci, Ryan, 2008). In cases when people are controlled, they might to feel pressure to think or behave in particular ways. Controlled motivation can also be defined as a desire to transfer learning that is not initiated and governed by the self (i.e. regulated by external rewards or sanctions) (Deci, Ryan, 2008).

A manager is a person who is a servant in the enterprise owned by the entrepreneur, but he or she does not bear any risk involved in the enterprise. Every month a manager gets fixed salary as the reward for the services rendered by him in the enterprise. A manager is a part of controlled work environment which diminish employees' experiences of autonomy, competence, and relatedness. Externally regulated managers see workplace rules as externally imposed, what limits their passion and desire for change, and their only motivation is to obtain rewards such as praise, promotions, and financial benefits. Typically top managers instead of using motivation in the workplace to inspire people to work better, they believe in the idea that “pressure makes diamonds”. There is also a believe that if you want exceptional performance, you align employee objectives with end-of-year bonuses for hitting certain milestones and then employees will turn up their work ethic to reach them (Tim Olson, Olson group).

Regarding points of distinctions, we can conclude that an entrepreneur differs from a manager and that different thing motivates them. A manager is someone good at execution. Typically managers follow a business plan, or strategic plan, which they may or may not have had any say in developing. The entrepreneur has an idea for a new business. Entrepreneurs are independent thinkers, brave enough to take risks and put ideas into action. All this differences influence on their motivation and goals. In this paper, we would like to put the focus on entrepreneur motivation and entrepreneurship because newly created enterprises increase the dynamism of economy and generate employment, and that could be one of the way of reshaping the future- through entrepreneurship.

3. MOTIVATIONAL CONCEPTS THAT DRIVES ENTREPRENEURS

No two entrepreneurs are alike and there is a range of factors which could inspired them to take the leap and start a business. One of a judge for Ernst and Young's Entrepreneur of the Year (EOY) Award Program, Jack Stack, said that their inspiration and motivation is evident in their appearance and behavior - ―You can see it in their eyes. You can see it in their confidence. You can see it in the way they talk" (GCASE). Entrepreneurs are creative and willing to take risks especially if they know they can influence the outcome of the event. They have great vision of commitment, vision, and passion. They are idealistic and optimistic, innovative, aggressive, and intensely focused.

Study of the entrepreneurial process and entrepreneurs' motivation is important because it drives innovation and technical change, and that leads to economic growth (Schumpeter, 1934). Entrepreneurial action is the process through which supply and demand are equilibrated (Kirzner, 1997). Also, we can observe entrepreneurship as an important process by which new knowledge is converted into products and services (Shane & Venkataraman, 2000). It has become an important vocation, and has important role in the development of human and intellectual capital (Zahra & Dess, 2001).

Motivational differences in many ways influence on entrepreneurial process. One of the things that have an effect on entrepreneurial process is variation across people in their perceptions of risk and opportunity (Shane & Venkataraman, 2000). People vary in how they view the risk of expending resources before knowing the distribution of outcomes (Palich & Bagby, 1995). At the entrepreneurial process the probability of success is low. Only those people who are willing to precede despite these odds might be more optimistic or higher in self-efficacy than people deterred by these odds.

Through the example of an entrepreneurial process and motivational concepts that are defined by Scott Shane, Edwin A. Locke and Christopher J. Collins in the paper ―Entrepreneurial motivation", we will try to explain motivational concepts that drive entrepreneurs. Also, Ivan Bjelajac COO at Devana and one of the most successful Serbian entrepreneur explained on his example how he see the different motivational factors, and what drives him through his entrepreneurial career.
There is a set of human motivations that psychologists have shown to influence many aspects of human behavior. These include the motivations, nAch, and the locus of control, desire for independence, passion, and drive.

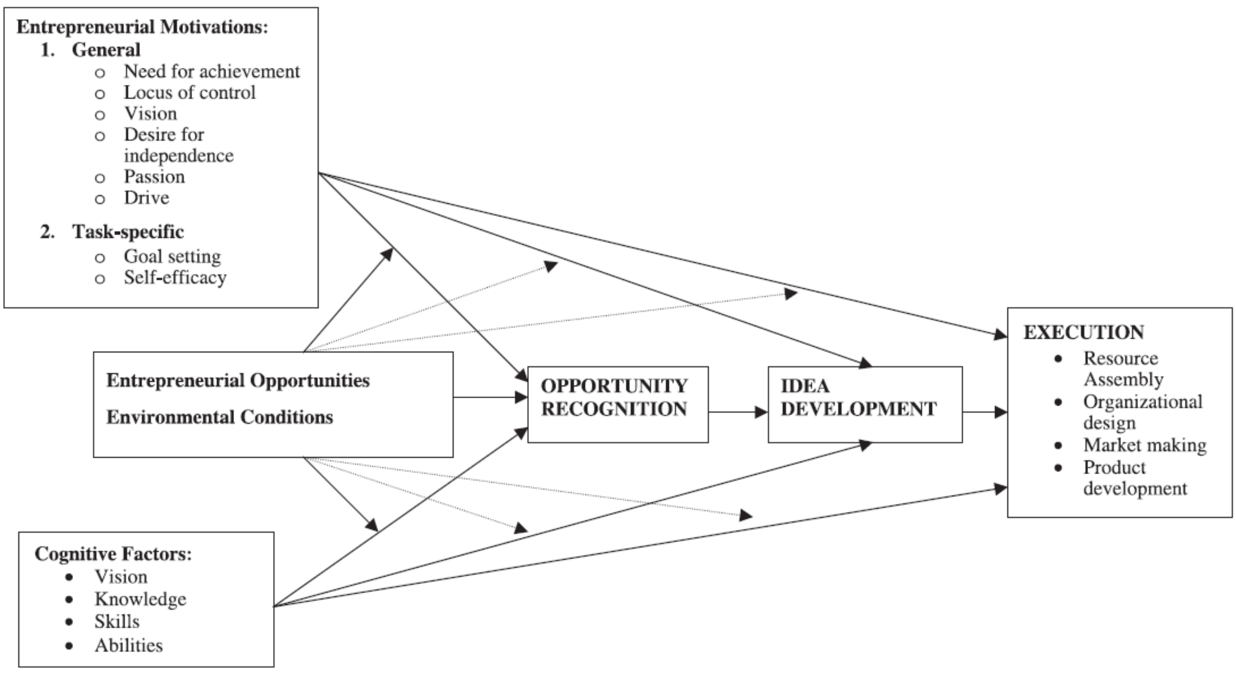

Figure 1: Model of entrepreneurial motivation and the entrepreneurship process (according to Shane, Locke & Collins, 2003).

Need for change and achievement

The need for achievement is driven by the need for a sense of control and in particular it is evidence that we can influence what happens around us. Achievement can also boost our sense of identity as our achievements help define our self-image. Individuals who are high in nAch are engage in activities or tasks that have a high degree of individual responsibility for outcomes, require individual skill and effort, have a moderate degree of risk, and include clear feedback (McClelland, 1961). Maslow (1943) effectively includes achievement as a part of self-actualization, where we seek to achieve what we are capable of achieving.

Balaji Viswanathan, Product Manager at a VC Funded Startup, from his experience, said that entrepreneurs constantly want change; they have a wish to be the bearers of the change and constantly achieve more. They are problem solvers, but also motivated to create something new. Every entrepreneur has a vision ("I want to aggregate the world's information" or "I want to put a PC on every desk") and always find a way to realize the same.

Ivan Bjelajac, COO at Devana and one of the most successful Serbian entrepreneurs, said that everyone likes to give his life some meaning, you can do it in many ways, but building stuff is a great way to do it. He thinks that all people love to see something they created being used by other people. When someone compliments your product, it feels very special.

Risk-taking

Entrepreneurship means risk, the risk of walking away from security and career path to create something new. Most business types that thrive on innovation will encourage risk takers. Individuals who have higher achievement motivation should prefer activities of intermediate risk because these types of activities will provide a challenge (Atkinson,1957). On the other hand, individuals who score high on the motive to avoid failure will avoid intermediate risks. Begley (2000) defined risk-taking propensity as the willingness to take moderate risks.

Balaji Viswanathan, Product Manager at a VC Funded Startup said that many people who like to start-up, want it for the challenge and want to handle big problems. Also, he said that successful entrepreneurs are always curious and ask - what if we implement a new way of working, and remove existing. They endeavor to understand the customer's minds, markets and competitors. They almost always include huge risk while making decisions. Balaji Viswanathan concludes that an entrepreneur in no different from a researcher who is searching for the truth.

On the other hand, Ivan has an opinion that whole life is filled with taking risks. We take risks every day, but most people are not even aware of them. Entrepreneurship can mean that you are aware of the risks and want to influence the outcome. Not influencing the outcome could be considered more dangerous. Actually, Ivan thinks that entrepreneurship is not so much about risks.

Tolerance for ambiguity

Ambiguity refers to the situation which is doubtful or uncertain. Tolerance for ambiguity can be understood as an important trait for entrepreneurs. The challenges and potential for success associated with business start-ups are unpredictable (Schere, 1982). It involves tolerance for ambiguity as the propensity to view situations without clear outcomes as attractive rather than threatening for entrepreneurs (Budner, 1982). Entrepreneurs continually meet more and more uncertainty in their everyday life, but the business owners with a high tolerance for ambiguity can normally handle new and unpredictable situations.

Many entrepreneurs do not like ambiguity. They want to influence the outcome. However embracing ambiguity can sometimes be mind opening and can lead to some amazing results (Ivan Bjelajac).

Locus of control

There are two types of individuals - ones who have an external locus of control, and others who have an internal locus of control. People with an external locus of control believe that the outcome of an extent is out of their control, and attribute their success or failure to outside influences. The others, with an internal locus of control, are the ones who base their success on the own work and completely control their lives. They also believe personal actions directly affect the outcome of an event (Rotter, 1966). That is why an internal locus of control would be likely to seek entrepreneurial roles. They desire positions in which their actions have a direct impact on results (Durand, 1975).

So, we can conclude that entrepreneurial actions affect the outcome of an event. Individuals have the opportunity to be more creative when running own business. They can experiment with a new website design, develop new marketing strategy, create something innovative, design new packaging and new advertising campaigns.

People, especially entrepreneurs, do stuff because they want autonomy, purpose, and mastery (Ivan Bjelajac).

Self-efficacy

Self-efficacy is the belief in one‘s ability to muster and implement the necessary personal resources, skills, and competencies to attain a certain level of achievement on a given task (Bandura, 1997). Regarding self-efficacy, or confidence as it is commonly known, we can explain why people of equal ability and knowledge can have different results and successes.
An important role in determining chances for success is self-efficacy. Individuals with high efficacy have a positive attitude towards new situations and difficult tasks see as a challenges rather then the limitations. This approach leads in intrinsic interest in activities. For entrepreneurs it is characteristic to have high efficacy, which is reflected through the continuous setting of challenging goals. Entrepreneurs always have a strong commitment to accomplish those goals.

Goal setting

Edwin Locke, in 1960's, put forward the Goal-setting theory of motivation. This theory predicts that people will channel effort toward accomplishing their goals, which will in turn affect performance (Locke & Latham, 1990). Locke and Latham (2002) found a direct linear relationship between goal difficulty, level of performance, and effort involved. This relationship will stay positive, as long as the person is committed to the goal, has the requisite ability to attain it, and doesn't have conflicting goals (Locke & Latham, 2006).
If an individual has a challenging, specific, and concrete goal, that is also measurable, he or she will setting a structure which directs actions to achieve the same.

One of the MIT professors, Edward Roberts, has also addressed this topic. He has studied MIT graduates who had gone on to start technology-related businesses. Through its research he discovered that the most successful ones did not seek “some intangible objective.” Instead, they want to create something “significant and tangible”, and it was a challenge for them.

Many people are able to make a onetime success without setting a clear goal. Goals are key to understanding failure and success and repeating it (Ivan Bjelajac).

Independence

For all entrepreneurs, starting a business is the route to “life, liberty, and the pursuit of happiness,” no matter how risky. Independence makes people more capable, more prepared and a little more confident on handling issues that are a part of their lives. They are more prepared to make decisions and take actions without having to wait for support or permission.
Independence is leading motivation for entrepreneurs. That assumption is proved by Hornaday and Aboud (1973) who were interviewed 60 founders. All the founders were significantly higher than the general population on measures of independence.

Balaji Viswanathan, Product Manager at a VC Funded Startup, also conclude from his experience that independence is one of the key factors that drives entrepreneurs. Many guys who start-up a business, do that don`t wanting to be a part of a company in which they have no way to shape the destiny. They wish to create work their own time, own place, own tasks and goals.

Ivan Bjelajac, COO at Devana agrees that for many entrepreneurs, starting a business is the route to “life, liberty, and the pursuit of happiness”. Running your own business gives you a sense of freedom.

Drive

The drive is a willingness to put forth effort— both the effort of thinking and the effort involved in bringing one‘s ideas into reality (Shanea, Locke, Collins, 2003). When entrepreneurs pursue the opportunity, they must take action to make it real. There are the four aspects of the drive: ambition, goals, energy and stamina, and persistence (Shanea, Locke, Collins, 2003).

“Because an entrepreneur can never be sure of a return on his investment, starting up a business is like offering a gift to the world, in the hope, but never the certainty, that the gift will be reciprocated” (George Gilder). Through this sentence, technology guru George Gilder described how he see importance of drive in entrepreneurship.

Ivan also explained this from his experience “The key to success is that when you fail, you must fail quickly and inexpensively. Test, analyze, figure out why you failed, evolve, and iterate. Focus and energy are two key attributes of the drive. That is the meaning of having the drive because there is no way to do that without being self-driven.”

Egoistic passion

For the most of the entrepreneurs, ego is a central motive to take up entrepreneurship. After they took the first step in starting business, they passionately start the process of building an organization and making it profitable. They are lying an effort to do what is actually in their interest.

Amar Bhide, after a ten-year period of teaching and studying entrepreneurship at Harvard Business School, concluded that “it takes an extraordinary individual to build a promising company - extraordinary regarding someone who has an almost maniacal level of ambition. Not just an ambition to make a comfortable living, to make a few million dollars, but someone who wants to leave a significant mark on the world” (GCASE).

Entrepreneurs choose to "live a few years of your life like most people won't so that you can spend the rest of your life like most people can't.” Ivan said: “I do not necessarily agree with this presumption, but it is true that money is a big motivator. I always felt like ownership devoid of work is a bit parasitic, so I think that entrepreneurship is a great way to build assets you can play with later” (Ivan Bjelajac).

4. CONCLUSION

Entrepreneurs do not only produce revolutionary technology, they also change human habits and lifestyle, and become cultural phenomena. Bill Gates was a major figure and successful entrepreneur in the 1990s. In the 2000s, it was the late Steve Jobs and the Google boys, Larry Page and Sergey Brin. And now, in 2010s, we have a Facebook founder Mark Zuckerberg.

These people and more other entrepreneurs are motivated by a range of factors that are different for everyone. When we talk about motivation we should considered both personality and the environment. For example, Need achievement theory explains why high achievers (entrepreneurs) choose challenging tasks and why low achievers (managers) choose easier tasks. And each of the above-mentioned motivation theories has some valid points. But, in general, the most important issue is to recognize the small number of bio-behavioral wants as the basis of all motivation.

When we talk about entrepreneur‘s motivation, about “entrepreneurial obsession”, we talk about intrinsic motivation. Intrinsic motivation is a term that explains one's desire to work on something that is stimulating satisfying or challenging on a personal level. On the other side, there are the people who are extrinsically motivated, driven by expected evaluation and rewards. Almost all entrepreneurs enjoy their work, have clearly set goals, and strive to create something that is tangible and significant.

Regarding motivational factors in this paper, we try to explain how an entrepreneur differs from a manager and how different things motivate them. A manager is someone good at execution. Typically managers follow a business plan, or strategic plan, which they may or may not have had any say in developing, while entrepreneurs have ideas for a new business. Entrepreneurs are independent thinkers, brave enough to take risks and put ideas into action.

Through the road map of an entrepreneurial process, our attention was to review the major motivations that prior researchers have suggested should influence the entrepreneurial process, as well as to give examples of entrepreneurs who use their experience to explain all of those motivations. Also, this paper providing specific recommendations how motivations might influence the entrepreneurial process at each of its stages and main conclusion in this paper is that motivated entrepreneurs are the most important factor to the entrepreneurial process, human motivation in all theories of the entrepreneurial process is crucial.

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IMPACT OF HUMAN RESOURCE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE

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Abstract: *Modern organizations are faced with numerous challenges imposed on them by changing and dynamic environment. Among the many activities undertaken, special attention should be paid to proper management of human resources. Human resources are the most important resource in the organization and a source of competitive advantage. Employees with their knowledge, skills and abilities contribute to business success and improving the performance of organizations. In the scientific theory and practice is increasingly emphasizes the importance of human resource management and its impact on organizational performance. The aim of this paper is to explain the connection between human resource management with the performance of the organization through appropriate theoretical models, as well as to show the individual results of relevant research in this area. In the case of Spanish companies will show how the training of employees as a human resources activity has positive influence on individual and organizational performance and growth of the company.*

Keywords: *human resource, human resource management, organizational performance, training*

1. INTRODUCTION

Organizations should recognize importance of human resource as a source competitive advantage. People with their skills, knowledge and abilities represents critical factor for business success. Human resource become more important as business environment become more competitive. Globalization, permanent growth of inovation, and technology, knowledge-based economy are contemporary trends that impact on individual and organizational performance. This paper will explain the concept of organizational performance, the importance of human resource management to improve organizational performance, and consequently business performance of organizations. You will examine theoretical models explaining the link between human resource management and organizational performance. With regard to the training of employees is an important activity human resource management, the research results show the Spanish authors explaining the positive effects of training employees on organizational performance.

2. HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE

Performance management is a “continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals of the organization ”. (Aguinis, 2009 , p. 3). The key components of this definition are that this is a continuous process and that there is an alignment with strategic goals.

2.1. Term and definition of organizational performance

According to Enos (2007), organizational performance is related to defining and achieving specific goals, although different definitions can be found in literature.

Table 1: Definitions of organizacional performance (source Enos, 2007.)

Author	**Definition**	**Contribution**
Enos (2007)	Organization performance are indicators and progressive achievement of tangible, specific, measurable,worthwhile and personally meaningful goals.	Definition and selection of quantitative indicators.
Parmenter (2010)		

	The organizational performance is marked and classified by success indicators, performance indicators and key performance indicators as key success indicators. The fundamental success factors are the list of problems or aspects of organizational performance that indicate the vitality of the organization, its state and success.	Key indicators of organizational performance
Franceschini, Galetto and Maisano (2007)	Measuring organizational performance reports on the long-term process of continuous monitoring and reporting on achievements, especially of the pre-defined aims. The measures of organizational performance can be related to the type or level of process, direct output results.	Observation of everything that the measures of organizational performance can relate to.
Buble (2006)	Taking into consideration the effects of performance represents the beginning of the business process transformation. One of the aims of improving business processes is to determine economic sense that the changes will bring, which is not possible without measuring performance.	Quantifying the economic sense of changes.
Jeston i Nelis (2008)	If business performance is not measured, you cannot manage your business. To measure performance means to know and to be able to make a decision in certain circumstances.	The importance of measuring performance in the context of making good business decisions.
Davenport (1993)	Actions are important, but they will not be taken unless everything is directed towards improving the process.	Discusses performance problems.

2.2. Linkage between human resource management and organizational performance

In recent years, scientists have devoted great attention to examination of the relationship between human resource practices and organizational performance. Based on previous research until today, it becomes increasingly clear that the system of human resources is an important component that helps the organization to be more efficient and achieve competive advantage.

Develop organizational skills by learning from the past, present and adaptation to create the future on the basis of predictions. The competitive advantage of the company is that these features needed to create recombine and transform the organization in the context of a dynamic competitive environment. Problem creating a model from strategy HRM-firm-performance is difficult because of the dynamics that exists in environment and affects organizational skills.

In the scientific theory and practice, there is a growing interest in understanding connection between HRM and organizational performance. In analysing the impact of HRM on organisational performance, each of the HRM-performance linkage models developed complements the others by adding constructs, variables or relationships (Alcazar, Fernandez, & Gardey, 2005).

Resource based view is an appropriate theoretical framework that describes the proper relationship model relationships between strategy, HRM and performance. Given the complexity of the relationship, this relation has been recognized as the “black box”.

According to Guest (1997), there is a need for theory on performance, theory on HRM and theory how the two are linked. The theory proposes that performance at individual level depends on high motivation, possession of the necessary skills and abilities and an appropriate role and understanding of that role. Only HRM practices that encourage skills,motivation and appropriate role structure impact HRM outcomes. These factors influence behaviour outcomes, which translate into performance outcomes, which result in financial outcomes (see the next figure).

HRM strategy (differentiation, focus, cost) ➔ HRM practices (selection, training, appraisal, rewards, job design, involment,status and security) ➔ HRM outcomes (commitment, quality,flexibility) ➔ Behaviuor outcomes(effort/motivation, cooperation,involvement, organizational citizenship)➔ Performance outcomes(high: productivity, quality, innovation; low: absence, turnover,conflict, customer complaints)➔ Financial outcomes (profits,ROI)

Figure 1: Guest model HRM- performance

This model suggests that business strategies drive the design of the HR system. HRM practices directly impact employee skills, employee motivation and work design which consequently influence employee’s creativity, productivity and discretionary behaviour. These variables, in turn, result in operational performance, which relates to profitability and growth, ultimately determining firm market value (Gardner *et al*., 2001).

Model of Becker (1997) suggests that business strategies drive the design of the HR system. HRM practices directly impact employee skills, employee motivation and work design which consequently influence employee’screativity, productivity and discretionary behaviour. These variables result in operational performance.

Business and Strategic Initiatives ➔Design of HRM System ➔Employee skills, Employee motivation, Job design and Work structures ➔Creativity, Productivity, Discretionary Effort ➔Improved Operating Performance ➔Profits andGrowth ➔Market Value

Figure 2: model HRM- performance by Becker

The People-Performance framework (Purcell *et al.,* 2003) is built on two assumptions:
1) the framework advances the concept of discretionary behaviour by suggesting that virtually all employees have the capacity to engage in discretionary behaviour;
2) the critical role of line managers because they have discretion in the way that they apply HRM and the way they behave towards employees.

These model also focus on abilities, skills and motivation of employess and opportunities to participate (Boselie, 2010).

Wright and Nishii (2006) examined some of the mediating processes that might occur in HRM-Performance relationship by examining the relationship at multiple levels of analysis. They present the model that includes intended HR practices, actual HR practices, perceived HR practices, employee reactions and performance (see Figure 3).

Intended HR practices ➔Actual HR practices Perceived HR practices ➔Employee reactions (affective, cognitive behaviour) ➔ Organization performance

Figure 3: HRM- performance link model by Wright and Nishi

3. HRM-ORGANIZATIONAL PERFORMANCE RESEARCH BASED ON SPANISH FIRMS

Among the many activities of human resource management that have a critical impact on organizational performance highlights staff training. In changeable conditions imposed by a dynamic environment, organizations need to pay special attention to the development of intellectual capital. Training is an essential activity of human resource management. Expansion of training in organizations reflects its potential use as a means to improve the development of human capital and the enterprise. However, research regarding the effects of training in the practice of late in some way and it is necessary to establish a theoretical framework to explain the training process and its results.

Spanish authors Núńez-Cacho P., Grande F., Lorenzo D. (2015) have conducted research on the effects of training on organizational performance. The main contribution of this research is to improve the training and knowledge of its basic characteristics.In addition, analyzes its impact on employees and organizations and identify factors that can affect the efficiency of this type of training. As for the implications, this study provides valuable guidance to help managers in the assessment of investment in training and orientation in human resources planning strategies in their organizations.

The questionnaire was sent to managers of human resources in the 2,303 Spanish companies. In order to collect the information needed for research, companies are selected from the Spanish business register.The response rate was 21.6% and in the stydy participated 498 companies. The confidence level of the sample is 95% and the margin of error is 3.96%. As a control varijebile were used medium-sized companies (in terms of number of workers whose average is 174), and the average age of the company (35 years). The study companies from the following sectors: industry (39%), trade and services (37%) and the primary sector (24%). Even 91% of the companies surveyed fully implement training programs.

The questionnaire was developed based on a review of existing literature in order to obtain information necessary for solving research problems. The variables that were used in the study are:

- Organizational support and precondition
- Training
- Individual performance oh human resource
- Organizational performance
- Sales growth and productivity.

As a control variable were used medium-sized companies (in terms of number of workers whose average is 174), and the average age of the company (35 years). The study companies from the following sectors: industry (39%), trade and services (37%) and the primary sector (24%). Even 91% of the companies surveyed fully implement training programs.

Given that in the scientific literature there is no consensus around considerations of training effectiveness, the authors define it in the study tested four hypotheses:
1) Hypothesis 1: Organizational Support improves individual performance human resources in the company;
2) Hypothesis 2: training improves individual performance of the human enterprise resource;
3) hypothesis 3: Improvements in individual performance as a result of the training has a positive effect on organizational performance;
4) Hypothesis 4: Improvements in individual performance as a result of the training has a positive effect on the growth of the company.

Table 2: Corelation and Cronbach alpha (diagonal) for measurements scale

	Organizational support	**Training**	**Individual performance**	**Organizational performance**	**Sales growth and productivity**
Organizational support	**0.77**	-	-	-	
Training	0.49	**0.94**	-	-	
Individual performance	0.41	0.40	**0.71**	-	
Organizational performance	0.36	0.44	0.31	**0.81**	
Sales growth and productivity	0.26	0.38	0.38	0.33	**0.77**
Varians	0.55	0.67	0.52	0.71	0.81

Source : Núńez-Cacho P., Grande F., Lorenzo D.,(2015), „*The effects of coaching in employees and organizatinal performance*“, Intagible capital, 11 (2), p. 166-189, downloaded 15.01.2016.ca http://www.intangiblecapital.org/index.php/ic/article/view/586/464

Overall, scala has realibility α = 0,711 and r = 0,728 which is acceptable for investigative srudy, a composite index of reliability in accordance with the recommendations.All relations are recognizable. Therefore, the assessment index indicates good agreement on the basis of accepted criteria.

The research results make it possible to infer that the processes have become the medium of training is useful for the development of professionals in the organization, as found effect on the performance of human capital. Training helps organizations to improve their competitive position through the impact on organizational performance, increase sales and productivity growth. On the one hand, managers can benefit from the training process, and to exploit the potential of human resources of the company. On the other hand, a relevant contribution of this research is the positive effect of the training process in the organization, which can be measured in terms of the results of the company and its growth.

4. CONCLUSION

As organizations strive to compete in the global economy, differentiation on the basis of the skills, knowledge, and motivation of their workforce takes on increasing importance. In theory and practice of management, is increasingly emphasizes the importance and impact of certain activities of human resource management on the performance of the organization. According to the modern understanding of "strategic partnership" human resources function needs to have both strategic and operational focus and at the same time takes into account the systems and people. Then human resource management is not only a link between the strategy and the expected performance of the organization on the one hand and the needs of employees and their individual performance on the other hand, it is an integral part of the formulation and implementation of business strategy. Adequate training programs and the development of human resources lead not only to changes in reaction, attitudes, knowledge and behavior, but also to improve the results of the work of individuals and beyond that to the better performance of the organization expressed a variety of key performance indicators such as productivity growth and / or reducing absenteeism or staff turnover, improve the quality of products or services, reduce costs and / or increase the profits of the company. Organizations need to understand that human resources management is an important segment of business strategy and a source of competitive advantage. Numerous studies in theory and practice have shown that there is a correlation between the practice of human resources and organizational performance. Research conducted by Spanish autors show that exists positive relations between training (as an important part of HRM) and organizational performance. In the opinion of the author of this work in the future is even more expected expansion of research on the impact of HRM on organizational performance.

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SPIRAL DYNAMICS AS VALUE SYSTEM AND COMPETITIVE ADVANTAGE OF AN ORGANIZATION

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Abstract: *This paper aims to discuss the Spiral Dynamics as both theory of value system and usable tool for organizational competitive advantage. Spiral Dynamics is a framework for understanding the dynamic forces that drive people to action in personal lives, business relationships, education, and even geopolitics. The theory of spiral dynamics can be seen as a model for understanding complex values and beliefs that encourage people to different behaviours, but t can also be considered as a tool for managing differences between people and differences between people's value systems and organizational value system. The theory of Spiral dynamics is very wide and complex subject to discuss, but in this paper it will be described just essentials for understanding the whole concept, what is Spiral Dynamics about, some main principles of it, how is could be applied to organizational efficiency and effectiveness and make a competitive advantage of it.*

***Keywords**: values, beliefs, ᵛMEME, value system, organizational value system, motivators on spiral, value fit as competitive advantage*

1. INTRODUCTION

The person who is responsible for the foundations of Spiral Dynamics is professor Clare W. Graves. He was professor of psychology of Union Colleague, New York. Professor Graves was disappointed with psychology as science back then. He had found lots of mess and inconsistency and even contradictories in psychological data and theories, and it led him to go to adventure of researching. Professor Graves initiated research project, wanting to find out which is prevailing worldview among people. The main question he asked was: "What is that characteristic that makes mature, grown-up human personality". His research lasted for thirty years. Data he got in his research, Graves benchmarked with the date of other scientists. After thousands of interviews worldwide, Graves developed a theory which he called: "The Emergent, Cyclical, Double-Helix Model of Adult Biopsychosocial Systems Development." He later modified the name as "The Theory of Levels of Human Existence." Graves (1973) summarized his theory in this manner: "Briefly, what I am proposing is that the psychology of the mature human being is an unfolding, emergent, oscillating spiralling process marked by progressive subordination of older, lower-order behaviour systems to newer, higher-order systems as man's existential problems change." Even today, his opinion and theory are considered advanced and it is more and more accepted.
After Graves, there are other people who contributed to the development of todays Spiral Dynamics theory, and its practical application on ordinary life situations. To develop the version of today's theory after Graves, many other achievements from other sciences and science disciplines are used, such as are: neurobiological science and achievements of organizational science, which no gives to Spiral Dynamics an interdisciplinary characteristic. Some of the well-known names are: Don Beck, Christopher C. Cowan, Nataša Todorović and Ken Wilber.

The name itself tells about Spiral Dynamics as non static theory, it is not determined, but evolves with the evolution of human consciousness. Humanity has the power to establish new levels of consciousness that carry withinthem the characteristic values within itself, beliefs and artifacts that together create totaly new value systems.

2. SPIRAL DYNAMICS THEORY

2.1. Definition

Spiral Dynamics is the most modern, most comprehensive and most respected psychological theories, which combines the 'bio', 'psycho' and 'socio' aspects of human functioning. (Beck and Cowan, 1996) stated that It gives us a scientifically based way of thinking about the complexity of human existence and understanding of order and chaos in human relationships. Explains the deep forces in human nature that shape our values and representing the form and trajectory of effective change. Spiral Dynamics provides a greater understanding of how people, organizations and entire cultures work from the inside out or herself is a very versatile tool that allows people to work, study and live with better quality of life and to be more successful.

Spiral Dynamics is:
• a way of understanding and predicting changes in response to these changes,
• also a way of understanding the 'why' people think the way they do,
• a model of development of human value system,
• a framework for understanding organizational development,
• a mechanism for assessing the appropriateness of changes
• a human factor that is missing in the process of business restructuring,
• an effective framework for guidance - for understanding complex situations and create new relationships,
• a framework that the best way fits other systems, models, approaches or interventions
• the development model of human nature, not just out of where it comes what we think is worth, but also out of where our values and thinking come and which directions they go.

2.2. Six dimensions of value system

Six dimensions of value system are: semes, themes, mindsets, world views, ^{v}MEME and gens.

1. Semes - words, symbols, icons (pictures) and objects that are related to ^{v}MEME.
Schemes are what is tangible. These are: words, music, literary metaphors, icons, paintings, artifacts, and other "concrete" objects that are the final products and specific packages of stored ^{v}MEMEs. It can be, for example: symbols such as Christian Cross or the Star of David; political campaign slogans or props; flags, logos and markings; fashion and dress codes; colored gangs and their behavior; musical styles, the lyrics, melodies and rhythms; Personal possession (cars, houses, collectors' items and status symbols); architectural styles and living spaces; Technology and gadgets in all forms.

2. Themes - Questions (outcomes) causes and events that formed around the meme energy field
Topics are what is intangible. The idea, cause, reason, question, position or event that is attracted by the ^{v}MEME and the one where ^{v}MEME also put its core intelligence in. This then becomes the theme of a representative or transferor for that specific Meme, for example: religion, political affiliation, socio-cultural movement, a philosophy, a symbolic event, a celebration, etc.

Together, Schemes and Themes are called “memes” according to Richard Dawkins (1976) and other in “memetic” literature. The idea behind the” Meme” is self-repeating package of information that is propagated through the ecology of the mind in the forms of reproduction similar to viruses. Parallel structure in biology is gen. In chaos theory, the parallel structure of the fractal. In the language of Spiral Dynamics, "a great meme" - value MEME or we will call it ^{v}MEME - the process by which people become closer to it, drawn to it, and then eventually take them away from Themes and Schemes category so called "Little memes".

3. Mindsets - online, constantly present active, dominant ^{v}MEME(s) in certain situation
Activated ^{v}MEME(s) and "on-line" world view are employed in a particular moment of judgment. It will be shaped by previous experiences, the relative priority clusters of ^{v}MEMEs of that person and the unique properties of the message or stimulus that activates and focuses the mind. Think of memes as "hot" and "cold" buttons that can be artificially manipulated (to some extent) with the agents of change that would affect on which of the ^{v}MEME to use in the act of interpretation and judgment. How can ^{v}MEME(s) come and go, to shine and to fade out in terms of priorities, the persons ways of thinking are designed with a special ^{v}MEME which is activated at a specific time and a specific place and will reply on specific living conditions.

4. World views - repertoire range of all awakened, available ^{v}MEMEs
   - Cluster all available memes that recognizes the mind (that are in it)
   View of the world is made up of the repertoire meme (that had been awakened) with their relative strengths and significance. Find itself in a view of the world:
   - epistemology-way knowledge.
   - Community FILTER AND EDITORS (both conscious and unconscious) that sieved and sorted input.
   - Sets of evaluative filters and editors (both conscious and unconscious) to sift and sort input
   - Built in priority stack or cluster that exists in varying degrees of strength and relevance when a person/organization/society is in a “idle” position (before a mindset-focusing stimulus) and which orders inputs.

- Ways of interpreting themes and connecting with Shemes
- Lenses that magnify or minimize events in the perceptual world.

- Process of pattern recognition and scanning for relationships.
- Structures of like/dislike, approach/avoidance, and live-for/die-for causes.

5. ^{v}MEME(s) - the Core Intelligence within the Biopsychosocial System's "DNA", are:
   - A "bottom line" for human existence.
   - A rationale for why thing happen.
   - A Level of complexity of functioning.
   - A Neurological capacity to detect and deal with a specific set of life conditions.
   - A range of development from low to high elaboration.
   - A Closed, Open, and Arrested condition (within the situation and context).
   - A specific package of approaches to emotions and feelings.
   - A concept of time and place.
   - A locus of control (from inside or outside).
   - A degree of predation or proliferation (how driven to spread outward like a virus or consolidate. inwardly; how much to move beyond boundaries or to operate within the boundaries).
   - A particle-field focus between concentration on individual particles *(elites)* or the entire field *(collectives).*

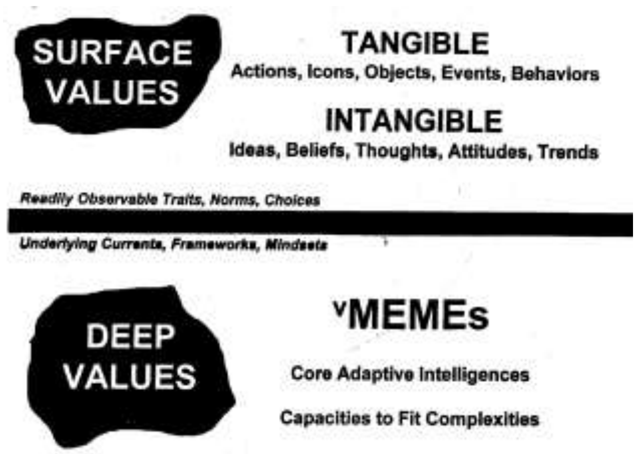

Figure 1: Structure of ^{v}MEME, Adopted from: National -Value Center, Inc. Denton TX, Spiral Dynamics Integral Level I Certification course materials

6. Gens - The individual and collective biological genetic pools
   - A Closed, Open, and Arrested condition/capacity (within the person)
   - Personality - temperament and texture attributes
   - Physiological characteristics and traits
   - Propensities toward intelligences and capacities

2.3. Five deep strata which shape value system

Five deep strata of value system consists of, on the first place: Life conditions (internal and external), which when any change occur in them, it effect on Genetic and Memetic codes (in people), than as chain reaction it affect on Minds and ways of thinking, than it again has effect on Systems and structures, and finally it is noticeable in change of our actions and behaviors.

Different life conditions activate different value system ^{v}MEMEs. According to professor Graves (1970) life conditions are the real activators of ^{v}MEMEs and his research suggests eight main value systems which evaluated until today. They are reactive, traditionalistic, exploitive, scarifying, materialistic, sociocratic, existential and experimental.

Table 1: Existential states, associated motivational systems and end values;
Adopted according to table from the article: Graves, Clare W.,"Levels of existence: An open System Theory of Values", Journal of Humanistic Psychology, November 1970, Vol. 10, No.2

Existential state*	**Motivational system**	**Means values****	**End value****
H-U	Experience	*Experiencing*	Communion
G-T	Existence	Accepting	*Existence*
F-S	Affiliation	*Sociocentricity*	Community
E-R	Independence	Scientism	*Materialism*
D-Q	Security	*Sacrifice*	Salvation
C-P	Survival	Exploitation	*Power*
B-O	Assurance	*Traditionalism*	Safety
A-N	Physiological	No conscious value system; values purely reactive	

*A-N: a psychological system: B-O/H-U: psychological systems.
**Italicized values: primary orientation on each value system.

^{v}MEMEs awakened with certain life conditions are found in: people, organizations and entire societies.

2.4. Spiral with characteristics

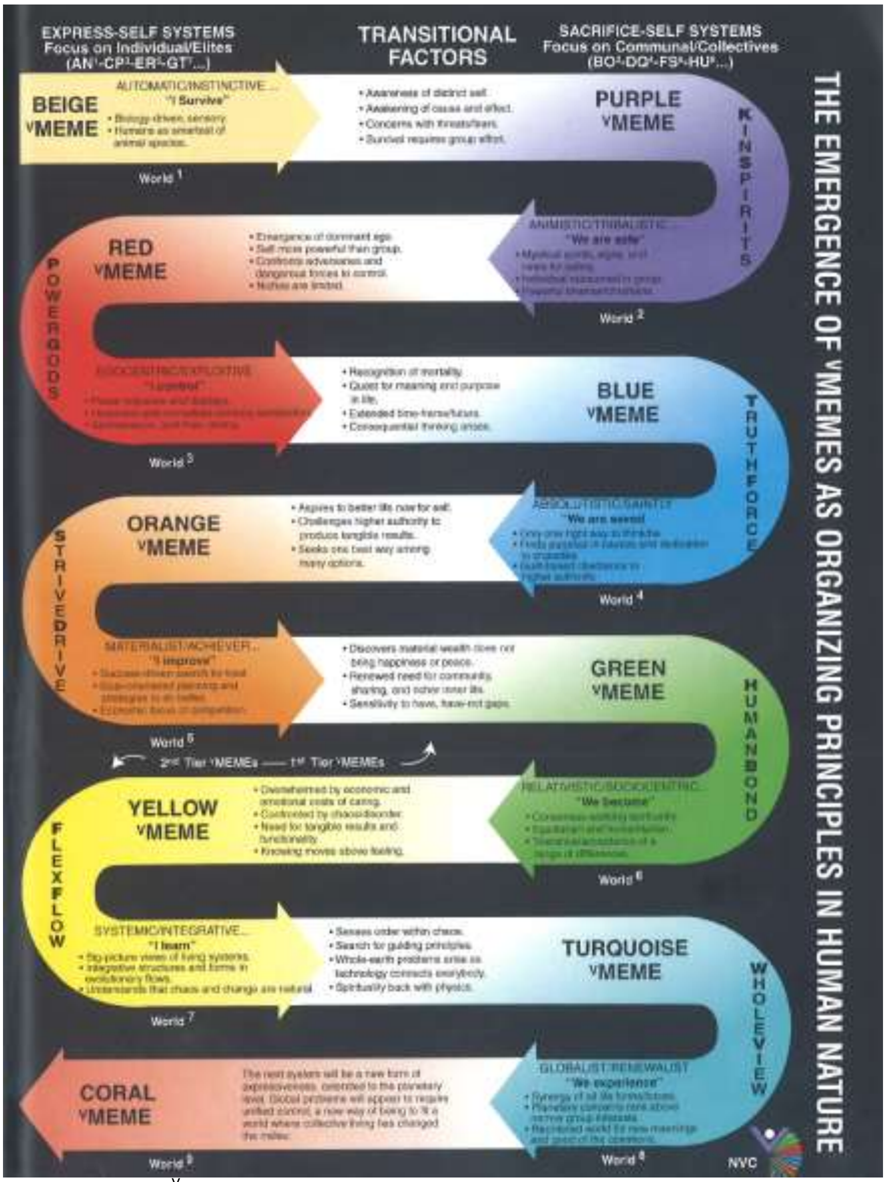

Figure 2: The emergence of ^{v}MEMEs as organizing principles in human nature, adopted from: National - Value Center, Inc. Denton TX, Spiral Dynamics Integral Level I Certification course materials

3. SPIRAL DYNAMICS AND ORGANIZATION

According to (Beck and Cowan, 1996) organizations are structures in our mind. The words printed on the charts projected onto the walls, symbols and actions around the neck, and areas occupied as a manifestation of power are nothing else but the artifacts and icons. Really genuine, real connections are within the ^{v}MEMEs in profile of people who are part of this organization, this invisible network that command ordered society and relationships. We carry them around in our heads at any moment. Each location along the Spiral has its own mental configuration as the range of radar, where the contours are drawn being ideal life. Which circle on the radar scope is the most important depends on which meme active. Then our radar screen looks like this:

BEIGE ^{v}MEME: to care about bread and butter issues of survival at its most basic level.
PURPLE^{v}MEME: as a magical circle that makes everyone feel safe within it.
RED ^{v}MEME: self-centered as an empire where one feels powerful and controls weak and subordinate.
BLUE ^{v}MEME: as a fixed pyramid, which provides stability, durability and assigns each place.
ORANGE ^{v}MEME: as a matrix of the playing field that promotes opportunities and rewards capabilities.
GREEN ^{v}MEME: a warm supportive community of equal who care about each other.
YELLOW ^{v}MEME: as a floating network that transfer functions above, below and between natural layers.
TURQUOISE ^{v}MEME: as a living organism that brings order internally (within the chaos).

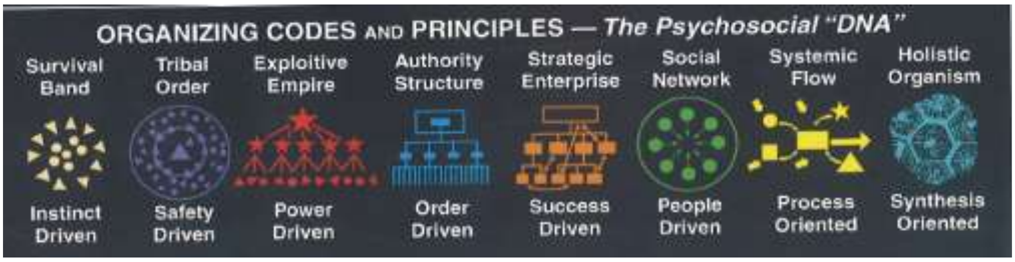

Figure 3: Organizing codes and principles, adopted from: National -Value Center, Inc. Denton TX, Spiral Dynamics Integral Level I Certification course materials

3.1. Spiral Dynamics and leadership

Leadership as the ability to translate vision into reality according to (Bennis, 1961). If just the leadership based on the results, is taken into consideration, than the highest quality is selected from short-term and long-term results achieved "leaders with clearly articulated set of values" (Ulrich, Zenger and Smallwood,2013). Leaders who understand their personal values, their organization achieve lasting results. In the absence of clearly defined values, leader with no real vision is constantly changing his goals, so the direction for the organization is not clear as well.

Some principles of Spiral leadership:
1. Different organizations have different positions on the Spirals, therefore, need to develop management strategies that align people, the vision of the future and the work currently performed.
2. Managers should develop a consistent, comprehensive approach to every issue within the Organization - the selection, hiring, positioning, training, internal management and external marketing - so that all these elements are balanced, integrated and unified in its effect.
3. Organizations should be designed in such a way from "top to bottom and from the bottom up" to link the functions, logistics and decision-making structure so as to prepare for the new complex problems.
4. Successful organizations may be at risk of failure if they continue to lead the people in a way that made them successful in the past.
5. Many people today should lead and manage differently, because they can be placed at different levels on Spiral and can move faster than most of their bosses, teachers or parents.
6. Marketing strategies often fail because the designers transfer their value systems on the public assuming that these people have the same values as they do.
7. It is not a question of 'how to motivate people?' but how you treat what you are doing in relation to their natural motivational currents. A person has a right to be who he/she is.
8. Today's problems with productivity, quality, political instability and restructuring are signs of growth, not decline. This will force us to find new and innovative ways of managing people, based on what these people have now already become.

3.2. Motivators according to the Spiral levels

vMEMEs	HOT BUTTONS	COLD BUTTONS
BEIGE	offer food, water; sex; input through basic senses; touch {if safe); caress to give reassurance; recognize the intelligences which are there	withdraw food or make threatening moves; cause physical pain or discomfort through temperature: .' thirst; treat as animal-like being
PURPLE	rituals; respect for powerful figures; appeals to safety, magic, mysticism; traditional ways and customs; home and hearth; desires of spirit beings, signs and omens; give tokens & tangible goods; respect elders; show honor to ancestors	speak ill of the chief or tribe; step on or desecrate sacred grounds; violate taboos or ritual ways; introduce ambiguity; isolate and force accelerated change and uncertainty; threaten family; disrespect eiders or ancestors; don't try to understand
RED	immediate payoffs; macho appeals, challenges, and dares; heroic images; more clout and personal power; looking good and getting due respect; gaining control over nature and other people; getting by with something; prizes and rewards—NOW	challenge power or courage; shame or put down person/group; move onto turf uninvited; display more powerful weapons; make gestures and name- call; be derisive and laugh; make to lose face; taunt as an outsider; appear or talk weak; make excuses
BLUE	duty, honor, country; *semper fr,* righteousness; obedience to. higher authority; being prepared; sacrifice and discipline; rewards for dedication to come in the afterlife; stability/order; purpose; standards & norms; finding greater meaning; being a good citizen; punctuality	attack religion, country, or ethnic heritage; desecrate symbols or Holy Books; put down the One-True-Way or make fun of it; violate chain-of-command; disregard rules and directives; appear unfair or sleazy; be wishy-washy; use bad" language; demean the standards; be late
vMEMEs	HOT BUTTONS	COLD BUTTONS
ORANGE	opportunities to succeed; progress, growth, winning, achievement, making things better; competitive edge & advantages; bigger-and- better, new-and-improved; state-of-the-art; fashionable; prevailing through experience, calculated risks & good science; cutting-edge; make deals & bargains; treat like VIP	put down profit or entrepreneurism; talk about collectivization accuse of games and demean .outcomes;challenge compulsive drives; deny rewards for good performance; force sameness; cost prestige; trap with rules and procedures; fail to bargain or negotiate; seem inflexible; treat as one of the herd; seem ordinary
GREEN	participation and involvement; consensus decisions; teamwork; liberation of the oppressed; sharing; acceptance of human weakness and foibles; openness; environmental sensitivity; tolerance; political correctness; inclusion; social responsibility and awareness; participation; corporate citizenship; community involvement	assault the group's goals and ideals; try to get centralized control; divide the group; reject collective for individual accountability; support aggressive competition; deny affect and feelings; degrade quality of life or environment; appear cold-blooded; appear mercenary; rely on "hard facts" to the exclusion of people factors; act elitist or exclusive
YELLOW	liberate to be and do as one chooses; learning interesting things to enhance quality of being; access to diversity in people, choices, and big- picture views; enhancing competency and functionality; principles and "what's right" tries to produce in appropriate and sustainable ways; demonstrate linkages & interconnections	force rules without reasons; impose dysfunctional structure; focus on minor details; be punitive; deny individual control of time; make work repetitive; close access to varied information or learning resources: try to homogenize; knowingly harm people or the environment; pass the buck to the future; force groupness; ignore diversity of thinking
TURQUOISE	experience *of* being above self-interests and even group pressures; to find unity in ideas and goals of whole-Earth impact; responsible to the overall good; complex, multidimensional thinking; survival of life on the planet; interactive holism; interdependence; to form groups of individuals; appreciates the spiritual side of things	hide reality; set short-term goals at expense of living system in the long-term; enforce narrow views about ethnicities, ideologies, and political conflict, deny spirituality; make self-serving excuses; leave residues; seek advantages through deception; appear mundane; take a narrow view; put up with destructive forces; take the easy course; be too earthbound

Figure 4: Motivatos and “cold buttons” for each Spiral level, adopted from: National -Value Center, Inc. Denton TX, Spiral Dynamics Integral Level I Certification course materials

3.3. The example of application of Spiral Dynamics on organization as its possible competitive advantage

It is known that the corporate culture can affect company’s success both in a positive and negative way. Clearly defined values shared with the employees that are followed within the company have proven decisive factors the level of success of the company (Krumm and Rainer, 2012).

This is 5 years old practical example from my working experience. Client’s one branch office of one well known pharmaceutical company - leader in pharmaceutical innovations and development of new technologies – Abbott , had to choose candidate for marketing manager position for that branch office and that country. In the pictures below is shown final check of just one candidate C2 (because of the privacy of people and company).

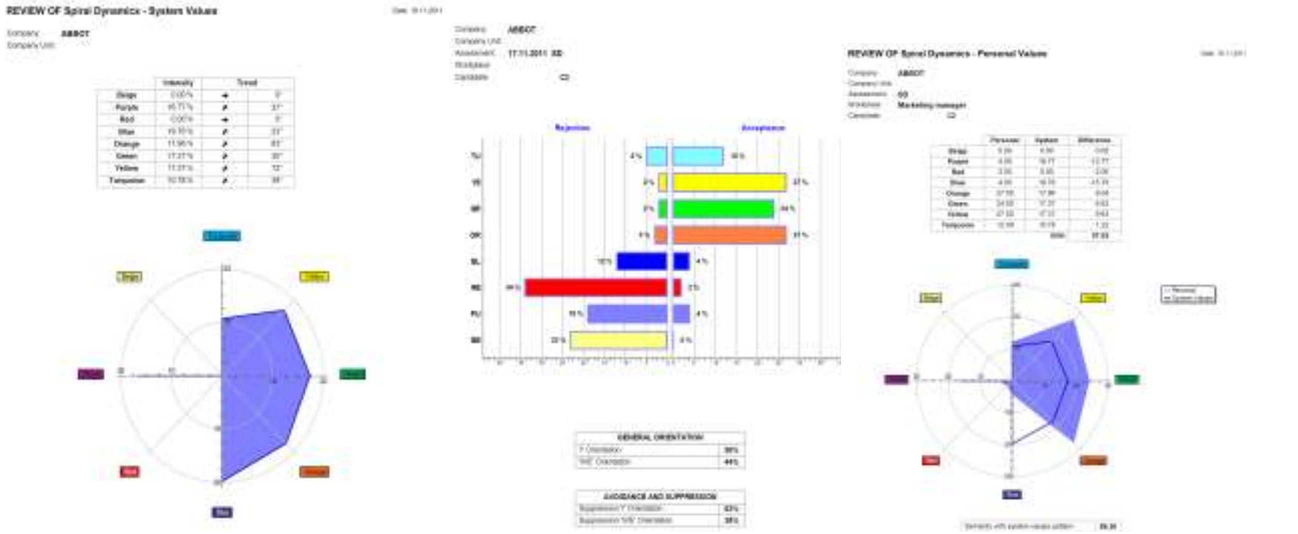

Figure 5: (from left to right) Company's value system; Candidate's value system**;** Candidate-organization fit

As we could see on Picture 5, last diagram shows us value fit between organization and candidate C2. What we can see from it is that similarity of value pattern of candidate with the value system of company is 86.36 %, which is high score. We can also see that with 10% candidate differentiate from the pattern of organizational value system. When we look at the diagram, we clearly see that the candidate has a greater presence of orange, yellow and green ^{v}MEMEs comparing to the organization. Then let's see the workplace, the position of the Marketing Manager. If we remember that if person should be a manager, it is good to take care of people, considering all people to have same rights and starting points, social care and etc., and it can all be found in green ^{v}MEME, and because of that it actually leads to the conclusion that this is not the perfect fit but this is preferable for candidate, to have more green than organization. If we now remember that marketing is an eternal struggle that by marketing research activities organizations are trying to ensure competitiveness in the market and that our orange ^{v}MEME gives us competitive spirit, ambition, initiative, relying on knowledge and science, we can here conclude that it is good if the marketing manager for its function and requirements of workplace to has more orange in the present value system rather than a company, because he/she is the one who pulls the company to continue to develop value system and be more competitive in the market. The last one, yellow ^{v}MEME where a candidate has more developed and present than the organization. Yellow ^{v}MEME -system flows, saving resources, continuous improvement, and the ability to look at all previous levels to spiral in the organization and the people, again impose the conclusion that if candidate or employee does not match 100% with the organizational value system , this exactly could be the competitive advantage of this organization.

4. CONCLUSION

This paper aimed to introduce to the reader the theory of Spiral Dynamics from the roots of its origin to its application to individuals and organizations or organizational development, as well as to show the adjustment of employees to the organizational value system and vice versa. In case of adapting the organizational value system to the employee's is more in the case of adjusting the value system of individuals who are the initiators of further organizational development, such as organizational leaders, or change leaders for example.

Throughout this paper is tried to make closer the development of the Spiral Dynamics theory, but also its dynamic character, its specific "never-ending" characteristic, because of the constant evolution of living beings on Earth and evolution of individual, social and collective consciousness .Value systems typical for any period of human development from the very beginning until now, are codes engraved in human bio-psycho-social "DNA" , and in every moment of changing living conditions they are adapting to the constant social changes and changes in information technology. Those value system changes and adapt to new era phenomenon are deeply affecting behavioral patterns and forming the new ways of social interaction, but also new forms of existence and personal development of individuals.

Thus, four-dimensional, powerful, this theory of Spiral Dynamics justifies its emergence from numerous psychological theories unified with the other sciences research, giving us the most complete picture of how deeply engraved artefacts, symbols, traditions, ways of thinking, systems and structures can respond to changes in living conditions and circumstances surrounding triggering an avalanche of predicted behavior patterns characteristic to the dominant value system.

Knowing the dominant value system of the individual, we can predict his/her reactions in certain circumstances, as well as its drivers but also what discourages him/her. Also, knowing the dominant value system of an organization, we can assume or even we can easily describe the organizational culture, both visible symbols on eyesight and also the deep beliefs which are shaping organizational culture to be as it is.knowing then, both the value system of the individual and the organization, it could be possible to predict the chances of developing the organization and the individual, as well as to predict possible conflicts, motivation and reward systems.the other things we could do knowing both organizational and employees' value systems, we can do strategical planning, we can successfully do the alignment of the organization's vision with the vision of the individuals (employees), and we can certainly predict some of the problems that affect today's organizations.

These are mainly problems affecting domain of human resources departments in the organizations, they can be manifested in the form of employee fluctuations and absenteeism phenomena for example. Value system fit between organization and new employee could be beneficial in a way that if the fit is positive, it could help avoiding the costs of introducing new employees in workplace. From the other hand if employee does not fit well into the value system of the organization and the organizational unit to which it should belong, it could be cost for organization in a way of need for finding new candidate for this workplace and there are cost for hiring an cost for introduction to work of new employees plus cost of loosing time and money on previosu employee and its introduction to workplace.
Here in conclusion of this paper, are mentioned just a few of the possible applications and benefits of the Spiral Dynamics theory, as useful tool for predicting organizational change, its competitive advantage in the market, and also as tool to avoid major problems in the field of human resources which are nowadays increasingly affecting organizations operating in modern business environment. As the theory is dynamic, its application will never be "out of fashion" because it is closely follow human society and all the changes it faces, and then Spiral Dyanmics again develops and evolve from all the changes and leaps of human society, it is never ending circle.

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MILLENNIALS IN THE WORKPLACE

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Abstract: *Each generation has its own distinct characteristics, values and attitudes toward work. Companies need to adapt processes and procedures in order to successfully integrate diverse generations into the modern workplace. The aim of the paper is to reveal the key characteristics of Millennials in the workplace as well as main challenges they face in organizations nowadays. There is a big difference between what Generation Y expects and demands of a job and what it actually gets. In this regard, it is necessary to change the modern organizations and adjust them to meet the needs of Millennial workers which will soon dominate the workplace in numbers.*

Keywords*: workplace, human resources, Millennials, generations, employees*

1. INTRODUCTION

Members of each generation resemble each other having a number of common characteristics due to the influence of different social, economic and political events that shaped their childhood and adolescence. This usually results in the fact that each generation adopts a system of values, beliefs, expectations, and behavioral patterns that are different from previous generations' and form a recognizable generational identity (Inglehart, 1997).

However, many analysts emphasize that numerous organizations around the world have no proper understanding and knowledge of the employees who work for them, nor make serious attempts to identify the profiles of the employees. For this reason, organizations are failing to align the needs, attitudes, values and behavior of their employees with organizational requirements (Singh, Raj and Bhandaker, 2012). In the absence of such a strategy and the necessary knowledge, workers are assigned tasks, schedules and work principles which do not suit them, and for which they are, by their preferences and characteristics, in some way incompetent. Thus, managers' discontent grows and companies' objectives are not achieved while motivation of workers decreases gradually, which eventually leads to increased absenteeism and unavoidable lay-offs or resigns.

2. DIFFERENT GENERATIONS IN THE WORKPLACE

Generation Y or the Millennial Generation, is a demographic cohort that follows Generation X (1966-1979). There are no clearly defined years that determine this generation's span, but most researchers and authors use a range between 1980 and 2000 to mark the birth years of the members of this generation. Several authors use other names for this generation, such as 'Nexters ' or 'Nextus Generation' (Barnard, 1998; Burke, Cooper and Antoniuou 2015; Zemke, Raines, and Filipczak, 2013), 'Boomerang ' or 'Peter Pan' generation, as they are called by American sociologist Kathleen Shaputis (2004), because of the characteristics they have. According to the Pew research center, in 2015, Millennials made up 34 percent of the US labour force, and the same source anticipates that by 2020 they will make almost half (46 percent) of the workforce. Even more dramatic are the Brookings' numbers which claim that by 2025 Millennials will become 75 percent of the global workforce. It's worth noting that the Millennial population as a whole (not just its workforce) surpassed that of Baby Boomer generation (1946-1965) in 2015 as the nation's largest living generation.

In this regard, it is necessary to deal with the generation Y thoroughly at both global and regional levels, and make the necessary changes in the approach and motivation of employees in order for the business world in every industry to continue to operate at an optimal level.

Organizations expect employees to obediently adapt to work, their work roles and the existing organizational culture, rather than to adjust organizational processes to the expectations and needs of the people who work there. This would not be the biggest of a problem if it was not for one of the main characteristics of the youngest working cohort, which is ''disobedience''. Or at least it is perceived as such.

They are perceived as outrageous, lazy, spoiled and egoistic. They are considered to have no work ethic and are not loyal to the organization they work for. In the eyes of their predecessors they have no respect for authority, are unprofessional, too relaxed and have poor communication skills on one hand, and on the other hand are very demanding with a lot of unrealistic expectations (Tulgan 2015). Nevertheless, this infamous generation is spreading its wings in the workplace, outnumbering Gen X and Baby Boomers in the business world and outside of it. And who are they? They are Millennials! They do not ask for permission, they are blind to hierarchy and, avoiding false modesty, they claim what they want from scratch. And, what do they want? They want answers, flexibility, continual feedback and mentorship. They want meaningfulness, team work and to be heard. Most importantly, they want their life and they do not compromise about it. Unlike their parents. Unlike their grandparents. How bold is that? Should their managers let them get away with it? Well, if they want their companies to work after they have retired, if they want to boost their business and stay competitive in a global market, and, if they want to create a survivable, let alone positive work environment, then the answer is yes, they probably should.

Those companies that find a way to work with Millennials without diminishing performance standards and the quality of work will have a strategic advantage on the market. Having acknowledged that the problem exist, business experts around the globe have started to bust the ongoing myths about Millennials and to take a different, more positive approach to them, in order to bridge the gap between the cohorts and find a constructive way to work with Millennials and ensure the future of their own business.

During the last two decades, a large number of researches and studies on Generation Y have been conducted, especially on the western hemisphere. Different authors rely on the data from numerous works on this topic (Singh, Raj and Bhandaker, 2012; Barkin et al. 2010; Deal, Altman & Rogelberg, 2010; De Hauw & De Vos, 2010) in order to show that this generation differs from the previous by its system of values, aspirations, goals, priorities in life and lifestyles. Taking it into account, the integration of Millennial generation into the business culture created by the baby-boomer generation (Baby Boomers) is not an easy thing.

First of all, in order to better understand this generation, we need to consider the main factors that shaped their childhood and growing up, namely: globalization, technology, uncertainty of institutions, digital environment and diversity. Also, two micro trends that have formed them, particularly stand out, and these are: helicopter parenting and virtual reality (Tulgan 2015).
Let’s start from the last.

Helicopter parents usually do everything for their children. They organize or structure their time from the morning to the time they go to sleep, carefully planning their activities, leaving them no much space for free play and the like. They also resolve conflicts for them, either because ‘they are trying to help or don't have time for their children to take up their time to work it out’ (Caraher 2015). Even though or because of the fact that they are raised in completely opposite way, most of the parents, who belong to Baby Boomer or Generation X, are overprotective, stroking egos of their children for participating, and not for accomplishing tasks properly, let alone winning, which is one of the biggest differences. Older generations weren't commended until they have won something, got all the best grades, completed any of the tasks really well and were exceptional. They were also strongly criticized for not behaving properly, not doing their best, not putting enough effort into what they did, etc. The same goes for the patronizing behaviour of Millennials’ teachers and professors. The bottom line is that they are expected to behave in the same way as their parents only when they start working. In the workplace, once they make big mistakes, they get fired, and are not praised only for showing up. They are not encouraged and guided anymore, and they become disillusioned.

In spite of that, parents continue to be extremely involved in their Millennial children's careers and lives (and the case is mostly the opposite with previous generations), and many HR managers consider it a secret weapon to talk to or involve parents in some way in order to convince the Millennials to join or stay in a company. Several studies show that Millennials’ parents are more influential than any other input. ''Let’s summarize these astounding statistics once more. Nearly nine out of ten (88 percent) of the Millennials look to their parents as a positive influence, and only 3 percent view the parents negatively. Also, 85 percent of the Millennials look to their parents as their primary source of advice and guidance.'' And here's the irony- Baby Boomer and Xers complain the most about Millennials and they do not realize they are products of their own parenting style.

3. MILLENNIALS AS DIGITAL NATIVES

Millennials are the first generation born after computers and technology have been invented. They are part and parcel of their lives, just like the radio or TV was of previous generation. They are called digital natives because they are native speakers of the digital language of computers, the Internet and other virtual reality media. That's why their attitude towards it is significantly different from that of digital immigrants who have only partially adopted technology as part of their work and life. Millennials, called by some Generation Txt, are always connected, either by email, smartphones or social networking sites, and they always communicate. They want this kind of communication in their workplace as well, they are used to it and feel more comfortable with than with face-to-face communication. They also want access to anyone and anything at any time. 'Just as access to any information is taken for granted, so is access to anybody' (Caraher, 2015). In addition, their informality present in virtual world, is usually transmitted to the workplace, where, accompanied with the crave for an unrestricted accessibility, makes this generation blind to hierarchy.

Apart from being always available as well as connected to everyone, digital world has also conditioned them to fast responses depriving them of patience (once an extremely valued characteristic). Now they want immediacy at work as well as in their private lives.

Blogging and gaming on the Internet, chatting on social networking sites, made them prone to team work, diverse surrounding and peer collaboration both in real and virtual world, since they simultaneously live in both. Due to the virtual world they prefer an interactive, engaging and fun environment, including the workplace as well.

The Generation Y is defined by uncertainty, uncertainty of their safety, uncertainty of their future, and uncertainty of what is to come next. Terrorism, global economic crisis, recession, lay-offs have been their reality emphasizing the unpredictability of tomorrow. The only sure thing about the future of the Millennials is that everything can change, and that the change is the only predictable thing in their lives. And they have trained themselves to expect it. The whole concept of their career perspective has changed in comparison to the one of the former generations. Lifelong learning, perpetual professional development and acquisition of new skills have strengthen and equipped them for the time of the utmost uncertainty. They have learned how to rely on themselves rather than the institutions and not to have great expectations, but start from scratch easily every time the country or an institution lets them down. Moreover, they are not prone to making permanent connections with companies, but rather voluntarily change them in search for a better job which will give them more satisfaction on a daily basis.

The advance of technology, rapid communication and transportation, has made the world a 'global village'. Relationships are built via social networks, and video conferencing has allowed for the deepening of relationships among people who have not met in real life. Many companies are founded by partners whose relations are digital. The quality of somebody's work, not their geography, has become many headhunters' priority. Diverse workforce is becoming commonplace both in virtual and in real world. The awareness of global issues is also expanding. Meeting people virtually, travelling more internationally and connecting globally is what Millennials expect in their workplace as well, making diversity a must in their professional lives.

4. THE MILLENNIAL MIND-SET

In her book 'Millennials & Management: The Essential Guide to Making It Work at Work', Lee Caraher (2015) points out that contrary to how they are generally perceived by others, Millennials see themselves as confident, contributors, change makers and capable:

- Confident. They are confident that they can contribute, that they can learn, that they can make a difference, that they matter and that they can be fulfilled in their work as part of a meaningful life. On one hand, they are raised to believe in themselves, on the other hand, they don't want to spend their lives at miserable jobs just because they have to pay the rent, like some of their parents did or do. They want it all and they believe they can get it. There's just this problem that they want it now, sometimes with no hard work, hence the feeling of entitlement.
- Contributors. They want to contribute to the 'real' work from day one (which is why the direct access to leadership is at the top of the list of job satisfaction priorities for them). They want to do important work and do not want to wait for years to get an opportunity to do it. What is also connected to this is that hierarchy and structure of the company is an outdated concept for them, and something that stands in the way of their hopes, dreams and fulfillment. So, even though, according to Lee, 91% of Millennials expect to stay in their jobs for less than three years, they stay longer when they understand how they fit in, and how their work contributes. They want to feel that they are important for the company, and they want to be told so. They need feedback, support, and the thorough understanding of the entire work process of their company and how exactly they fit in and why their work and their job position is important.

- Change makers. They want and feel that they can make a difference (to change the world or their part of it), the way the business works, the way it contributes to the community (that's why their dedication to community service and volunteerism can be found in most of the researches on the topic). If their job makes a direct environmental or social change, they are more satisfied.
- Capable. They believe in themselves so much, that they can do anything, they feel they have so much to offer and that they are full of potential, and they question whether the job is right for them and not if they are right for the job (such a different attitude to that of Boomers or Xers at their age).

These Millennials' traits strongly influence the characteristics they desire from the workplace. The research conducted by Singh, Raj and Bhandaker (2012) and presented in their book 'Millennials and the Workplace: Challenges for Architecting the Organizations of Tomorrow' lists the following characteristics of the workplace as Millennials' priorities:

1. The Millennial generation craves for a work environment that provides its members with the freedom to experiment, offers opportunities for taking initiatives and encourages innovation and generating ideas.
2. The Millennial generation also wants to work in an environment where their work and contribution are recognized and rewarded.
3. Fairness and transparency are important factors that attract representatives of the Millennial generation to join the organization.
4. The members of the Millennial generation would like to work in the workplace which offers many opportunities for learning, growth and development.

Other important attributes of a desired job for Millennials are: the possibility of teamwork, frequent, constructive feedback, work-life balance, openness to suggestions and expressing opinions, opportunities for leadership development, participation in charity and volunteering, care for physical and mental health of the employees, and only after these come meeting their financial needs and job security.

5. CONCLUSION

In the past the workplace functioned in such a way that employees would simply follow orders given by the supervisor – they didn't ask questions. However, Millennials don't typically respond well to this type of management style. There is a big difference between what Generation Y expects and demands of a job and what it actually gets. In this regard, it is necessary to change the modern organizations and adjust them to meet the needs of Millennial workers which will soon dominate the workplace in numbers. Modern workplaces have become more flexible and respectful of the needs of their employees. The most important segments of management to work on while building a Millennial-friendly organization include: making work meaningful, giving clear directions, providing constant feedback, provide meaningful acknowledgement and appreciation, ensuring transparency, providing full-life approach to work, providing access to management/leadership as well as mutual mentorship.

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WHAT EVER HAPPENED TO THE CONCEPT OF HR BUSINESS PARTNERSHIP? SOME EVIDENCE ON FIRMS OPERATING IN SERBIA

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Abstract: *The concept of HR business partnership has not been understood appropriately by the majority of HR professionals in Serbia, which is why this paper seeks to remedy this situation. It starts with a theoretical concept of HR business partnership and accompanying Ulrich's model. After that, some insights about the current situation of HR business partnership concept in Serbia are given based on the author's investigation within three firms operating in different industries. In the end, a set of guidelines for HR professionals is provided. They refer to the need of acquiring better understanding of the HR business partnership concepts and Ulrich's model, after which they provide several useful steps for implanting them within a firm. The premise of the whole paper is that, if HR professionals want to take a sit at the executive table, they have to position themselves as strategic partners that add value to the entire organization.*

Keywords*: HR, business partnership, Ulrich's model, HR excellence, HR service center*

1. INTRODUCTION

Some critics argue that HR has not yet proved to be worthy to take this place because it acts more as an administrative service or compliance function than business partner (Ulrich & Dulebohn, 2015). Even some critics in US, where the field of HR has its roots, say that HR managers focus too much on administrative side of their work and lack vision and strategic insight (Cappelli, 2015). They claim that HR function is more focused on details within its scope of authority than the big picture and it is more concerned with its specific activities than the end-to-end value creation for the external customer. In other words, there is too much concentration on being expert in particular areas, such as: recruitment, staffing, rewarding, communication, training, employee relations, and so on (Hird, Marsh & Sparrow, 2009). What is needed instead is orientation on results and overall firm performance.

The concept built during 1990s as a result of inability of HR to make a significant contribution to the strategic agenda came to be known as “HR Business Partnership” (Ulrich et al., 1995; Ulrich, 1997; Losey, 1999; Ramlall, 2006). Intent of the HR Business Partnership (HRBP) was to help HR professionals integrate more thoroughly into business processes and align their day-to-day work with business outcomes (Ulrich & Brockbank 2009). With this concept, HR professionals have tried to provide a seemingly profound answer to the challenges business has been imposing on them. Even though HRBP has resulted in increasing the perceived value of HR, it is still hard to say whether it is close to deliver value to the business on a constant basis as promised.

2. THEORETICAL BACKGROUND

HRBP concept has not evolved over night, but rather resulted as a response to the shifting demands of business through the years of HR discipline development. Therefore, a very short look back down the HR history lane seems to be appropriate, after which we will explaine the model that enables HRBP concept operationalization.

2.1. A Short Look Back at the HR History

The need for HR and the emergence of this field as a profession in U.S. were results of World War I. In 1914 a widespread labor shortage began, especially for skilled workers, resulting in wage increases. This situation created a need for employers to utilize their workforce as much efficiently as possible, while trying to minimize the turnover rate. The epilogue was seen in establishing personnel departments between 1915 and 1920 to centralize employment related activities directed toward meeting business needs (Ulrich & Dulebohn, 2015).

In the following period, the priority of HR has been on dealing with unions due to their growth in power, while most other activities came to be viewed as low level and purely transactional. Thus, business has started to perceive HR as a necessary function that focused on administrative activities and cost control.

Another leap in viewing HR as a function that adds value to the entire organization happened in 1980s. This happened due to several factors occurring simultaneously: increased internationalization of business operations, deregulation in many industries, decreased unionization, changes in employment legislation, and the start of the shift from industrial to knowledge-based economy (Ulrich & Dulebohn, 2015). This situation led to rethinking the way in which business perceived its employees. All the sudden, they were no longer treated as mere expense, but became the most valued “resource” for gaining advantage over competitors (Prewitt, 1982). This approach was based on so-called “inside-out” view (Baden-Fuller & Stopford, 1994), in which internal resources constitute the starting point for understanding what organizational success means.

The massive restructuring of firms that took place in subsequent years starting from the 1990s, saw the first large scale outsourcing, including a large portion of transactional HR activities, such as payroll and benefits processing, as well as some types of training. At the same time, information technology proliferation has enabled the use of employee self-service with respect to a wide variety of HR activities. All the sudden, it has become obvious that a radical shift in perception of HR has to happen again in order for HR field and profession to remain viable in the long run.

2.2. The Contemporary HR Paradigm

Pressed with increasing demand to produce more value to the bottom-line, HR professionals had to rethink its role within a firm. The line of work that sparked the new wave of thinking about HR has been provided by various authors who argued that overall firm performance is maximized when HR policies and practices are consistent with the business strategy (cf. Schuler & Jackson, 1987; Miles and Snow, 1984, Ulrich, 1997, Becker and Huselid, 1998). In the exact words of Lawler and Mohrman (2003): “HR's greatest opportunity to add value may well be to play a role in the development and implementation of corporate strategy.” (p. 2) This wave led to HRBP concept in the form we know today.

HRBP concept focuses on HR’s role in the creation and maintenance of the capabilities that a firm must possess in order to deliver value to its customers, shareholders, employees and communities (Ulrich & Brockbank 2009). In order to be viable in everyday life of a firm, HRBP work ought to be divided into at least three, but in more complex organizations – five components, each with its own roles and responsibilities (Joinson, 1999; Kates, 2006; Ulrich, Younger & Brockbank, 2008; Ulrich & Dulebohn, 2015). Three basic components and their interactions came to be known as “Ulrich model”, “3 Box model” or “Three Legged Stool”. These components are as follows:

(1) HR business partners (a customer-facing front end). These are generalists who are matrixed in some form between line managers and HR. They act as consultants and planners, linking the business with appropriate HR programs. In other words, they are client relations managers whose job it is to diagnose client’s wants and needs and then pull knowledge together to meet those client’s expectations.
(2) Centers of excellence/knowledge (a product-focused back end). These are small specialist groups that produce programs and policies and provide decision support. They are populated with individuals who have deep expertise in the HR core areas of staffing, learning, compensation, organization development, and so forth. These employees depend upon the business partners to roll out the programs they create to the business.
(3) Operational/administrative service center. This center is intended to reduce costs and improve both efficiency and quality by systematizing and reducing transactional work, such as: payroll and benefits processing, employee assistance programs, relocation administration, pension plan enrollment and administration, applicant tracking, queries answering, resolving low-intensity employee relations issues, and the like. In addition, by taking employee-centered work away from the generalists, it theoretically frees up their time to concentrate on higher-value, management-focused work. HR service center enjoys economies of scale, meeting employee needs and resolving concerns by fewer dedicated HR resources based on highly standardized processes. Due to maturation of information technology, it may be located anywhere (usually, the choice is some lower-cost location, such as Eastern Europe or India). Also, the center may be centralized internally, outsourced, or provided through multiple vendors.

Even though the model just depicted proved to be worthy in terms of adding value to the overall business, some HR work continued to fall through the cracks (Reilly & Williams, 2006). Thus, the work on operationalizing HRBP had to be continued. Besides these three basic components, two additional components were brought to light in order to strengthen the weaknesses perceived in the “Three Legged Stool” model (Ulrich, Younger & Brockbank, 2008). These are:

(4) Operational executor. What has been missing in some HR endeavours is the capacity to deliver and implement the ideas from the excellence center, while maintaining focus on the business and its customers. While this work ideally occurs through an integrated team made from experts pulled from various components of the excellence center, a designated person ought to be charged with this team and how it works. Thus, operational executor is usually assigned to a business in order to help turn the strategy into action. This position is focused on implementing specific projects within the business.

(5) Corporate HR. Since operationalization of HRBP concept obviously disperses HR activities, it is necessary to have one instance to integrate the remaining four. Therefore, corporate HR is established. Its primary concerns are the relations with CEO and the rest of top management, alignment of all HR work to be done with business goals, arbitration of disputes between centers of excellence and business partners, ensuring HR professional development and creating a consistent organizational culture.

As Ulrich’s HRBP model has grown in popularity, numerous questions have been raised. For example: (1) Is this model suitable for firms no matter what their context or industry is, (2) What specific competencies does each role require, (3) how should differentiated roles be integrated in order to achieve the necessary level of coordination, (4) is this model really effective in selecting and developing business partners or linking HR strategy and business strategy, etc. Some of these questions have been answered and others are still waiting for appropriate response based on empirical evidence.

However, the fact remains that the benefits gained from Ulrich’s model implementation have been mixed. While HR in some firms has made progress down the road of becoming a true business partner, many other firms claimed not to be able to experience the results anticipated by the use of this model. It has become obvious that the depth of HR talent capable of taking on an HR business partner role varies markedly between countries and firms. On the other hand, cultural differences reflected in the relationship between line managers and employees, and employees and HR have all impacted the ease with which this model can be implemented.

The results of a year-long ethnographic study considering the themes of becoming strategic, becoming a partner and remaining a generalist, showed that various tensions emerge as HR practitioners attempt to become strategic partners (Pritchard, 2010). Caldwell (2003) argues that converting HR practitioners to strategic partners will always be an overly ambitious transformation given the intrinsic role of ambiguities in the HR profession, which derived from its shifting cross-functional boundaries, substitutable expertise, unclear accountabilities and performance measures, and invariably problematic dependence on line managers for HR delivery (Caldwell, 2003).

Nevertheless, HRBP concept and Ulrich’s model have proven their usefulness in different contexts, especially in firms with product portfolio diversified in related, as well as in non-related manner (Ulrich, Younger & Brockbank, 2008).

3. HR BUSINESS PARTNERSHIP CONCEPT IN FIRMS OPERATING IN SERBIA

The critique presented by magazine Fast Company’s deputy editor, Keith Hammonds, in August 2005 has brought to light many negative aspects of HR work (Hammond, 2005). Hammond argued that HR managers contributed very little to organizational performance and remained fixated to bureaucratic procedures and administrative tasks. He also noted that the few things HR was good at could be outsourced, and that the strategic contribution HR managers were trying to achieve was beyond their capabilities. As much harsh as this critique may sound, it perfectly paints the picture of HR work in majority of firms operating in Serbia today, 10 years after this article was published.

Even though there is a general agreement that: (1) human capital can be a source of competitive advantage, (2) HR practices have the most direct influence of human capital of a firm, and (3) the complex nature of HRM systems of practice can enhance the inimitability of the firm (Delerey and Shaw, 2001), there is still an urge to thoroughly define how HR is going to add value to the firm and enhance its overall performance. This is especially true for firms doing business in Serbia. In those firms, it seems that an “inside-out” approach (Baden-Fuller & Stopford, 1994) still dominates. Under this approach, HR creates value just by serving employees, redesigning HR practices or making them more efficient.

So what ever happened to the HRBP concept in Serbia? The simplest answer would be that it has been misunderstood by majority of firms that attempted to implement it. This conclusion is made based on more than dozen unstructured interviews in the previous four years author has had with HR representatives working in various industries. However, since information gathered this way is not first-hand, i.e. not experienced directly, it has been treated only as a spark for further investigation on this topic. As a result, three large firms operating in Serbia, each of them with a long tradition but within different industries, were chosen for examination of HR practices. Their names will not be revealed due to confidentiality reasons.

3.1. Chemical Exporter

The first firm operates in chemical industry. It was founded in 1970s and now employs more than 1,500 people. Even though its technology is very old and needs to be renewed, it has a wide range of products with more than two-thirds of revenues coming from the export.

As for the HR concerns, it does not have a business partnership concept implemented. Instead, it relies on classic functional support to the business based mainly on transactional activities, which is the result of several factors (analysis of these factors is out of scope of this paper and will not be discussed any further). In other words, the work is more focused on administrative tasks, rather than on talent issues. Nevertheless, HR is divided in the following areas of expertise: recruitment and staffing, training and development, administration, employee relations, and internal communications. These areas of expertise are being coordinated at the level of HR director. This person is responsible for integrating the efforts of HR employees and delivering services to the business. The following figure illustrates the relations between HR and business (Figure 1).

Nevertheless, even a highly capable HR director cannot replace the business partnership concept, no matter how hard he or she tries. In the case of the Chemical Exporter, HR is acting completely reactively. It is mainly focused on administrative and employee relations tasks, while often seeks outside help from various consultants for HR activities that may influence the strategic agenda of the firm. Even though there is awareness about the lack of HR competences, nothing is being done in order to develop the knowledge, skills and abilities that might help the business to achieve its goals and add value to the organizational performances.

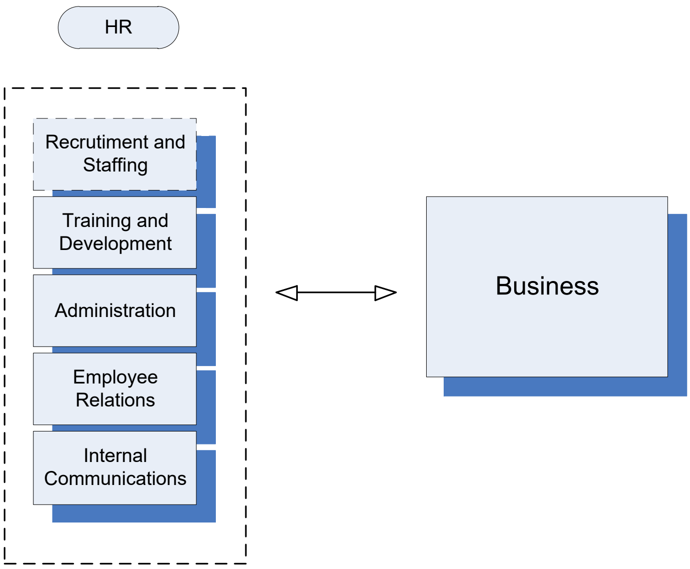

Figure 1: Relationship between HR and business in Chemical Exporter

3.2. Financial Traditionalist

The second firm operates in financial industry. It was established in 1860s with the aim of providing loans to the farmers. In the following decades, it has significantly broadened its scope of services resulting in a complete strategic repositioning. These changes in its business policy, even though seem large when perceived cumulatively, have been made in a slow and conservative fashion during a long time period. On the other hand, exceptionally long history of this firm has allowed it to play a very important role in the development of Serbian economy, thus creating its image in a public as a very reliable business partner with traditionalist values. It now provides jobs to approximately 1,500 people.

In this firm, HR has recognized the concept of business partnership as a valuable asset and started its implementation. Nevertheless, the model currently implemented represents some sort of a hybrid somewhere between functional and HRBP models. As may be seen in Figure 2, HR Business Partner is actually a liaison between business on one side, and recruitment and staffing, as well as training and development on the other. In other words, if the business needs some services related to internal or external staffing, or perhaps increasing the competences of employees, it will approach HR Business Partner. On the other hand, services related to employee administration or relations, job descriptions, internal communication, and so on, will be provided directly, without HR Business Partner in between.

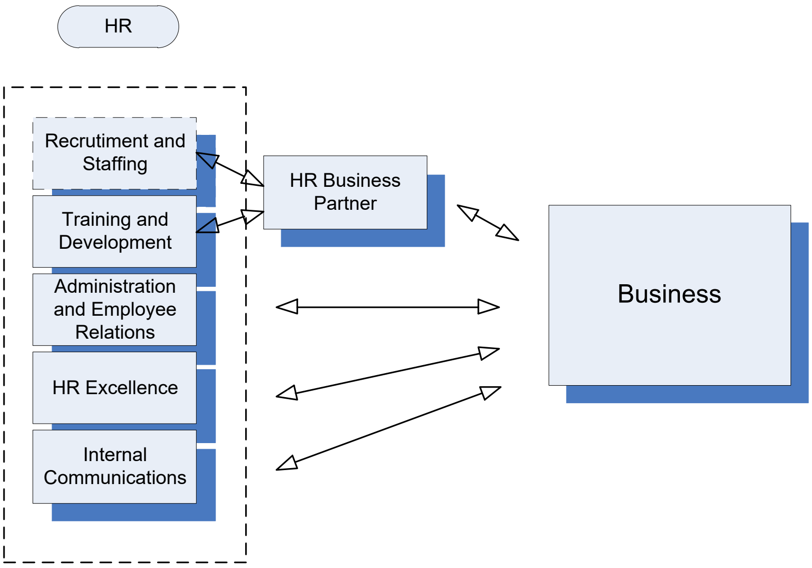

Figure 2: Relationship between HR and business in Financial Traditionalist

Even though HR Business Partner role in this case somewhat decreases the complexity for the business by creating a single point of contact for staffing and development services, it does not add true value to the strategic agenda. HR is still acting reactively by providing mainly transactional services on demand (even talent management services, if done purely according to the request when requested, may be seen as transactional), mainly due to the fact that there is still a wide gap to bridge in terms of competences needed to become a value added business partner.

3.3. Oil Major

The third firm operates in oil and gas industry. It was founded in 1940s in order to perform oil and oil derivatives trading. Due to its long history, it has gone through several periods of profound ownership and organizational restructurings, resulting in significant growth and business development. Now, it has become a vertically integrated firm with various products, supplying a major part of Serbian oil market. It has also become a highly successful competitor in the regional market that employs more than 10,000 people and provides a significant contribution to the Serbian GDP and budget increase.

Oil Major is organized into several divisions, each one being semi-autonomous and in charge for one particular part of the integrated value chain. Due to the complexity of the business coming from several lines of operations, it had been decided that HR needs would have been best served by adopting the HRBP concept. Therefore, each division has been granted a designated HR Business Partner in charge for all of its HR challenges. At the same time, administrative tasks have been kept centralized. They have been automated and organized based on a self-service principle. The HRBP model implemented in this firm is depicted in Figure 3,

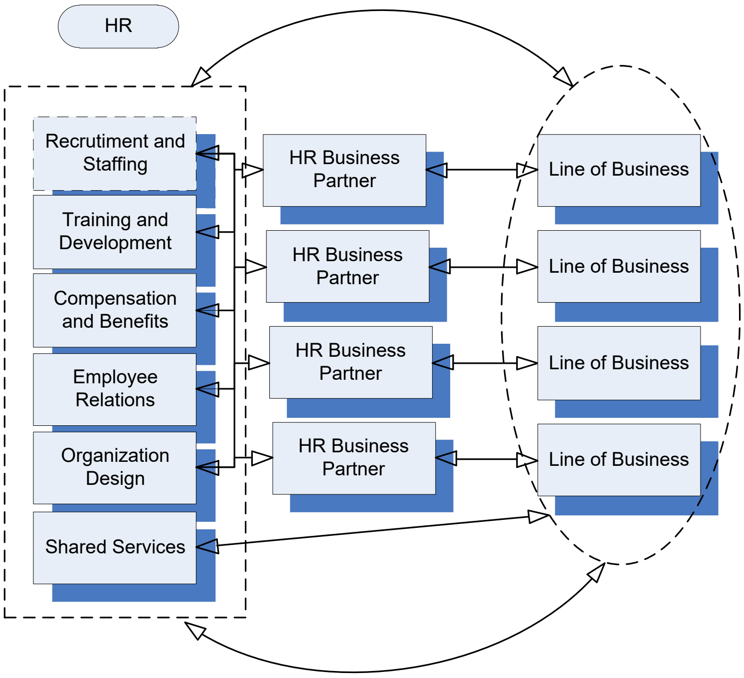

Figure 3: Relationship between HR and business in Oil Major

However, due to the lack of a proper communication about the business partnership concept and critical competences needed for this model to be adopted throughout the firm, as well as a strong organizational heritage that created inertia, the result of the entire endeavour has not been a true HRBP model. Rather, it has been a sort of a hybrid that, on one hand, provides the interface for all HR services toward the lines of business in the form of a designated HR Business Partner. Here, a business partner is an HR generalist and acts as a broker by providing the services to the business that he or she integrates after pulling them from HR centers of knowledge (Recruitments and Staffing, Training and Development, Organization Design, etc). On the other hand, the relationships between the business lines and HR centers of knowledge are still being maintained, which very often results in HR Business Partners being skipped. In those cases, business lines communicate with HR lines directly.

This situation creates a lot of difficulties and confusion. Roles are not well defined, activities are being duplicated, and communication channels are not straightforward. This usually leads to procedure breaches, not meeting the deadlines and overhead costs increase. Thus, implementation of this kind of HRPB model may have led this Oil Major into more unnecessary complexity, resulting in higher costs than benefits.

Regardless of the fact that some level of awareness about the importance of HRBP concept in Serbia does exist, after seeing these three examples, one might conclude that the attempts of implementing it somehow do not achieve the desired end result. Even though findings in these three organizations certainly may not be generalized on the whole population of firms operating in Serbia, they may serve as a signal that the HRBP concept has not been understood correctly in the HR community and that it is necessary to remedy this situation. Therefore, some recommendations seem appropriate.

4. RECOMMENDATIONS FOR HR PROFESSIONALS IN SERBIA

If firms operating in Serbia want to increase the value they add to the business, their perception of the business ought to switch. Instead of “inside-out”, they need to adopt an “outside-in” view. This approach starts with the environment in which the firm operates, after that it moves to the strategy by which the firm seeks its alignment with the environment, and finally considers HR policies and practices customized to meet the strategy and add value to it. According to Ulrich and Dulebohn (2015), in “outside-in” approach, HR creates value by making sure that services HR offers inside the firm are aligned to expectations outside the firm. Therefore, HR professionals ought to “… shift their attention from the organizational level and internal regulation to a more interactive level between the organization and the environment…” (Paauwe & Boselie, 2003, p. 67)

So, what is needed in order for HR in firms operating in Serbia to become a strategic partner? It seems that the proposal provided by Lawler and Mohrman (2003) for the firms operating in developed country equally applies to the situation currently found in Serbia. “The consensus seems to be that change is required both in the skills of individuals in the HR function and the way the HR function is organized and carries out its activities. HR not only needs to have competencies having to do with the business issues involved in strategy and strategy development, it needs to be able to contribute to organization design and change management. As far as its own organization concerns, it needs to be organized to carry out the basic administrative functions as well as being a strategic partner.” (Lawler & Mohrman, 2003, pp. 4-5)

If this becomes a case, the business will finally start perceiving HR as a true strategic partner. According to Ulrich, Brockbank & Johnson (2009), HR professionals can ensure HR takes a true leap toward becoming a strategic partner by doing the following:

(1) Facilitate the strategy creation process by ensuring that right people are engaged in communication about strategic agenda and streamlining this discussion.
(2) Help clarify and articulate the strategy by making substantive contribution in communicating strategy to all employees and other stakeholders.
(3) Ensure execution of strategy by aligning HR practices in all its activities (recruitment, staffing, rewarding, communication, training, etc).
(4) Align leadership behaviour to strategy by clearly articulating what leadership knowledge and behaviours align with strategy and then turning these expectations into clear competencies and performance standards.
(5) Bring the view of the outside customer in by getting to know the motives, drives, and needs of external customers, and then translating this knowledge into relevant actions.

It should be mentioned that, in practice, the implementation of HRBP has rarely followed a single model, and there is growing concern regarding the efficacy of the more generic and context-independent competency frameworks propounded by advocates of business partnering (Ulrich and Brockbank, 2005). In other words, HR professionals in Serbia must undertake a broad multidimensional analysis of the current situation in their firms. Only after they are fully aware of the strengths and weaknesses within them, they may start designing the HRBP model to be implemented, as well as the process of implementation. The contingency approach should be entirely taken into account (cf. Pugh et al, 1963; Lawrence and Lorsch, 1967; Mintzberg, 1979).

5. CONCLUSION

HRBP concept and accompanying Ulrich’s model have presented a tremendous revelation within the field of HR development. They have paved the way toward increased significance of HR as a true business partner that influences the performance of an entire firm.

Nevertheless, experience in Serbia has shown that implementation of HRBP concept is not an easy task to master. HR professionals must understand what this concept is really about and start working on elevating their competences in order to meet the requirements of becoming strategic partners. On the other hand, simply pursuing the structural solution implied by the Ulrich’s model is not a sufficient condition for HR to deliver high perceived value (cf. Hird, Marsh & Sparrow, 2009). Becoming true strategic partners that add value to the entire organization require from HR professionals to understand the business context and key stakeholders, as well as how they interact with each other. They also need to rethink their role within the firm and find a way in which they may add value to the entire firm. These findings will help them acquire the knowledge that will enable them to participate in strategy formulation and execution on a sustainable basis.

HR has traveled a long way since it first emerged as a profession, but it seems that somewhere down the road it took a wrong turn, especially in case of Serbia. In order to continue this journey toward increasing the significance of HR as a true business partner, HR professionals must rethink their purpose and role in firms and start developing HR as a contributor of value to the strategic agenda. They must embrace the fact that if they wish to be recognized and take a sit at the executive table, they will have to be able to bring their share of value to the performance of an entire organization.

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WFMS AS THE FOUNDATION OF BUSINESS PROCESS IMPROVEMENT: HUMAN RESOURCE MANAGEMENT PERSPECTIVE

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Abstract: *The optimization of business processes is a modern approach to implementation of organizational changes of different scope. This paper is closely related to business processes improvement through their automation and informatization. The aim of this paper is to explore the effects of the application of Omega Workflow Manager in the process of recruitment and selection of human resources. The basic characteristics of the process, its role in the organization, the impact on the efficiency and effectiveness are presented, as well as the description of an Omega Workflow Manager. The results of the analysis indicate that the implementation of this system leads to savings in terms of time, material resources and allows for a better control and coordination with the processes related to human resources.*

Keywords*: organizational change, process improvement, process optimization, workflow management, human resources*

1. INTRODUCTION

The term “process” may have various interpretations. Lindsay, Downs and Lunn (2003) cite the definition of Hammer and Champy from their well-known book *„Re-engineering the Corporation“,* in which they define it as “a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer. A business process has a goal and is affected by events occurring in the external world or in other processes” (p. 1015). Radović, Tomašević, Stojanović and Simeunović (2012) cite Davenport’s definition of business processes as "a structured set of activities that can be measured, and which is designed to produce a specific output for a particular customer in the market" (p. 4). These definitions are sufficiently compressed, but at the same time they provide sufficient information to understand the processes and their importance.

Lin, Yang, and Pai (2002), after analyzing the work of well-known authors in this area like Davenport, Hammer, and Champy, suggest that business processes consist of five elements (p. 20-21):

- *Users* - each process serves a particular user with its output
- *Activities* - parts of the process which can be regarded as sub-processes
- *Related activities* – the identified activities are not isolated but are a part of the chain of activities directed towards the creation of value for the end user
- *People and technology* - the identified activities performed by humans or machines, or a combination thereof
- *Organizational units* - processes often span across multiple organizational units, but also there are processes that ocur in only one of them

Aguilar-Saven (2004) emphasizes that the processes go through different phases of development within an organization. These are (p. 131):

- The initial phase which leads to the establishment of the process
- The stage with an increasing number of repetitions of certain processes
- The defining phase that leads to the standardization and documentation of the process
- The stage where the processes can be managed, where you can measure and control their performance, and
- The optimization phase wherein the processes are being improved continuously

Hammer (2007) points out that for successful functioning, it is essential that the process is well designed and that the people who participate in its implementation have appropriate skills and knowledge. Furthermore, the owner of the process (a person who has authority and responsibility for providing the results of the process) needs to be identified and the infrastructure needs to support the progress of the process. Lastly, it is necessary for the system measuring the process results to be precisely developed. All these elements correlate with each other and they cannot separately lead to the proper operation of the process. Although all these elements are prerequisite and obligatory, the existence of each one of them is no guarantee for the progress of the process. In addition, so as to successfully realize the process, the existence of certain

organizational elements is critical. The most significant among them are leadership, culture, expertise, and management (p. 3).
When the process does not work properly, the certain changes must be taken. Draheim (2010, p. 16-17) and Mansar and Reijers (2007, p. 199) suggest that improvements of the process can be achieved in different ways: by defining a new job by combining several existing ones (elimination, recombination or introduction of new activities), performing work in the context where it arises, balancing centralization versus decentralization, allowing decision making at the operational level, allowing process steps to be performed parallelly wherever possible, identifying efficient versions of business processes, reducing control etc. These activities are performed in order to achive the process standardization. As Davenport (2005) points out, this term may refer to the standardization of activities and the process flow, standardization of process performance (when companies determine the activities that make up a process, they can start measuring its results and comparing it with external companies), standardization of process management (which shows how well the processes are managed and how to measure their success). This type of standardization is now the most widely used (p. 102-104).

There are various types of business processes; however, taking into account the aim of this paper we will highlight Porter's (2008) classification of activities: *primary activities* (inbound logistics, operations, outbound logistics, marketing & sales, and service) and *support activities* (firm infrastructure, human resource management, technology development and procurement) (p. 37). The following sections of this paper shall focus on dealing with the support processes, since their automation is rather applicable.

Once we have identified the basic elements and main characteristics of business processes, we shall analyze the concept of automation and informatization of business processes, as well as *Omega Workflow Manager*.

2. WORKFLOW MANAGEMENT SYSTEMS (WFMS)

Informatization and automation of business processes create the opportunity for “consideration of the organization on the entirely new way” (Jaško, Čudanov, Jevtić, & Krivokapić, 2013, p. 34). Permanent development of information and communication technologies on a global scale has caused an expansive growth of automation and informatization of business processes. Enterprise Resource Planning (ERP) and Workflow Management System (WfMS) are some of the most commonly used software solutions that represent the integration of IT-domain and business process management (BPM). Ravesteyn and Batenburg (2010) point out that implementation of such a solution is very often understood as “just another software application” and from this perspective it usually leads to a lack of coordination with social and organizational aspects of business (p. 493). Therefore, to prevent this kind of business misunderstanding, they suggest that “...organizations should realize that BPM-system implementation is not mainly an IT project, but should preferably be initiated by top management” (Ravesteyn & Batenburg, 2010, p. 492).

Petković and Lazarević (2012) define the workflow management as “…a technological support in redesigning work, business and information processes, as a technique of organizational change and a technique of process redesign” (p. 60). Also, Mentzas, Halaris and Kavadias (2001) describe the workflow management system as “…the most evolved of those applications providing consistent information flow between the participants in the process, smooth integration of the flow of work, timely sharing of data and information during the planning and implementation phases and harmonious support for the collaborative aspects of work” (p. 124). They highlight that development and implementation of this kind of application require precisely defined tasks, employees' roles, rules, and procedures. WfMS, as a business processes management tool, has three main perspectives: (1) control flow perspective - defining the sequence of activities in the process; (2) data perspective – the set of information that is transmitted, and (3) resource perspective - assigning responsibilities to employees for task realization (Stroppi, Chiotti, & Villarreal, 2015, p. 86).

Assigning a required number of people to carry out each business task, effective monitoring of its realization and control of the business task flow are the three main reasons why an increasing number of organizations all around the world have implemented WfMS (Tsai, Huang, Wang, & Chen, 2010, p. 1538). Besides that, WfMS allows employees to spend less time on delegation and coordination of work; process informatization leads to a decrease in time when a task comes to a standstill during its life cycle and also encourages the reduction of time when task is to be completed (Reijers, Vanderfeesten, & Van der Aa, 2016, p. 128). For successful application of WfMS, it is necessary to precisely define the process - all steps and activities that the process comprises. A great number of authors emphasize the importance of properly defined process flow. For instance, Van der Aa, Reijers and Vanderfeesten (2016) explain that properly defining activities is crucial because their content and size affect model understandability, experienced meaningfulness and execution efficiency, as three crucial aspects of process design (p.162).

Replacement of manual labour with a process that is automated through information system, leads to improvement of the process efficiency (Vukicevic & Milosevic, 2012, p. 65). Reijers, Vanderfeesten and Van der Aa (2016) did a multi-case longitudinal study of the implementation of Workflow Management System (WfMS) to determine whether the use of this kind of system positively affects the process improvement. This process oriented analysis included over 25 processes across 10 organizations and showed that the business process automation had a positive effect on reducing the time needed for the realization of business activities. The results showed that performance improvements through implementation of WfMS in general were substantial (p. 130-139).

Based on the literature review, we can conclude that the WfMS is a modern, applicable and prospective concept, which could lead to significant improvements, as shall be explored and demostrated in the case of *Omega Workflow Manage*r.

2.1. Omega Workflow Manager

Omega Work Flow Manager is a web application created using a variety of Internet technologies in order to develop a software that will support process automation of the real system (organization). The authors have attempted to make this application user-friendly, so that the software can be quickly developed and implemented. A wide range of functionalities allow modeling of mainly medium-sized processes.

The software is based on logic and the basic elements of the existing process, as well as on the experience of WFM moderator. WFM primarily has been developed for moderators of the process, i.e. people who are studying, modeling and designing process to create software. Also, predefined processes help automation of new similar processes, which is great because clients require a simple and quick solution.

The form that represents the process has its own database – information, users, execution rules, restrictions, etc. It is divided into steps and each step has its own processor. The processor is actually the owner of the step. The step represents an ordered set of pages, wherein questions for the users are defined, recognized and adequately set up in order to follow the process in the right way.

In OWfM, participants from the real process are presented as software users and activities are presented as steps. The application is able to communicate with the database, so it is possible to retrieve useful information which is not directly presented on the form, but could be useful in the decision-making process when a user starts filling out the form. As regards the work with data, SQL operations are supported (select, insert, update, delete), as well as queries and complex queries. All this is implemented through actions, which is comparable with methods in programming languages. With regard to the used technology, the outputs from the process (documents, reports and results) can be exported to an Excel or a Word file that allow monitoring of all data that have passed through OWfM, or, more precisely, through a certain process.

Process automation through OWfM is performed in several steps:
- Determination of processes which are to be automated
- Modeling business processes
- Defining users, their roles and activities
- Defining the database
- Defining the input and output documents

The graph below shows the use of certain software solutions depending on the complexity of the process. For example, an increase in the complexity reduces the efficiency of the use of e-mails as a tool of managing the process. Also, the more complex the process is, the ERP is imposed as the optimal solution, but the major obstacle is the price. Obviously, the implementation of OWfM in the processes of medium complexity is the best solution, provided that it is used in the right way.

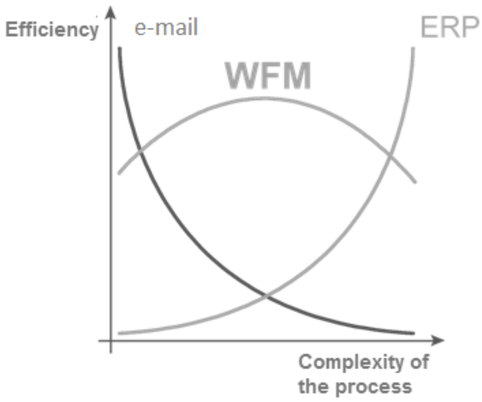

Figure 1: Relation between the process complexity and the software efficiency

These are the basic characteristics of Omega Workflow Manager. Moving on from the example of application in Organization M, we are going to present some of its implementation results, advantages, and limitations. The results of the following analysis are mainly quantitative, which is important for the comparison of the state before and after the introduction of OWfM.

3. THE EXAMPLE OF THE OMEGA WORKFLOW MANAGER IMPLEMENTATION

Organization M (hereinafter only *Organization*), measured by the number of employees (around 1,000) and financial performances, represents a large, successful and stable company. The organization does not have financial problems, but wants to improve the operational efficiency. The subject of the project was the improvement of HR processes, and the entire organizational unit (hereinafter only *Human Resources* or *HR*). Human resources consist of four departments: *Department for Norms of Labor Relations, Department for Employees Education and Training, Department for Labor Legal Affairs, and Department for Selection and Potentials Evaluation.* Each of these departments has employees in the central part of the organization, and in the four organizational depots. The analysis of the work volume in HR for the period of previous three years was conducted during the first phase of the project. The data on the main processes, their average duration as represented in hours, the number of repetitions on an annual basis, as well as the total annual work volume (average duration * number of repeats) for these organizational units and in total were obtained through the analysis and the relevant calculations. Some of the data are shown in the following table.

Table 1: List of HR processes, their annual duration and percentage share in total work volume

Process	Annual work volume (h)	Share in total work volume (%)
Department for Norms of Labor Relations	2,275	8.96%
Normatives of Labor Law Affairs	1,479	5.82%
Additional jobs	796	3.14%
Department for Employees Education and Training	8,059	31.74%
Employees education	1,633	6.43%
Training and professional development	2,839	11.18%
Additional jobs	3,588	14.13%
Department for Labor Legal Affairs	4,943	19.47%
Labor legal affairs during employment	3,519	13.86%
Labor legal affairs outside employment	172	0.68%
Labor legal affairs for employment	100	0.39%
Additional jobs	1,153	4.54%
Department for Selection and Potentials Evaluation	10,112	39.83%
Recruitment and selection of youth cooperatives	24	0.10%
Recruitment and selection for temporary jobs	415	1.63%
Recruitment and selection for intern	181	0.71%
Recruitment and selection of trainees	3,123	12.30%
Recruitment and selection for employment	5,280	20.80%
Additional jobs	1,091	4.30%
TOTAL	**25,390**	**100.00%**

It should be noted that not all of the business processes can be the subject of automation. For example, Hall and Johnson (2009) define so called "artistic processes" that use diversity environment to create variations of products or services that are highly valued by consumers (p. 58). These processes cannot be the subject of automation. Becker, Kugeler, and Rosemann (2003) suggest that the previous analysis should include structural characteristics of the process, organizational status and conditions, as well as the potential benefits of automation in order to allocate certain candidates (p. 268). Based on the results of the first phase, we can consider the type and the scope of work in human resources, and isolate the processes that can be modeled. This selection was based on the following criteria: the possibility of modeling, participation in total work volume, the possibility for the improvement of related processes in other organizational parts, and the number of participants in the process. In our case, the analysis showed that certain processes can be modeled (e.g. recruitment and selection, training and professional development, labor legal affairs), while others either cannot be modeled or are not so important for modeling (normative of labor law affairs and additional jobs by individual organizational units). For the purpose of this article, we will explain in detail modeling of the process of *Recruitment and selection*, while other processes were modeled in a similar way.

Recruitment and selection is one of the most important processes in organization M, as evidenced by the share of its organizational unit of 39.83% in total work volume. This can be seen as a direct consequence of the size of the organization and the constant need for new employees. There are several different forms of the process realization, depending on whether the subject is recruitment and selection for a full-time employment, for temporary jobs, for youth cooperatives or trainees. Essentially, the process encompasses the following activities: *initiation for declaration of needs for employees, identification of needs for employees, forming the Plan of employment, advertising the need for candidates, recruitment and selection of candidates, creation of the Employment Contract, and training on health and safety at work.* The process is carried out by three executors and passes through all previously mentioned services. The average number of repeats on an annual basis is around 1000 (including all different forms of recruitment and selection).

The process analysis revealed that there are some problems in the realization of most of these activities, and that there is a significant room for improvement. For example, during the activities of initiation for declaration of needs for employees, the identification of employees' needs, and forming the Plan of employment, there are problems of late delivery of the requested data, submission of data in a form that is not appropriate, unnecessary repetition of work (e.g. retyping the data) or frequent typing mistakes, and the like. These three activities are carried out for all of the above mentioned forms of recruitment and selection (full-time, temporary, youth cooperatives or trainees). In the part of advertising the needs for candidates and recruitment and selection of candidates, main problems are related to overworked (overburdened) employees at headquarters, since all received biographies are being analyzed in the central organizational unit, although in depots there are all the technical and human prerequisites for the performance of this activity, high costs of transport charges of candidates who are obliged to take all the selection tests in the central organizational unit, inefficient processing of received biographies in terms of their grouping in one place and inefficient comparison of one candidate with another. Then, in the part that refers to the creation *of the Employment Contract*, one of minor problems that may come up is that there are no document models that would be largely automatically filled, and therefore there is a possibility of making some minor mistakes. In relation to the abovementioned problems, this is the smallest one. Some common problems that exist in the whole process are related to the long duration that some routine tasks require, which results in a lack of time to deal with substantive matters; the fact that there is no process automation at all, and the data on employment are not integrated and available in one place. Thus, there is a large space for implementation of the system, not only for solving the current problems, but also for those that could arise in the future.

The implementation of the system was based on the previously presented analysis, the identification of the problems, and the needs of users. The largest portion of this phase was dedicated to a search for solutions to the identified problems, while the modeling was completed relatively quickly. Based on the analysis, it can be concluded that the long duration of the process is the main problem, or as a large part of it, and therefore, the focus was on its reduction. It should be noted that the system shortens the process duration in two basic ways: through the process optimization (e.g. elimination of unnecessary activities), and automation that the system allows (automatic creation of reports, documents, overview of the relevant data for the decision making, etc.). The improvements can be best examined by a comparative analysis of the obtained data presented in the table below. The table shows the situation before and after the system introduction.

Table 2: Comparative analysis of the process of recruitment and selection

Recruitment and selection	Duration time (before OWFM)	Duration time (after OWFM)	Change (%)
Initiation for declaration of needs for employees	5	3	40.00%
Identification of needs for employees	260	243	0.07%
Forming the Plan of employment	60	50	0.17%
Advertising the need for candidates	2.5	2.5	0.00%
Recruitment and selection of candidates	2	1	50.00%
Creation of the Employment Contract	5	3	40.00%
Training on health and safety at work	2	1	50.00%
TOTAL	**336.5**	**303.5**	**9.73%**

It is notable, based on the table, that a significant shortening of the duration of certain activities (from the minor ones by 0.07% to the large ones by 50.00%) has been achieved. This can be interpreted as a direct result of the transfer of particular manual activities to the system. What cannot be seen from the table is that the recruitment and selection activities were decentralized and partially transferred to depots, thereby achieving the savings in terms of the costs of transport charges. A very interesting fact is that this improvement was made without any other organizational change, which opens the space for redistribution of work within the framework of human resources, but also in relation to other organizational units (e.g. finance). Čudanov, Jaško, and Jevtić (2009), point out that “ICT itself does not point organization toward more or less decentralization, but widens possibilities for adjusting level of decentralization to other internal or external parameters characteristic to the organization. Development of ICT leaves much more freedom to the designers and consultants to accommodate organizations to other influences, both internal and external“ (p. 106). Other processes in human resources were modeled in a similar way, and their obtained time savings are shown in the table below. By grouping the time reductions per processes and their organizational units, we made a comprehensive quantitative analysis of their improvements. Therefore, it can be noticed that the organizational unit of Human Resources achieved significant improvements in terms of time saving per organizational units (from 3.35% to 48.47%) and are huge in total. Besides these quantitative effects, there have been significant qualitative improvements, related to the main strenghts of the system listed in the following table.

Table 3: Effects of implementation of Omega Workflow Manager in HR

Process	Annual work volume (h)	Share in total work volume (%)	Annual work volume (h) after OWFM	Share in total work volume (%) after OWFM	Change after OWFM (%)
Department for Norms of Labor Relations	2,275	8.96%	2,199	12.20%	3.35%
Normatives of Labor Law Affairs	1,479	5.82%	1,479	8.21%	0.00%
Additional jobs	796	3.14%	769	4.27%	3.35%
Department for Employees Education and Training	8,059	31.74%	7,072	39.25%	12.25%
Employees education	1,633	6.43%	1,546	8.58%	5.33%
Training and professional development	2,839	11.18%	2,705	15.01%	4.71%
Additional jobs	3,588	14.13%	3,509	19.47%	2.21%
Department for Labor Legal Affairs	4,943	19.47%	3,537	19.63%	28.45%
Labor legal affairs during employment	3,519	13.86%	3,230	17.93%	8.21%
Labor legal affairs outside employment	172	0.68%	157	0.87%	8.57%
Labor legal affairs for employment	100	0.39%	92	0.51%	8.36%
Additional jobs	1,153	4.54%	1,115	6.19%	3.31%
Department for Selection and Potentials Evaluation	10,112	39.83%	5,211	28.92%	48.47%
Recruitment and selection of youth cooperatives	24	0.10%	22	0.12%	8.71%
Recruitment and selection for temporary jobs	415	1.63%	380	2.11%	8.36%
Recruitment and selection for intern	181	0.71%	165	0.91%	9.01%
Recruitment and selection of trainees	3,123	12.30%	2,834	15.73%	9.25%
Recruitment and selection for employment	5,280	20.80%	4,766	26.45%	9.73%
Additional jobs	1,091	4.30%	1,054	5.85%	3.41%
TOTAL	**25,390**	**100.00%**	**18,018**	**100.00%**	**92.52%**

The effects of the system implementation can be felt very quickly, especially for the processes which are often repeated. Having analyzed the improvements that the system has brought, we should shortly analyze the costs of implementation. In general, it can be said that they vary depending on the process complexity and the project duration (which again depends on the complexity), and that they are made of two components: the costs of process modeling, and the costs of license for using the software. The implementation costs can be roughly assessed at 40 Euros per hour, while the costs of license for using the software could range from a few hundred Euros to several thousand Euros per month. However, as compared to other, more complicated softwares (e.g. SAP) the period of return is much shorter.

Based on the foregoing, we can point out that the system implementation leads to the improvement of coordination, simplification of the process through the elimination of some unnecessary activities, reduction of the process duration and costs, improvement of the process quality, unburdening employees and consequently to the increase in their satisfaction, a partial improvement of related organizational units, better data management, as well as to opening up opportunities for implementation of other un/related organizational improvements (e.g. optimization of the number of employees, better performance monitoring etc.). Considered in relation to other systems, the advantages of the system are: a shorter period of implementation, lower costs of implementation, faster return on investment, lower volume of change etc.

During the system implementation and use, certain problems of much smaller scale and significance compared with the more complex systems could also occur. They are mostly organizational in nature, and related to unclear needs of users (they usually do not know what are the real problems, for what purpose they want to use the software, what are the most suitable processes for modeling etc.), resistance of employees towards the use of the system (fear of some employees due to the system transparency, the possibilities of determining a halt holder, the increased degree of control) and the like.

4. CONCLUSION

The rapid development of technology has created challenges in the field of the optimization of business processes. New information technologies offer great opportunities for the improvement and optimization of business processes. The optimization can be incremental or radical and, depending on the current state of the organization, it may include the whole organization or just certain parts. It can be the part of a broad or narrow organizational change. Likewise, the optimization does not have to refer only to the elimination of process activities, but also to the reduction of time and other resources. Considering technology as one of the main factors that affect changes in Human Resource Management (HRM), some authors explained that changes in technology "…transformed the way that organizations recruit, select, motivate, and retain employees" (Stone, Deadrick, Lukaszewski, & Johnson, 2015, p. 1). According to them, the growing importance of these changes is a consequence of the contemporary business approach based on the knowledge and talents of employees.

However, if company decides to conduct the informatization of business processes, it would be good first to conduct the evaluation of optimal software solution. Čudanov, Jaško and Saviou (2010, p. 37) in their research showed that the highest level of information and communication technology adoption is recorded in large and medium-sized enterprises. In our country, the largest number of enterprises are medium-sized enterprises where ERP or SAP cannot be effective, due to the lack of complexity of the processes, and those systems also require excessive implementation costs. The practice has shown that the WfMS software is an excellent tool for modeling processes of medium complexity.

In practice, it has been proven that Omega Workflow Manager System gives good results in processes from different organizational units (finance, procurement, sales, marketing, etc.). The system has been successfully implemented in some of the leading companies in Serbia: SBB - sales channels management, Mercator-S – work performance evaluation, online tests, legal documents approval, Coca-Cola Hellenic - processing applications, work performance evaluation, Vinča Institute of Nuclear Sciences – public procurements.

In the case of organization M, we saw that in human resources department only one process automation can lead to significant improvements in efficiency and effectiveness. Moreover, if the number of modeled processes increases, the total effect also increases due to the synergy effect. This kind of project represents an ideal opportunity for the analysis of the current working modes, and solving some core problems and the implementation of new ideas.
In this paper, we focused on the organizational aspects of business processes optimization. The subject of further research could include a cost-benefit analysis and also it would be interesting to investigate the effects of joint realization of system implementation and implementation of major organizational changes, such as corporate restructuring.

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