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M KOPS Centar



From Editor's desk

Men are a thousand times more intent on becoming rich than on acquiring culture, though it is quite certain that what a man IS contributes more to his happiness than what he HAS."

Artur Schopenhauer

Rapid and unexpected changes in the contemporary socio-economic and industrial background, recession, crisis, numerous risks and security challenges imply a certain changes in the philosophy of human resource management. Despite the fact that human resources are perceived as a fundamental factor in the proactive management of safety and security, the bibliography covering this issue has not reached a satisfactory level yet.

In a quest for new topics and multidisciplinary approaches to safety engineering, the editorial staff has decided to dedicate this issue of the journal to the problems of human resource management and development in the system of occupational and environmental safety. You are invited to make critical observation about the papers dealing with the issues of corporate social responsibility and environmental safety management, organizational behavior and crisis management, insurance, stress, mobbing, competence development, career management, human potential development / management, occupational safety engineers, etc..

We believe that the results of these studies will be regarded as interesting reading, but also a challenge for undertaking the research tasks that will help shape the policy of human resource management and human resource development strategy, on their way towards sustainable development in the future.

"Ljudi se hiljadu puta više trude da steknu materijalno nego duhovno bogatstvo, mada je sasvim sigurno, da našu sreću stvara ono što jesmo, a ne ono što imamo."

Artur Schopenhauer

Nagle i neočekivane promene u savremenom društveno-ekonomskom i privrednom kontekstu, recesija, kriza, brojni rizici i bezbednosni izazovi impliciraju svojevrzne promene u filozofiji menadžmenta ljudskih resursa. Uprkos činjenici da se ljudski resursi posmatraju kao fundamentalni faktor u proaktivnom upravljanju zaštitom i bezbednošću, bibliografija koja pokriva ovu problematiku još uvek nije na zavidnom nivou.

Tragajući za novim temama i multidisciplinarnim pristupima u inženjerstvu zaštite, uređivački kolegijum je odlučio da tematiku ovog broja posveti problemima upravljanja i razvoja ljudskih resursa u sistemu zaštite radne i životne sredine. Vašoj kritičkoj opservaciji prepuštamo radove koji se odnose na probleme korporativne društvene odgovornosti i upravljanja zaštitom životne sredine, organizacionog ponašanja i kriznog menadžmenta, osiguranja, stresa, mobinga, razvoja kompetencija, upravljanja karijerom, razvoja ljudskih potencijala/ menadžmenta i inženjera zaštite na radu i dr.

Verujemo da će rezultati ovih istraživanja predstavljati zanimljivo čitalačko štivo, ali i svojevrstan izazov za preduzimanje takvih istraživačkih zadataka koji će pomoći oblikovanju politike upravljanja ljudskim resursima i strategije razvoja ljudskih resursa na putu ka održivom razvoju u budućnosti.

On behalf of the editors
Dr Vesna Nikolić, Prof.

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Journal of occupational safety, health, environmental and fire protection
SEIBL – TRADE doo, Beograd
Occupational safety equipment
ALEKSANDAR INŽENJERING D.O.O. Novi Sad, Srbija
Sales and Service of measuring instruments

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Izveštaj sa konferencije

Izveštaj sa 7 međunarodne konferencije "Manadžment i zaštita" (M&S 2012)

Oglašavanje

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BRANKO BABIĆ¹ | STUDYING AND STRESS

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Abstract: *During November and December of 2011, a research concerning the stress among the students of the Higher Educational Technical School of Professional Studies in Novi Sad has been conducted, as well as the influence the stress has on their university studying. The research sample consisted of the second and the third year students of all departments, while the first year students presented the control group. The obtained results have partially been given in the paper: only those needed to present the main results are included. The research goal was to view the accurate state of the students during the time they spend at the university, to reach the information whether the stress has an influence on the quality of university studying and to find a more effective studying model (if possible), eliminating the stress as one of the main factors of failures at the university level.*

Key words: research, stress, students.

INTRODUCTION

Most people in the modern world live under a lot of stress which, if it takes too long or becomes too overbearing, leads to the development of mental and physical diseases. The faster – modern – tempo of life and numerous activities that it imposes and that have to be done, mostly in a short period of time, under a deadline, enforce constant presence of concern, irritability and anxiety. Only in rare moments can people afford to rest, be calm and relaxed.

The phenomenon of stress and its researches are recent. It is considered to be one of the largest causes of many organisational problems, heart and arteries diseases, as well as mental diseases. In the Republic of Serbia, a number of physical disorders caused by stress is rising, and they are a consequence of the past wars, hyperinflation, sanctions, NATO bombing, social transition, financial crisis and high unemployment rate. The results conducted by the experts from the Institute of Public Health of Serbia “Dr Milan Jovanović Batut” point to that. There were 271.944 cases of mental illnesses in the Republic of Serbia in 1999, while that number rose to 309.281 by 2002. The mental health of the citizens of the Republic of Serbia is worsening – stress is one of the causes and it has been noticed that every fourth citizen suffers from depression.

Stress is an overall reaction of the body to any demand from the environment, made in order to adjust to the changed conditions. It is a complex phenomenon and we see its sources, characteristics and mode of actions on a daily basis.

Stress is one of the most serious problems in modern organisations, including the educational ones. It is a consequence of the body's general response to a situation that includes special demands – both physical and psychological. Stress factors are the outside actions that are out of control, and they appear as a consequence of constant and frequent changes, faster life tempo, and fierceness of the competition, higher

uncertainty and insecurity at work. Stress has become an integral part of a modern life and work, and it affects health, physical balance and performance of work tasks in a negative way.

The process of studying at a university level carries a lot of stressful situations, and, disregarding personal resistance, it cannot always be avoided. The time of studying is, among other sources, a significant source of stress. Most importantly, stress is connected to the environment and conditions in which the process of education takes place, such as fulfilling the conditions for enrolling into the following year, receiving good grades, fear of failure, fear of facing the parents due to poor results and fear of losing the funding which is granted by the state budget. During studying, the students are, wishing to fulfil all conditions, exposed to personal, material and health problems that affect their behaviour and health and, therefore, the appearance of stress.

Some researches on stress

“Stress is the spice of life” is a famous quote by Hans Selye, a psychologist who conducted a detailed research on this topic. Although we can accept this to be true, it is necessary to take the other side of the story, i.e. the negative consequences of (especially long-term) stress, in consideration.

Stress is useful when it is a momentary reaction of the body. It is an adaptive reaction developed during the course of filogenetic evolution. Its purpose is (was) to save an individual in a life-threatening situation. Rapid mobilisation of strength enabled escape or fight. We often hear of people who work well under pressure. Similar to that are “healthy jitters” before an exam. These statements have their justification in the nature of the processes that take place in a body at that time. Secretion of adrenalin and other physiological mechanisms help us be more efficient in a given situation. However, body's reserves are not unlimited!

The Institute of Public Health of Serbia “Dr Milan Jovanović Batut” [1] conducted a research on stress in Serbia in November 2004, and it showed that 37% of the population in Serbia is under constant stress. A significant number of students claimed that the exam periods are the most stressful, and pointed out that tranquilizers, mostly Benzedrine, are the way to cope with stress.

The researches conducted by The Medical Faculty in Belgrade [2] have confirmed the rise of the number of students who suffer from cardiovascular diseases and cancer. During physical examinations, it was also noticed that more and more students suffer from allergies. The main reason for this, according to the experts, is stress which is “more expressed and ruinous with students.” Because of that, the experts express the importance of healthy food, physical activities, avoiding drugs, good communication and general hygiene.

A research conducted on six British universities showed that students have better results if their hearts are working faster. The most successful students had 23.9 heart beats above average while doing their tests, whereas those who had the lowest scores had only 3.9 heart beats above average. The higher number of heart beats is more connected to the increased attention than to nerve tension. Susan Chamberlain, the head of the research team, said: “The increase of the number of heart beats is a sign of enhanced excitement in students, which encourages them to show their best abilities.” The experts, however, do not recommend using stimuli, such as energetic drinks, which would increase the number of heart beats.

The negative effects of life highly correlate to the risk towards “professional burnout” which, according to the authors of Mayo Clinic [3], affects 45% of medical students from three medical schools in Minnesota and certainly alters the quality of their lives. Researches on the effects of stress on the students of other schools (future dentists and nurses) show the identical negative effects on their psychological and physical health and welfare. The research notices that the intensity of negative stress effects on health is constantly rising with the students of both sexes during the years spent in medical school, which emphasizes the importance of introducing management stress topics in the curriculum of medical schools even more. In that way future medical professionals could learn how to help themselves first, and then their patients, avoid harmful effects of stress on health. Presence of sex differences in the perception of stress, higher level of perception of stress and posttraumatic stress symptoms have been expressed by female students as opposed to male, but also by female population in general, which means that sex differences are not specific for female medical students only.

Methodological approach to the research

The main reason for conducting the research on stress and its effect on studying in the Higher Educational Technical School of Professional Studies in Novi Sad was to reach relevant indicators and determine how much stress affects both an individual and groups (in departments), what the main indicators of stress are, whether they can be partially or fully eliminated and how to elevate the fulfilment of the students and the quality of their studies.

The second reason for the research was the fact that this kind of research is rare and the results cannot be easily reached.

Problem formulation

The problem of the research is stress which appears during studying at the university level, from enrolling to graduating, in all phases and periods

Research goal:

- Determining if the students of the Higher Educational Technical School of Professional Studies in Novi Sad are under stress.

General research goals:

- To test if the students are under stress;
- To test how much stress affects their process of studying, work productivity and achieving better or worse results.

Specific research goals:

- To determine which period of studying is the most stressful;
- To determine if sex affects stress appearance and manifestation;
- To determine if difference between places of birth and studying is connected to stress appearance.

Research hypotheses:

- General hypothesis – “Students are under stress and it affects their studying significantly”;
- Specific hypotheses – the most stressful period is taking exams; change of place of living affects a lot of students

Variables:

- Variable 1 - stress during studying (for the purpose of research, we will question only people who attend university on a regular basis, and received results will be compared to the control group);
- Variable 2 - gender: two categories, male and female;
- Variable 3 - year of study at a college.

A method of scientific research, poll and survey have been used as research methods. The poll is anonymous. The survey consists of twenty-seven questions that are both multiple choice and fill-in questions. We expected honest answers and constructive suggestions so that the school management could reduce stress level in students.

Research sample: The sample consists of the second and third-year students (students who enrolled into the

respected year for the first or second time) of all departments of the Higher Educational Technical School of Professional Studies in Novi Sad (see table 1). The control group consisted of first-year students of Safety Engineering. The sample consists of 420 students, 75.48% of which are male students and 24.52% are female.

The research includes 420 students - 196 second-year students, 138 third-year students and 86 first-year students (control group) of the Higher Educational Technical School of Professional Studies in Novi Sad (see Table 1). Out of the whole number of students, there were 56.8% of second-year students, 27.7% of third-year students and 19,1% of first-year students.

Table 1. Overview of school's population and research sample according to departments

Department	Study group	Second-year students			Third-year students			Control group (First-year students)		
		Popu lation	Sam ple	%	Popu lation	Sam ple	%	Popu lation	Sam ple	%
Mechanical Engineering	Production Engineering	20	8	40	24	1	4.2		9	
	Termoenergy and Maintenance	15		0	21	6	28.6		5	
Graphic Engineering and Design	Web Design	35	11	31.4	45	8	17.8			
	Graphic Design	38	14	36.8	48	25	52.1			
	Applied Photography	15	11	73.3	23	10	43.5			
	Graphic Engineering	4		0	24	3	12.5			
Safety Engineering	Occupational Safety and Health	28	28	100	26	6	23.1		26	
	Environmental Safety	27	27	100	48	19	45.8		19	
	Civil Protection and Emergency Rescue	4	4	100	7	3	71.4		10	
	Fire Protection	23	18	78.3	55	17	30.9		17	
Electrical and Computer Engineering	Informational Technology	82	39	47.6	89	1	1.1			
	Electroenergetics	39	31	79.5	76	33	43.4			
	E-Business	15	5	33.3	13	6	46.2			
TOTAL		345	196	56.8%	499	138	27.7%		86	19.1%

WORK METHODS

The research was conducted between 5th and 20th September 2011 with consent from the Schools management. The students filled in the survey about stress before the start of their classes when most of them were present and rested, with consent from their professors who were also present during the survey. The researcher had previously explained to the students the purpose and the significance of the survey, clarified that their participation is voluntary and that they had the option to answer the questions or not, that their anonymity was guaranteed, as well as the confidentiality of the data which would be used in scientific and research purposes only. The students' interest in participating in the research was high, so a very small number of questions remained unanswered. Filling in the survey lasted for about fifteen minutes.

The students who were absent that day did not have an opportunity to fill in the survey later. A different number of students participated in collecting data, from five to thirty-five per group. The survey was completely filled in by 404 students, while sixteen surveys (3.8%) remained uncompleted (twenty-five questions remained unanswered, which is 0.07% of the whole number of answers for all students). This did not have any substantial impact on the final results taken into analysis in the present, uncompleted, condition.

RESULTS AND DISCUSSION

The surveys were filled by 420 students, while 404 of them (99.9%) filled it completely.

The research sample consisted of 317 male (75.48%) and 103 female students (24.52%), which is in accordance with the percentage domination of male students – see Table 2.

128 students came from urban area (30.47%), while 292 students (69.53%) came from rural areas or smaller town – see Table 3 which also shows the ratio of male to female population in the research sample.

25.7% of research sample are first-year students who have just enrolled into school and were born in 1991 (see Table 2).

There are fifty-six students (13.33%) of both sexes (forty-three male and thirteen female students) who have enrolled in their respected years of study for the second time after originally failing them – thirty-four of those are second-year students (71% are male students), while twenty-two are third-year students (86.3% are male students). For clarification, see Table 4.

Table 2. Overview of the research sample according to the year of birth and sex

Year of birth / Sex	'68	'73	'76	'77	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	Total
Male		2	1	2		5	2	2	2	5	5	14	35	44	70	86	32	10	317
Female	1				2		1	1	2	2	2	4	9	13	29	22	13	2	103

Table 3. Male to female ratio of the research sample according to the place of living

Sex	Live and attend university in the city	%	Came from rural area or smaller town	%	Total number of students
Male	87	27,40%	230	72,60%	317
	68%		78,70%		
Female	41	39,80%	62	60,20%	103
	32%		22,30%		
Total	128	30,47%	292	69,53%	420
	100%		100%		

Table 4. Overview of studying process by year of college and population

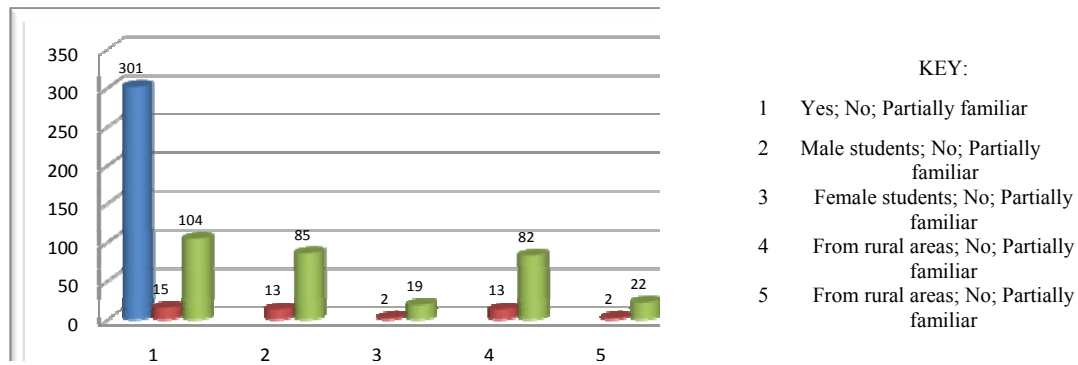
	Second-year students		Third-year students		Control group		TOTAL	
Male population	153	48,30%	101	31,90%	19,80%	63	254	317
%	100%		100%				100%	
First time enrolled	129	61,10%	82	38,90%			211	211
%	84,30%		81,20%				83,10%	
Second time enrolled	24	55,80%	19	44,20%			43	43
%	15,7		18,80%				16,90%	
Female population	43	41,70%	37	35,90%	22,30%	23	80	103
%	100%		100%				100%	
First time enrolled	33	49,30%	34	50,70%			67	67
%	76,70%		91,90%				84%	
Second time enrolled	10	77%	3	23%			13	13
%	23,3%		8,10%				16%	

Table 5. Overview of studying process by year of college, population and place of birth

Sex, enrollment time, number and percentage				Second-year students				Third-year students			
				Urban area		Rural area		Urban area		Rural area	
Male population	total	317	100,00%	55	17,30%	161	50,80%	32	10,10%	69	21,70%
	%	100%		100%		100%		100%		100%	
First time enrolled	total	211	100,00%	30	14,20%	99	46,90%	23	10,90%	59	30%
%	%	66,60%		54,55%		61,49%		71,88%		85,51%	
Second time enrolled	total	43	100,00%	7	16,30%	17	39,50%	9	20,90%	10	23,30%
%	%	13,60%		12,73%		10,56%		28,13%		14,49%	
Control group	total	63	100,00%	18	28,60%	45	71,4%				
%	%	19,80%		32,73%		27,95%					
Female population	total	103	100,00%	22	21,35%	44	42,7%	19	18,40%	18	17,50%
	%	100%		100%		100%		100%		100%	
First time enrolled	total	67	100,00%	14	20,9%	19	28,3%	16	23,90%	18	26,90%
%	%	65,00%		63,64%		43,18%		84,21%		100,00%	
Second time enrolled	total	13	100%	3	23,1%	7	53,8%	3	23,10%		
%	%	12,60%		13,64%		15,91%		15,79%			
Control group	total	23		5	21,70%	18	78,3%				
%	%	22,40%		22,73%		40,91%					

71.7% of students are familiar with the term “stress,” 0.35% are not (thirteen male and two female students), while 24.76% are partially familiar with it (eighty-five male and nineteen female students). Students who

come from rural areas (when talking about geographical background) are less familiar with the term “stress” (thirteen students, or 87% of the total number).



Graph 1. Familiarity with the term “stress” when talking about sex and geographical background

According to the survey, stress does not have a negative effect on the studying process in 7.45% of students; it slightly affects 45.67% of students, whereas 47.4% of students report that stress has a negative effect on the quality of their studying process and that it is the reason for their failing exams.

Concerning the main causes of stress, 338 students (78.8%) reported one of the following causes: the level of difficulty and the demands of the studies (29.6%), conflicts with their peers (0.03%), conflicts with professors (3.92%), causes not related to studying (25.38%), personal ambitions (13.59%), pressure from the environment (7.85%) and miscellaneous (19.33%). Sixty-five students (15.5%) report two causes of stress, twenty students (4.7%) report three causes, while three students (0.7%) report four causes of stress.

Stress manifests in one appearance with 67.8% of students. There is anxiety (49.1%), disinterest in the surroundings (8.4%) and miscellaneous (17.9%). 135 students report more than one appearances of stress – from two to four. Most of the students (253) manifest stress as a more serious sense of nervousness (60.2%), ninety-seven students have headache (23.1%); seventy-three students become disinterested in their surroundings (17.4%), while stress manifests as some other medical problems with only thirty-nine students (9.3%).

Stress is the most intense during the exam period (58.8%), at the end of the school year (15.5%) and during “boring classes they have to attend” (14.2%).

During the exam period, the most stressful periods are the day of the exam (29.9%), during studying for the exam (25.2%), awaiting results (24.1%) and the day before the exam (20.8%).

50.2% of students are under stress during the exam period only when they take hard exams, 27.6% of students are under stress always, no matter how hard the exam is, while 15.5% of students are under stress only when they had not studied.

Students cope with stress in various ways: 67.14% of them report one way of coping and, among those, the predominant ones are physical activities (34.04%), hobbies (26.95%) and going out with friends (26.95%), while 29.7% of students report all three ways of coping

as one unique way. In addition to given choices, students wrote down some of their mechanisms for fighting stress: “I use the same path to school as the one I used when I passed an exam,” “enough sleep,” “coffee,” “good, strong breakfast,” “eating seeds,” “skating,” “sleeping for two or three days,” “alcohol,” “praying to God,” “homemade rakija,” “a shot of alcohol before an exam,” “party,” “meditating,” “smoking cigarettes and drinking beer,” “yoga,” “making a schedule,” “listening to music while taking a break,” “sex,” “visiting church,” “literature,” “going out, getting drunk, have a good time,” “putting on clothes backwards,” “rituals,” “nature and its goods,” “studying as a part of a study group,” “washing my face often,” “drinking,” “lighting candles,” “new tattoo or piercing,” “watching a film,” “styling my hair,” “polishing my nails,” “cleaning my apartment,” “lying in bed,” and so on.

Students who come from a village or a smaller town (69.53%) think that their relocation does not affect their studying process or their attitude towards it significantly. Relocation affects 18.5% of those students, 30.8% of them are not sure if it affects them, while 50.6% do not think that relocation affects them.

Despite high demands of the process of studying and financial possibilities, 24.52% of students can handle the studying well. 53.33% of students handle it in a satisfying way, while 22.14% handle it poorly. The majority of students who are in a worse financial situation are those who relocated to the city (61.3%) and, among those, most of them are male students (84.21%).

70.71% of students do not work, so that affects the quality of their studying as they depend on their parents who are in a less favourable financial situation.

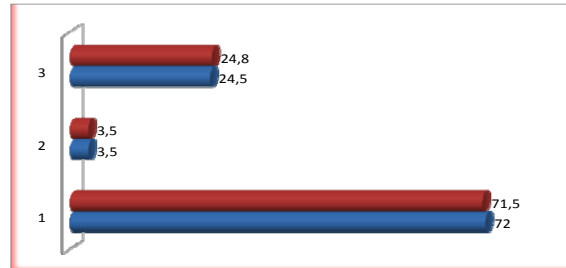
When the results from second and third-year students were analysed and compared to the results from the control group (first-year students), the following has been received:

1. Considering the familiarity with the term “stress” (see graph 2): the received results are almost the same, which indicates that there is no difference between first-year students and older students. Over 70% of students are familiar with the term “stress.”

2. Effects of stress on the quality of studying (see graph 3). Both groups are under stress (more or less), while the older students are under more stress than first-year students.
3. Main causes of stress (see graph 4) are the most obvious when considering the demands of the

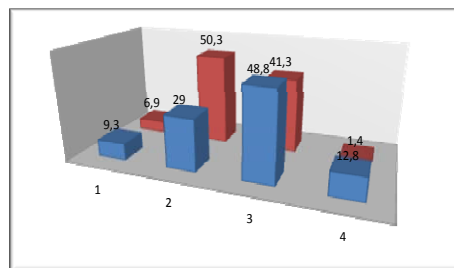
process of studying and personal problems that are not related to studying, but have an impact.

4. When is stress the most intense (see graph 5)? During the exam period and at the end of school year.



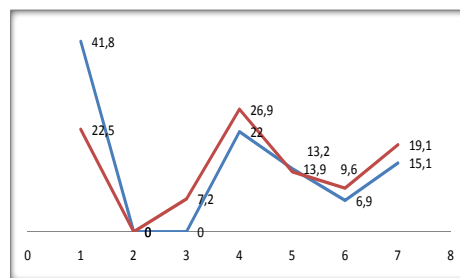
Graph 2. Familiarity with the term “stress”: control group (blue) and second and third-year students (red)

Key: 1 – familiar with the term; 2 – not familiar with the term; 3 – partially familiar with the term



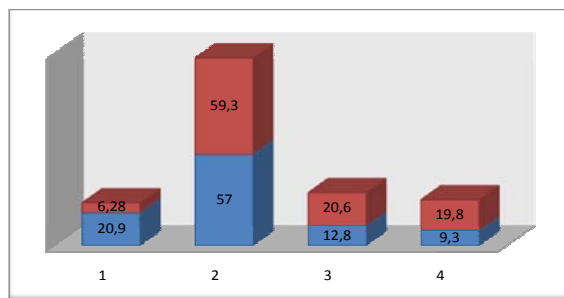
Graph 3. Effect of stress on the quality of studying: control group (blue) and second and third-year students (red)

Key: 1 – does not affect; 2 – affects slightly; 3 – affects a lot; 4 – I fail exams due to stress



Graph 4. Causes of stress: control group (blue) and second and third-year students (red)

Key: 1 – the level of difficulty and demands of the studies; 2 – conflicts with peers; 3 – conflicts with professors; 4 – causes not related to studying; 5 – personal ambitions; 6 – pressure from the environment; 7 – miscellaneous



Graph 5. intensity of stress: control group (blue) and second and third-year students (red)

Key: 1 - at the beginning of semester; 2 - during the exam period; 3 - at the end of school year; 4 - during “boring classes”

48.8% of students feel tired during their day; 29.4% of students have problems relaxing after classes, in the evenings and at weekends; 16.5% of students drink more alcohol than before in order to relax; 23.9% of students have problems falling asleep and wake up in the middle of the night; 41.3% of students cannot concentrate and get distracted during classes; 52.5% of students feel overloaded and think that “something is constantly hanging over their head”; 52.6% of students are irritable when something is not according to their plans and expectations; 22.1% of students have gastric problems, headaches and faster heartbeats; 8.1% of students often feel as professors' victims; 13.5% of students are annoyed with phone ringing more than before; 10.1% of students become detached from their friends and avoid public conflicts; 28.3% of students feel old and like carrying a giant burden on their backs; 20.1% of students are often aggressive towards other students; 14.9% of students feel that they will lose control over themselves and their behaviour.

CONCLUSION

Attending university and studying are stressful because they are a part of life – a transitional part of life of any student. It is a period of transition to adulthood and a continuation of the processes started in puberty. Every segment of this process gives different causes for stress. First-year students must get used to more responsibilities and independence, have to adapt to new environment and learn new ways of working at a university level. During their final years, the students worry about finding a job after graduating, and there is more pressure from their environment concerning the number of exams yet to be passed and the date of the graduation. Many stress factors are out of students' reach. This leads to the feeling of helplessness, which closes the cycle – the level of stress is constantly rising, the reactions are inadequate, the responsibilities keep piling up, the control is lost, and so on.

General research goal was to determine if the students are under stress and how much it affects their studying

process and productivity. Based on the obtained and processed results, it can be concluded that:

- 27.3% of students are under stress and it has a negative effect on the quality of their studies;
- Stress significantly affects the quality of studies and achieving good results with 47.4% of students;
- Requirements and difficulty level have a negative effect and cause stress with 29.6% of students;
- 49.1% of students express their stress through nervous behaviour.

Specific research aims were to determine which period of studying is the most stressful, if gender affects stress appearance and manifestation and if the difference between places of birth and studying is connected to stress appearance. The results show that:

- Stress is the most prominent during the exam period with 58.8% of students;
- Gender does not affect stress manifestation, but it is evident that: female students suffer from more stress (51.4% as opposed to 41% of male students), the most stressful day is the actual day of the exam (39.8% as opposed to 24.6% of male students). Male students find that they are most stressful while awaiting results (26.7% as opposed to 18.5% of female students) and studying for exams (25.9% as opposed to 20.4% of male students);
- 69.53% of students who come from rural areas or smaller town think that the relocation does not affect the quality of their studies and attitude towards studying; 18.5% of them think that the relocation affects them; 30.8% remain uncertain.

The results of the analysis of stress impact on the students who enrolled the same year again (13.3%) show that there are no major differences in the impact of stress.

In the end, it should be emphasised that all students must be true to themselves and assess their advantages and disadvantages in order to prepare for stressful situations that await them during the course of studying at a university level. Stress is a part of life and it is better to welcome it prepared. That is why it is

important to try to predict situations that carry stress and find possible solutions for overcoming it. Stress cannot be avoided, and it is essential to find good ways of overcoming it.

Educational management is based on specific characteristics of education as a social process. The goal of that management is to enhance work efficiency and, hence, the knowledge will increase. Student care, their knowledge, creativity and expertise are extremely important for overcoming stress. Experts and educated students are invaluable asset that can enhance the value of not only the Higher Educational Technical School of Professional Studies in Novi Sad, but the society in general.

A long time ago, the management of School realised that investing in human resources is a necessary condition of existence in a more competitive economy. By investing in the education of its employees and students, the School achieves complete success not only in the field of fulfilling business strategy, but also in including it in the widest social framework.

In order to provide assistance to students, overcome stress and achieve better results during their education, the management of the School conducted a series of educational measures, including the following advice:

- Allow yourselves not to be perfect – do not think in terms of what you “should” and “must” do, since that kind of thinking only elevates the level of tension and lowers students’ possibilities to be efficient. You should be true to yourselves and assess your advantages and disadvantages realistically;
- You should prioritise, make a list of the most important goals and try to accomplish them. In that way, you will make enough time and be able to calmly dedicate yourselves to other duties.
- You should make time for yourselves even with all your duties – exams, seminar papers, etc. – and

spend at least an hour a day relaxing by reading, jogging, socialising, etc.

- You should be prepared for stressful moments – stress is a part of life – and it is better to welcome it prepared. That is why you should try to predict stressful situations and prepare possible solutions for overcoming them.

REFERENCES

- [1] Institut za zdravstvenu zaštitu Batut, www.batut.org.rs
- [2] Medicinski fakultet u Beogradu, www.med.bg.ac.rs
- [3] L.N.Dyrbye, M.R.Thomas, J.Huntington, K.L. Lawson, P.J. Novotny, J.A. Sloan, T.D.Shanafelt: “Personal life events and medical students burnout: a multicenter study”, *Acad Med* 2006;81(4):374-84 <http://dx.doi.org/10.1097/00001888-200604000-00010> PMID:16565189

BIOGRAPHY

Branko Babić graduated and earned his MA and PhD from the University of Belgrade. He is currently working as a Professor at the Higher Educational School of Professional Studies in Novi Sad. His work consists of seven monographs and over thirty



bibliographical items: papers in scientific and professional journals, as well as proceedings in scientific and professional conferences on the system of civil defense, civil protection, emergency situations stress and mobbing, place and role of civil forces in the system of defense. His research interests include: emergency situations, mobbing and stress, population education, etc.

STUDIRANJE I STRES

Branko Babić

Rezime: Tokom novembra i decembra 2011. godine sprovedeno je istraživanje stresa kod studenata Visoke tehničke škole strukovnih studija u Novom Sadu i uticaj na tok studiranja. Uzorak istraživanja su predstavljali studenti druge i treće godine svih studijskih programa, dok su studenti prve godine predstavljali kontrolnu grupu. Dobijeni rezultati istraživanja se delimično prikazani u radu, samo u obimu koji je potreban za prezentovanje osnovnih rezultata. Cilj istraživanja je bio da se sagleda realno stanje u kome se nalaze studenti tokom studiranja, da se dođe do podataka da li stres ima uticaja na kvalitet studiranja i da se pronađe efikasniji model studiranja (ukoliko je to moguće) eliminišući stres kao jedan od glavnih faktora neuspeha na studijama.

Ključne reči: istraživanje, stres, studenti.

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INSURANCE AS AN EMPLOYEE PRIVILEGE

Abstract: *Employee privileges and their significant role in motivating and retaining employees should be a key item for every company, considering their contribution to safety and motivation of the employees. The most common privileges the employees and managers are offered by their companies are the use of mobile phones, laptops and cars for private purposes. Indirect material compensations, among other, include various insurance products, such as accident insurance, health insurance, life insurance and optional retirement insurance. The employers, however, are not motivated for offering the privileges that concern employee health and safety since the existing legislature certainly does not support this type of benefits.*

This paper evaluates the types of insurance products that may be considered as employee and management privileges. Furthermore, the benefits of such products for the employers and employees are also considered.

Key words: employee motivation, employee privileges, insurance.

INTRODUCTION

Work motivation is one of the key factors for business success. Through a correct and transparent employee rewarding system, the employers provide a frame in which a high level of work motivation is achieved. The choice of the motivational techniques most often depends on the knowledge and experience of the manager. The reward and motivation system cannot depend on the individual behaviour and attitude of the manager. Rather, it is the key part of the business and development policy, with defined rules and norms of the business system [10]. Consequently, according to [1], there are a number of material and nonmaterial compensations which the company is ready to offer to its employees. Direct material compensations are applied to the earning system, determined by the systematization of the work places in the company, and to other financial incentives that depend on the work results of the individual worker (such as bonuses, stimulation and financial rewards, etc.). Indirect material compensations include a number of benefits that the worker is entitled to based on his or her work status in the company, regardless of the work effect of the individual (such as retirement and health insurance, collective accident insurance, recourse and Christmas bonus, as well as various types of education financing and so on). This kind of reward system is effective in attracting and keeping the employees in the company.

Indirect material compensations are divided into two categories; the ones that are the legal obligation of the employer (such as the rights of the employee to a vacation and personal days off, retirement and health insurance), and the ones that the employer distributes based on his or her personal decision (such as the rights to use the company mobile phone and/or the company car for private purposes, voluntary retirement

insurance, accident insurance, life insurance, and so on). These “voluntary” indirect material compensations usually differ significantly in practice, depending on different management levels, but can also differ among employees who work on similarly or even identically ranked work positions. For example, in some companies (and institutions as well), managers can use the company vehicles free of charge, not only during the working hours but for their private affairs (using the vehicle for 24 hours), while that same benefit is not available to the employees. Furthermore, financing an expensive education programme will be made possible for the employees that are believed to use the acquired knowledge for the benefit of the company, and not for those who show interest in participating. In those cases, there have to be clear criteria which determine the rights (and obligations) of the employees. In a great number of public companies and state institutions those rights are regulated by collective contracts, as opposed to private companies, where indirect material compensations are determined “along the way”, depending on the financial results of the business.

This puts employees in private companies in a more unfavourable position, seeing that if the company lacks the financial aids, “voluntary” indirect material compensations are abolished.

Nonmaterial compensations are primarily applied to the development and acknowledgement of one’s own capabilities through extra education, identification of accomplishments and rewards in forms of recognition, advancement in one’s career, flexible work hours and so on. According to [1], employees do not only wish to satisfy their existential or material needs. However, in these times of recession, practice shows that 50% of the employees find money as the greatest motivation for work (the research was conducted by the web portal Moj Posao, in April 2012, on 597 people) [11]. Most of

them emphasise that, especially in today's hard times, money gains importance when it comes to work motivation, since it allows for the settlement of basic life expenses. In addition, they do not underrate the importance of nonmaterial compensation such as the feeling of personal achievement, recognition from their superior, the possibility of obtaining experience and advancing, but they do expect adequate material compensation, primarily their earnings, while other benefits are expected after achieving the results.

This paper considers insurance as an indirect nonmaterial compensation which the employer can, but does not have to, provide as a benefit to his or her employees. Different kinds of insurance offered on the Croatian market have been analysed from the employee and the employer point of view.

INSURANCE AS AN INDIRECT NONMATERIAL COMPENSATION

Insurance is an economic activity through which financial aid is collected in order to protect people and things from hazardous consequences of extraordinary events and remove economically harmful consequences of the aforementioned events. The economic basis of insurance consists of a dispersion of harmful consequences of the insured cases to a large number of the insured. By individual payments of insurance premiums, the insured persons form the insurers' financial funds, which are intended for the reimbursement to those insured who suffer damage [3].

Insurance can also be defined as a legal relation based on a contract, as well as being considered a commercial and legal occupation. Through this occupation, the insurance company, with certain expenses (the insurance premium), is obliged to the insurance holder that it will pay out the insurance compensation to a certain individual (the insurer). The insurance compensation is reimbursed for a damage which was inflicted on people or things, and which was a consequence of the causes specified in the contract (insured risks). The insurance premium is defined on the size of the risks established before entering into agreement about the insurance.

Social insurance is not specified by the aforementioned definitions. In the case of social insurance, the funds are collected based on the insured person's earnings and do not have the features of the premium, since the size of risk is not defined. Furthermore, according to [7], social insurance is not a unique system, so it cannot certainly be determined by everything it includes. This paper will examine, taking into consideration social insurance, health and retirement insurances, some of which are obligatory, and some can be considered employees' benefits.

Health and retirement insurance

The Mandatory Health Insurance Law and the Voluntary Health Insurance Law helped establish social health insurance in Croatia and set a frame in which insurance companies can offer their own proposal of premium insurance products. According to the aforementioned legislations, health insurance is divided into mandatory and voluntary health insurance.

Mandatory Health Insurance

Mandatory health insurance assures that all insured people have the same rights and responsibilities from the basic health insurance based on the principle of reciprocity and solidarity. It is carried out by the Croatian Institute for Health Insurance (Hrvatski zavod za zdravstveno osiguranje – HZZO). The legislation determines who the insured are and what the extent of their rights is. Every citizen of Croatia is obliged to apply for mandatory health insurance, as well as persons residing in Croatia and foreigners with approved permanent residence in Croatia, unless the international contract on social insurance does not state differently. Also, foreigners with approved temporary residence in Croatia have to apply for mandatory health insurance. They are insured either based on the employment with an employer in Croatia or based on performing their economic or professional occupation in the Republic of Croatia, under condition that all requirements laid down by the regulations regarding foreigners working and living in Croatia are met, and international contracts on social insurance do not state differently.

Employers are obliged to pay a contribution for mandatory health insurance amounting to 15% of the gross earnings, and an extra 0,5% of the gross earnings for the event of work injury or professional illness.

Voluntary Health Insurance as Employees' Privilege

Voluntary health insurance is divided into supplementary, additional and private health insurance. According to Article 3 of the Voluntary Health Insurance Law, supplementary and additional health insurance belongs to a group of non-life insurances, conforming to the Insurance Law. The insurance policies are concluded as long-term insurance contracts, the shortest period of time being one year.

Supplementary health insurance covers a part of the expenses that are required to reach a full price of health protection from the mandatory health insurance (supplement). Additional health insurance insures a higher standard of health protection and a bigger range of consumer rights, as opposed to the mandatory health insurance. Private health insurance insures health protection to private persons who reside in the Republic of Croatia and who, according to the Mandatory Health Insurance Law and the Foreign Health Insurance Law in the Republic of Croatia, are not obliged to insure themselves.

Unlike mandatory health insurance, voluntary health insurance can be considered a benefit that the employer can, but does not have to, offer to the employee. Although the supplementary insurance (as well as the additional, according to the last changes and additions to the Law) can be contracted by HZZO, employers often opt for insurance companies, which offer a range of other services that have shown profitable for their companies. According to [9], based on an example of a company with 14,530 employees, it has been established that in the period of the first three years of observation the expenses related to sick leave were lowered by circa 36%, the number of sick leaves for circa 28%, and another 40% in the next three years. These results are a consequence of high quality care for the employees' health, lower employee frustration due to their health problems being solved rapidly and without waiting. In addition, preventive physical examination provides detection of various illnesses and other health related issues in time.

Insurance companies offer extra health insurance packages (most often including supplementary health insurance), which include a various range of health services, and also determine the premium. Sometimes employers choose cheaper packages for their employees, and the more expensive ones for managers, since they believe that managers are more liable to health risks because of the stress they encounter at their work place. In spite of the positive experience, Republic of Croatia does not motivate employers to contract these insurances since the premium for voluntary health insurance is considered as a part of the employee's salary. As a consequence, employers are avoiding this type of indirect nonmaterial compensation due to high expenses arising from contracting voluntary (supplementary, additional or both) health insurance policies for employees. The exception are public companies and state institutions, where those rights are guaranteed to the employees by a collective agreement, as well as some private companies that rated contracting this kind of insurance profitable.

Mandatory Pension Insurance

The pension system in Croatia is divided into three pillars. The first two pillars are mandatory and the employer is obligated to pay a contribution of 20% from the employee's gross salary. Mandatory pension insurance, or pillar 1, is based on generational solidarity, and is conducted by the Croatian Institute for Pension Insurance (Hrvatski zavod za mirovinsko osiguranje – HZMO). Mandatory pension insurance for old age, or pillar 2, is based on individual capitalized savings, and is run by mandatory pension funds. The insured person opens his or her account in a bank (the custodian), and the amount is calculated to 5% of their gross salary. The payment of the pension is carried out via the pension insurance company chosen by the employee.

Voluntary Pension Insurance as Employees' Privilege

Voluntary pension insurance, or pillar 3, is based on an individual capitalized savings. It is run by voluntary pension funds, and can be considered a privilege that an employer can but does not have to offer to the employee. The pillar 2 pensions can be paid out via the pension company that the employer chooses only when the conditions for the retirement and the pillar 1 pension have been met. Voluntary pension insurance is not associated to the beginning of the retirement, but to the age of the insured person. This means that the insured person can choose his or her pension company and pension payout plan at the age of 50. It is also possible to pay a certain amount of money to the pension company on a one-time basis, and then contract the pension payout to a certain amount of years of for life, in equal or variable monthly rates.

Employers have been offered tax reliefs for this type of nonmaterial compensation since July 2010, as the employer's input in pillar 3 is not considered a salary anymore. These tax reliefs are considering a maximum input of 500 HRK a month, or 6.000 HRK a year. In that way, the employer can raise an employee's salary without changing the work contract. Also, this type of compensation is in practice also contracted through collective contracts. Furthermore, it allows the possibility to pay out a manager bonus (or part of it) using voluntary pension savings.

Except from creating contracts with open pension funds, employers can create closed pension funds for their employees' voluntary savings, with the employer's obligation to regularly deposit agreed amounts in the fund. Furthermore, the Republic of Croatia pays in incentives for all insured persons' deposits, up to 5.000 HRK a year.

Today, there are sixteen closed pension funds (in relation to six voluntary ones), whose establishers are mainly public companies (the HEP group, HAC – Croatian Motorways, Rijeka-Zagreb Motorway, etc.), unions (like the Seafarers' Union of Croatia or the Croatian Medical Union), large private companies (such as Ericsson Nikola Tesla), and even the insurance companies themselves (such as Croatia Insurance or Allianz Zagreb d.d.) [13].

Because of the aforementioned tax reliefs and state incentives, this type of reward is beneficial for both the employer and the employees.

It should be noted that voluntary pension insurance is not a part of life insurance. When contracting voluntary pension insurance, the age and health of the insured are not checked, and the amount of insurance determined in case of death of the insured is not guaranteed. In that case, the successors will be given the amount that has been deposited so far with the belonging profit [3].

Employee's privileges also include the pension purchase. Pension purchase is a lifelong severance pay, which comes in a form of extra monthly income along

with the pillar 1 pension. It is meant for the employees who have met the conditions for an early old-age pension or employees that have met the conditions for the old-age pension but will, in agreement with the employer, realize full old-age pension, in spite of early retirement or shorter work experience. Purchased pension is the difference between the early old-age pension according to the Pension Insurance Law and the pension that would be realized if the determined old age and/or determined years of retirement have been met [12].

In Croatia, this insurance has been conducted by Royal Medugeneracijska Solidarnost d.d. since 1990. Since 2010, Raiffeisen Pension Insurance Company offers almost an identical model [14]. The contribution for pension purchase is paid exclusively by the employer for his or her employee. Since the employer voluntarily decides on accepting the pension purchase and signs an agreed termination of the work contract, this unique model of taking care of the employees is considered extremely humane. It is important to note that according to the Income Tax Law, the employer's amount of the input for the pension purchase is completely non-taxable and that the decision on purchasing the pension does not exclude the opportunity for receiving a singular severance pay.

Pension purchase is applied in processes of restructuring and rationalization of business in companies and institutions, and is followed by an inevitable measure of the decrease in the number of the employees, most often the ones that are soon to be retired. Lately, pension purchase has often been applied in companies that are mostly state owned and in public services. Thus the Republic of Croatia as an employer in reality gives a privilege to the employee who has to retire earlier because of business restructuring. It can also be considered a reward for his or her life-long work. However, when handing out this privilege to the employee, the employer must be aware of the public warning of 27 March 2012, in which HANFA (Croatian Financial Services Supervisory Agency) warns that the Royal Intergenerational Solidarity Company operates in Croatia without their consent, and therefore it cannot supervise the legitimacy of their business, or influence the adequate protection of rights and interests of the insured [13].

TYPES OF INSURANCE THAT MAY BE CONSIDERED AS EMPLOYEE PRIVILEGES

Injury insurance, life insurance and voluntary travel insurance are types of insurance which the employer is not obliged to contract and that are considered as employee privileges. Damage liability insurance for the employees can also be considered a privilege since the damages are paid to the employee, but it serves to protect the financial interests of the employer. In this way, long-lasting court disputes are avoided, and the employee receives the compensation in a more

adequate period of time. However, all insurances that do not have the savings component or that do not provide some easily measured benefit (such as the physical examination that comes with voluntary health insurance), are not considered privileges by the employees. The premium of these kinds of insurances is recognized as the expense of the employer.

Accident Insurance

Accident insurance is most often contracted as a combined collective accident insurance for all of the employees in the company who have signed a work contract with the employer, noted in the personnel records, whether they are employed for a determinate or indeterminate period of time. Accident insurance can be contracted for other employees as well, such as the employees who are employed under a service contract, pupils and internship students, pupils and students employed via authorized pupil and student centres, persons on professional training, employees who have been assigned by authorized agencies, etc. Since this is a premium insurance, every insurance company offers their own insurance terms and conditions and disability tables, and the employer has to decide which of the offered terms and conditions are most acceptable to them. With accident insurance, there are differences in the cover range that individual insurers offer, so it is recommended to study the insurance conditions before signing the contract. Negotiating with the insurers about modifying their conditions to meet the specific needs of the employer and the employees in a certain company is also possible. In case the employer cannot decide by himself how to choose the insurance coverage, he or she can authorize an insurance broker who will represent his or her interests in further contacts with the insurance companies.

An accident is any sudden event, outside of the insured person's volition, which, by producing an external, sudden impact to the insured person's body, results in their death, total or partial disability, temporary incapacity or health deterioration which requires medical attention [2]. Since the insurance covers persons, the amount of damages in case of an accident will be the one contracted by the employer, or a part of it. The disability percentage is determined on the basis of contracted disability tables, and every insurance company can change that percentage on their own accord. The higher the insurance sum, the higher the damages, so sometimes different policies are contracted for employees and managers, who usually have higher insured sums.

Injury always occurs due to some danger which is tried to be avoided or prevented at any moment. Aim of work safety in all businesses is preventing injury and health damage while working, or at least eliminating and decreasing their harmful consequences. The insurer's obligation in occupational accident insurance exists only when the accident occurred while performing the activity that is explicitly stated in the policy (for example an administration worker,

construction worker, etc.), and while travelling to or from the work place (if the contract states it).

The insurers' conditions determine which events are considered an accident (such as being run over, having a car crash, being hit by an object, getting electrocuted or hit by a lightning, falling down, slipping, getting injured by a weapon, getting stung or bitten by an animal or insect, etc.), and which are not (contagious, professional and other illnesses, etc.). The insurers also state under which conditions the insured person does not have the right to claim damages (such as an accident that occurred while the insured was under the influence of alcohol).

The insurers, while contracting accident insurance policies, warn that the risks that happen to the insured while doing certain sports (the list of which is provided by the insurer) are not covered by the policy. Sometimes particular sports can be insured with an extra fee. Also, some occupations are more risky than the others so the insurers demand an extra supplementary premium. For example, some insurers include recreational and amateur sporting without any special contracting and without the extra insurance premium, while others do not.

It is possible to contract accident insurance for a period of 24 hours, as well as for the times of travelling to and leaving from work. If an accident occurs during working hours, the insurer will pay the employee the damages defined by the accident insurance contract or the liability insurance contract. For injuries that have occurred while travelling to and leaving from work it is not possible to request the employer's responsibility for inadequate work protection. In that case, the responsibility lays in the momentary concentration of the driver, his or her abiding of traffic regulations, and so on. Despite that, the legislator has foreseen that the employee's salary calculation and accounting has the same status whether the injury occurred while travelling to and leaving from work, or while at the work place. This means that every such injury creates extra costs for the employer, since he or she does not only pay for the injured employee's salary but also for the salary of the new employee, who will replace the injured one [4].

When an accident occurs, the injured insured person is obliged to visit the doctor immediately, or call the doctor for examining and providing necessary help. The insured also has to undertake all necessary treatment measures and follow the doctor's advice and directions concerning his or her treatment. The accident has to be reported to the insurer immediately, or in the shortest period of time after the time of the accident. The insurer is authorized by the insured, the contractor, the user, a health institution or any other legal or natural person to ask for extra explanations and evidence concerning the accident. The insurer can also undertake actions for the purpose of a medical examination of the insured with other doctors and

medical committees to establish various circumstances about the reported accident.

On an example of a medium-sized construction company that mostly does business as a contractor, and sometimes as an investor [4], the importance of accident insurance for the employer has been shown. The period between 2002 and 2007 has been examined (the period can be considered relevant for the research since after this period, the recession and decline in employment in the construction business occurred). During the given period, the employees who got injured during the working hours were semiskilled, and the employees with higher and university education got injured during travelling to and leaving from work. Injuries during working hours amounted to 2.136 absence hours, which equals to a monthly absence of 12,4 employees out of the total employee count. Financially, this represents a loss of about 182.000 HRK (about 24.000 euro). Injuries that occurred while travelling to and leaving from work amounted to 624 hours of employees' absence, and a financial loss of about 51.500 HRK (about 6.800 euro). The analysis of the injuries at work showed that the injuries occurred because the employees did not use personal protection means and did not follow the employers' directions, but also because of the employers' failure to provide certain protection measures. The injury with the biggest consequences (in term of the amount of sick leave) is an injury that occurred because of the employee's inattention and because he or she did not follow the employer's directions. However, practice has shown that it is not enough for the employer to buy and hand out personal protection means to the employee, but to insure that the employees are using them. Consequently, the injuries occur because either the employee or the employer did not completely follow work safety directions.

The legislator, in this case the Republic of Croatia, failed to recognize the importance of this kind of employee insurance, so this insurance (as well as voluntary health insurance) is treated as a part of the employee's salary if it is contracted for a 24 hour period. Therefore, the employers rarely decide on paying for accident insurance for their workers, but it is no rarity that they organize the cheapest collective accident insurances for their employees at the insurance companies with which they have a long term contract, along with the use of special discounts. In this case, it is recommended to pay the premium in monthly rates in a way that the monthly rate be deducted from the insured person's salary. The height of the monthly premium depends on the contract, on the risks covered by it and on the insured sum. Damages are always paid to the employee or his or her legal successors. In that way the employee does not have extra insurance expenses, but still provides an adequate insurance protection for a reasonable price. Naturally, the premium is not treated as a salary since all obligations connected to the salary are already accounted for.

Collective combined employee insurance is specific because, besides the usual risks of death and partial or permanent disability caused by an accident, it allows contracting the coverage of medical bills up to a certain amount, a daily fee for an injury induced hospital stay, compensation in case of death caused by a disease and compensation in case of specific sudden illnesses. Because of the covered risks listed above, this type of insurance is sometimes mistaken for life insurance.

The insurer pays the damages to the insured (the employee). The amount of the damages is based on the percentage of the disability determined by the insurer. In case of death of the insured, the damages will be paid out to the legal successors or the appointed user. This insurance protects the individual, the employee, and not the employer who pays for the insurance. Therefore, this insurance can be considered as an employee privilege, especially if it is contracted for a 24 hour period.

Travel Insurance

Travel insurances can be considered a privilege when the employer contracts them for his or her employees who travel abroad. It is the obligation of the employer to pay a special fee for using health protection abroad, which cannot be delayed until returning to Croatia (a person must apply to HZZO before the trip). However, employers often decide to contract travel insurance policies with insurance companies, which can cover accident travel insurance and baggage insurance along with health insurance. This makes the employees (or more often managers) better protected on their trip, and this insurance can be considered a privilege. Travel insurance does not cover treatment of chronic illnesses or operations, but only emergency medical assistance (and, for example, emergency transport to Croatia for further treatment).

Travel insurances (or insured travel) are the most similar to the model that is applied in the EU. Insurance companies with headquarters in Croatia sign contracts on business and technical cooperation with specialized travel insurance companies. One of the most famous such companies is the Swiss insurance company ELVIA Reiseversicherungs Gesellschaft, a member of the Allianz Group. Insurance companies also work with the German Mercur Assistance and French CORIS Group, which has its branch in Croatia [5]. In case there is a need for emergency medical assistance, there companies provide a direct contact via a call centre to the person who will guide the insured to the nearest doctor or hospital 24/7. It should be stressed that some companies have special agreements with the doctors, so the insured does not pay any medical expenses up to the amount contracted on the policy. If there is a need to pay for medical intervention, the insurance company will compensate the fee to the employer in a much shorter period of time than HZZO.

Statistics have shown a significant growth of travel insurance in Croatia, but do not point out those contracted by the employers for their employees.

Therefore, it is not possible to claim their share and status on the Croatian insurance market with certainty.

Life Insurance

Employees often consider life insurance the most profitable privilege their employers can offer. In general, an endowment assurance is contracted, since it covers case of death and survival, and it includes a savings component. Sometimes, the endowment assurance policy includes a supplementary accident insurance, with significantly higher insurance amounts than in collective accident insurance. Agreement of the insured person, employee or manager is obligatory with this insurance, according to the Law on Obligatory Relations.

The research of the influence of the insurance on the banking business defined that 82% of bank clerks prefer health insurance. They believe that the bank contracted health insurance for their protection and welfare, thus giving them a better incentive for working harder [8]. Accident and life insurance are significantly less represented, which can be attributed to the sample on which the research was conducted. Life insurance is mostly manager privilege, and employee life insurance versions should be connected to the interests of the employers, not the employees.

According to the Income Tax Law, the tax treatment of life insurance is determined based on the status of the person entitled as the insurance beneficiary on the insurance policy. The life insurance policy holds the names of the policyholder (always the employer), the insured person (always the employee) and the insurance beneficiary (employer, the insured, or a person appointed by the insured, with the approval of the policyholder). Therefore, there are three different types of the life insurance tax treatment.

In the first case, when the employer is the insurance beneficiary, he or she wants to protect their economic interest which would be at risk by the death of the insured. Premium payments are treated as an expense during the insurance period. After the insurance period, or when the insured case occurs, the insured amount is treated as an income. If the employer's business ended with a profit at the end of the insurance period, he or she is obliged to pay the income tax. The employer can contract whole-life insurance (valid only in case of death) for the managers of co-owners of the company, or as a guarantee for a loan.

The second case deals with an endowment assurance (survival and case of death). The insured person is a private person (the employee, his or her family, or someone else), the life insurance premium payments paid by the employees for their employers and other people are considered as receipts on the basis of dependent work (article 12, paragraph 2, Income Tax Law). In this case, the insurance premium is treated as a salary. The payout of the insured amount is treated as an employee's income which is taxable according to the Income Tax Law. The assigned surtax is also

calculated. This model is often used in insuring managers as a reward (severance pay), for a period of their appointment or choice.

In the third case, when the insured in case of survival is a legal person (the employer), and the insured in case of death is a private person (the employee's family, etc.), life insurance premium payments are treated as the employee's salary. However, when the insurance expires, the insured amount is paid to the employer and represents income. If the employer agreed with the employee to pay the arranged amount after the insurance policy expires, they will have to arrange who will bear the cost of tax and surtax. Practice shows that it is the employee in most cases. If the insured case is realised, and if the employee dies during the duration of the insurance, the insured amount is then paid to the private person (the insured beneficiary) – the legal successor stated in the policy.

All of these versions are liable to change by the legal regulations. Therefore, the employer must decide on the profitability of contracting of the specified insurance, which can, but does not have to, be an employee privilege. With this type of insurance the employees most often do not think about the specified versions. They consider the life insurance policy a privilege, so when the insured case occurs, they sometimes end up disappointed.

Liability Insurance for Damages to Employees

General liability insurance (third part liability insurance) covers the responsibility of the insured for damage due to death, body or health injury, as well as damaging or destroying third party possessions. Furthermore, the responsibility for the damage that has happened because of the occupation (profession) of the insured, property ownership, legal relationship or a specific capacity as the source of damage is also covered. This paper considers exclusively damage liability insurance towards the employees, that the employer can contract with damage liability insurance towards third parties, and can be considered an employee privilege.

Insurance premiums are not the same for all occupations. For riskier occupations, where more frequent and bigger damage is possible (such as forestry or civil engineering), the insurance premiums are higher.

The maximum coverage of the insurer in liability insurance is determined by the harmful event. Every employer must calculate which risk and how much risk is present, and which part overcomes their financial abilities. Based on that, the employer determines the insured limit. It is possible to limit it on a yearly level regardless of the number of the claims. In that case the premium is lower since the coverage is actually lower [4].

In liability insurance towards the employees, the damages will be paid out to the employee who suffered the damage only if all safety measures were taken

during work. If the employee is to blame for the accident by his or her negligence or by disobeying the rules, the insurer will decline to pay out the damages, or it will be paid out in a smaller amount, in proportion to the share of the injured person's fault in the damage. In spite of the differences in individual insurance companies' conditions, the contract usually excludes the insured person's responsibility for purposely caused damage.

The employers often contract liability insurance towards employees only after an accident occurred, and the employer was forced to cover the damages. Sometimes the employees never got the damages because the company ceased working, the employer established a new one, and court processes were too expensive and long-lasting, with a questionable outcome. Today, legal regulations demand a third part liability insurance policy from the employers, along with professional liability insurance policy. The segment of employees' insurance is being neglected and not demanded (it is only sometimes that the contractual parties such as, for example, investors, demand liability insurance towards employees). Therefore, this insurance can be considered an employee privilege because the employees get a sense of security and trust in the employer by paying a small premium. Additionally, the employer can avoid the risk of long-lasting, arduous court disputes and the expenses for their business, which is, when it comes to accidents, usually not negligible (in case of death or disability). At the same time, the employees are aware that if they do not follow the rules, they will not get the damages from the insurance company and are in that way encouraged to approach work safely, so this privilege has a positive effect on managing human resources in the company.

CONCLUSION

Work motivation is one of the key factors in the success of business systems. Employee privileges play a very important role because they can significantly add to attracting and keeping high-quality employees. Beside the standard direct and indirect material compensation, insurance policies are being offered more often. Employees are usually acquainted with the rights that arise from social insurance, but other kinds of insurances and the risks they cover are known only to few.

Voluntary health insurance (that often includes supplementary and additional insurance) is useful to both the employer and the employees, according to the research conducted so far. However, employers are not motivated to offer privileges of safety and health to their employees. The existing legal regulation is not in favour of the situation, since it treats the costs of such policies as salaries and requires additional expenses.

Voluntary pension insurance have a more beneficial legal treatment, so voluntary pension insurance policies and pension purchases are being contracted, and closed voluntary pension funds are being established.

Concerning the scheduled end of the recession, one can expect that the number of funds in times to come will grow and that the employers will be more motivated for such investments into their employees.

Insurances that the employer is not obliged to contract and that can be considered employee privileges are accident insurance, life insurance and voluntary travel insurance. These types of insurance are considered a privilege by the employees only if they have direct benefit from them. However, the way in which the insurance is contracted is important, and that especially applies on the tax treatment of life insurance.

Damage liability insurance is most often not considered a privilege by the employees, even though it helps avoid long-lasting court disputes, and the employee gets his or her fee in a more adequate time.

Employers are willing to contract insurances as an employee privilege, but the state should support the improvement of safety and employee protection with a more suitable tax policy. The employees should be acquainted with the types of insurance the employers offer as a privilege, should recognize the benefits they have or will have in the future, and repay the employer with their dedicated work.

REFERENCES

- [1] F.Bahtijarević-Šiber: "Management ljudskih potencijala, Zagreb, Golden marketing", 1999.
- [2] M.Bijelić: "Osiguranje i reosiguranje", Zagreb, Tectus, 2002.
- [3] K.Klasić, I.Andrijanić: "Osnove osiguranja – načela i praksa", Zagreb, TEB, 2007.
- [4] K.Klasić, M. Janžetić: "Osiguranje osoba na gradilištima", UDK 624:657.446, Sigurnost 52 (1) 35-47 (2010), ZIRS, Zagreb, 2010.
- [5] K.Klasić, K.Kaleb: "Modeli osiguranja rizika u turizmu, Zbornik Visoke poslovne škole Libertas", ISSN: 1846-9728, str 197-213, UDK 338.48:368, Zagreb, 2008.
- [6] N.Mašić: "Životno osiguranje- osnovni principi", Zagreb, 2008.
- [7] N.Muslim: "Prava radnika od zapošljavanja do umirovljenja", Sigurnost 53 (2) 109-117 (2011)
- [8] T.Peruško: "Unaprjeđenje bankarskog poslovanja primjenom osiguranja bankarskih kadrova", Ekonomska istraživanja, 114-126, Vol 19 No 1, 2006.
- [9] A.Šijaković, J.Kereta, D.Kiš: "Utjecaj dobrovoljnog dodatnog zdravstvenog osiguranja na stopu bolovanja i smanjenje troškova", Sigurnost 50 (4) 385-390 (2008).
- [10] M.Varga: "Upravljanje ljudskim potencijalima kroz motivaciju", Zbornik radova Međimurskog veleučilišta u Čakovcu, Vol. 2 No. 1, 2011.
- [11] Portal Moj Posao, www.moj-posao.net/Press centar: Novac je u današnje vrijeme najbolji motivator za rad, (14.04.2012).
- [12] Royal međugarancijska solidarnost d.d., www.royal-mirovina.hr (14.04.2012).
- [13] Hrvatska agencija za nadzor financijskih usluga, www.hanfa.hr (15.04.2012).
- [14] Raiffeisen mirovinsko osiguravajuće društvo, www.rmod.hr, (14.04.2012).
- [15] Zakon o dobrovoljnom zdravstvenom osiguranju, NN 85/06, 150708, 71/10.
- [16] Zakon o mirovinskom osiguranju, NN 102/98, 127/00, 59/01, 109/01, 149/02, 177/04.
- [17] Zakon o obveznom zdravstvenom osiguranju, NN 150/08, 94/09, 153/09, 71/10, 139/10, 49/11, 22/12.
- [18] Zakon o obveznim i dobrovoljnim mirovinskim fondovima 49/99, 63/00, 103/03, 177/04, 71/07, 124/10, 114/11
- [19] Zakon o obveznim odnosima, 35/05, 41/08
- [20] Zakon o osiguranju, NN 151/05, 87/08, 82/09
- [21] Zakon o porezu na dohodak, NN 177/04, 73/08, 80/10, 114/11.

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OSIGURANJE KAO POVLASTICA RADNIKA

Ksenija Klasić

Rezime: Uloga povlastica radnika trebala bi biti važna stavka u svim poduzećima, jer može značajno pridonijeti privlačenju i zadržavanju zaposlenika. Jedan od važnijih razloga za pružanje povlastica je sigurnost i motivacija zaposlenika. Najčešće beneficije koje radnici i manageri koriste odnose se na korištenje mobitela, prijenosnih računala pa i automobila u privatne svrhe, dok u neizravne materijalne kompenzacije spadaju i razna osiguranja poput osiguranja od nezgode, zdravstvenog osiguranja, životnog osiguranja, dobrovoljnog mirovinskog osiguranja. Međutim, poslodavci nisu motivirani za pružanje povlastica sigurnosti i zdravlja radnicima. Tome svakako ne pogoduje ni postojeća zakonska regulativa.

U radu se obrađuju vrste osiguranja koje se mogu smatrati povlasticama radnika i managementa, te utvrđuje njihova isplativost sa stajališta radnika i poslodavca.

Ključne riječi: motivacija zaposlenika, osiguranje, povlastica radnika.

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COMPETENCIES OF SAFETY MANAGERS AND SAFETY EXPERTS IN THE FIELD OF HUMAN RESOURCE MANAGEMENT- SURVEY RESULTS

Abstract: Human resource management ultimately aims to maximize performance. Employees are the center of any business process and they have to give their best while preserving their health and safety. The role of the occupational safety and health specialists is to contribute to the business activities in the field of occupational safety and health. The aim of this study was to examine the participation of safety experts in the field of human resource management and to observe their impact on the satisfaction of safety issues among workers and their motivation. It was found that in case of small employers, human resource management is reduced to administrative work where the participation of safety experts is not needed. On the other hand, increased number of employees increases the number of activities related to human resources management, as well as the involvement of experts in the selected tasks.

Key words: human resources management, employee satisfaction, motivation of workers, safety, safety specialist.

INTRODUCTION

Theoretical background

Modern enterprises and their managers recognize the fact that workers and their potential are crucial for the success of the employer, and therefore managers should manage human resources, in both private and public sectors, as a critical business function [1]. Human resource management (HRM) is an area that has been extensively investigated worldwide since the 1980s, particularly its impact on business performance [1]. When we talk about business performance, the ability of workers to create new value has a greater importance than making profit. Knowledge as intellectual capital of the company is the most important source and a driver for the company development. The same author highlights that the need to solve problems related to employees [3] (the selection of employees, monitoring of work performance, motivation, etc.) does not depend on the size of the employer, only the same problems are solved in a different way and with a different organization. The greater number of employees demands wider functions and tasks of human resources management as well as the level of expertise of persons who perform these functions. Despite the delay, domestic economy increasingly recognizes the impact and importance of human resources management for good business. A brief review of national research shows that its importance is only partially recognized and only in relation to the private sector and with particular emphasis on large employers. A significant number of large and successful companies still have not recognized the importance of HRM as the basis of competitive advantage and the

main driver of growth and development of modern organizations [5]. Workers are put in the first place only "in theory", and to achieve better financial results, employers must invest in their people and human resource management activities. The author states that employers in private companies must be more mobile in their human resources policies, stimulating and well-paying their workers, identifying key staff; invest in staff education, measure the quality of human resources management and monitor the work performance of employees. One of the HRM activities is care for the health and safety of workers [1]. The issue of occupational health and safety of workers directly affects not only the health and safety of workers who perform their tasks, but the success or failure of the employer, the overall economy, the workers' families and society as a whole. Since the purpose of managing human resources is achieving the goals of the organization, then to the issue of safety and health of workers should be given a special attention. Unquestionably, the worker can take advantage of their potential and contribute to the success of the enterprise only if he or she is healthy and happy. The issue of HRM is not equal in all industries. Increasing technology increases the demand for human capital whose basic quality is knowledge (intellectual capital). On the other hand, certain economic activities demand lower skilled workers. The selection, retention and / or monitoring of work performance for those two categories of workers requires a completely different function and expertise in managing human resources. Parallel to the above mentioned facts, safety managers and health and safety professionals are expected to have knowledge and competencies that go beyond

technical knowledge and knowledge of legal framework and regulations in the field of occupational safety and health. Nowadays, those experts need to have very specific skills related to economic branch in which they perform their activities. Safety is a multidisciplinary field and experts are required to have knowledge of the factors of human behaviour, particularly work psychology, to measure employee satisfaction and observe and solve problems through communication and application of consultation skills. The ability to monitor and reward employees, maintaining high motivation and commitment of employees affects the workers' individual and thereby the employer's results.

Very often, especially in manufacturing and / or processing activities, a safety expert is the person that not only knows the work process, but communicates with employees and can identify problems that workers face which affect the "exploitation" of their potential and work. An important activity in HRM is strategic planning and recruitment. In order for the employees to respond to the requirements, job description, job requirements, as well as criteria for admission to work and success criteria should be clearly defined prior to their employment. Also, a special emphasis should be placed on human resource planning. Proper planning, defining and job analyzing avoids the confusion regarding the responsibilities of individuals in achieving set goals. Safety experts should have an important role when it comes to the orientation of new employees, particularly young workers and their training.

The purpose and research objective

The primary purpose of the research is to determine whether safety experts or persons who manage safety and health services, participate in work activities in the field of HRM. Particular emphasis is placed on the activities directly related to health and safety at work (planning and employment of human resources, training and orientation of new employees, job analysis, survey of attitudes, health programs and / or safety training). In addition to this goal, it is necessary to determine whether the observed sample shows differences in the quantity of engagement of safety experts in HR activities among small, medium and large employers. Finally, the authors are interested in whether the application of the knowledge and participation of safety experts in these activities has a positive impact on employee's motivation and stimulation for implementation of occupational safety rules as well as workers' attitudes towards safety in their work environment.

METHODOLOGY

For the purposes of achieving the objectives of this research, single empirical study has been conducted. An intentional sample was used with the prior assumption that the selected employers conduct their business in a highly risky sector (manufacturing) and that they can and want to provide the information necessary for achieving the objectives of the research. The study applied a combined methodology. The research instruments were questionnaires which gave quantitative indicators of human resource management practices in selected employers. Data on satisfaction and motivation of workers and indicators on the state of health and safety were collected in the same way. The survey was conducted on a sample of five relevant employers in Croatia high-risk jobs in industry with high rates of injury at work. The main strata in which economic entities are grouped in the structuring of this sample are their activities in accordance with the national classification of activities and their division into small (1-49), medium (50-249) and large (> 250) employers, depending on the number of employees. The sample involved one small, two medium and two large employers. Also, all employers in this sample comply with the legal obligations related to the employment of safety experts and existence of safety service. The total sample comprised of 1983 subjects (total number of employees) out of whom 381 completed the questionnaire (19%), whereas 32 survey ballots were not properly filled.

RESULTS

Data on employer and OSH

All employers in this sample, regardless of their size, perform their activities in high risk sectors and none of the employers has implemented voluntary system for managing health and safety (OHSAS 18001:2007). For the research purposes and in order to protect business data and the interests of employers, we used the names of the employers as it is represented in figure 1.

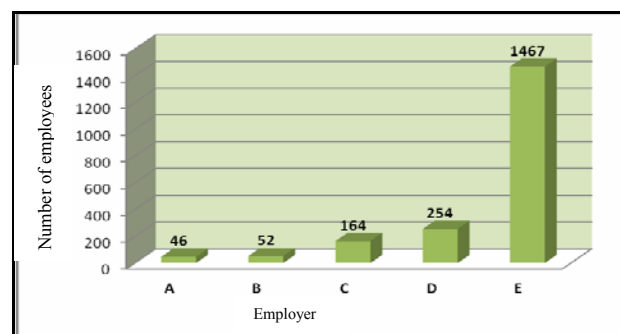


Figure 1. Size and name of the employer

Number of occupational injuries and rates of injuries are shown in the Figure 2. This figure shows that employers C and D have a very high injury rate compared to the economic sector they work in. None of the studied subjects had fatally injured workers.

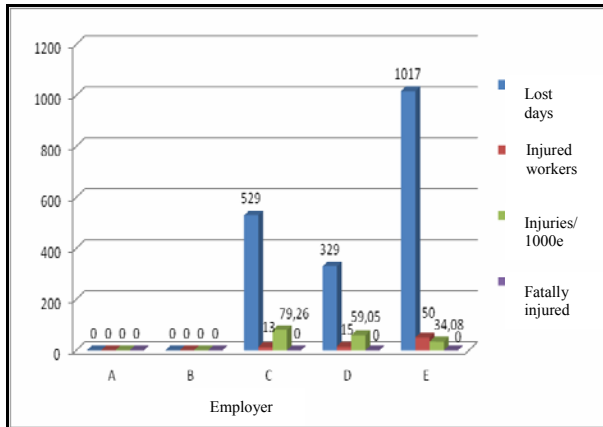


Figure 2. Number of injuries, injury rate per 1000 employees and working days lost due to occupational injuries

Human resource management and the participation of safety experts in HRM activities

To determine which HRM activities are carried out by the employer and which of these activities involved safety experts, we gave the same questionnaire to the HR manager and to the safety expert. The analysis of the questionnaires showed that the number of activities related to HRM, in particular the activities such as training and / or employee satisfaction is present only at enterprises that employ more than 1,500 workers. HRM activities of small and medium-sized employers can generally be reduced to recording of employee's files (Table 1). The tested sample showed that the number of activities in the field of human resource management grows with the number of employees and this analogy follows the participation of safety experts in HRM activities. The participation of safety experts in the activities that are related to safety and health of workers (job analysis, orientation of new employees, improving productivity and quality, planning holidays and absence and safety training) was particularly observed. The study showed that all safety experts are involved in planning vacations and absence as well as in improving productivity and quality. On the other side, only safety experts employed by large employers are involved in safety training. It is also important to note that the same pattern occurs in the case of orientation of new employees and training of employees (Table 1.)

Table 1. Activities in the field of HRM and participation of safety experts

<i>Activity</i>	<i>HRM department/ Participation of safety expert in HRM activities</i>				
<i>EMPLOYER</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>
Defining the conditions for employing	YES	YES	YES	YES	YES
Testing and interviewing candidates for employment	NO	NO	NO	YES	YES
Prediction of Human Resources	NO	NO	NO	NO	YES
Keeping the files of employees	YES	YES	YES	YES	YES
Job analysis	YES	YES	YES	YES	YES
The study of satisfaction and employee attitudes	NO	NO	NO	NO	YES
Orientation of new employees	NO	NO	NO	YES	YES
Assessing the performance	NO	NO	NO	YES	YES
Professional development	NO	NO	NO	YES	YES
Improving productivity / quality	YES	YES	YES	YES	YES
Planning holidays and absence	YES	YES	YES	YES	YES
Safety training	NO	NO	YES	YES	YES
Health and recreation programs	NO	NO	NO	NO	YES

Note: Employers and HRM activities in which safety experts participate are shown in coloured fields

Satisfaction and employee motivation to work

Average ratings of employee satisfaction with OSH situation do not show any significant differences in small and large employers as well as the ratings in terms of injuries at work.

Thus we have the same average score for *consideration of attitudes by the superior and encouragement in the work by the supervisor* with the employer A and E. The same situation is with *precise knowledge of the tasks and activities and the existence of written instructions and work instructions*. Interestingly, almost all employers have equal average score in terms of satisfaction of environmental parameters, except for employer C who has generally received the lowest overall average rating (Table 2). Motivation of employees to work through the observed points and

their ranking by priority confirmed that the material factors such as salaries and especially the necessity of keeping job is in line with the economic situation and the situation on the labour market (Figure 3). More than 25% of workers think that the most important motivator is the necessity of keeping the job, whereas in small and medium-sized enterprises, more than 30% of workers think that the least important factor that affects their motivation to work is *the stimulation*. It is interesting to note that workers employed in small and medium-sized enterprises ranked *interpersonal relationships* as a motivator, while the workers employed by large enterprises consider *opportunity for advancement* as more important motivator.

Table 2. Average ratings of employee satisfaction with OSH situation

The statements from the questionnaire	Employer				
	A	B	C	D	E
I precisely know what my duties are	3,7	4,0	3,4	4,0	3,7
I have a precise written instructions and work instructions for my tasks	3,2	4,1	3,1	3,7	3,6
I am satisfied with the working conditions (temperature, humidity, protective equipment, etc.)	3,6	3,8	2,7	3,7	3,6
Occasionally, my supervisors check if I perform work assignments in accordance with the instructions	3,1	3,6	3,4	3,6	4,0
My supervisor encourages me in my work	3,6	3,9	2,5	3,5	3,6
I am free to express my opinions, suggestions and recommendations	3,7	3,9	3,5	3,2	3,6
I have all the materials and equipment to properly perform my tasks	3,6	4,2	3,7	4,1	3,3

Assessing immaterial factors that contribute most to the quality of work, regardless of the employer size, the workers put *the good organization* in the first place (employer A - 40%, B - 37% , C - 46%, D- 38% and E - 33%). A significant percentage of workers in small companies think that the most important motivational factor is *interpersonal relations* (22%), whereas in large enterprises the percentage for this factor is 15%. The analysis also showed that *safety factor*, as a factor that affects the quality of work, is mostly valued in large and medium-sized enterprises.

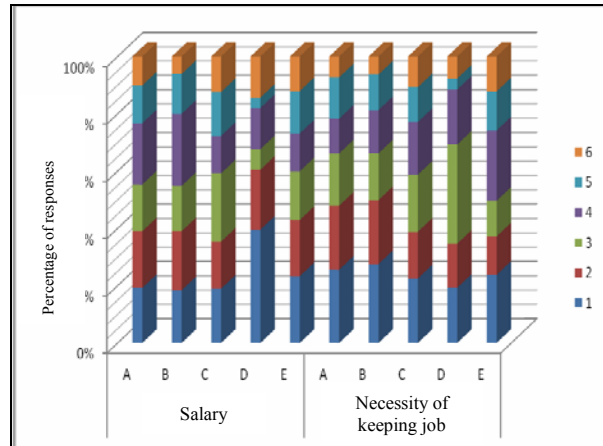


Figure 3. Material factors as motivation to work

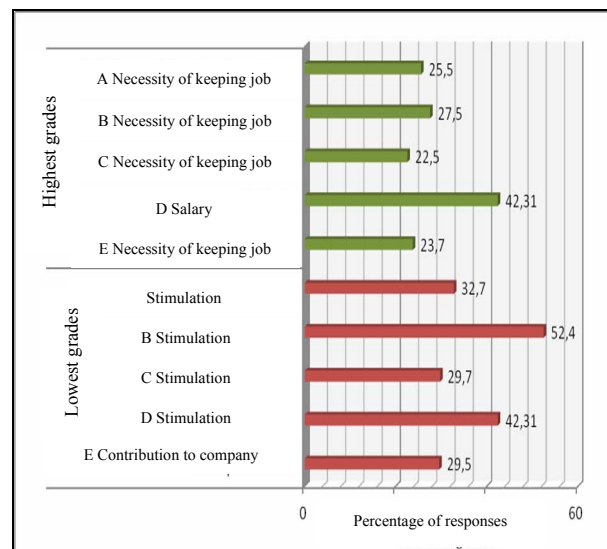


Figure 4. The highest and lowest rated motivating factors

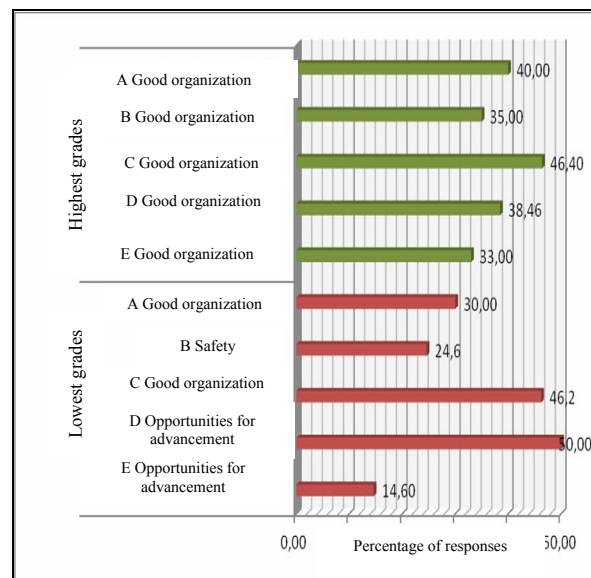


Figure 5. The highest and lowest rated immaterial factors that influence the work

DISCUSSION

Safety and health at work system in the Republic of Croatia, among other problems, is characterized by dissatisfaction of safety experts with their status and position in the company. This specially refers to the attitudes of others towards their profession and the general neglect for the importance of safety and occupational health and safety, as an essential and unavoidable part of business activities. On the other hand, human resource management as the most important resource in Croatian companies has not yet taken hold [5]. Together with the economic situation at the global level, this leads to a situation in which is ungrateful to insist on putting emphasis on the increased involvement of safety experts in HRM activities. It should be noted that the integration of a segment in the broader context of business (safety in human resource management) requires the importance of safety and health at work, not only in theory but in practice. Otherwise, we may find that the inclusion of safety experts in these activities diverts attention from what is essential and that is protection of workers' health and their safety.

The tested sample is certainly not sufficient to generalize the results but, given the size and credibility of employers we can make certain conclusions. This study showed that human resource management is not sufficiently recognized even in large companies, which has also been confirmed in larger studies [6]. In order for employees to respond to the requirements, the required job description and job requirements should be clearly defined prior to their employment. We believe that this is the area in which safety experts can contribute when it comes to managing human resources. Of course, the scope of HRM activities depends on human potential. In order to maintain and increase their intellectual capital, the potential employers have to invest in training, employing quality staff, establish a system of staff appraisal and performance, reward and promote quality staff. On the other hand, the activities in which the research was carried out, mostly refer to physical strength and physical abilities of workers as capital. Our attention is not to diminish their contribution and importance of proper management of this kind of workers. It is unrealistic to expect the same training needs, methods of motivation and performance appraisal as in the workers who are primarily intellectual capital. Generally, the examined sample shows that the extent and width of the functions of HRM as well as number of staff who conduct these activities are not the same as in high-tech industry or the labour process which is supported by advanced technology. Unsurprisingly, the result shows reduced HRM activities for small enterprises and their volume increases with the number of employees which is consistent with the relevant literature [1].

CONCLUSION

The conducted research confirmed that the participation of safety experts in HRM activities can influence the state of safety and health of the employer. The primarily aim is to raise the awareness of the employer and workers on safety issues. The fact is that bigger employers have better organized workers who are aware of their rights and legal obligations of the employer, but they are also more often the subject of inspection. Despite the size of the sample, the survey showed that the increase in engagement of safety expert is proportional with increase of safety awareness. On the other hand, this is a base for building a safe working environment. Competences of safety experts rise or fall depending on the field they work in. His/her competence must be in accordance with the requirements of demanding business processes and technological developments, new forms of work and employment, and thus the new dangers the workers are faced with. It is recommended that this type of research is carried out in other high risk sectors. The question is whether the competences of safety experts are both in accordance with technology of working process, and with the protection of workers and their potential. We highly recommend that safety experts participate in the HRM activities especially in planning and implementing safety training, planning and implementation of professional development and all activities related to changes in production processes. Competence of safety experts for these jobs requires additional research but contribution in terms of OSH is not questionable. Finally, if risk reduction is a process which includes the activities - education of future workers, defining the conditions for recruitment, selection of workers, training and professional development, evaluation - then it is logical that certain HRM activities must involve safety experts within the framework of competencies that they have.

REFERENCES

- [1] F.Bahtijarević-Šiber : "Managment ljudskih potencijala", Zagreb: Golden marketing. Zagreb, 1999.
- [2] F.Bahtijarević-Šiber, N.Pološki,: "Utjecaj tehnologije na upravljanje ljudskim resursima", Informatologia, 31, 1998, 1-2; 37-41.
- [3] M.Buble: "Osnove menadžmenta", Zagreb: Sinergija, 2006.
- [4] Karaman Aksentijević, N. ; Ježić, Z. ; Đurić, K. Upravljanje ljudskim resursima kao pretpostavka inovativnosti i uspješnosti poslovanja. // Informatologia. 41 (2008), 1, str. 46-50. URL: hrcak.srce.hr/index.php
- [5] N.Pološki Vokić: "Menadžment ljudskih potencijala u velikim hrvatskim poduzećima" Ekonomski pregled, 55, 2004, 5-6; 455-478.
- [6] N.Pološki Vokić, M.Vidović: "Komparativno istraživanje razvoja MLJP-a u Hrvatskoj", Zbornik Ekonomskog fakulteta u Zagrebu, 5, 2007;403-417.

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BIOGRAPHY

Ivana Krišto was born in Zagreb in 1981. She graduated from Higher Police School (2003) and from University College of Applied Sciences in Safety (2005). She finished postgraduate studies in information sciences at the University of Zagreb, Faculty of Organization and Informatics in Varazdin. She is currently working on her PhD thesis in Information Science at the University of Zagreb. Her research interest include: safety and occupational health, management and public administration.



REZULTATI ISTRAŽIVANJA KOMPETENCIJA RUKOVODIOCA SLUŽBI ZAŠTITE NA RADU ILI STRUČNJAKA ZAŠTITE NA RADU U UPRAVLJANJU LJUDSKIM RESURSIMA

Ivana Krišto, Marija Batak, Ana Šijaković

Rezime: *Upravljanje ljudskim resursima ima za cilj maksimalizaciju rezultata rada. Radnik (zaposleni) kao središte bilo kog poslovnog procesa treba dati svoj maksimum, a pritom sačuvati svoje zdravlje i sigurnost. Uloga stručnjaka zaštite na radu je da doprinese ovim poslovnim aktivnostima svojim znanjem i kompetencijama u području sigurnosti i zaštite zdravlja na radu. Cilj studije bio je da na ispitnom uzorku u području rizične delatnosti analizira učešće stručnjaka u razmatranim aktivnostima iz oblasti upravljanja ljudskim resursima, kao i uticaj njegovih aktivnosti na zadovoljstvo radnika stanjem sigurnosti i njihovu motivaciju. Utvrđeno je kako se kod malih poslodavaca upravljanje ljudskim resursima svodi na kadrovske poslove u kojima učešće stručnjaka zaštite na radu nije potrebno. S druge strane, porastom broja zaposlenih, raste i broj aktivnosti vezanih za upravljanje ljudskim resursima kao i angažman stručnjaka u razmatranim zadacima.*

Ključne reči: motivacija radnika, sigurnost, stručnjak zaštite na radu, upravljanje ljudskim resursima, zadovoljstvo radnika.

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CAREER MANAGEMENT IN THE FUNCTION OF THE MANAGEMENT SYSTEM QUALITY

Abstract: *The implementation of the quality management system needs to be the strategic decision of the organization. Its aim is to improve characteristics of the management system of an organization to contribute to its competitiveness and better market position. This project is one of the most important for each organization and depends on human resource quality. Every organization has human resources but not every succeeds in creating human capital out of this potential. In order to initiate this process and for the process to have a possibility for success, career management is necessary. The career management procedure is one of the written procedures which support human resource potential management in the organization. Besides the Regulations of the organization and systematization, Catalogue of job descriptions, analytical evaluation, Heading contribution and Employment contract, the career management procedure is one of the quality management documents that can decisively influence the transformation of the human resource potential into the human capital.*

Key words: *quality, management system, career management.*

INTRODUCTION

Career management is a process step in the process of human resource potential management, a part of the process structure as a structural element of the management system. Without this process step and a written procedure as documentation support for managing the process step, it is impossible to document in a satisfactory way and, therefore, find the proofs for management of human resource potential in an organization. In order to make it possible, it is necessary to ensure competence of the process managers and participants in the process for understanding the management system, the process approach and the methodology of business processes modelling.

The subject of the research is the human resource potential management process as a part of the process structure within the management system of an organization, with the emphasis on the process step - *career management*. The reason for focusing on this research subject is the fact that due to lack of career management of employees in an organization there are no optimal investments in development of competence, no progress in the profession. Also, on the hierarchy ladder within the organizational structure based on competence, there are no optimal business results for the organization and no sustainable success.

The problem this research is dealing with is primarily the fact that career management may be clearly identified and documented only in organizations which have, through a project of quality system management under the requirements of the international standard ISO 9001, established process organization and identified, named, modelled and documented business

processes by applying the IDEF₀ (Integration Definition for Function Modelling) methodology as a part of the SADT (Structured Analysis and Design Technique) model. The number of organizations in the Republic of Croatia fulfilling this precondition is small. Even when organizations have a modelled human resource potential management process, they do not necessarily have the process step *career management*, and this depends on the level of competence of the process team working on modelling of this business process.

The aim of the research is to show the structure of the human resource potential process and the importance of career management within this process, both for development of the employees' motivation and for optimization of investments in career management and business success of the organization.

The basic hypothesis of this paper is that a modelled business process of human resource potential management and within it the process step *career management*, documented by a written procedure, provide for easier career planning, better organization of career management, fact-based decision making about the career, reaching the stage of human resource potential management and easier control of process quality.

The task of the paper is to present one of possible solutions for career management that has a practical application, and to have an effect on developing awareness about the need to establish career management as an inevitable structural element of the human resource potential management process in an organization.

METHODS

The following general scientific knowledge methods are used in this paper: 1) systems theory method, in the part relating to presentation of structural elements of the management system and their interaction, 2) modeling method in the presentation of the human resource potential management process and 3) case study method in the part of presenting the human resource potential management process modeled within the scope of the quality management system implementation project under the ISO 9001 standard requirements, applying the IDEF₀ methodology, the SADT model and the career management procedure.

The following specific scientific knowledge methods are dominantly applied: 1) analytic synthetic; 2) generalization and specialization and 3) inductive-deductive method, in the part of the research relating to decomposition of human resource potential management process and definition of interactions among its structural elements, process steps. Further application of this method relates to further decomposition of the human resource potential management process to the level of activity.

RESULTS

A management system of an organization is a complex composition of structural elements needed for business processes operation. These are: 1) strategic documents that determine the commitment of the organization, materialized in the mission, vision, strategy, policy and managerial objectives and targets, 2) organizational structure, 3) business processes, 4) resources, 5) partnerships and 6) information and communication. In order to be able to speak about quality of a management system it is necessary to arrange all structural elements of the management system on the principles of quality. Only then have the prerequisites been made for the results of business processes materialized in products or services to be of good quality, i.e. to have such characteristics that they can completely meet the requirements of customers/users. If any of the management system structural elements are not arranged according to the quality management principles, it may endanger the quality of the business processes results, as well as the entire management system.

Human resource potential

“Various terms of almost identical meaning appear in national and world literature that relate to people as thinking beings, such as: personnel, staff, worker, employee, official, recruits, clerk, workforce, human resources, human potential, and most recently also human capital or intellectual capital” [11]. Despite the similarity of these terms and the fact that some of them are often used as synonyms, there are differences. Beside some similarities with other terms, the term “human potential” also has some particularities. “This expression replaces the previous term *cadre* or

personnel function in order to emphasize the importance of people and their development as a significant resource, and points out a new approach to the human capital in capital relationships. A human with his knowledge and ability, acting in processes of production and other activities is a resource and a potential. However, human potentials are abilities of a human being who carries them inside as inborn properties that other resources lack” [11].

Internal and external institutional framework

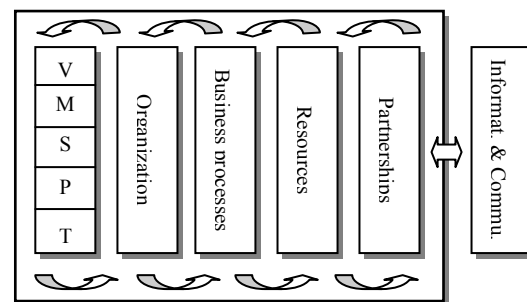


Figure 1. Structural elements of management system

All structural elements of an the management system of an organization, more or less, deal with human potentials. This applies particularly to: 1) business processes and 2) resources, as management system structural elements.

Human resource potential management as a business process

In the framework of the management system theory and within it the quality management system, four types of business processes are recognized: 1) core business processes; 2) managerial business processes; 3) support processes or logistics business processes, also called resource business processes and 4) processes of measurements, analyses and improvements.

Human potentials management is categorized as a support process or a logistics business process or a so called resource business process. The reason for this is that human resource potential, i.e. people, is considered a resource that support, meaning it represents a logistic support to the core business processes and through them, that is to say indirectly, creates and transfers added value to the end user by means of products or services having their materialization in the market [9].

Human resource potential management process as a management function, [3] may be decomposed, i.e. divided to structural elements or components, called process steps. Figure 2 shows decomposition, the structure of this process from which it may be concluded that this business process is modelled from the following process steps: 1) planning; 2) employment; 3) monitoring; 4) education and professional training; 5) career management and 8) final activities. The process step 5) *career management* is a process step that makes the difference between organizations from the viewpoint of the quality of human potential management. It is difficult for

organizations that have not developed and documented this process step to prove (document) the management of this business process.

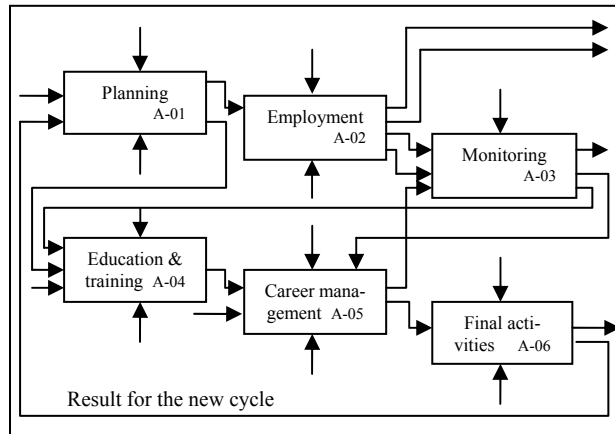


Figure 2. Decomposition diagram of the Human resource potential management business process

The decomposition on the fourth level can show what activities are conducted within each process step (Table 1). Furthermore, it can show that it is possible to have different number of activities in each individual process step, thus determining complexity, duration and risk in the flow of such process step. By including these activities in a written procedure, with defined responsibility for execution and responsibility for execution control would be present of the procedure flow it is ensured that every performer, respecting the written procedure, may fulfil his role in the business process of human potential management in a satisfactory manner, in relation to quality requirements. This also eliminates a possibility to forget any of the activities foreseen by the procedure, or to forget to perform control on control points that aim at determining if the activities are carried out in compliance with the written procedure. The responsibility for execution of the activity and the control of the execution would be clearly defined.

The career management procedure is particularly significant for each organization since it depends on this procedure if and in which extent, human resource potential will turn into human capital. "Certain potentials are improved by education and innovating knowledge that should be further developed, improved and promoted in order to turn the potential to the capital, to really aware and relevant activity in the process of production or other activities" [11].

Career management procedure gives to the human potential management process manager and other levels of management, access to the type and the sequence of activities that should be conducted in order to always know the level of competence of each candidate for individual working posts, the necessary activities for raising competence of the employees and managing the career of each employee. Thus the optimal management of the human potential in an organization is ensured, and control points and responsibility for execution and control of execution provide for transparency of behaviour at each moment. This way enables the

organization to engage each employee on the work post where she/he will give optimal contribution, the fact of special relevance from the viewpoint of the organization's cost management.

Table 1. Process steps activities in the human resource management process

Planning A-01	Employment A-02	Monitoring A-03
1. Receipt of a development plan 2. Data levy 3. Data control 4. HR plan proposal making 5. HR plan proposal control 6. HR plan proposal improvement 7. Decision making about improvement 8. HR final plan making 9. Final control 10. Final decision to accept the HR plan 11. Distribution to the users	1. Request analysis 2. Request check 3. Control of the request with plan 4. Check of the internal solution 5. Advertising needs for the employees 6. Offers collecting 7. Offers control 8. Evaluation 9. Interviews 10. Testing 11. Final mark 12. Ranking 13. Informing 14. Check of other formalities 15. Contracting 16. Contract check 17. Evidence 18. Registration 19. Data base 20. Work place initiation	1. Worker monitor. 2. Determination of the expert monitoring team 3. Check of the decision making 4. Training progr. preparing 5. Training progr. adopting 6. Program acceptance 7. Work initiation 8. Work monitoring 9. Workers allocating 10. Work monitoring 11. Continuous evaluation 12. Tenure control 13. Redundancy
Education & training A-04	Career management A-05	Final activities A-06
1. Needs planning 2. Conformity checks with the education programme 3. Out of plan cases check 4. Check if it is possible in side of organization 5. Outsourcing 6. Decision about outsourcing 7. Contracting 8. Providing the education programme 9. Control of program providing and diploma issuing 10. Evidence 11. Reporting 12. Analysis of realised education programme 13. Conformity check 14. Non conformity reporting 15. Correctives	1. Situation analysis 2. Need planning 3. Medium term plan verification 4. Candidate list 5. Team formation for competence 6. Competence score 7. Ranking list 8. Decision about in addition of educ. 9. Decision check 10. Additionally education 11. Check of the conditions 12. Ranking correction 13. Plan implementing control 14. Promotion 15. Check the decision about promotion 16. New contract 17. Candidate work monitoring 18. Periodical evaluation 19. Redistribution	1. Reporting 2. Update 3. Process analysis 4. Process quality measurement 5. Improving measures planning 6. Improving measures plan implementation 7. Preparing inputs for the new process cycle

A developed and documented process of human resource potential management and a procedure for career management prevent behaviour such as nepotism at employment, incompetence of selected candidates, cheating at employment competition, all typical for numerous organizations in Croatia, especially those

owned by the state, the fact that has also had a significant effect on the economic situation in Croatia. Modelling human potential management process and making a written procedure for career management, as well as lower level documentation (work instructions, criteria, forms and the like), are not a responsibility of one individual in the organization. Business process is a complex structure that requires interdisciplinary holistic approach. The process team responsible for modelling, and later also for managing the process in its application, should be composed of various profile professionals. It is estimated that the optimal result would be achieved by a process team consisting of: a lawyer, an economist, a social worker, an occupational safety professional, a human resource potential manager, a quality manager. Consultations may also be made with the experts of other professions such as physicians, psychologists and others, although most organizations do not have them in its composition.

Such an approach changes the dominant value system in an organization, which means that in a situation when they have to cut business costs, they first decrease investments in education, training of employees, salaries and number of employees. This primitive way should be replaced by affirmation of the idea that managing human potential is significant for success of the organization. In this way it comes to the understanding that people are the most valuable assets of the organization [2].

The career management process step as a structural element of the human potential management process should be documented in a written procedure. This facilitates the conduct of this process step activities, without which it is not possible to prove and document that the organization manages the human resource potential process. The shown procedure is one of the possible solutions. It represents an original solution, but not the only one possible. The process team in charge of human resources management in the organization, depending on the level of its competences, may elaborate a different procedure. The only condition is that the procedure enables career management of employees and that it is possible to document it, and in this way also prove it.

Human potentials as a resource

“The phrase human resources indicates people of certain knowledge and attributes, that is abilities, which enable a person to use production means, in order to satisfy his personal and production consumption“ [10].

Human resources present a group of individuals making the workforce of an organization, business sector or economy. In the organization vision, the employees are seen as its asset, the value of which is increased by development [7].

Characteristic for the dominating concept of neoliberal capitalism is the so called “... hard management that tries to maximize productivity and profit and sees a worker as a resource, and the managers are primarily

responsible to the shareholders, while soft management of human resources is open to development of employees, is not inclined to firing people (except in extreme cases) and also takes the interests of employees into consideration“ [4].

A resource, according to its original meaning (stock, reserve, source) [1], may be used or not. In this sense the human potential management process, and within its scope the career management process step, present a prerequisite for optimal use of the so called human resources and their putting into function of sustainable successfulness of an organization. Thereby it is necessary to avoid a possible conflict by: 1) focusing only on organizational objectives or 2) individualization of objectives and giving unnatural favours exclusively to employees. This conflict may be avoided if the employees' career development is a result of interaction and integration of the individual and the general, i.e. individual goals of people and objectives of the organization.

DISCUSSION

Great majority of organizations in Croatia, including those having a certified quality management system under ISO 9001:2008, does not have a documented process of human resource potential management, and consequently no career management procedure. The mentioned standard requires identification of business processes and process management, but it does not suggest a methodology for documenting these processes. It is therefore logical to ask in which extent the human potential in these organizations are managed and if the career management may be proved, and how successfulness is measured. An organization may have a significant human resource potential, but it is important what value is made by this potential in relation to spent resources. In this sense an organization should monitor the efficiency of its intellectual capital [8].

The efficiency of spending resources, including human potentials, i.e. intellectual capital, is materialized at the organization's micro level in its business results and at the macro level in the degree of competitiveness of Croatian economy. At the micro level there are examples of successful organizations. Their successfulness may be measured in two directions: 1) in relation to the objectively possible or optimal that is hard to determine and 2) in relation to the origin of control (plan, previous period, industry average, standards dimension). As for the competitiveness of Croatian economy as a possible measure of efficiency of human resource potential management, the facts are devastating. In the period from 2006 to 2011, on the global competitiveness scale of the World Economic Forum, Croatia dropped down for 25 places, from 51st to 76th place out of 139 world countries (Table 2) [12]. That possible means two things:

- other countries are developing faster,
- Croatian economy is not managed well.

Table 2. *Croatian position in the global competitiveness rankings*

Year	Position
2002.	-
2003.	-
2004.	79
2005.	64
2006.	51
2007.	57
2008.	61
2009.	72
2010.	77
2011.	76

As the main problem of the competitiveness growth of Croatian economy, cited: [6]

- inefficient state bureaucracy – 18,8% cause;
- tax rates – 13,8% cause;
- tax regulation – 13,5% cause;
- corruption – 13,2% cause;
- availability of capital – 10,9% cause;
- labour law restrictions – 8,8% cause, etc.

This very bad position of the competitiveness of Croatian economy is caused by several big crisis, as follows:

- crisis of the system of values which characteristics are: incompetence, nepotism, lack of business ethics, corruption, money laundering, pillage of national assets, etc.;
- moral crisis caused by the travesty system of values which exists in Croatian society for almost twenty years;
- crisis of management on all levels, from the government to the country football team and volunteer fire department around the country, and
- depression and economic crisis that lasts too long, much more than in other countries.

For this problem solving, Croatia needs to provide many structural reforms such as: fiscal reform, social care reform, pension system reform, tax rates reform, health care system reform, agriculture system reform, production sector reform, etc.

All of these reforms will have a chance to succeed only if the system of values will be changed and supporting the values such as: competence, knowledge, business ethics, social responsibility and democracy. For this extremely important reform, a new quality level of management is necessary.

The quality of management at the national level is inter alia a reflection of the human potential management. The way of employing people in public administration and companies in the majority ownership of the state and the local administration and self-governing units, criteria applied for nominating managing and supervising boards, have an impact on the level of the economy competitiveness. Out of this it may be concluded that a part of the solution, meaning possible improvements, may be found in modelling the business process of human resource potential management and within this process modelling of career management,

clearly defined criteria and their practical application at all management levels.

CONCLUSION

The structure of the human resource potential management process shows a logical sequence of process steps, from input requirements of the user for competent workers to the career management and final activities in the process. It also shows that career management is a significant process step, without which there is actually no human resource potential management. The presented decomposition of the human potential management business process, further decomposition of process steps to the level of activity and presentation of the career management procedure enable the management of an organization to have a constant insight into the structure and complexity of the human potential management issue. In this sense the aim of this research is achieved because it enables the interested parties to have an insight into shortcomings of the existing system and offers a possible good quality applicable solution. The applied decomposition method of the human resource potential management business process to the level of process steps and further to the level of activity, made it possible to review the complex structure of the process and a logical sequence of activity conduct in the process, with the focus on control points where various types of controls are made: checking, supervision, comparison, decision making and the like, since the process is actually being managed at the control points. Following this structure from the entry into the business process to the exit in the form of various reports and results of process cycle analyses, the management responsible for human potential management may significantly increase the efficiency of human potentials and through activities in the career management procedure actually influence the transformation of the human potential into the human capital.

Certain prerequisites have to be ensured for transformation of the human potential to the human capital. The most important is affirmation of a value system and organizational culture based on: honesty, work, competence, business ethics, social responsibility, sustainability, communication and democracy. It has to be a strategic decision of the organization that includes strategic restructuring of its management system. Within the scope of this, the modelling of the human resource potential management process as an integral part of the process structure is understood, as one of structural elements of the management system of an organization. This confirms the basic hypothesis of this paper, namely that the modelled business process of human potential management and within it a process step career management documented by a written procedure, enables easier career planning, better organization of career management, fact-based career decision making, coming to the level of human potential management and easier control of the process quality.

Further research on significance of career management from the viewpoint of the management system quality should be carried out in several directions: 1) existing manner of career management, 2) level of implementation and documentedness of the human resource potential management process, 3) manner of human resource potential management and 4) contribution of career management to the management system quality. In this way it would be possible to undoubtedly verify the gap between the wished and the existing, this being an essential prerequisite for decision making about how to manage the human potential based on facts, as one of quality management principles. A very important point of view is that an expense for human potential improvement and development does not have to be treated as a classic cost, because it has the nature of investment. This point of view needs to be accepted as a philosophical approach and as a daily practical action.

REFERENCES

- [1] V. Anić: „Rječnik hrvatskoga jezika“, Zagreb: Novi Liber, 1994.
- [2] J.B. Barney, P.M. Wright: “On Becoming a Strategic Partner: The Role of Human Resources in Gaining Competitive Advantage”, Ithaca, NY, USA: Center for Advanced Human Resource Studies Working Paper Series, 1997.
- [3] M. Buble: “Osnove menadžmenta”, Zagreb: Sinergija, 2006.
- [4] M. Cook, B. Cripps: „Psihološko procjenjivanje na radnome mjestu“, Zagreb: Školska knjiga, 2009.
- [5] M. Drljača: „Modeli upravljanja potpunom kvalitetom u funkciji povećanja poslovne izvrsnosti“ – doktorska disertacija, Fakultet za menadžment u turizmu i ugostiteljstvu Sveučilišta u Rijeci. Opatija: 2010, 19-20.
- [6] M. Drljača: “Sustav upravljanja kvalitetom u Hrvatskoj i europski kontekst”, Zbornik radova I. naučno-stručnog skupa Politehnika 2011, U susret evropskim integracijama u oblasti kvaliteta, bezbednosti, zdravlja na radu i zaštite životne sredine, Visoka škola strukovnih studija Beogradska Politehnika, Beograd, 2011, str. 41-45.
- [7] F. H. II. Elwood, W. T. Jr. James: “Trends Toward a Closer Integration of Vocational Education and Human Resources Development”, Journal of Vocational and Technical Education, 12, 1996, 2, p. 7.
- [8] N. Knežević, D. Hulenčić: “Poslovna izvrsnost i efikasnost intelektualnog kapitala”, Poslovna izvrsnost, 1, 2007, 2, 9-29.
- [9] A.M. Ould: „Business Processes“, Chichester, England, UK: John Wiley & Sons Ltd., 1995.
- [10] I. Vinski: „Ljudski kapital i neto produkt suvremene jugoslavenske emigracije“, Ekonomski pregled, 3-4, 1972, p. 123.
- [11] V. Vujić: „Menadžment ljudskog kapitala“, Rijeka: Sveučilište u Rijeci, Fakultet za turistički i hotelski menadžment Opatija, 2004.
- [12] World Economic Forum: The Global Competitiveness Report 2010-2011.- Geneva: 2010.

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UPRAVLJANJE KARIJEROM U FUNKCIJI KVALITETA SISTEMA UPRAVLJANJA

Miroslav Drljača

Rezime: Uvođenje sistema upravljanja kvalitetom treba da bude strateška odluka organizacije. Ima za cilj poboljšanje karakteristika sistema upravljanja organizacije kako bi se doprinelo njezinoj konkurentnosti i boljem pozicioniranju na tržištu. Ovaj projekt jedan je od najznačajnijih za svaku organizaciju i zavisi od kvaliteta ljudskih potencijala. Svaka organizacija raspolaže ljudskim potencijalom, ali ne uspeva svaka od tog potencijala izgraditi ljudski kapital. Da bi se taj proces pokrenuo i imao izgleda za uspeh potrebno je upravljati karijerama. Postupak upravljanja karijerom jedan je od pisanih postupaka koji podržava proces upravljanja ljudskim potencijalima u organizaciji. Nakon Pravilnika o organizaciji i sistematizaciji, Kataloga opisa poslova, analitičke procene i Tarifnog priloga te Ugovora o radu, Postupak upravljanja karijerom jedan je dokumenata kvaliteta koji može presudno uticati na pretvaranje ljudskih potencijala u ljudski kapital.

Ključne riječi: kvalitet, sistem upravljanja, upravljanje karijerom.

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ORGANIZATIONAL BEHAVIOUR, CRISIS MANAGEMENT AND HUMAN RESOURCES DEVELOPMENT

Abstract: *Disciplines of organizational crisis management and human resources development (HRD) share similar problems and field of research, so the scholars and practitioners in both disciplines focus on the question of how could certain elements within the organization (culture, systems, technology) influence individual, group and organizational behavior. Scientists dealing with crisis management and human resource development are likewise involved in the research stemming from common theoretical perspectives, especially in critical reconsideration of human capital/ economic, psychological and strategic/systemic aspects. Besides, the main goal of both disciplines is to deal with the impacts of the organization on the individual, the community and society. The main aim of crisis management is to protect and sustain key organizational stakeholders, communities and resources in the case of a crisis event; the aim of human resource development is to develop human intellectual and emotional abilities and skills for the performance of various tasks for the sake of organizational and social sustainability. Therefore, it seems that disciplines of crisis management and human resource development overlap significantly, although these relationships and their relative implications for the research and practice are yet to be explored. This paper will specify the relationships and ties between these two disciplines, as well as their mutual interrelations.*

Key words: crisis management, human resource development, organizational behavior.

INTRODUCTION

When considering organizational behaviour of the disciplines of organizational crisis management and human resource development (HRD), one can observe that those two disciplines share similar problems and fields of research, so scientists and practitioners in both fields focus on the way in which elements within an organization (culture, systems, technology) can influence an individual, group and organizational behaviour, as indicated by Mitroff and Pearson, as well as Swanson [1],[2]. Scientists dealing with crisis management and human resource development are likewise involved in research stemming from common theoretical perspectives, especially in critical reconsideration of human capital/economic, psychological and strategic/systemic aspects [3],[4],[5]. Besides, the main feature of both disciplines is ultimate concern about impacts of the organization on individuals, community and society. The main goal of crisis management is to protect and sustain key organizational stakeholders, communities and resources in the case of a crisis event; the aim of human resource development is to develop human intellectual and emotional abilities and skills for the performance of various tasks [6] for the sake of organizational and social sustainability [7],[8]. Therefore, it does seem that the disciplines of crisis management and human resource development overlap significantly, although

these relationships and their relevant implications for research and practice are yet to be explored [9]. Implications arising from existing crisis management literature for human resource development are mostly limited to proposals concerning the training for crisis management. However, as observed by McConnell and Drennan, the level of „symbolic readiness which does not reflect operational realities“ often arises when crisis training and exercises are the focal point of crisis management preparation. Learning and intervention concerning performance are likewise usually related to other human resource management (HRM) responsibilities like management of emergency benefits for displaced workers and compliance with federal and state laws relating to safety [10],[11],[12] in crisis situations, frequently overshadowing the role and contribution by which other interventions of the department of human resources could contribute to crisis management. As a result, the relationship between human resource development and crisis management received limited attention both from scientists, as well as practitioners, thus limiting the possibility that managers who deal with human resource development understand how the measures and interventions undertaken with the aim of developing human potential can be used as a support for the efforts of crisis managers in the same organization.

THE ROLE OF HRD IN THE EFFORTS OF CRISIS MANAGEMENT

Hutchins and Wang believe that HRD experts can significantly contribute to the crisis management activities in concerning organization. HRD started out as a field oriented towards improvement, problem solving and systems thinking, focusing primarily on the organization [13]. With the appearance of various philosophical paradigms and theoretical assumptions HR focuses on the development of intellectual capital and supporting reconstruction and transformation of the organization [7] for the benefit of individuals, organizations, communities and nations/states [14]. In any case, it is clear that the focus and scope of HRD as a truly integrated global and multidisciplinary profession widen [15], and Torracco observes that HRD has expanded by influencing traditional domains of training, organizational development and career development so that they include issues such as ethics, diversity, human and social capital, development and strategic changes [6]. HRD has likewise widened its scope, with an emphasis not only on organizations, but also considering policy development in developing countries, reform of secondary and higher education and the development of the non-profit sector. This is an integrated perspective, positioning HRD as a central player in helping organizations develop intellectual and social capital necessary for effective management of potential or actual crisis events. Five philosophical metaphors by Watkins on HRD are applicable when it comes to crisis management: HRD as organizational problem solvers, as initiators or facilitators of organizational change, as those who build organizational strength and values and develop human capital [16]. Each of these roles is applicable to the process of crisis management.

Problem solving. HRD is a process of defining the problem and its solution with the aim of improving the organization [13]. To this end, the experts must assume proactive role in identification of the problem or the variables which could cause a crisis. Numerous tools and models for analyzing deficiencies on individual and organizational level created by HRD researchers, like the Swanson's diagnosis matrix [5], Rummler and Brache's performance model [17], Cummings and Worley's organizational development model [18] can contribute to the elimination of those deficiencies and therefore prevention of crisis situations. Problem identification and solving is what exactly forms an integral part of crisis management. HRD experts direct their attention more towards problem identification than towards their solving, so they have to be continuously proactive and observe and estimate how internal and external changes influence organizational performance, as well as to seek to identify problems that could have an impact on organization's survival.

Agent of change. Crises frequently instigate organizational changes for better or for worse [19]. Organizational crises and their consequences make the role of HRD professionals as agents of change even

more important. HRD professionals are responsible for the education of organization leaders and employees concerning the process of change management and seeking appropriate interventions which would facilitate changes and help individuals and organizations to better deal with crisis outcomes. A field on which HRD professionals can have a significant impact concerns the promotion of organizational culture which includes preparedness for a crisis. Within the scope of crisis management [20], [1] organizational culture is seen as one of main predictors of crisis events, since it represents shared beliefs on the issues like risk and organizational vulnerability to crisis situations [21]. Bearing this in mind, the main task of HRD professionals is how to create mentality and organizational environment prepared for a crisis. Such a culture can be developed through training and education an organization's leaders and employees of how to seek signs of an upcoming crisis and continuously estimate organizational practices [22]. Besides, HRD experts can use changes resulting from the crisis in order to promote organizational learning. Through strategic interventions within the scope of learning they can help organizations to establish efficient systems for crisis communication, build a knowledge base on crises, develop critical thinking in an individual, as well as skills of rethinking and knowledge reevaluation [23].

Organizational designer. Experts functioning from this perspective can see clear connection between the working structure and development of human potential [16]. What is particularly important in organizational design is a continuous assessment of the gap between actual organizational reality and the state which the organization would like to achieve [24] by using diagnostic tools focused on the performance. HRD experts assuming the role of organizational designers should carefully diagnose and choose structures and communications' systems, authority and responsibility in order to enable the achievement of organizational goals [16]. Mitroff's model of crisis system [20] can be a useful framework for HRD professionals while considering numerous organizational factors which can contribute to a crisis. For example, HRD professionals can help organization leaders to make strategic decisions concerning the choice of technological systems and overall organizational structure, what are two critical elements that can cause a crisis event. Besides, these experts can help organizations design corresponding information systems [25] and crisis communications channels [10], [11], [26] so the organization members can timely and effectively share and process information with the onset of a crisis event.

A well-designed organizational structure will likewise enable organization leaders to efficiently respond to uncertainties facing the organization [27]. Finally, HRD professionals assuming the role of organizational designers could also significantly contribute to the development of crisis management system. For example, they can play an important role in the creation

of a system which will enable immediate identification of early crisis signals and then redesign of the organizational crisis management system in order to achieve better results.

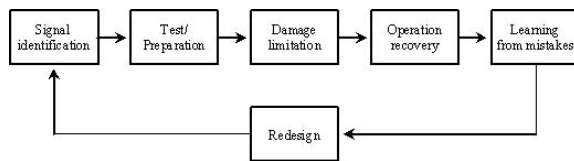


Figure 1. Crisis management model. Source: Mitroff and Pearson, 1993

Organizational empowerer/meaning maker. HRD experts who accept this metaphor have a tendency to adopt a critical perspective and try to transform people and organizations to encourage long-term success [16]. Organizational crises management should be seen as an effort in that direction. Swanson and Holton have suggested strategies for transforming action perspectives, including (a) identification of potential unwanted consequences of an action strategy, (b) ensuring that organization members assume full responsibility for their actions and (c) they offer alternative for action in the form of learning-oriented behavior instead of control-oriented behavior [13]. Such critical perspective is especially useful in promoting organizational awareness and respecting merits of and the need for crisis management. They can likewise help in reducing negative effects of shared beliefs, values and process of understanding for individuals involved in crisis situations [21],[26]. HRD professionals with a critical approach must look for corresponding strategies in order to include organizational leaders and employees into collective reasoning and understanding, as well as critical reflection on crisis experiences, for example, through dialogue and collective learning activities.

Human capital developer. Scientific community agrees one of the fundamental roles of HRD to be the development of human resources through training and development activities.

One of the factors contributing to the occurrence of a crisis, according to Mitroff and Pearson, is human error [1]. The fact is that individuals make mistakes and certain decisions are based on the lack of information what indicates the need for and the significance of training and development. It also represents enormous possibilities for HRD professionals primarily responsible for human capital development and organizational efficiency. In crisis circumstances, it is extremely important that organizations build a knowledge base on crises and capacities to cope with them. For this purpose, training can be an efficient means for the reduction, if not elimination, of the influence of elements which could probably cause a crisis, like complex technology and human factors. Training can be applied in each phase of the crisis management process from identification to redesigning in order to help organization members to learn

systematically about nature and causes of crisis events and become capable of coping with a crisis when it occurs. Besides, numerous studies have discovered that risk perceptions of organizational leaders and their ability of dealing with them have a direct impact on the organizational plans for preparation, prevention, reaction to crisis and crisis management [1, 28, 21, 29]. It is vital that HRD professionals provide not only general training for the development of crisis management awareness, but also training for the improvement of crisis leadership in order to ensure the development of proper and adequate mentality in organizational leaders, as well as appropriate perception relating to risks which could then lead to shared beliefs and culture reflecting organizational reality [30]. In the meantime, with a lot of essential training, it is quite likely that the leaders will make decisions based more on the information and knowledge in order to avoid or reduce potential negative outcomes of a crisis. In the same line of thinking, HRD professionals should assume responsibility for the improvement of individuals and organization learning abilities so that organization members have knowledge bases for crisis management not only when a crisis occurs, but also the ability of documenting, analyzing, comparing and sharing knowledge of their crisis experiences [31]. This can be achieved through individual and organizational learning which is strategically harmonized with the organization's aims and values [11].

Finally, HRD professionals can play a crucial role in the facilitation of organizational crises management by (a) insisting on the development of indispensable leadership qualities (e.g. strategic thinking, communication, empowerment, trust and integrity),

(b) encouraging organizational culture and learning abilities which will enable organizations to foretell crisis situations [32] and learn from crisis experiences, (c) harmonizing crisis management with business results using key performance indicators (e. g. a balanced organizational performance map) [11] and (d) establishing crisis communications channels [26].

These possibilities represent three main aspects of HRD training and development (e.g. leadership development), career development (e.g. succession planning) and organization development (e.g. organizational culture, organizational learning, strategic compliance) and further emphasize the fundamental role which HRD could play in the efforts of crisis management.

IMPLICATIONS FOR HRD RESEARCH, THEORY AND PRACTICE

Efficient crisis management is of crucial significance for the success and continuity of an organization at the time of intensive changes and complex systems. Analysis of current literature and the above stated indicate several implications which could be of use for future HRD research and development of theory and practice.

Hutchins and Wang provide two approaches to the improvement of HRD research on the basis of the analysis of theory and practice of organizational crisis situations' management [9]. First, the majority of existing HRD research has been conducted in quite stable and predictable conditions in which rational and logical decisions help in performance achievement. However, major crises in organizations during the last decade show that decision making and operation frequently occur in dynamic and unpredictable circumstances, rather than in a static environment in which most research is conducted. In that sense, it is important that HRD researchers think about the way in which HRD interventions concerning learning and performance achievement can be used in complex times of changes and to understand the relationships of these interventions with success or failure [33]. Several HRD studies have been devoted to cognitive, behavioral, psychological and technological implications of a crisis on the crisis interventions in organizations. The other approach focuses on additional research of the crisis management process. Significant part of organizational crises research is focused on three of five areas of crisis management, especially crisis preparation, crisis limitation and recovery, that is, continuation of operations after a crisis. Despite the importance of learning for the prevention of crises and crisis preparation [22], the exploration of ways in which organizations can identify new learning opportunities arising from a crisis event is a focal area in which HRD research can involve stakeholders in order to contribute to the consideration of system redesigning and the processes which led to the problems. Common HRD analysis methods like evaluation research [34] and action learning [35] can serve as effective interventions in order to help the stakeholders identify and process crisis events, as well as to improve current practices in crisis management. Traditionally, learning is considered as a separate step in the crisis management process and frequently occurs in the form of crisis training in the planning phase or as a reflection on practices immediately after a crisis. When included in planning, lessons learned are usually related to the HRM practices like management of emergency benefits for displaced workers, coordination with the employee assistance program in compliance with federal and state laws on security [11],[12] in crisis situations. Considering learning as a component of crisis management, HRD researchers are more prone to assume a proactive role in helping the organization search for opportunities to learn how to prevent, deal with and finally recover after crisis situations. In any case, it would be useful to collect even more empirical evidence and case studies supporting the claim that learning contributes to efficient crisis management in each phase of this process.

DEVELOPMENT OF HRD THEORY

Overview of theoretical perspectives governing research in the field of crisis management can be a useful starting point for future theoretical development. Likewise, it would also be useful to reconsider main or emerging perspectives in HRD in order to formulate new or different approaches to research in the field of crisis management. McGuire and associates have suggested four meta-perspectives (language, community/societal, system and psychological) representing a "higher order view" of various theoretical perspectives in HRD. Each of these four metaphors represents a collection of similar individual perspectives as a way of emphasizing the difference between values represented by each of them [3]. For example, meta-perspective systems consist of strategic, line management and evidence-based perspectives, each of whom represents resource based economic perspective of HRD role in organizations. Although the scientists in the field of organization and management have primarily observed crises from the system perspective (meaning how to mitigate operational or financial loss through crisis planning), there is also the need to take into consideration other perspectives (community/societal) what could enhance our understanding of crisis situations management. Earlier studies which explored crisis consequences firstly and foremostly from the aspect of environmental protection and ecology [4], in developing countries or communities located in sensitive ecological areas are excellent examples of how the community or societal perspective has been used for studying the impact of crises on communities. This is in accordance with spreading interest among HRD professionals for national and international HRM [8] where the concept of learning and employee performance has begun to involve the community even in global issues like health, culture, safety and community development within the context of national development policy [15].

HRD PRACTICE

Beside the possibility to improve HRD research and theory, HRD practitioners can find Garavan's strategic HRD model to be a useful framework for the understanding of how could HRD coordinate interventions concerning changes and performance in order to support organizational goals concerning crisis management [37]. This model suggests that HRD is given an integral role in the mission of organization in collaboration with line managers in order to design and develop HRD measures in accordance with HRD policy and organizational culture and values. Garavan's articulation of SHRD model [37] relates learning, performance and change strategies to different organizational levels (organization, group, individual) and stakeholder interests (owner, employee, internal and external users). As one of the features of an organization prepared for a crisis, it is said that within it crisis management is a process encompassing the

entire company and representing systematic coordinated effort which connects human resources, safety, information technologies and other related areas [20],[1]. While HRD practitioners consider how to play the roles specific to crisis management, SHRD model provides a blueprint for understanding not only the way in which HRD interventions will affect organization performance arising from crisis management process, but also the way in which organizational culture and stakeholder roles will influence those interventions in the sense of acceptance, implementation and evaluation. SHRD model provides a wide objective for research of how various crisis factors can interact, influencing results of crisis situations management. Additional implication for HRD practitioners would be to consider crisis vulnerability of current interventions and processes used in the function of HRD. Clardy was the first to apply the practice of risk management on HRD interventions, especially in administration and support of training and development programs which can result in a crisis event [36]. Examples of potential dangers include failure to comply with relevant HR laws and HRD practices (necessary training, copyright laws, fair employment, fees), not using professional standards (ethics, proper application of regulations) in HRD planning, development and evaluation and inefficient management of HRD function (records, controls, reports). Clardy's working protocol for the revision of HRD function (identifying potential risks, planning procedure and implementation of guidelines) could help HRD reduce the risk of specific interventions using programs and policies. Consideration of how crisis vulnerability occurs in HRD function can also help practitioners overcome initial stakeholders' scepticism towards organizational practice of crisis management.

CONCLUSION

Besides having common theoretical roots in critical consideration of economic, psychological and strategic/systemic aspects of human capital, study of the influence of culture, system and technology on the individual, group and organizational behavior is the subject of both organizational crisis management and human resource development, from somewhat different, but complementary angles and aspects. Different approaches are determined by different goals since crisis management tries to protect and support key organizational stakeholders, communities and resources in the case of a crisis event, while human resource development wants to develop human intellectual and emotional skills and abilities for the performance of various tasks for organizational and social sustainability. Accumulation of human knowledge and abilities definitely increases the overall potential of employees as a basic resource of every organization which can be useful both in normal (regular) conditions and crisis (emergency) situations. The cause of why this synergy did not earn appropriate scientific and practical attention, that is, why it is

generally reduced to implications related merely to training, lies foremostly in the reduction of holistic concept of crisis management to training, which is at the same time often reduced to symbolic ritual, while human resource development is related to other aspects of personnel management, and potential contribution to crisis management is unduly neglected. Because of all this, the relationship between human resource development and crisis management has not so far been the subject of consideration, research and action to the extent necessary, neither in the academic sphere, nor in the management arena. Mutual dialogue, partnership and joint efforts of theorists and practitioners dealing with human resource development and crisis management can undoubtedly provide results which would significantly improve personnel operation in both normal circumstances and in a crisis situation.

REFERENCES

- [1] I. I. Mitroff, C. M. Pearson: "Crisis management: A diagnostic guide for improving your organization's crisis-preparedness", San Francisco, Jossey-Bass, 1993.
- [2] R.A. Swanson: "Human resource development: Performance is the key", *Human Resource Development Quarterly*, 62(2), 1995, 207-213, <http://dx.doi.org/10.1002/hrdq.3920060208>
- [3] D. McGuire, T. N., Garavan, D., O'Donnell, S. Watson: "Metaperspectives and HRD: Lessons for research and practice", *Advances in Developing Human Resources*, 9 (1), 2007, 120-139, <http://dx.doi.org/10.1177/1523422306294500>
- [4] P. Shrivastava: "Crisis theory/practice: Towards a sustainable future", *Industrial & Environment Crisis Quarterly*, 7(1), 1993, 23-42.
- [5] R. A. Swanson: "In praise of the dependent variable", *Human Resource Development Quarterly*, 7(3), 1996, 203-207.
- [6] R. J. Torraco: "Human resource development transcends disciplinary boundaries", *Human Resource Development Review*, 4(3), 2005, 251-253.
- [7] J. Gilley, A. M. Maycunich: "Strategically integrated HRD" - Boston: Perseus, 2003.
- [8] G. N. McLean: "National human resource development: What in the world is it?", *Advances in Developing Human Resources*, 6(3), 2004, 269-275.
- [9] H.M. Hutchins, J. Wang: "Organizational Crisis Management and Human Resource Development: A Review of the Literature and Implications to HRD Research and Practice", *Advances in Developing Human Resources*, 10(3), 2008, 310-330.
- [10] J. N. Kondrasuk: "The effects of 9/11 and terrorism on human resource management: Recovery, reconsideration, and renewal", *Employee Responsibilities & Rights Journal*, 16(1), 2004, 25-36.
- [11] N. R. Lockwood: "Crisis management in today's business environment: HR's strategic role", *SHRM Research Quarterly*, 5, 2007.
- [12] J. I. Pasek, "Crisis management for HR", *HR Magazine*, 47(8), 2002, 111-115.
- [13] R. A. Swanson, E. F. Holton: "III Foundations of human resource development", Berrett-Koehler, 2001.
- [14] G. N. McLean, L. D. McLean: "If we can't define HRD in one country, how can we define it in an international context?" *Human Resource Development International*, 4(3), 2001, 313-326.

- [15] G. N. McLean, A. M. Osman-Gani, E. Cho (Eds.): "Human resource development as national policy" [Special issue]. *Advances in Developing Human Resources*, 6(3), 2004.
- [16] K. E. Watkins: "Five metaphors: Alternative theories for human resource development." In D. Gradous (Ed.), *Systems theory applied to human resource development* Alexandria, VA: ASTD Press, 1989. 167-184.
- [17] G. A. Rummier, A. P. Brache: "Improving performance: How to manage the white space on the organizational chart" San Francisco, Jossey-Bass, 1995.
- [18] T. G. Cummings, C. G. Worley: "Organization development and change (7th ed.)" Cincinnati, OH: Southwestern, 2001.
- [19] C. K. Barnett, M. G. Pratt: "From threat-rigidity to flexibility: Toward a learning model of autogenic crisis on organizations" *Journal of Organizational Change Management*, 13(1), 2000, 74-88.
- [20] I. I. Mitroff: "Why some companies emerge stronger and better from a crisis" New York: AMACOM, 2005.
- [21] C. M. Pearson, J. A. Claire: "Reframing crisis management", *Academy of Management Review*, 23(1), 1998, 58-76.
- [22] K. H. Roberts, R. Bea: "Must accidents happen? Lessons from high-reliability organizations", *The Academy of Management Executive*, 15(3), 2001, 70-78.
- [23] C. Argyris, D. A. Schon: "Organizational learning II: Theory, method, and practice" Reading, MA: Addison-Wesley, 1996.
- [24] J. Lorsch: "Organization design: A situational perspective. In *Organizational dynamics*", New York: American Management Association, 1997.
- [25] J. Galbraith: "Organization design: An information processing view", *Interface*, 4, 1974, 28-36.
- [26] B. Turner: "The organizational and interorganizational development of disasters", *Administrative Science Quarterly*, 21, 1976, 378-397.
- [27] H. Simon: "Administrative decision making", *Public Administration Review*, 25, 1965, 31-37.
- [28] I. I. Mitroff, C. M., Pearson, L.K.M. Harrington: "The essential guide to managing corporate crises: A step-by-step handbook for surviving major catastrophes", New York: Oxford University Press, 1996.
- [29] A. H. Reilly: "Exploring human resources issues in organization crises: A preliminary analysis of the banking industry", *Current Topics in Management*, 3, 1998, 283-298.
- [30] L. P. Wooten, E. H. James: "Linking crisis management and leadership competencies: The role of human resource development", *Advances in Developing Human Resources*, 10(3), 2008, 352-379.
- [31] E. Stern, B. Sundelius: "Crisis management Europe: An integrated regional research and training program", *International Studies Perspectives*, 3, 2002, 71-88.
- [32] P. Lagadec: "Learning processes for crisis management in complex organizations", *Journal of Contingencies and Crisis Management*, 5(1), 1997, 24-31.
- [33] R. W. Herling, "Bounded rationality and the implications for HRD", *Advances in Developing Human Resources*, 5(4), 2003, 393-407.
- [34] H. Preskill, R.T. Torres: "Evaluative inquiry for learning organizations", Thousand Oaks, CA Sage, 1999.
- [35] M. J. Marquardt: "Optimizing the power of action learning", Palo Alto, CA: Davies-Black, 2004.
- [36] A. Clardy: "Toward an HRD auditing protocol: Assessing HRD risk management practices", *Human Resource Development Review*, 3(2), 2004, 124-150.

BIOGRAPHY

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ORGANIZACIONO PONAŠANJE, KRIZNI MENADŽMENT I RAZVOJ LJUDSKIH RESURSA

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Rezime: *Discipline organizacionog kriznog menadžmenta i razvoja ljudskih resursa (HRD) dele slične probleme i oblasti istraživanja, tako da se istraživači i praktičari u obe discipline usredsređuju na pitanje kako pojedini elementi u okviru organizacije (kulture, sistemi, tehnologija) utiču na individualno, grupno i organizaciono ponašanje. Naučnici koji se bave kriznim menadžmentom i razvojem ljudskih resursa su takođe uključeni u istraživanja koja proističu iz zajedničkih teorijskih perspektiva, posebno iz kritičkog preispitivanja ljudskog kapitala/ekonomskih, psiholoških i strateških/sistemskih aspekata. Pored toga, glavni cilj obe discipline je izučavanje uticaja organizacije na pojedince, zajednicu i društvo. Glavni cilj kriznog menadžmenta je zaštita i održavanje ključnih organizacijskih stejkholdera, zajednica i resursa u slučaju kriznog događaja; cilj razvoja ljudskih resursa je razvoj ljudskog intelektualnog kapitala i emocionalnih sposobnosti i veština za obavljanje različitih poslova u cilju organizacijske i društvene održivosti. Imajući ovo u vidu čini se da se discipline kriznog menadžmenta i razvoja ljudskih resursa u značajnoj meri preklapaju, mada ove odnose i njihove relativne implikacije za istraživanje i praksu tek treba izučiti. U radu se navode odnosi i veze između dveju disciplina kao i njihovo međudejstvo.*

Ključne reči: krizni menadžment, razvoj ljudskih resursa, organizaciono ponašanje.

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MOBBING: CAUSE OF ACCIDENTAL RISK IN ORGANISATIONS

Abstract: *Since each organisation creates specific corporate culture that defines behaviour of the employees, it also creates rules and procedures of internal communication. Therefore, company management should define internal communication security procedures to ensure security their employees on all levels. Efficient procedures can help employees avoid mobbing and conflicts that might have negative influence on company results*

Key words: mobbing, occupational risk, accidents, risk.

INTRODUCTION

Mobbing is a specific type of behaviour in the workplace, when an individual or a group of individuals systematically psychologically (morally) abuses another individual with the purpose of ruining his/her reputation, honour, dignity and integrity in order to force the victim out of the workplace. The abused individual is often helpless and unable to defend him/herself.

The term mobbing¹ was coined twenty years ago, when the results of the research conducted by a psychologist Konrad Lorenz² were made public. Lorenz described the type of animal behaviour when members of a group team up against one member of the group, attack and force the member out of the group. Systematic research of mobbing began twenty years ago and in 1984 a psychologist Heinz Leymann³ first defined mobbing as a specific type of behaviour in the workplace, i.e. psychic terror carried out by an individual or a group who systematically psychologically (sometimes physically) abuses and humiliates another individual with the aim of damaging his/her reputation, honour, human dignity and integrity and ultimately driving the victim to quit the job. (Kuhn: 2002). Mobbing is manifested in hostile and unethical communication with the targeted victim, who is thereby pushed in a subordinate position, which makes him/her defenceless before the abuser(s).

The definition of mobbing in the French Social Modernisation Act from 2002 is closest to what has been recognised in every day working life: "Mobbing is psychic abuse which occurs in repetitive activities with the aim or consequence of degrading the employee's working conditions and can lead to an assault and inflict damage to human rights and dignity as well as harm physical or mental health or compromise professional future of the victim." (Leymann: 1996)

Consequences of mobbing for companies are huge and fatal because the employee who is subjected to psychic violence is not motivated, so his/her working abilities are diminished significantly.

Mobbing can be displayed horizontally and vertically. Vertical mobbing is displayed when a superior abuses a subordinate employee or one subordinate employee after another until he/she destroys the whole group, or when a group of employees abuses their superior (which happens in 5% of the cases). Horizontal mobbing occurs among the employees of an equal hierarchical status. According to the research 55% of the cases are vertical and 45% horizontal mobbing (Leymann: 1996). It had been regarded in the past that mobbing was exclusively vertical. However, a high number of cases of horizontal mobbing shows that the employees like to use inhumane methods, especially when they help humiliate a colleague of equal rank or prevent him/her from being promoted.

The victim is constantly exposed to criticism, accused of doing mistakes which objectively have not been done by the victim, but are the consequence of a deliberate elimination or damage done by the perpetrator. The abusers unjustly underestimate the results of the targeted victim and deprive him/her of important information. The targeted victim is laughed at and his/her way of speaking, posture, walking, dressing, private life, nationality, gender, race, etc. The abusers spread rumours and slander in the attempt to humiliate the victim. They engage in sexual intrigues, threaten with physical and sexual harassment, terrorise the victim with telephone calls and in the case of perpetrator's mistake, the victim is denied an apology.

The most common consequence of mobbing is the unconditional resignation by the victim so he/she is allowed (forced) to leave the company. Hospitalisation of the victim is also not rare, often in a psychiatric ward. However, if the victim is physically, mentally and/or politically empowered, the situation changes. The abuser might calm down, choose another victim, or provoke an overt conflict resulting in an unexpected incident which can put the company performance in danger.

¹ mob - a disorderly or riotous crowd of people

² Konrad Zacharias Lorenz (1903-1989), Austrian psychologist who studied negative human behavior and published the results in the book *About Aggression* (1966).

³ Heinz Leymann (1932.), German psychologist who lives in Sweden

Stages of mobbing

Mobbing process usually occurs in five stages which might overlap. At the first stage, it is possible that an unsolved conflict among co-workers results in damaged human relations. At this stage, victim's capacity to communicate well is judged and aggressive tendencies are directed towards the target.

At the second stage, the suppressed aggression escalates to psychic terror. Pulled into the web of intrigue, humiliation and psychological abuse the victim loses his/her professional and human dignity, starts to feel inferior and loses his/her reputation, support and the right to speak. At this stage, the victim's ability to maintain social relations is judged.

At the third stage the abused target becomes the "punching bag" and the "whipping boy", blamed for all the mistakes or failures of the group. This is when his/her personal reputation and performance are judged.

The fourth stage is characterised by an attack on victim's health and his/her desperate "battle of survival", which can cause the burnout syndrome⁴ and psychosomatic or depressive disorders.

At the final, fifth stage, often after the long-term abuse, the victims get ill and start suffering from chronic diseases and disorders, leave work or opt for suicide (Petar, Marjanović, Laušić: 2008).

The consequences of mobbing in the workplace for the company are reduced efficiency and absenteeism due to sick leaves and for the victim physical disorders (chronic fatigue, digestive problems, over- or underweight, insomnia, different pain syndromes, decreased immunity, increased alcohol consumption, need for tranquilizers or cigarettes), emotional disorders (depression, burn-out syndrome, emotional void, loss of the sense of the meaning of life, anxiety, loss of motivation and enthusiasm, apathy or hypomania, adjustment disorder), behaviour disorder (unreasonable risk behaviour, loss of concentration, forgetfulness, anger outbursts, rudeness, hypersensitivity to exterior stimuli, insensitivity, rigidity, being constantly preoccupied with his/her work).

Majority of the people are insufficiently familiar with the term public mobbing. However, the majority of respondents are exposed to systematic psychological abuse in their workplace. The research "Mobbing in Croatia" (conducted via the portal www.posao.hr in 2005 on 812 respondents aged 25-44) shows that even 97% of respondents think mobbing is not discussed sufficiently, although every fourth individual in Croatia

is exposed to it. The question of whether they have ever found themselves in the position to be psychologically abused by their superior or their colleagues was answered positively by 84% of the respondents.

82% of the respondents identify their abusers among their superiors, hence the type vertical mobbing, whilst 17% report suffering from horizontal mobbing. Only 1% believes the abusers are commonly their subordinate associates. If the abuse continued over a longer period, 54% would put up with it, simultaneously searching for a new job, 27% would resign and consecutively look for a new job. No less than 12% would take the abuse without looking for a new position and only 7% would report the abuse to the institutions in charge. Such a small percentage shows that employees do not trust the institutions and perceive them as inefficient and badly organised.

The influence of mobbing on the (business) results of the individual and the company

The research which was carried out on the sample of 700 individuals (49% of the respondents were women and 51% were men) shows that about half the urban population (53.4%) have experienced some form of mobbing in their workplace. This has been well illustrated by the sector where human relationships should be especially valued. The preliminary results of the research "Types of Negative Behaviour as a Possible Source of Stress in the Workplace", carried out by the Croatian Nurses Association (CNA), show that more than half of the nurses in Croatia complain about abuse in the workplace.

The results show that nurses complain about being belittled (39%), yelled at (39%), insulted (31%), about their opinion being ignored (28%), particular members of the team being favoured when allocating tasks (28%), their private life being commented about (23%), etc. Immediate superiors are thereby identified as the most common abusers (40%) as well as the colleagues in their immediate work environment. The researchers emphasize that these are the institutions where teamwork is imperative, i.e. both in the profession and in the whole healthcare system. (Petar, Marjanović, Laušić: 2008)

Who are mobbers?

"A typical mobber" in the workplace is described as the individual who feels inadequate, incompetent and who, due to fear of being exposed, wants to be dominant. Mobbers abuse others out of fear that they would not be appreciated or that they would become victims themselves. Some abusers do this deliberately, with the intent to harm the victim or to force him/her out of the job, e.g. when they feel threatened (regarding their own career) or when there is a surplus in workers and the head office devises ways to downsize (e.g. transfers the employees to jobs far from their homes without covering their commuting costs).

Typically, mobbers are less capable but powerful individuals incapable of love, joy, play, creativity,

⁴ *burn-out* is a progressive stress- and work-related loss of idealism, energy and purpose of own work experienced by people in service professions. Burnout is related to numerous negative emotions, e.g. depression, lack of energy, dissatisfaction, fear, inadequate quality of life, hopelessness, loss of confidence, incapability of clear judgment and decision-making, emotional exhaustion, lack of emotional control due to continuous, long-term exposure to stressful situations, depersonalization - pathologically altered perception of own identity.

giving and sharing. They are easily joined by unstable individuals who, for fear of becoming victims themselves, take the abuser's side. Mobbers hide their inadequacy in other life aspects (most commonly in their private life, marriage or family), by gathering a group of supporters they can prove their power and importance to, at the expense of the victim. Usually, the abusers feel inferior, but by mobbing somebody else, they ensure their dominant position or eliminate the one who stands in their way of success.

RESEARCH ON HARASSMENT (MOBBING) AND VIOLENCE AT WORK AND LEGISLATION

Framework Agreement on Harassment and Violence at Work [9]

“Mutual respect for the dignity of others at all levels within the workplace is one of the key characteristics of successful organizations. That is why harassment and violence is unacceptable.”

Those are introductory words of *Framework Agreement on Harassment and Violence at Work*, published on 26th of April 2007 by BUSINESSEUROPE, UEAPME, CEEP and ETUC which condemn harassment and violence in all their forms. According to the institutions mentioned above, EU directives and national law should define the employers' duty to protect workers against harassment and violence in the workplace (Directive 2000/43/EC of 29 June 2000 implementing the principle of equal treatment between persons irrespective of racial or ethnic origin; Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation; Directive 2002/73/EC of 23 September 2002 amending Council Directive 76/207/EEC on the implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion, and working conditions; Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work).

Creators of the Framework consider it is a mutual concern of employers and workers to deal with this issue, which can have serious social and economic consequences. In that manner, the Framework identifies a few key points about harassment and violence which can affect workplaces:

- The basic forms of harassment and violence are: physical, psychological and/or sexual
- It can be one of the incidents or more systematic patterns of behavior
- It can be amongst colleagues, between superiors and subordinates or by third parties such as clients, customers, patients, pupils, etc.
- It can range from minor cases of disrespect to more serious acts, including criminal offences, which require the intervention of public authorities.

The European social partners recognize that harassment and violence can potentially affect any workplace and any worker, irrespective of the size of the company, field or activity or form of the employment contract or relationship. However, certain groups and sectors can be more at risk. In practice not all workplaces and not all workers are affected.

Framework Agreement on Harassment and Violence at Work entitles a few essential arguments:

- Harassment and violence at work arise due to unacceptable behavior
- Harassment and violence at work can take many forms, some of which may be more easily identified than others
- The work environment can influence people's exposure to harassment and violence
- Harassment occurs when one or more worker or manager are repeatedly and deliberately abused, threatened and/or humiliated in circumstances relating to work
- Violence occurs when one or more workers or managers are assaulted in circumstances relating to work
- Harassment and violence may be carried out by one or more managers or workers, with the purpose or effect of violating a manager's or worker's dignity, affecting his/her health and/or creating a hostile work environment

Raising the awareness and organizing appropriate trainings for managers and workers can reduce the likelihood of harassment and violence at work. Enterprises need to have a clear statement outlining that harassment and violence will not be tolerated. This statement will specify procedures to be followed where cases appear. A suitable procedure will be underpinned by, but not confined to the following:

- It is in the interest of all parties to proceed with the necessary discretion to protect the dignity and privacy of all
- No information should be disclosed to parties not involved in the case
- Complaints should be investigated and dealt with without undue delay
- All parties involved should get an impartial hearing and fair treatment
- Complaints should be backed up by detailed information
- False accusations should not be tolerated and may result in disciplinary action
- External assistance may help
- The victim(s) will receive support and, if necessary, help with reintegration.

Pan-European opinion poll on occupational safety and health [7]

The document mentioned presents research findings from 2011. The research was conducted by Ipsos MORI Social Research Institute at the request of the European Agency for Safety and Health at Work (EU-OSHA). EU-OSHA commissioned Ipsos MORI to develop and conduct a survey of the general public about occupational health and safety. Ipsos MORI carried out surveys in 36 European countries (27 EU member states, 3 EEA countries (Iceland, Liechtenstein, Norway), and 6 candidate and potential candidate countries (Albania, Croatia, FYR of Macedonia, Montenegro, Serbia, Turkey), conducting a total of 35,540 interviews between 24th October 2011 and 17th January 2012.

Below, we summarize the findings from the survey across Europe:

- NEW AND EMERGING RISKS IN OCCUPATIONAL SAFETY AND HEALTH

Around 8 in 10 of the general public across Europe think that the number of people who will suffer from stress over the next 5 years will increase (77%), with as many as 49% expecting this to "increase a lot". While not directly comparable, the ESENER survey similarly found that 79% of managers who think stress is an issue.

- IMPORTANCE OF OCCUPATIONAL SAFETY AND HEALTH FOR ECONOMIC COMPETITIVENESS AND HELPING PEOPLE WORK LONGER

Most Europeans agree that good occupational safety and health practices are necessary for economic competitiveness (86% across Europe agree; 56% "strongly agree"). Views are similar among the active (working) and inactive population (86% agree and 85% agree respectively). Among the general public, there is some variation by age, with 61% of those aged +55 "strongly agreeing" compared to 49% of those aged under 35.

There is a broad consensus that good occupational health and safety practices are important to help people work longer before they retire (87%, including 56% who say they are "very important"). This high level of agreement is evident across all age groups and types of employment. Regional differences are not particularly apparent, although there are some noticeable national differences within the regions. Iceland has the highest proportion of people who consider good occupational health and safety practices as "very important" to help people work longer before they retire (77%), and Hungary was the lowest (37% say it is "very important").

- WORKING TOGETHER FOR RISK PREVENTION

On the whole, workers feel confident that an occupational health and safety problem raised with a supervisor would be addressed (74%, including 40%

"very confident"), although again a significant minority are not confident about this (23%, including 7% "not at all confident"). Employees in small companies are less likely to feel confident that those in larger companies. Regional patterns are evident in Nordic countries and North Western Europe most likely to feel confident that a health and safety problem raised would be addressed and the South Eastern and Southern European countries least likely.

Generally Europeans consider themselves well informed about occupational health and safety (67%, but a significant minority say they are not informed (27%, including 8% "not at all informed"). 82% of employees are "very well informed" compared to half of those who do not work (50% informed). Organization size also appears to affect the extent to which employees feel informed. 42% of those who work in large organizations (with 250+ employees) consider themselves "very well informed" compared to only 28% in companies with less than 10 employees. Among the general public, younger and older people are more likely to feel not informed (29% of 18-34 years olds and 31% aged 55+ compared to only 22% aged 35-54). (As in the 2009 poll, men feel better informed than women on health and safety risks at the workplace (70% vs. 64%). Similar regional differences are apparent with the Nordic countries and those in North Western Europe most likely to feel "very well informed" and South Eastern and Southern European countries the least. The proportion of people who feel "very well informed" about occupational health and safety has increased since the 2009 survey (from 20% to 26% for EU countries).

What were the findings in candidate and potential candidate countries (Albania, Croatia, FYR of Macedonia, Montenegro, Serbia, and Turkey)? In all countries mentioned above, the interviews were carried out by telephone with adults aged 18+, and they were nationally representative samples with quotas set by gender, age, type of area (rural/urban), region and education level.

Figure 1. shows that job-related stress is expected to increase in those 6 countries over next five years, and numbers are similar with those found in the rest of EU countries. General public of those countries also thinks good health and safety practices play a very important role in economic competitiveness and raise the retirement age. But, it is quite interesting that Croatia shows the lowest results on both topics in comparison with the rest candidates and potential candidate countries.

The employees (in all 6 countries) are mostly confident that health and safety issues will be addressed in their workplace, but they are less confident than the employees in most European countries (the exception is Turkey whose workers are much closer to the European results at this matter). The sense of being informed about health and safety in the workplace showed significant differences between those 6 countries and

EU countries (Albanian public does not feel informed about health and safety in the workplace (76%)). The rest of the countries are split almost evenly between those who feel themselves informed and those who do not (app. 50-50%). On the contrary, the European average is two thirds (67%) of the subjects who feel informed about health and safety risks in the workplace.



Figure 1. Candidate and potential candidate countries findings on occupational safety and health in comparison with European average

Research on violence, harassment and discrimination in the workplace in EU [8]

National working conditions surveys in recent years have highlighted a trend towards the increasing incidence of psychological health problems cited as the basis for work related health problems significant factors contributing to psychological ill-health and stress may include bullying or harassment, violence or the threat of violence, as well as various forms of discrimination. Research shows that, if left unchecked, these forms of behavior can have damaging effects, not only on the individual well-being and performance of the person targeted but also on the collective psychosocial work environment and overall organizational and economic performance.

The small percentages reported for all of these issues reveal them to be an exception rather than the norm in the working lives of Europeans. One in 20 workers reports having been exposed to bullying and/or harassment in the previous 12-month period and a similar proportion reports having been exposed to violence, only about one worker in 100 reports experiencing discrimination in relation to religion, ethnic origin or sexual orientation. It should be pointed out, however, that selection bias may lead to underreporting for many of these categories. For instance, it could be the case that many workers subjected to serious instances of abuse (physical or psychological) or discrimination are no longer working and hence do not appear in the target population group „persons in employment“.

It is also the case that certain forms of discrimination – for example, those related to religion, ethnic origin, sexual orientation and nationality – may only realistically apply to very limited subgroups from the survey sample belonging to specific minority

groupings. The low overall incidence of these forms of discrimination tends to conceal a much higher incidence in the groups potentially affected. Therefore, the figures relating to discrimination should be interpreted with caution.

In terms of trends, the incidence of various forms of violence, harassment and discrimination at work has remained broadly stable over the last 10 years, although the levels of exposure to violence appear to be increasing (from 4% to 6% over the period 1995-2005, in the EU only).

Physical violence

Physical violence at work affects just a small proportion of overall workforce: one in 20 workers (5%) overall reports having been personally subjected to violence either from fellow workers or from others. Higher-than-average levels are reported in the Netherlands (10%), France and the UK (both 9%) and Ireland (8%). In general, there is a higher reported incidence of exposure to violence, as well as to threats of violence, in the northern European Member States and a lower reported incidence in the southern Member States.

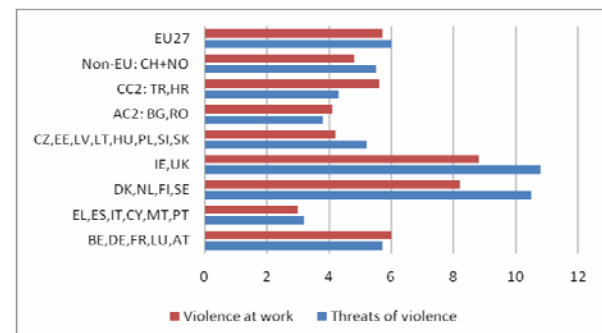


Figure 2. Workers subjected to violence or threats of violence, by country group (%)

Neither sex nor employment nor contractual status appears to have a significant impact on exposure to violence, although there are substantial occupational and sectorial variations. In contrast to standard workplace physical risk exposures, white collar workers are somewhat more exposed than blue-collar workers to risk related to violence, harassment and discrimination (6% compared to 4%).

Harassment

Two forms of harassment are examined in the survey: bullying and/or harassment and sexual harassment (“unwanted sexual attention”).

Around one in 20 (5%) workers reports having been subjected to bullying and harassment in the workplace in 2005. However, this low average figure conceals wide variations between countries, ranging from 17% in Finland and 12% in the Netherlands to 2% in Italy and Bulgaria. Such differences may reflect different levels of cultural awareness of, and sensitivity to, the issue as much as differences in actual incidence. Despite the change in wording of this question, it is

worth noting that Finland and the Netherlands were also the two countries with the highest reported incidence of “intimidation” in the 2000 survey, at 15% and 14% respectively.

Women are more subject to bullying and harassment (6%) than men (4%) and younger women are at greatest risk (8% of those under 30 years old).

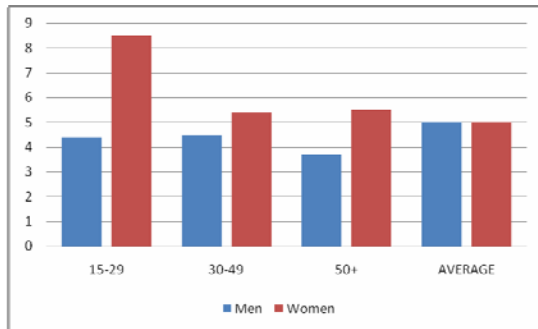


Figure 3. Bullying and harassment, by sex and age, EU 27 (%)

Employees (6%) are more susceptible than self-employed people (3%), while there are no notable differences according to the employment status. There are substantial differences in the incidence of bullying and harassment by company size: those working in larger establishments (over 250 workers) report the highest levels (8%).

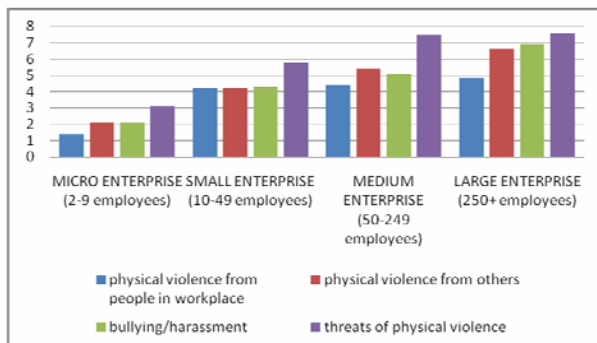


Figure 4. Violence and harassment, by company size, EU27 (%)

Sexual harassment

The incidence of sexual harassment, or unwanted sexual attention, is reported by fewer than 2% of respondents overall but affects three times as many female workers as male. Women in the Czech Republic (10%), Norway (7%), Turkey, Croatia (6%), Denmark, Sweden, Lithuania and the UK (5%) are the most affected, while in some southern European countries the phenomenon is barely reported at all. Italy, Spain, Malta, Cyprus all have incidence of less than 1% overall.

Again, the group most at risk is young women (under 30 years old), where the incidence rises to 6%. The rate is higher for employed workers than for self-employed, and in terms of contract status, women on fixed-term

contracts or temporary agency workers report higher levels (5%) than those on indefinite contracts (2%).

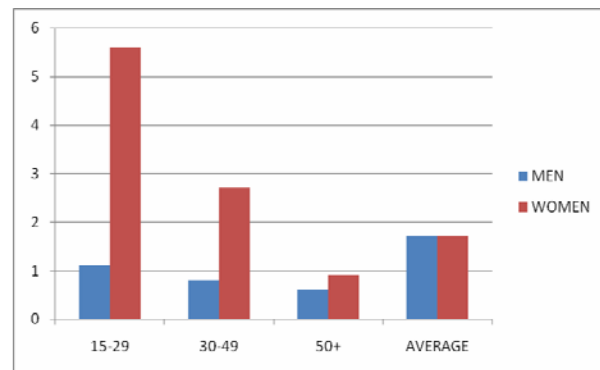


Figure 5. Sexual harassment, by sex and age, EU 27 (%)

Incidence of violence and harassment by sector and occupation

The survey reveals major sectorial differences in the incidence of violence and harassment. In many sectors where physical risks are high – agriculture, construction and manufacturing – relatively low levels of violence and harassment are reported. The reverse is also true: in sectors where physical risks are low, high levels of exposure to psychosocial risk factors are reported. Workers in the health sector are eight times more likely to have experienced the threat of physical violence than workers in the manufacturing sector. The risk of experiencing both violence and harassment is greatest in the education and health sectors, as well as the public administration and defense sectors, with lower but still significantly above average levels in the transport and communication and hotel and restaurant sectors.

Given that the health and social work sector reports the highest incidence of any sector, it is not surprising that, in occupational terms, life science and health professionals and associate professionals (occupational categories including, e.g., doctors, dentists, nurses, dental technicians, etc.) also report high levels of exposure to violence. A high level of occupational skill or specialization does not appear to offer protection in this respect, as professionals are somewhat more affected than associate professionals.

If the figures above are further analyzed, it can be concluded that there are two components of workplace violence: violence from fellow workers and violence from people outside. There are also interesting differences in health and teaching professions between occupational levels. Professionals, those generally holding more senior positions, have a high level of exposure to violence from non-colleagues but comparatively low levels of exposure to violence from colleagues. For associate professionals in both professions, on the other hand, violence is as likely to appear from the people from their workplace as from people outside.

Overall, 6% of public sector workers report having experienced bullying or harassment compared to 4% of those working in the private sector. One reason why public sector workers are more affected by violence or the threat of violence at the workplace may be the higher level of interaction with people other than colleagues. (Around half of the public-sector workers surveyed (50%) reported that their job involves dealing directly at least three quarters of the time with non-colleagues (i.e. customers, students, patients, clients, etc.) compared to just 38% of private sector workers.

Impact of violence and harassment in the workplace

Those affected by violence or harassment in the workplace tend to report higher levels of work-related ill-health. What is especially noticeable from the survey is that the proportion of workers reporting symptoms of psychosocial factors, such as sleeping problems, anxiety and irritability, is nearly four times greater among those who have experienced violence or bullying and harassment as among those who have not. However, the negative impacts are not exclusively psychological or mental. It is also the case that a higher incidence of psychological symptoms, notably stomach ache, is reported by those subjected to bullying and harassment.

Anxiety and irritability are mental states suffered by employees and may serve as the potential trigger for "returning the blow", and cause damage to the company which "allowed" the abuse. Incidents which can arise range from verbal outbursts (loud complaining about the company at work, during meetings with business partners), absenteeism (frequent sick leaves increase the company's expenses), spreading slander in public, assaulting managers or even provoking incidents which can put employees' and clients' (business partners') lives in danger.

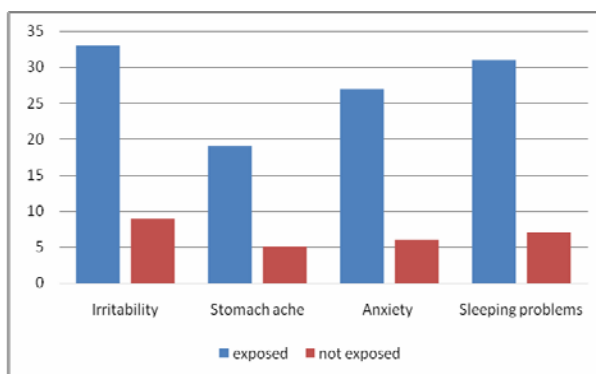


Figure 6. Health problems associated with bullying and harassment, EU27 (%)

Higher levels of stress are also reported, although the proportionate increase is not as great as for the four symptoms indicated in the figure above. In each case, anxiety, irritability, sleeping problems and stomach ache are among the symptoms with the highest

proportionate increase in incidence if compared to those not exposed.

Overall, 23% of workers report having been absent from work in the 12 months prior to the survey as a result of health problems. Taking into account only those who attribute at least a proportion of such absences to work-related causes (as distinct from general health problems unrelated to work), this percentage falls to 7%.

SAFETY AS A BUSINESS EFFICIENCY FUNCTION

Safety of the business system is a multidimensional probability function of random variables. It describes and quantifies the current state of the system or its parts.

Therefore, it is possible to define the safety of the business system as follows:

$S(t) = V(t) * U(t) * Pr(t)$, respectively:

$S(t)$ – safety for the system at a random point in time,

$V(t)$ – vector for negative influences on the safety

$U(t)$ – matrix or the vector for in-company influences on the safety

$Pr(t)$ – vector for safety characteristics of the business system

Vectors $V(t)$, $U(t)$, and $Pr(t)$ are multidimensional random values of the condition, which can range from 0 to 1 or from 0 to 100%. This means that safety of a business system is a random probability value which can also range from 0 to 1.

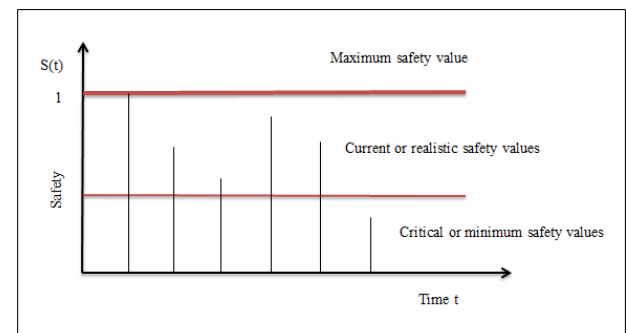


Figure 7. Values of the safety function in time

As defined above, safety function shows as follows:

- At any given point in time there is a certain probability of the negative influence from the elements of the system (employees) on the safety of the system
- Safety as a complex function of the total condition achieves its wanted or estimated values both simultaneously with and connected to environment factors $V(t)$, inner safety factors $U(t)$ and, of course, the characteristics of the business system itself $Pr(t)$.
- If any of the safety components equals zero, the safety of the whole system is zero

It is often necessary to define the critical or minimum safety level in business processes and it has to meet legal and other requirements. In other words, corporate regulations have to be devised so as to provide employee safety and prevent negative reactions of both mobbers and employees subjected to mobbing. Positive financial indicators under the conditions of low safety level provide little comfort.

The companies which are unable to ensure the safety of their business activities are too often unable to gain trust from their clients as well, and soon also from their employees. Unless the employees are safe and protected from the tyranny imposed by a mobber, the company which permits the development of a negative corporate culture will sooner or later experience the negative effect of this on its financial results.

REFERENCES

- [1] C.K. Allard: "Business as war", John Wiley & Sons Hoboken, 2004, New Jersey
- [2] R. Charan: "Profitable Growth Is Everyone's Business", Crown Business, 2004, New York
- [3] S. Finkelstein: "Why Smart Executives Fail", Portfolio – Penguin Group, 2003, New York
- [4] G.R. Jones, J.M. George, C.W.L. Hill: "Contemporary Management", 2nd edition, Mc Graw Hill, 2000.
- [5] Goleman, Daniel: Emocionalna inteligencija u poslu, Mozaik knjiga, Zagreb, 2000.
- [6] R. Heller: "Manager's Handbook", Dorling Kindersley Limited, 2002, London
- [7] <http://osha.europa.eu/en/safety-health-in-figures/eu-poll-press-kit.pdf> (15th April 2012)
- [8] <http://www.eurofound.europa.eu/pubdocs/2006/98/en/2/ef0698en.pdf> (15th March 2012)
- [9] http://www.ueapme.com/docs/joint_position/2007_Framework_Agreement_Harassment_and_Violence_at_Work.pdf (15th march 2012)
- [10] D.G. Krause: "The Art of War for Executives", A Perigee Book, 1995, New York
- [11] D.S. Katz, I. Caspi I.: "Executive's guide to personal security", John Wiley & Son, 2003, New Jersey
- [12] D.A. Kuhn: "Jane's Workplace Security Handbook", Jane's Information Group, 2002, Alexandria
- [13] H. Leymann.: „Mobbing and psychological terror at workplaces“, Violence Vict, 5(2), 1990, 119-126, PMid:2278952
- [14] H. Leymann: „Mobbing and Victimization at Work“, A Special Issue of The European Journal of Work and Organizational Psychology, 1996.
- [15] P. McBride, S. Maitland: "The EI Advantage", McGraw-Hill, 2002, Cambridge
- [16] S. Petar, I. Vrhovski: "Ljudska strana upravljanja ljudima", Mozaik knjiga, 2004, Zagreb
- [17] S. Petar: "Tamna strana upravljanja ljudima", Mozaik knjiga, 2005, Zagreb
- [18] S. Petar, B. Marjanović, M. Laušić: "Jeste li još uvijek sigurni da ste sigurni?", Mozaik knjiga, 2008, Zagreb
- [19] N. Rawls, S. Kovach: "Be Alert, Be Aware, Have a Plan", The Lyons Press, 2005, Guilford PMCid:1389788
- [20] J. Sorowieckis: "The Wisdom of Crowds", Doubleday, 2004, New York
- [21] A.Ch. Sennewald.: "Effective Security Management", Elsevier, 2003, Burlington
- [22] I. Šlaus: "Security and Sustainable Knowledge Society", Croatian International Relations Review, Vol. XI, No 40/41, 2005.

BIOGRAPHY

Saša Petar was born in Samobor, Croatia, in 1962. He is an author of 21 business books. His business background includes more than 25 years of various management positions. He is a lecturer in Business school UTILUS, Zagreb and many other business schools in Croatia. He led business trainings in management, communication, problem solving and motivation, change and crisis management, and business safety in numerous companies in Croatia and abroad.



MOBING: UZROK SLUČAJNIH RIZIKA U ORGANIZACIJAMA

Saša Petar, Ivana Vrhovski, Barbara Ilijaš-Juranić

Rezime: *Svaka organizacija stvara posebnu korporativnu kulturu koja oblikuje ponašanje zaposlenih, a takođe oblikuje i pravila i procedure interne komunikacije. Stoga, menadžment organizacije treba da definiše procedure koje bi osigurale sigurnost komunikacije zaposlenih na svim nivoima. Efikasne procedure mogu pomoći zaposlenima da izbegnu mobing i sukobe koji mogu imati negativni uticaj na poslovne rezultate organizacije.*

Ključne reči: mobing, profesionalni rizik, akcidenti, rizik.

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BUILDING MANAGEMENT IN THE INTELLIGENCE AND SECURITY COMMUNICATION NETWORK

Abstract: *Security and intelligence services, at present time, are more exposed to public criticism due to terrorist acts which, as a consequence, had large number of people being killed and material damage being caused. Security and intelligence services have been observed through the following: operative fails, organizational disadvantages and democratic misuse. For the above mentioned reasons, the authors would like to resolve the specific role and the meaning of the manager of security and intelligence system with special needs who is managing in the field of functional and organizational adaptation of security and intelligence subjects to a new security environment. Also, they would try to put an accent on the importance of knowing organizational culture and its elements that are reflected through the managerial knowledge of organizational values, organizational surrounding and managerial style. Modern security reality and all transnational challenges had conditioned a need for the exact analysis of corporative and other security partners, which had resulted in a general shift of security challenges. Due to that reason, managers should recognize the need to integrate security and intelligence services into institutional security frame of network units which comprise of state organizations, business, nongovernmental sector, citizens and international organizations. The consequence of excluding the above mentioned security subjects from the institutional security frame could be fragmentation, separation and independency of one subject in comparison to another which can result in negative consequence for citizens safety, national and global safety as well.*

Key words: Security Manager of, Security and Intelligence System, security, security challenges and threats.

INTRODUCTION

The definition of the intelligence service is a fundamental epistemological category and Pajević presents it as follows: "Modern intelligence service, as holder of an intelligent and specific institutional intelligence, strive by propagating, in accordance with the principles of intelligence, security and culture of the appropriate methodology, to predict, penetrate, and preempt threats to national security and to contribute to all who create and implement national security policy, in peace and war, in order to protect national security and conduct a national political agenda, with particular emphasis on the creation of conditions for optimizing resources and competitive advantage in relation to state, powers and the actors that pose a threat to national security" [7].

The role of managers in managing and directing the intelligence activities

Management in the intelligence-security system is a continuous process that initiates and directs intelligence (counterintelligence) and security activities for the efficient and effective achievement of objectives and tasks entrusted to protect national security. The result of

the management process of intelligence-security system is the decision-making and its implementation in the intelligence activities. The result of the intelligence activities are certain final intelligence products (intelligence) and services (covert action) which satisfy needs of the state and political leadership (e.g., president, army commander, Prime Minister, etc), which is the basis for making wise decisions in the internal and external political plan. The term "consumers" is often used for this category of recipients of the final intelligence products. The function of management is to allocate the resources to those activities of intelligence (intelligence and covert actions) for which there are observed and identified security needs and requirements in the socio-political process. It is deliberately emphasized in the socio-political process because intelligence activities are not related only to the area that includes the national territory, but on all the territories where there are the holders of threatening activities whose activities may directly or indirectly endanger the national security and national interests or the interests protected as a result of international institutional cooperation (e.g. NATO).

The ultimate goal of management in the intelligence-security system is meeting the consumer needs with the final intelligence products, where the subjects of intelligence and security systems appear as services in the political process and/or services such as covert actions. In this case, it appears as an instrument for the implementation of foreign policy decisions. Intelligence-security system is established to meet the needs of state and political leadership and society which has a permanent character. These elements represent the basis for the permanent management activities. To have a successful intelligence management, the management itself must understand the importance and significance of organizational culture and has knowledge of all its elements of which include: organizational values, organizational climate and managerial style.

The research of quality of information was motivated by problems of quality of information that have emerged in the organizations. A number of intelligence, military, economic and political initiatives have failed because of the problems in the information quality. The definition of information quality can be based on the perspective of a consumer of information and data perspective. The term quality is defined as the ability to use and this definition is widely accepted in the intelligence literature. Wang and Jaka define the information quality as the information quality that is appropriate for the consumers of information.

They argue that consumers are the ones who, at the end, decide whether the information products are suitable for use. However, consumers are not willing to find defects in the information, or change how they use the information. From the perspective of information, information quality can be defined as information that correspond to the specifications and requirements. The research on information quality is divided into two perspectives: management and databases. There is a combination of two perspectives: the high quality of information and without damage, possessing desired features [1].

The assessment of information quality (IQ assessment) is the essential for quality information management. The goal of quality information management is improving the validity and usefulness of information. Information quality management (IQ Management - IQM) is composed of three different areas of management: quality management, information management and knowledge management.



Figure 1. Information quality management

Management refers to the process of directing others to execute a certain task, while leading focuses on the ability to influence others who should execute some task [8]. Among many divisions and terms for each level of management, it seems logical to accept, based on systematic theory the following classification levels of management: immediate or operational level of management, middle or coordination level of management, strategic, supreme, principal, or the general level of management. However, despite significant research and organizational and practical interest, we have found that there are the positions which, under management style, imply some other phenomena with the same content. "Under the style of managerial behavior we mean optimal, specific, dynamic, stable and flexible synthesis of methods, tactics and techniques of management, which are immanent in the leadership and management system and which should be decisive for the inventive and creative execution of specific tasks" [4].

However, all previously developed management styles are mainly based on three basic types: "autocratic, democratic and style of individual freedom." Vršec has got a convenient and scientific approach – he accepts so-called general methods and styles. General methods can be a part of management system, whereas the name and the approach are consistent with the styles that we have defined. These are the "autocratic methods (consistent with autocratic style), the liberal method (compatible with the style of individual freedom), paternalistic methods (method of paternalism in the autocratic style), the democratic method (in accordance with democratic style), authoritarian-democratic methods (practical mix of styles)" [3].

In this sense, managing intelligence service is carried out by performing various activities, which are often called (in the literature) "functions of a management process." In theory, there are different views on the number, importance and content of these activities. Management viewed as a process in this approach, can be analyzed from the standpoint of the holder of managerial functions, according to groups of activities performed by a manager of the intelligence services: "representing the organization to the environment, planning and programming work, and building and implementing systems of planning, organization of work processes, coordination and synchronization, control over the scope and quality of organizational units and individual employees, or recording or developing and application of information systems of organization, analysis of implementation, evaluation of results, communication (intraorganizational and toward the environment), solving the current problems and conflicts, etc. [3] In this context, managerial staff has the following tasks: design of intelligence research, coordination and subordination of all organizational units, data protection, development of intelligence methodology, respect for human rights and freedoms, energetic and proactive approach, etc.

Managers of the intelligence organization represent a primary organizational, actional, and mobile element needed for realization of the state function of the intelligence and its objectives. Managers should be familiar with security issues that are part of their activities; they should also have an impact on the creation of professional policies and defining of program tasks of the intelligence [9].

The attitude of the intelligence towards the future is very important in the philosophy of manager's plans. The degree of ambition varies from manager to manager, as well as from intelligence to intelligence. A number of intelligence and security services is preoccupied with the present and solves urgent and not important security challenges, threats and risks. Many intelligence and security services are preoccupied with correcting errors made in the past. A proactive attitude of management is reflected in the acceptance of change as something that is normal and the willingness to initiate structural changes, not just an incremental character. Inspired by the concepts of Russell L. Ackoff, an American scholar in the field of organizational theory, many experts studied the approaches of a manager as a subject of intelligence-security systems towards the future. In this regard, we have considered four positions: nonactive, re-active, preactive, and interactive. Although not having been made on the basis of a broad empirical analysis of intelligence planning practice in many countries, this systematization constitutes quite a good approximation to the actual situation in the intelligence practice.

Non-active or vegetative approach means that managers of a subject in the intelligence-security system reconcile with current developments and plans on the basis of features, avoiding any sensitive risk. They do not look for the optimal solution, but they are satisfied with so-called *the second best solution* (satisfying results or results "Day after day", i.e., to meet daily needs). The objectives are adapted to the possibilities of the subject of intelligence- security system. In practice, managers of intelligence and security agencies often complain about not having adopted the proposed budget decision to the legislative and executive branches of government; allegedly, restrictive measures can be the reason for the lack of possibility to plan and implement prevention programs. Of course, a proactive approach requires adequate budget, but this is not the only variable that would discourage managers to take active preventive orientation.

Reactive or repressive approach means that managers of subjects in the intelligence-security system try to avoid problems and resolve problems as they did it in the past. There is nostalgia for past times. Unlike non-activists who "swim with the stream", reactivists "swim against the tide". Reactivists are susceptible to recurrences of the past, and often such managers may hear statements that relate to the period of the previous "golden age in which you could sleep in the park and cover yourself with the newspaper, and being sure no one will compromise your safety". Often, this type of a

manager grieve for reprisals (repressive measures such as police powers: arrest, detention, use of force, informative talks, wiretap telephone and other communications, etc., which should have the intelligence service).

Preactive or proactive approach means that managers of subjects in the intelligence-security system accept orientation toward the future and have a positive view to the changes in the environment in which they carry out the intelligence activities. Managers favored analyzing the changes that may have adverse consequences on national security and interests. Management is focused on predicting the future course of events in society and strive to create strategies to adapt to anticipated security challenges and threats carried by the new global changes. Managers of the intelligence are seen as the planners, not as prophets. The similarity of the planners and the prophets is that both sides are able to predict the future, and the difference is that the planner can control the future, and it affects the perceived trend of its achievements. Hence, planning is not fortune telling, but the process of controlling the future.

Interactive or futuristic approach means that managers of the intelligence and security services are oriented to the future. The assumption is that the future can hardly be absolutely controlled, but can be changed. Managers of the intelligence and security services are trying to create opportunities for growth and development of positive security trends in society, that induce economic, social and political processes. They strive to solve problems, not only on the basis of past experience (feedback), but with a view forward (feedforward). They consider technology as a significant factor in the development, but at the same time as something that can have both good and bad sides.

All intelligence agencies must deal with standard administrative matters, but the nature of intelligence operations makes many of these functions more complicated than those in the industry (private) or other parts of the government. "These functions include human resource management, security, training, communication, money management and logistics. The last three functions are very sensitive in the intelligence community, for several reasons, and would not be surprising if intelligence service pay more attention to them" [9]. One of the biggest obstacles to create an effective intelligence community is a bureaucratic internal organization, especially when it comes to several intelligence organizations.

Contemporary management of Security-Intelligence Network

Contemporary security and all transnational challenges have caused the need for the exact and eventful analysis of corporate and other security actors, which led to a general shift in terms of confronting contemporary security challenges. Accordingly, Fry and Hochstein emphasize that the intelligence service should be integrated into the institutional-security framework - *network of units*, which include, in addition to state agencies and security services and institutions, non-

governmental sector and international organizations. Not including one of the security subjects in the institutional framework of security results in fragmentation, dispersal and independence of some subjects from others [2].

In this context, Johnston and Shearing advocate the application of the *node* based on networks, rather than the central concept of the state government. The authors offered "four sets of governmental nodes: a state set, corporate set, a set of non-governmental state organizations, and informal or set of volunteers" [2]. McGrew believes that the process of globalization caused that the police and the security-intelligence field of activity manifests itself in three dimensions: the level of *deepening* to increase interaction between local and transnational development, *expansion* of the sector with entities involved in management, and spatial *stretching*, so that a security event in one part of the world can have an immediate impact on global security plan. The three main sectors identified in figure No. 2 coincide with the already mentioned organizational model "state (bureaucratically-hierarchically organized), the corporate sector (competitive in the market) and non-governmental organizations and associations of volunteers. There are, of course, many divisions within each of these sectors" [2].

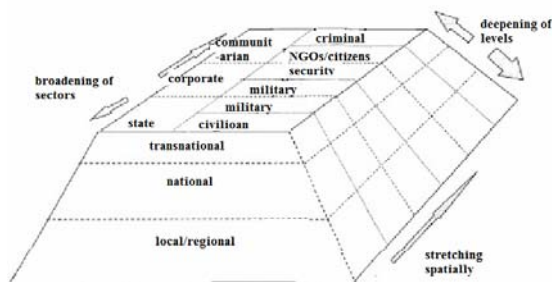


Figure 2. Security-Intelligence Networks

Networks can be developed within and/or between any of these three dimensions. Country or corporations will often appear as "the dominant node or partner in the security networks. Johnston suggests that, in general, the most productive thinking is directed to change the form of creating and managing institutional-security framework in which the individual fragmented parts of the state will interact with commercial, civil and volunteer subjects in domestic and global level. In this regard, Deibert points out that "transnational network of citizens-activists should be incorporated in the interactive state structure. Security companies and non-governmental organizations that have the intelligence capacity should be networked in order to create the function of protection of security. It would be useful. Security companies and NGOs through the networking form work within a number of specific states and localities. It is a form of multilayered governance. The development of local security networks between agencies, public, private and civic groups, provide clear examples of cross-sectoral networks, and other

examples can be found at the regional, national and transnational level" [2].

It is clear that there must be some common interest to meet the actors in the network. It is not difficult to establish an interest shared by many Western countries, and corporate security providers. It can be summarized by the principle of neo-liberal tendencies to the market that provides services. However, the actual nature of the relationship must be subject of the empirical validation, and conflicts can arise between "nodes within the network" (author's note: entities in the security system). So, within the public sector the agencies may have different mandates and objectives that are sometimes overlapping, sometimes not. Corporations could not agree with some joint projects taking into account that they can be in a competitive relationship. Opposition will be resolved, depending on the relative power of actors. In some cases, they can lead to a restructuring of the network. Therefore, one must not forget the impact of security networks and the tasks that are in focus. "One should bear in mind that particular groups which have security as the primary objective may, under certain conditions, become part of the network. Similarly, the way the targets react, trying to collect information and perform some repressive act, can have an impact not only on specific operations, but also on the form of a network" [2].

Management is essentially a matter within the state hierarchy and essentially represents the application of appropriate rules and procedures according to the level of responsibility. Discretion is a very important feature of the intelligence and other security services activity, while the network is characterized by fluidity, which is also their strength. In this regard, Kickert and Koppenjaan indicate that the network management has got two important functions: *game management* and *network structuring*. "Game management includes the following measures: (1) activism involves activation of the network in order to solve individual problems and the involvement of those actors who can help (2) mediation gathers an entirely different range of actors, problems and solutions, and (3) simplification involves the creation of favorable conditions for development." Network structuring takes transnational place in the world (for example, when the Berne group was formed it was comprised of six European internal security agencies, and now includes seventeen) [2, 13, 14].

CONCLUSION

The intelligence-security system is viewed as a complex economic, technological, sociological and organizational subsystem of the political system. The focus is on the ability to perceive the long-term consequences of current decisions. The dominant orientation of some of the intelligence and security services in the management is the following: in the past - reactive, in present - inactive, in the future - preactive, and also intelligence and security services are interactive. This means that they observe past, present and future as distinct, but inseparable aspects of

planning, being very similar in focus. The interactivist orientation is based on the assumption that all three elements of time should be taken into account in planning.

The intelligence and security services are not only interested in achieving the objectives of existing national security, but also in formulating new objectives which should contribute to efficient and effective prevention, confronting contemporary security challenges, threats and risks; both at the national and at the international level. They are all equally in the focus. The interactivist organization is based on the presumption that the three elements should be taken in account in the process of planning. The fundamental purpose of interactivist planning is changing the present state of intelligence and security services to fit the sketch of a desirable future. It is not desirable that the intelligence service on the basis of this orientation creates a conception of the future based on projections of the current situation. The intelligence and security services can not control all the elements and factors that may have negative consequences on the security reality.

Non-activist and reactivist approach of managers is archaic and inconsistent with modern organizational and functional adaptation of intelligence security challenges. This approach does not only have limited contributions to the security area, but also questions the existence of such organizations in the security system. Preactivists insist on adapting whereas interactivists insist on the impact on the future. Such a division is possible and it certainly has a place on a scientific and practical level. These approaches are not incompatible, they can be combined. Undoubtedly, the interactivist approach is more progressive than others, but the truth is that all entities in the intelligence-security system are not always capable to apply it. Managers of proactivist and interactivist type have an intention to define variables (security challenges, threats), then create assess of the ability and restrictions, as well as security trends of the major factors that are essential for the results of intelligence. Both approaches require to observe and analyze the efficient and effective courses of action and monitor their effect on the social-security interests.

Countering threats to the dominant and non-state actors not only requires the engagement of intelligence. In fact, opposition to contemporary security challenges requires a transformation of the security sector. Dominant threats can be confronted only if all the actors, which are authorized to deal with contemporary security threats, are in the required communicative network. Therefore, the existing guidelines, processes and structures should be transformed. The goal of transformation implies the strengthening of management and the establishment of effective processes and structures commensurate with the challenges to confront. Three principles form the core of the transformation programme are: management of central security networks, cooperation and the orientation of intelligence capacity.

Management of central security network refers to the systematic connection of the four areas. The first area includes all of the security sector entities which are authorized to confront contemporary security challenges. Second – it is based on all levels of decision making (internationally, nationally and locally). The third includes all security instruments. The last area refers to all tasks that are to be realized. Management of central security network puts the emphasis on cooperation between the security sector entities, and between this sector and the relevant third party. An integrated approach to security, however, expands the understanding of cooperation outside traditional boundaries in two ways. First, the operations are proportional to new security requirements which requires coordinated interaction between all stakeholders. The joint action of all actors in the security sector is needed to increase the efficiency and effectiveness. In addition, a common approach is a prerequisite for the second sequel of cooperation: cooperation with third parties and the business sector. Both the sequels of cooperation must take place at the national and international levels, because no national agency alone can deal with contemporary security challenges.

The above mentioned insights and reflections can serve as a basis for making relevant conclusions and recommendations (*de lege ferenda*) for the application of the presented model of management and functioning of the intelligence process and professional standards. They can serve as a model for functional and effective intelligence operation, not only for the intelligence, military and police, but also for other institutions which rely on intelligence in their work.

REFERENCES

- [1] M.Ge, M.Helfert: „A review of information quality research“, develop a research agenda, in ‘Proceedings of the 12th International Conference on Information Quality’, 2007, <http://mitiq.mit.edu/iciq/pdf/a%20review%20of%20information%20quality%20research.pdf> (7.1.2012)
- [2] P.Gill, M.Phythian: „Intelligence in an Insecure World“, United Kingdom: Polity Press, 2006.
- [3] M.Jurina: „Rukovođenje i organizaciono ponašanje“, Zagreb: MUP RH, 1994.
- [4] R.Masleša: „Organizacija i funkcionisanje policije u demokratskom društvu“, Sarajevo: Fakultet kriminalističkih nauka, 1999.
- [5] M. Pajević: „Obavještajni kapital“, Human, Vol. 1, 2011, No. 1, 9 - 18.
- [6] M.Pajević: „Preventivna uloga obavještajne službe na nadnacionalnoj razini“, Godišnjik na trudovi (Zbornik radova), Evropski Univerzitet Skoplje, 3(3), 2011, 499. - 518.
- [7] M.Pajević: „Uloga obavještajne službe na zaštiti nacionalne sigurnosti“, Međunarodna naučna konferencija, Zbornik radova, Evropski Univerzitet Skoplje, 2012, 207. - 224.
- [8] P.Sikavica, F.Bahtijarević-Šiber: „Menadžment“ Zagreb: Masmedia, 2004.
- [9] D.Vejnović: „Državna bezbjednost - obavještajne službe“, Banja Luka: Glas Srpski, 1995.

BIOGRAPHY

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2000 to 2010 Pajević was employed at the operational and managerial positions in the intelligence-security system in Bosnia and Herzegovina. Since 2010, he has been working as a lecturer of Criminology at the Agency for Education and Training of Police Personnel of Bosnia and Herzegovina. He is also working at College "Logos Center" Mostar as a Head of the programme "Security Studies".

JACANJE MENADŽMENTA U OBAVJEŠTAJNO-SIGURNOSNOJ KOMUNIKACIONOJ MREŽI

Maid Pajević, Armin Kržalić

Rezime: *Sigurnosne i obaveštajne službe su danas sve više izložene javnoj kritici zbog izvršenih terorističkih akcija koje su imale za posledicu stradanje velikog broja ljudi i nanošenje znatne materijalne štete. Efikasnost i efektivnost sigurnosnih i obaveštajnih službi se posmatra kroz percepciju sledećih pojava: operativni neuspesi, organizacioni nedostaci i demokratska zloupotreba. U vezi s tim, autori u članku žele rasvetliti specifičnosti uloge i značaja menadžera sigurnosno-obaveštajnog sistema sa posebnim osvrtom na, sa jedne strane, upravljanje i rukovođenje na polju funkcionalnog i organizacionog prilagođavanja sigurnosno-obaveštajnih subjekata novom sigurnosnom okruženju i, sa druge strane, akcentovati važnost i značaj poznavanja organizacione kulture i svih njenih elemenata koji se reflektuju kroz menadžersko poznavanje organizacionih vrednosti, organizacione klime i menadžerskog stila. Savremena sigurnosna zbilja i svi transnacionalni izazovi su uslovili potrebu egzaktno i sadržajno analize korporativnih i drugih sigurnosnih aktera, što je dovelo do opšteg pomaka na planu suprotstavljanja savremenim sigurnosnim izazovima. Shodno tome, menadžeri trebaju prepoznati potrebu da se sigurnosne i obaveštajne službe integrišu u institucionalno-sigurnosni okvir mrežnih jedinica, u koje se ubrajaju, pored državnih organa, i poslovni, nevladin sektor, građani i međunarodne organizacije. Neuključivanje naznačenih sigurnosnih subjekata u institucionalni sigurnosni okvir ima za posledicu fragmentiranost, raspršenost i nezavisnost jednih subjekata od drugih, što može imati negativne konsekvence za sigurnost građana, nacionalnu i globalnu sigurnost u celini.*

Ključne reči: menadžer sigurnosti, sigurnosno-obaveštajni sistem, sigurnosni izazovi i pretnje.

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ZAŠTITA ŽIVOTNE SREDINE - SPECIFIČNI ASPEKT KORPORATIVNE DRUŠTVENE ODGOVORNOSTI

Rezime: U prvom delu rada objašnjen je pojam i analizirane su dimenzije korporativne društvene odgovornosti-CSR. Ukazano je na značaj CSR u uslovima ekonomske krize. Prikazane su karakteristike razvoja procesa CSR u Srbiji. Od četiri specifična aspekta CSR posebno je, kao najznačajnija, analizirana zaštita životne sredine. Predstavljeni su elementi povezanosti održivog razvoja i zaštite životne sredine. CSR i zaštite životne sredine povezani su sa primenom međunarodnih standarda serije ISO 14.000 i razvojem čistih tehnologija. U završnom delu rada ukazano je na mehanizme razvoja korporativne društvene odgovornosti.

Ključne reči: životna sredina, društvena odgovornost, održivi razvoj.

KORPORATIVNA DRUŠTVENA ODGOVORNOST

Korporativna društvena odgovornost potiče od engleskog izraza *corporate social responsibility* – CSR, koji se uopšteno odnosi na posvećenost organizacije etičkom ponašanju i doprinosu ekonomskom razvoju, pokazujući, pritom, poštovanje prema ljudima, zajednici, društvu i životnoj sredini. Korporativna društvena odgovornost predstavlja posvećenost organizacije da doprinese održivosti privrednog razvoja, sarađujući sa zaposlenima, njihovim porodicama, lokalnom zajednicom i društvom u cilju poboljšanja kvaliteta njihovog života. Biti društveno odgovorna organizacija, ne znači samo puko ispunjavanje zakonskih obaveza, već ići dalje i ulagati još više u ljudski kapital, okruženje i odnose sa svim zainteresovanim stranama tj. sa zaposlenima, akcionarima, kupcima, dobavljačima, konkurentima, lokalnom zajednicom, vladom i nevladinim organizacijama.

Jedan od načina da organizacije pridobiju veliki broj korisnika i kupaca je rešavanje problema zajednice i uključivanje u zajednicu. Sve uspešne svetske korporacije, već decenijama sprovode koncept korporativne društvene odgovornosti. Organizacije ulažu sredstva, kako bi pomogle da se reše problemi u društvenoj zajednici, a ta pomoć je najčešće usmerena u školstvo, zdravstvo, kulturu, sport, umetnost, zaštitu životne sredine. Povećano interesovanje organizacija za ulogu u društvu je uslovljeno povećanom osetljivosti i svesti o etičkim i ekološkim problemima. Problemi zagađenja životne sredine, neprikladnog odnosa prema zaposlenima, sve težeg položaja potrošača... su pojave za čije se suzbijanje razvijaju i državni i međunarodni propisi i norme. Uspostavljaju se i standardi i zakoni koji investitore i menadžere teraju da vode računa o korporativnoj društvenoj odgovornosti i sprovođenju korporativne politike u tom pravcu. Na drugoj strani potrošači postaju sve osetljiviji na performanse organizacija na polju društvene odgovornosti, posebno onih organizacija čije proizvode i usluge koriste. Ovi

trendovi, u oblasti zakonske regulative i ponašanja potrošača, stvaraju pritisak na organizacije i zahtevaju od njih da funkcionišu na ekonomskim, društvenim i ekološki opravdanim i prihvatljivim strategijama i principima.

U literaturi ne postoji saglasnost o povezanosti korporativne društvene odgovornosti i finansijskog učinka organizacije. Najveći broj istraživanja ukazuje na postojanje pozitivne korelacije tj. da profit i korporativna društvena odgovornost ne moraju da budu u suprotnosti. Ukoliko i investitori i finansijski analitičari uzimaju u obzir ekološki i društveni učinak organizacija, onda korporativna društvena odgovornost omogućava organizacijama bolji pristup kapitalu.



Slika 1. Pozitivna korelacija profita i CSR

Pored značajnih napora da se pruži jasna i nedvosmislena definicija društveno odgovornog poslovanja, još uvek postoji izvesna konfuzija oko toga kako bi ga trebalo definisati. Koncept „korporativna društvena odgovornost“ ili „društveno odgovorno poslovanje“ odnosi se na dobrovoljnu samoregulaciju, koju uvode organizacije, kako bi popravile određene segmente svoje organizacije, koji se mogu odnositi na zaposlene, zaštitu životne sredine ili pitanja ljudskih prava.

Korporativna društvena odgovornost je koncept upravljanja organizacijom koji održava balans između ekonomskih i socijalnih ciljeva zarad „uspostavljanja viših standarda življenja, uz održavanje profitabilnosti kompanije, za ljude u i izvan kompanije“ [7]. Korporativna društvena odgovornost jeste socijalno

odgovoran i etičan odnos kompanije prema zajednici u kojoj ostvaruje profit i prema svim društvenim akterima u zajednici i kompaniji.

Dalsrud [4] predlaže sledeću definiciju: „Društveno odgovorno poslovanje tiče se odgovornosti koje ima organizacija i preduzimanja mera u okviru organizacije, koja prevazilaze njegove pravne obaveze i ekonomske/poslovne ciljeve. Te šire odgovornosti obuhvataju niz pitanja, ali se obično rezimiraju kao društvena i ona koja se tiču zaštite okoline – društveno se odnosi šire na društvo u celini, a ne samo na socijalna pitanja. Ovo možemo nazvati pristupom tri glavne linije: tj. ekonomske, društvene i ekološke.“

Shodno analizi sadržaja aktuelnih definicija društveno odgovornog poslovanja [4] za ovaj pojam vezuje se pet, najčešće pominjanih aspekata:

- **Ekološki aspekt:** Organizacije razvijaju svoje poslovanje na održiv način,
- **Društveni aspekt:** Organizacije doprinose boljem društvu, time što će biti svesne efekata koje njihovo poslovanje ima na zajednicu,
- **Ekonomski aspekt:** CSR ima za cilj da unapredi profitabilnost organizacije, uvažavajući načelo da organizacije treba da doprinesu društveno-ekonomskom razvoju,
- **Aspekt zainteresovanih strana:** Organizacija treba da unapređuje svoju interakciju sa svim zainteresovanim stranama (eng. *Stakeholders*), posebno sa zaposlenima, dobavljačima, klijentima i zajednicama u kojima posluje,
- **Dobrovoljni aspekt:** Potezi koji svedoče o društveno odgovornom poslovanju nisu definisani zakonom, već baziraju na dobrovoljnim potezima organizacije.

Društveno odgovorno poslovanje se tiče integrisanja društvenih, ekoloških i ekonomskih pitanja u poslovne procese i strukture donošenja odluka. Ono se odnosi na angažovanje deonika i drugih zainteresovanih strana i saradnju sa njima u cilju efektivnog i efikasnog upravljanja potencijalnim rizicima i izgradnju kredibiliteta i poverenja u društvu. Važno je znati koji razlozi podstiču korporacije da angažuju svoje resurse u aktivnosti društveno odgovornog poslovanja. Ti razlozi su:

- **Finansijski rezultati.** Organizacije mogu pribeći društveno odgovornom poslovanju i korporativnoj održivosti, da bi imale direktne pogodnosti za svoje finansijske rezultate. Na primer, može se smanjiti količina otpada i papir se može reciklirati. Ekološki efikasni potezi mogu istovremeno proizvesti i ekološke i ekonomske pogodnosti za organizaciju, doprinoseći snažnijim finansijskim rezultatima i većoj profitabilnosti;
- **Odnosi sa investitorima.** Investitori, često, proučavaju povezanost društvene odgovornosti organizacije i njenih finansijskih rezultata. Postoji sve više dokaza da organizacije koje prihvate osnovne karakteristike društveno odgovornog

poslovanja, uglavnom, prestižu ostale koji to ne čine;

- **Produktivnost i inovativnost.** Glavna potencijalna pogodnost koju donose inicijative društveno odgovornog poslovanja tiče se uspostavljanja uslova kojima se povećava lojalnost, zalaganje i motivacija zaposlenih, čime se stvara inovativnija i produktivnija radna snaga. Ovo može pomoći da se zaposle i zadrže zaposleni; da se motivišu da steknu nove veštine; da se ohrabre u pronalaženju inovativnih načina, ne samo za smanjenje troškova već i za uočavanje i iskorišćavanje novih mogućnosti maksimalizacije profita.
- **Odnosi sa zainteresovanim stranama.** Spremnost za stvaranje efektivnih partnerstava znači više kredibiliteta i poverenja u odnosima između organizacije i zajednice. Ovo je važna pogodnost za organizacije, zato što povećava njihove izgleda da ih zajednica dugoročno podržava.



Slika 2. Korporativna društvena odgovornost

Korula i Halme [8] definišu tri načina primene društveno odgovornog poslovanja:

1. Prvi i osnovni vid društveno odgovornog poslovanja mnogih organizacija je filantropija, dobrotvorne akcije i korišćenje korporativnih resursa da bi se „činilo dobro“ (najčešće, donacije),
2. Drugi pristup odlikuje se integracijom aspekata društveno odgovornog poslovanja u celokupno poslovanje, pri čemu organizacije pokušavaju da kombinuju odgovornost sa osnovnim poslovnim delatnostima. Najznačajnije aktivnosti su: obezbeđivanje najvišeg kvaliteta proizvoda, investiranje u istraživanje i razvoj, primena dobre prakse i mera zaštite životne sredine...
3. Inovativnost u društveno odgovornom poslovanju bazira na novijoj tendenciji da se društveno odgovorno poslovanje sagledava kao izvor poslovnih inovacija. Ključni aspekt te tendencije je pristup kojim se pokušava da se reše problemi socijalno ranjivih grupa u društvu, stvaranjem novih preduzeća ili povoljnih poslovnih mogućnosti za kompanije (Prahalad 2005). Drugi rezultat ove tendencije su novi modeli poslovnih usluga, koji su bazirani na energetskej ili materijalnoj efikasnosti kao i tehnologijama koje koriste održive izvore energije. Organizacija shvata neki ekološki ili društveni problem kao izvor poslovne inovacije i traga za načinima da razvije nove proizvode ili usluge. Dok pokušava da razvije nove poslovne poduhvate kako bi ublažila ekološki

ili društveni problem, organizacija istovremeno ima za cilj da poveća prihode [8].

Društveno odgovorno poslovanje je koncept po kome organizacije, koje ga usvajaju, svesno i dobrovoljno nadilaze svoju primarnu funkciju sticanja i raspodele profita i nastoje da pozitivno utiču na svoje radno, društveno i prirodno okruženje. Društveno odgovorno poslovanje predstavlja svest o novom položaju i značenju koje organizacije imaju u globalnom društvu i odgovornosti koje iz njih proizilaze.



Slika 3. „3P” koncept korporativne društvene odgovornosti (Planeta, društvo, profit)

CSR predstavlja posvećenost preduzeća da sopstvenim etičkim ponašanjem, prema internoj i eksternoj javnosti, doprinese povećanju kvaliteta života zaposlenih i njihovih porodica, privrednom razvoju lokalne zajednice i nacionalne ekonomije i društva u celini [5]. Biti društveno odgovorna kompanija ne znači samo ispunjavati zakonske obaveze, već uključuje i ulaganje u ljudski kapital, okruženje i u odnose sa zainteresovanim stranama. Drugim rečima, korporativna društvena odgovornost podrazumeva da za profit koji ostvaruju, organizacije nisu odgovorne samo akcionarima, nego i pojedincima i grupama na koje se profit, na bilo koji način, odražava.

Korporativni sektor i transnacionalne korporacije se sve snažnije nameću kao ključni akteri svetske ekonomske krize. Postojanje jeftinog rada, sredstava i povoljnih proizvodnih uslova u nerazvijenim zemljama su pojačali pokretljivost i profitabilnost kapitala. Transnacionalne proizvodne mreže povećavaju snagu globalnog kapitalizma, tako što olakšavaju transnacionalnim kompanijama da zaobiđu nacionalne radničke sindikate koji bi štitili interese radnika u pogledu visine zarada i uslova rada.

Ekonomska kriza nametnula je neke druge uslove poslovanja. U situaciji kada tržišna utakmica ne ostavlja prostora za dalji rast i razvoj organizacije, samo na osnovu cene i kvaliteta, do izražaja dolazi odgovorno ponašanje kompanije prema zaposlenima, klijentima, široj zajednici, dobavljačima i životnoj sredini. Odgovorne organizacije dobijaju i zadržavaju najbolje kadrove, potrošači su im lojalniji, imaju lakši pristup kreditima i finansijama i na taj način postaju konkurentniji [9]. Organizovana javnost sve češće i sve uspešnije primorava organizacije da odgovornije posluju u odnosima sa lokalnom zajednicom i društvom u celini, da se održivije ponašaju prema prirodi, kao i da se humanije odnose prema zaposlenima.

Korporativna društvena odgovornost ima za cilj razvijanje mehanizama koji podstiču pozitivne, odnosno smanjuju negativne efekte delovanja svetske ekonomske krize na razvoj. U tom kontekstu, korporativna društvena odgovornost se može smatrati i društvenim sredstvom koje treba da doprinese razvoju društvenog blagostanja kroz:

- poštovanje uslova koji obezbeđuju pristojan rad, poštene zarade, razumno radno vreme i dobre uslove za rad...;
- održivi razvoj i zaštitu životne sredine na lokalnom, regionalnom i globalnom nivou...;
- veću odgovornost u pogledu: kvaliteta proizvoda i usluga, transparentnosti, uvođenja i poštovanja standarda, razumnih cena, pravičnosti i poštovanja prava svojine...;
- doprinos efikasnosti države (poštujući zahteve u pogledu propisa koji se tiču transparentnog poslovanja, zaštite životne sredine, održivosti upotrebe resursa...);
- produbljivanje partnerstva i dijaloga između subjekata koji su angažovani u ostvarivanju opštih društvenih i ekonomskih ciljeva...

Dinamičko okruženje u uslovima svetske ekonomske krize i novog poimanja unutrašnjeg tržišta, nametnulo je organizacijama i nacionalnim ekonomijama dva ozbiljna izazova – novo značenje nacionalne konkurentnosti i koncept korporativne društvene odgovornosti.

KORPORATIVNA DRUŠTVENA ODGOVORNOST U SRBIJI

Većina zemalja u tranziciji nalazi se u ranijim fazama razvoja društveno odgovornog poslovanja u odnosu na ekonomski razvijenije zemlje. Filantropija i društvena odgovornost preduzeća, u Srbiji, nisu dovoljno razvijene zbog skorijeg uvođenja tržišne ekonomije i jakih tradicionalnih struktura porodične podrške, koje su zvaničnu filantropiju ranije činile nepotrebnom [1].

Prve korake u razvijanju društveno odgovornih praksi u zemljama u razvoju načinili su veliki multinacionalni investitori koji su, kao odgovor na pritiske u vlastitim zemljama, razvili novu kulturu menadžmenta, koja podrazumeva održivost, kada je reč o radnoj snazi u zemljama u razvoju. U nekim slučajevima, ovo je nateralo lokalna preduzeća da takođe usvoje neke od ovih praksi.

Kako je u Srbiji, kasnije nego u mnogim drugim zemljama došlo do političke i socioekonomske tranzicije, mnoga preduzeća još uvek nemaju razvijenu svest o pogodnostima društveno odgovornih praksi i smatraju ih nekorisnim i nepraktičnim.

Godine 2005. Smart Kolektiv, je sproveo prvo istraživanje društveno odgovornog poslovanja u Srbiji. Anкета je obuhvatila više od 2.000 ispitanika iz svih segmenata društva. Po rezultatima ove ankete, poslovni

Ljudi razumeju društveno odgovorno poslovanje kao poklanjanje pažnje pitanjima zaštite životne sredine, kao filantropiju, podršku zajednici i kao poštovanje zakona. Filantropija i učestvovanje u različitim projektima podržavanja zajednice su jedine aktivnosti u okviru društveno odgovornog poslovanja na koje se odlučuju kompanije u Srbiji. Samo 31 % organizacija sprovodi aktivnosti vezane za zaštitu životne sredine. Očigledno je da postoji svest o društveno odgovornom poslovanju u Srbiji, ali mnoge kompanije još uvek ne shvataju dugoročne prednosti društveno odgovornog ponašanja, dok različiti poslovni ljudi i preduzetnici veruju da nemaju dovoljno resursa ili znanja potrebnih da bi se angažovali u primeni drugačijih strategija. Javnost nije dovoljno informisana o vrednostima društveno odgovornog poslovanja, a svest potrošača je još uvek nedovoljno razvijena.

Zbog ratova devedesetih godina i potrebe da region razvije osnove za ekonomski razvoj, velika finansijska sredstva i donacije međunarodnih organizacija stigle su u ovaj region. To je za posledicu imalo podsticanje zavisnosti od donacija. Nakon što je otpočeo proces ekonomskog razvoja na Balkanu, sredstva međunarodnih fondacija su počela da se povlače sa Balkana. Razvijanje društveno odgovornog poslovanja znači razvijanje novih oblika partnerstva sa organizacijama, što potencijalno može da dovede do toga da obe strane budu na dobitku i da dovedu do pozitivnih posledica, po životnu sredinu i po društvo.

Potreba za razvijenijim kontekstom u kome bi moglo da se razvija društveno odgovorno poslovanje je prepoznata, pa je u Srbiji pokrenuto nekoliko međunarodnih inicijativa koje imaju za cilj da unaprede društveno odgovorno poslovanje na nacionalnom nivou. Te inicijative su UN Global Compact, UNIDO's Development of CSR i IFC inicijative koje imaju za cilj prihvatanje međunarodnih standarda i tehničku regulaciju u jugoistočnoj Evropi. Neka srpska i međunarodna preduzeća i državne institucije (Narodna banka Srbije, Soko Štark, Hemofarm) bile su među prvim koje su uvele principe društveno odgovornog poslovanja. Da bi bile uspešne i da bi podstakle održivi razvoj privrede, te inicijative moraju biti deo povoljnog okruženja, inače bi bile izuzeci, dok bi njihov uticaj na društvo i okruženje ostao prilično ograničen.

Strategije društveno odgovornog poslovanja su čvrsto motivisane vlastitim interesom, ali postoji i istinska želja da se poboljša život zajednice i unapredi životna sredina. Podsticanje razvoja društveno odgovornog poslovanja može da doprinese ekonomskom i socijalnom razvoju Srbije.

Dolazeći na naše tržište, velike strane kompanije sa sobom donose svoj kapital i svoju poslovnu politiku i trude se da uspostave određenu kulturu poslovanja, a to podrazumeva i primenu CSR koncepta. CSR u Srbiji postaje predmet interesovanja različitih organizacija, udruženja i kompanija. Tranzicioni procesi i sve snažnije prisustvo stranih kompanija na srpskom tržištu jesu stimulativni faktori u ovom procesu.

Poslovni uspeh kompanije na tržištu ne mora i nije suprotstavljen njenoj odgovornosti i etičnosti u poslovanju. Jasno je, kompanije nisu i ne mogu biti izolovane od društva u kojim posluju, tako da razvoj određenog društva, kvalitet obrazovanja, infrastrukture, razvijenost lokalnog biznisa, kvalitet rada javnog sektora, predstavljaju faktore koji umnogome utiču na poslovanje jedne kompanije. Među multinacionalnim kompanijama koje posluju u Srbiji, promotori društveno odgovornog ponašanja su: „Lafarž“, „Holcim“, „Cisco systems“, „EFG Eurobank“, „Societe General Bank“, „Purezs banka“, „Credit agricole meridian bank“, „Carlsberg“, „Banca Intesa“, „Erste Bank“, „Efes“, Filip Morris, Titan, US Steel, British American Tobacco, Microsoft, Michelin, Merkator, Gorenje, Krka, Japan Tobacco International i drugi.

Inicirano je formiranje baze podataka koja bi obuhvatila sve studije slučaja vezane za društveno odgovorne aktivnosti kompanija u Srbiji. Osnovna ideja kreiranja ovakve baze podataka jeste pouzdano i objektivno identifikovanje primera najbolje prakse koji istovremeno maksimiziraju kompetitivne i društvene dobrobiti. Cilj ove inicijative je da se organizacije u Srbiji podstaknu na intenzivnije merenje uticaja koje imaju na svoje radno, društveno i prirodno okruženje i da izveštavaju o svojim delatnostima u ovoj oblasti. Pomenute kompanije, koje su uspostavile uspešan biznis u Srbiji, su pokazale i jaku volju i uložile napore da uspostave partnerski odnos sa sredinom, koja im je omogućila uspešno poslovanje, ulažući u lokalnu zajednicu i na taj način postale njen „korporativni građanin“.

„Bezbednost i zdravlje na radu na gradilištima“ je program kompanije „Holcim“ u Srbiji, koji je započeo 2008. godine, sa ciljem podizanja svesti zaposlenih na gradilištima i njihovih poslodavaca o okolnostima koje mogu dovesti do ugrožavanja njihovog zdravlja i bezbednosti na radu.

Projekat „Eurobank EFG školarine“ deo je sveobuhvatnog programa korporativne društvene odgovornosti Banke pod nazivom „Investiramo u evropske vrednosti“, koji je usmeren na podršku edukaciji, zdravstvu, inkluzivnom društvu i zaštiti životne sredine.

„Carlsberg Srbija“ upravlja svojim procesnim rizicima korišćenjem Integrisanog sistema menadžmenta (QMS; OHSAS i EMS). Kroz EMS segment se upravlja rizicima po životnu sredinu.

Banca Intesa je pokrenula donatorski program koji predstavlja originalni vid alternativnog finansiranja humanitarnih potreba specifične ciljne grupe i koji je prepoznat i podržan od strane najviših zvaničnika Međunarodnog Paraolimpijskog Komiteta [9].

Organizacije u Srbiji su prepoznale interne i eksterne koristi primene koncepta korporativne društvene odgovornosti. Pomenute organizacije su prepoznale da primena koncepta društveno odgovornog ponašanja u praksi doprinosi dugoročnoj stabilnosti poslovanja, povećanju prodaje i većoj lojalnosti i motivaciji

zaposlenih. Organizacije su uočile i da im primena koncepta korporativne društvene odgovornosti donosi i eksterne koristi u smislu poboljšanja društvenog i poslovnog ugleda organizacije. Istraživanje je pokazalo da je najveća prepreka primeni društveno odgovornog poslovanja nepostojanje zakonske regulative u ovoj oblasti.

Sadržina koncepta društveno odgovornog poslovanja analizirana je preko aktera, transparentnosti poslovanja, pravila ponašanja, socijalnih projekata i zaštite životne sredine. Kao akteri društveno odgovornog poslovanja u Srbiji su prepoznati: zaposleni, deoničari, vlada, lokalna zajednica, civilni sektor, kao i vlasnici, udruženja i preduzeća koja se bave aktivnostima u interesu zajednice. Kao društveno odgovorne aktivnosti u Srbiji su prepoznate: transparentnost poslovanja, očuvanje zdravlja zaposlenih, izbegavanje korišćenja dece kao radne snage i zaštita životne sredine. U tom kontekstu, organizacije u Srbiji prepoznaju kao društveno odgovorne aktivnosti i plaćanje poreza, stvaranje novih radnih mesta, obezbeđivanje sigurnosti radnih mesta, osluškivanje aktera i davanje donacija.

Korporativna društvena odgovornost sve više postaje pitanje sa kojima se suočavaju i mala preduzeća i to u svim sektorima poslovanja. Ulaganje u zajednicu može pomoći razvoju podsticajnog okruženja za preduzetništvo, obezbeđenjem specifične podrške poslovnom razvoju i stvaranjem povoljnijih uslova za rast i razvoj malog biznisa. Primena CSR koncepta omogućava prednosti, kao što su: povećanje produktivnosti, kvaliteta i prodaje, dugovečnosti kompanije, lakše poštovanje zakonskih propisa, veća lojalnosti radnika, prednost u odnosu na konkurenciju, privlačenje i zadržavanje kvalifikovane radne snage, smanjenje troškova, finansijsko poboljšanje i pristup tržištu. Koncept korporativne društvene odgovornosti omogućava i eksterne prednosti: bolji imidž i reputaciju, doprinos održivom razvoju Srbije, lojalnost klijenata, očuvanje životne sredine... Prepreke i rizici, svrstani po veličini doživljenog rizika, pri implementaciji koncepta CSR, u kompanijama u Srbiji su: povećanje operativnih troškova, povećani zahtevi zainteresovanih aktera, povećano učešće regulatornih organa, zaostajanje u odnosu na konkurenciju, smanjena produktivnost, negativni uticaj na profitabilnost, negativan uticaj na kvalitet roba i usluga.

SPECIFIČNI ASPEKTI KORPORATIVNE DRUŠTVENE ODGOVORNOSTI

Najveći broj autora kao najznačajniji specifični aspekt korporativne društvene odgovornosti navodi *zaštitu životne sredine*.

Pored ove navode se:

- Zaštita interesa potrošača,

- Zaštita interesa konkurenata i poslovnih partnera,
- Zaštita prava radnika i
- Korporativna filantropija.

Zaštita životne sredine - specifični aspekt CSR

Zaštita i unapređenje životne sredine je svakako jedna od najznačajnijih oblasti primene korporativne društvene odgovornosti. Razlog za ovo su narastajući problemi u oblasti životne sredine, koji traju duži niz godina. Industrijski, ekonomski i društveni razvoj u poslednja dva veka imali su ogroman uticaj na životnu sredinu, kroz potrošnje energije, preterano iskorišćavanje resursa i zagađenja koja su proizvela. U svetu se od 1750. godine industrijska proizvodnja povećala više od stotinu puta, najvećim delom u XX veku, uglavnom u poslednjih pedeset godina.

Odlika savremenog ljudskog društva tokom većeg dela istorije bila je, u većoj ili manjoj meri, zagađivanje životne sredine tako da je obezbeđivanje čiste pijaće vode zahtevalo velike napore. U početku je zagađivanje bilo lokalizovano na grad, reku, rudnik ili dubrište. Industrijalizacija je proširila područja koja su se našla na udaru. Jedno od osnovnih pravila ekologije - da je Zemlja zatvoreni sistem i da sve nekud odlazi - znači da je odlaganje otpada tek puko premeštanje s jednog na drugo mesto na planeti, kako ističe Klajv (P. Klajv, 2009).

Rezultat industrijske revolucije bio je i neracionalno trošenje prirodnih resursa i zagađenje životne sredine. Masovna proizvodnja rezultovala je i masovnom potrošnjom i to ne samo potrošnih dobara, već i proizvoda namenjenih industrijskoj potrošnji, što u krajnjoj liniji podrazumeva prekomerno trošenje prirodnih resursa, posebno onih neobnovljivih. Ljudska zajednica mora se okrenuti razmišljanju koje je orijentisano na budućnost - razvoj društva mora biti usklađen i sa potrebama budućih generacija.

Od sedamdesetih godina dvadesetog veka pitanje zaštite životne sredine postaje sve značajnije.

Džejms Lavlok je 1972. godine razvio hipotezu o tome kako ova planeta funkcioniše. On je to nazvao "Geja teorija". Sa velikom jasnoćom je izložio viđenje da je Zemlja jedan ogromni živi organizam i da je svaki pojedinac deo ekosistema u sprezi sa svim ostalim delovima, čak i ako među njima ne postoji očigledna veza.

Godine 1972. održana je Prva konferencija UN o životnoj sredini, na kojoj je doneta i Deklaracija UN o životnoj sredini. Jedan od značajnih koraka u razvoju globalnog delovanja u domenu zaštite i unapređenja životne sredine je i donošenje Bazelske konvencije o kontroli međunarodnog kretanja opasnog otpada i odlaganja, usvojene na diplomatskoj konferenciji u Bazelu 1989. godine, koja je razvijena pod pokroviteljstvom Programa za zaštitu životne sredine UNEP, a koja je stupila na snagu u maju 1992. godine.

Druga konferencija UN o životnoj sredini i razvoju je održana u Rio de Ženeiru 1992. godine. Jedan od glavnih pravaca razmišljanja bio je koncept održivog razvoja, koji je razmatran krajem osamdesetih godina. Održivi razvoj podrazumeva razvoj koji zadovoljava potrebe sadašnjosti, a da pritom ne kompromituje sposobnost budućih generacija da zadovolje svoje potrebe. To je pristup koji ima za cilj da izbalansira društvene, ekonomske i ekološke posledice našeg delovanja sada i u budućnosti. Dakle, u potpunosti je saglasan sa konceptom korporativne društvene odgovornosti.

Na Konferenciji je prihvaćen koncept održivog razvoja koji se zasniva na principima:

- usklađeni privredni rast,
- socijalna pravda,
- zdrava životna sredina,
- održiva ekonomija,
- održivo korišćenje energije i
- održive industrijske aktivnosti.

Na konferenciji su usvojena i sledeća dokumenta:

1. Deklaracija UN o životnoj sredini i razvoju, sa usvojenim konceptom održivog razvoja. Ovim dokumentom su utvrđene i prihvaćene obaveze razvijenih zemalja sveta da finansijski i tehnološki pomognu zemlje u razvoju,
2. Konvencija o biodiverzitetu, odnosno obaveza svih zemalja da čuvaju i racionalno troše raznovrsnost i rasprostranjenost biljnog i životinjskog sveta,
3. Konvencija o promeni klime, sa obavezom da se smanji emisija gasova koji dovode do efekta staklene bašte,
4. Agenda 21, koja predstavlja uputstvo za primenu i sprovođenje koncepta održivog razvoja u svim sektorima razvoja i zaštite životne sredine u 21. veku, a sve zemlje potpisnice su obavezne da je primenjuju i da formiraju komisije za održivi razvoj. Agenda sadrži četiri osnovna poglavlja: socijalna i ekonomska pitanja, zaštita i upravljanje resursima za razvoj, jačanje uloge i značaja društvenih grupa i sredstva za ostvarivanje agende.

Na osnovu postavljenih smernica održana je 1997. godine u Njujorku Konferencija UN pod nazivom Samit Planete + 5, sa ciljem da se sagleda koliko se postiglo na sprovođenju prihvaćenih dokumenata sa samita održanog 1992., a posebno kako se sprovodi Agenda 21. Nakon dugog niza teških pregovora konačno je decembra 1997. godine u Kjotu u Japanu, potpisan sporazum. Sporazum iz Kjota obavezao je potpisnice da do 2012. smanje emisiju ugljen dioksida za 5,2% (u odnosu na 1990.). Većina stručnjaka u oblasti zaštite životne sredine smatra da su postavljeni ciljevi preniski i nedovoljni da se izbore sa obimnošću problema. Sporazum iz Kjota je stupio na snagu i postao obavezujući nakon ratifikacije u Rusiji, februara 2005. Februara 2002., novoizabrani predsednik Buš najavio je da SAD neće učestvovati u Sporazumu iz Kjota i odbacio sve obavezujuće redukcijske ciljeve

koji, tvrdio je, mogu štetiti američkoj ekonomiji, posebno ako zemlje u razvoju, poput Kine, ne moraju da smanje emisiju gasova.



Slika 4. Zastita životne sredine i profit-održivi razvoj

Komparativni prikaz osnovnih karakteristika industrijskog društva i modela društva baziranog na principu održivog razvoja dat je u tabeli 1.

Tabela 1: Neodrživi i održivi razvoj

NEODRŽIVI RAZVOJ
1. Dominacija industrijske paradigme
2. Prilagođavanje prirode čoveku
3. Zadovoljavanje potreba sadašnjih generacija
4. Fragmentarni pristup razvoju i životu
5. Ekonomska korisnost i parcijalna racionalnost
6. Kvantitativni indikatori rasta
7. Tržište kapitala, roba i rada
8. Ekonomska cena
9. Autoritarna organizacija društva
10. Demokracija većine

ODRŽIVI RAZVOJ
1. Dominacija ekološke paradigme
2. Prilagođavanje čoveka prirodi
3. Zadovoljavanje potreba sadašnjih i budućih generacija
4. Holistički pristup razvoju i životu
5. Trajnost, opstanak, globalna i dugoročna racionalnost
6. Kvalitativni, ekološki indikatori razvoja
7. Eko-tržište
8. Eko-cena
9. Autonomna pozicija društvenih subjekata
10. Participativna demokratija

Izvor: Malešević, K., Sociološki i etički smisao održivog razvoja, Ecologica, broj 2-3/99,

Sledeća velika konferencija zemalja okupljenih oko Sporazuma iz Kjota održana je 2005. godine u Montrealu. Nakon dugotrajnih i kompleksnih pregovora formulisana je dogovor o potrebi daljih redukcija i posle 2012. godine.

Polazeći od ovakvog načina razmišljanja potrebno je da se privredne aktivnosti zasnivaju na principu: planirati globalno, delovati lokalno. Danas 78% američkih tinejdžera smatra da će imati vremena da izvrši promene, 80% njih smatra da bi organizacije trebalo da se drže obaveze etičkog kodeksa o svom uticaju na životnu sredinu, 83% njih bi preduzelo mere za pomoć životnoj sredini, ukoliko bi im neko pokazao kako (Goleman 2010).

U idealnom smislu, želja je da razumemo štetne posledice jednog predmeta u tri povezane sfere:

- Geosferi

- Biosferi
- Sociosferi

I industrija se može posmatrati kao jedan tip ekosistema, onog koji ima dalekosežne uticaje na sve druge ekološke sistema.

Kao jedan od proizvoda razvoja ekološke svesti na globalnom nivou nastali su standardi upravljanja zaštitom životne sredine, opredmećeni u seriji međunarodnih standarda ISO 14000. Krajem osamdesetih godina Međunarodna organizacija za standardizaciju (ISO - *International Standards Organisation*) publikovala je međunarodne standarde kvaliteta iz kojih su se razvili i standardi ISO 14001. Društveni aspekt kvaliteta, kao jedan od tri aspekta kvaliteta (poslovni, tržišni i društveni aspekt kvaliteta) se odnosi na kvalitet življenja - društveni aspekt kvaliteta koji pretpostavlja da proizvodi i procesi organizacija budu takvi da u potpunosti obezbeđuju:

- zaštitu zdravlja ljudi,
- zaštitu životne sredine,
- zaštitu kupaca putem odgovornosti za proizvod,
- štednju prirodnih resursa,
- zadovoljenje građana u celini, uz poštovanje moralnih i etičkih društvenih i
- profesionalnih normi

Model sistema upravljanja zaštitom životne sredine (EMS) prema međunarodnom standardu ISO 14001 obuhvata:

- politiku zaštite životne sredine,
- planiranje,
- uvođenje i sprovođenje standarda,
- proveravanje i korektivne mere,
- preispitivanje od strane rukovodstva,
- kontinuirano poboljšanje kvaliteta životne sredine.

Ono što je posebno bitno za pristup međunarodnim standardima zaštite životne sredine jeste da su dobrovoljni. Standardi ISO 14001 su samoobavezujući, tako da nijedna ozbiljna kompanija u svetu koja drži do sebe neće izbeći da ga implementira, jer „ISO 14001 „traži samo ono što se Vas tiče“. Standard se primenjuje za one aspekte životne sredine koje organizacija može da kontroliše i na koje može da utiče (samim standardom se ne uvtrđuju posebni kriterijumi učinka zaštite životne sredine).



Slika 5. Međunarodni standardi

menadžmenta zaštitom životne sredine (EMS-ISO 14.001)

Primena standarda ISO 14001 omogućava bilo kojoj organizaciji da usaglasí svoju poslovnu politiku sa međunarodnim standardima upravljanja zaštitom životne sredine, da standarde ugradi u svoju poslovnu praksu i da primenjujući iste utiče na zaštitu i

unapređivanje kvaliteta životne sredine i razvoj sopstvene organizacije.

Jedna od značajnih oblasti društveno odgovornog poslovanja sa aspekta zaštite i unapređenja životne sredine jeste i razvoj i primena čistih tehnologija. Pojam čiste tehnologije obuhvata svaki proizvod, uslugu ili proces, koji donosi upotrebljivu vrednost uz minimalno trošenje resursa koji se ne mogu reciklirati i/ili istovremeno daje znatno manje otpadnih produkta u odnosu na klasična rešenja.



Slika 6. Čiste tehnologije

Čista tehnologija obuhvata širok spektar proizvoda i usluga, od solarnih sistema napajanja do hibridnih vozila. Ti proizvodi:

- Koriste reciklirajuće materijale i energetske izvore, ili smanjuju upotrebu prirodnih resursa tako što ih koriste efikasnije i produktivnije,
- Umanjuju ili eliminišu zagađenje i toksični otpad,
- Nude identične ili bolje performanse u odnosu na klasične proizvode,
- Investitorima, kompanijama i potrošačima obezbeđuju brzi obrt, smanjene troškove i niže cene,
- Otvaraju nove poslove u oblasti upravljanja, proizvodnje i razvoja.

Čiste tehnologije pokrivaju četiri oblasti: energetiku, transport, vodosnabdevanje i materijale.

ZAKLJUČAK

Korporativna društvena odgovornost predstavlja specifičan odgovor organizacija na pritiske potrošača i društva. Moderno shvatanje korporativne odgovornosti podrazumeva odnos kompanije prema širokom spektru interesnih grupa.

Prednosti malih i srednjih preduzeća prilikom uvođenja korporativne društvene odgovornosti su te što ona generalno bolje razumeju lokalni kulturni i politički kontekst, imaju više veza sa lokalnim civilnim društvom i mnogo veću posvećenost poslovanju u određenom regionu. Na osnovu istraživanja situacije u pogledu društvene odgovornosti poslovanja preduzeća u Srbiji je zapaženo da se, kao najčešće prepreke za primenu koncepta korporativne društvene odgovornosti navode: strah od (birokratije, ugrožavanja konkurentske pozicije, dodatnih troškova, izlaganja kritici), nedostatak (vremena, motivacije, znanja, prilika za angažovanje, sredstava ili sposobnosti), uverenja da je korporativna društvena odgovornost „stvar dobre volje“, a ne deo odgovornog poslovanja i

nerazumevanja pozitivnog uticaja koje odgovorno poslovanje može da ima.

U cilju stimulanja korporativne odgovornosti u zaštiti i upravljanju životnom sredinom, veoma je važno da se celo društvo uključi u realizaciju ovakvih projekata i da država sa svoje strane vodi računa o organizacijama koje ulažu u društveno odgovorne ekološke projekte. Implementaciji društveno odgovornog poslovanja preduzeća u Srbiji je neophodna široka finansijska i nefinansijska podrška.

Nije dovoljno da samo postoji svest o tome, već da se izvrši i praktična implementacija principa CSR u zakonska rešenja. Poželjno je slediti politiku razvijenih zemalja, koje poreskim olakšicama pospešuju vođenje računa o ovom važnom aspektu održivog razvoja. Ulaganja u zaštitu životne sredine treba da obezbede značajne poreske olakšice organizacijama. Poželjni oblik stimulanja su i konkursi za različite projekte zaštite životne sredine, koji se realizuju iz budžetskih sredstava.

LITERATURA

- [1] Addarii, F., Rattenbury, B. Understanding and Empowering Civil Society in the Western Balkans, 2009.
- [2] Baldwin, R., Globalisation: the great unbundling's, Economic Council of Finland, 2006.
- [3] Club de Excelencia en Sostenibilidad, Best Practices Catalogue in Corporate Responsibility, 2009.
- [4] Dahlsrud, A., „How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions”, *Corporate Social Responsibility and Environmental Management, Corp. Soc. Responsib. Environ. Mgmt.*, Wiley InterScience, 2006.
- [5] Hajiyeve, E., Baseline Study on Corporate Social Responsibility Practices in the Western Balkans, UNDP 2008.
- [6] Holme, R i Watts, P., Corporate social responsibility: Making good business sense. World Business Council for Sustainable Development, 2000.
- [7] Hopkins Michael, *A Planetary Bargain: Corporate Social Responsibility Comes of Age Revisited*, Macmillan, UK, 2005,
- [8] Kourula, A. and Halme M. Corporate Responsibility Type and Engagement with Nongovernmental Organizations: An Exploration of Business and Societal Outcomes, *Corporate Governance* 8(4): 557-570. 2008.
- [9] Poslovne perspektive o društvenoj odgovornosti preduzeća, Smart kolektiv, Beograd 2007.
- [10] Ristić, G., „Antropogeni rizik i upravljanje kvalitetom životne sredine prirodnih dobara», doktorska disertacija, Fakultet zaštite na radu Univerziteta u Nišu, 2004.

[11] Ristić, G., Integrisani sistemi menadžmenta zasnovani na analizi rizika, plenarno predavanje-štampan izvod, III nacionalna konferencija sa međunarodnim učešćem „Ocena profesionalnog rizika- teorija i praksa“, Fakultet zaštite na radu, 2008., str. 16-17.

[12] Ristić, G., Program menadžmenta vanrednim situacijama, plenarno predavanje-štampan izvod, XV naučni skup sa međunarodnim učešćem „Čovek i radna sredina – Upravljanje vanrednim situacijama“, Fakultet zaštite na radu, Niš 2007.

[13] Ristić, G., Na evropskom putu-obrazovanje menadžera sistema zaštite životne sredine, XIII naučni skup sa međunarodnim učešćem „Čovek i radna sredina-Zaštita radne i životne sredine u sistemu nacionalnog i evropskog obrazovanja“, Fakultet zaštite na radu, Niš, 2005., str. 165-174.

[14] Ristić, G., Vasović D., Dematerijalizacija kao aspekt održivog razvoja“, X međunarodna konferencija „Upravljanje kvalitetom i pouzdanošću-ICDQM 2008“

[15] Ristić, G. Bazic indicators of integrated solid waste management, *Facta Universitatis, Series Working and Living Environmental Protection*, 2005., Vol.2. No 5., pp. 383-392.

[16] Ristić, G., „Menadžment kvalitetom životne sredine“, Monografija nacionalnog značaja, Fakultet zaštite na radu u Nišu, Niš, 2009., str.284.

[17] Ristić, G., „Grad na deponiji - integralni menadžment čvrstim otpadom“, Monografija, Zadužbina Andrejević, Beograd, 2001, str.108.

[18] Ristić, G., Ekološko osiguranje kao metod upravljanja kvalitetom životne sredine prirodnih dobara, Preventivno inženjerstvo, god. IX, broj 2, Dunav-preveng, Beograd, 2001, str.61-70.

[19] Ristić, G., Glišović S., Minimizacija rizika i indikatori integralnog menadžmenta čvrstim otpadom, Nacionalna konferencija sa međunarodnim učešćem. „Ocena profesionalnog rizika-teorija i praksa“, Fakultet zaštite na radu Niš, 2005., str. 104-109.

BIOGRAFIJA

Goran Ristić rođen je 1964. u Vranju. Doktorirao je 2004. na Fakultetu zaštite na radu Univerziteta u Nišu, na temu: „Antropogeni rizik i upravljanje kvalitetom životne sredine prirodnih dobara“.



Najznačajnije oblasti istraživanja, kojima se bavi, su: sistemi menadžmenta životnom sredinom, integrisani sistemi menadžmenta, upravljanje otpadom, upravljanje kvalitetom životne sredine i komunalnim sistemom.

ENVIRONMENT PROTECTION - SPECIFIC ASPECT OF CORPORATE SOCIAL RESPONSIBILITY

Goran Ristić

Summary: *The first part of the paper explains the concept and analyzes the dimensions of corporate social responsibility – CSR. It also highlights the importance of CSR during the economic crisis. The characteristics of the process of development of CSR in Serbia are presented. Of the four specific aspects of CSR, environmental protection in particular is analyzed as the most significant. The paper also presents the connection between the elements of sustainable development and environmental protection. CSR and environmental protection are connected with the implementation of international standard series ISO 14000 and the development of clean technologies. The final section describes the mechanisms of development of corporate social responsibility.*

Key words: environment, social responsibility, sustainable development

BOOK REVIEW / PRIKAZ KNJIGE**„MENADŽMENT KVALITETOM
ŽIVOTNE SREDINE“** *dr Gorana Ristića*
Monografija nacionalnog značaja

Na oko tri stotine strana autor precizno, jasno, razumljivo i na naučno zasnovan način predstavlja sisteme menadžmenta životnom sredinom, posebno detaljno analizirajući razlike između sistema menadžmenta životnom sredinom prema zahtevima serije standarda ISO 14.000 i Sistem menadžmenta i proveravanja zaštite životne sredine (EMAS).

Na početku autor definiše ključne EMAS elemente i korake u njegovom razvoju u organizaciji i ističe da na putu do sertifikacije EMAS-a organizacija mora da učini četiri osnovna koraka: preispitivanje postojećeg sistema zaštite životne sredine, uspostavljanje efektivnog i efikasnog sistema menadžmenta kvalitetom zaštite životne sredine, proveru sistema menadžmenta zaštitom životne sredine i izveštavanje o učinku zaštite životne sredine.

Ukazuje se da ne postoji univerzalna metoda za vrednovanje i merenje uticaja organizacije na kvalitet životne sredine i dodaje da bi na početku svaka organizacija trebalo da stekne detaljniji uvid u sopstvene neposredne i posredne uticaje na kvalitet životne sredine.

Pišući o programu zaštite životne sredine autor naglašava da Program menadžmenta kvalitetom i zaštitom životne sredine predstavlja skup mera i aktivnosti za ostvarivanje opštih i posebnih ciljeva zaštite životne sredine, koji su osmišljeni da poboljšaju učinak i performanse kvaliteta i zaštite životne sredine u organizaciji. Program određuje odgovornosti i identifikuje sredstva za ostvarivanje, definisanih, opštih i posebnih ciljeva u precizno definisanim rokovima. Posebno se ističe da Program integriše zaštitu životne sredine u svakodnevni život organizacije i mora dovesti do promena u ponašanju i poboljšati učinak zaštite životne sredine i da on predstavlja pokretačku snagu stalnog poboljšavanja kvaliteta i performansi životne sredine.

Detaljno su, veoma sadržajno i jasno obrađeni aspekti aktivnosti i postupci za identifikaciju i vrednovanje aspekata životne sredine. Autor ističe da ovaj proces započinje izborom aktivnosti, proizvoda i usluga koji su dovoljno obimni da ispitivanje ima smisla i dovoljno veliki da se mogu dobro razumeti. Sledeći koraci, koji se obrađuju su identifikovanje neposrednih i posrednih aspekata životne sredine, koji interaguju sa životnom sredinom, zatim, identifikacija stvarnih i potencijalnih, pozitivnih i negativnih uticaja na životnu sredinu i na kraju vrednovanje značajnih uticaja.

Izuzetno značajan deo publikacije, koji se odnosi na identifikaciju opasnosti, nezgoda i vanrednih situacija sa uticajem na životnu sredinu, adekvatno i sadržajno je obrađen. Istaknuto je da bi postupci u slučaju opasnosti i vanrednih situacija trebalo da pokrivaju sve situacije koje se mogu očekivati u organizaciji. Konstatuje se da je neophodno obaviti procenu rizika kako bi se utvrdili svi potencijalno opasni uslovi i dodaje da se mora preispitati procena rizika po bezbednost i zdravlje na radu i proveriti da li su u procenu uključeni i uticaji na životnu sredinu.

Publikacija doprinosi razvoju nauke i prakse u zaštiti i stalnom poboljšanju kvaliteta životne sredine. Obradeni sadržaj veoma je koristan za studente zaštite životne sredine i srodnih fakulteta na svim nivoima studija, stručnjake u organizacijama koji razvijaju, primenjuju i unapređuju sisteme menadžmenta životnom sredinom.

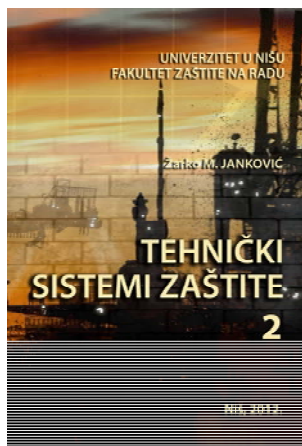
Analiza sistema menadžmenta životnom sredinom, obrađena u publikaciji, posebno je korisna za efikasan i efektivni pristup u procesu integracije sistema menadžmenta u organizaciji.

Publikacija predstavlja kvalitetnu i sadržajnu naučnu građu sa kritičkim pregledom u oblasti menadžmenta kvalitetom zaštite životne sredine.

Publikacija predstavlja vredan doprinos nauci u oblasti menadžmenta kvalitetom životne sredine, između ostalog, zato što: precizno, jasno, razumljivo i na naučno zasnovan način predstavlja i analizira sisteme menadžmenta životnom sredinom; struktura rukopisa odgovara zahtevima savremenog naučnog pristupa u obradi veoma složene i izuzetno aktuelne materije; sistemski analizira postupke za identifikaciju i vrednovanje aspekata životne sredine; pruža mogućnost za dalji razvoj istraživanja u oblasti upravljanja kvalitetom životne sredine

Analiza sistema menadžmenta životnom sredinom, obrađena u publikaciji, posebno je korisna za efikasan i efektivni pristup u procesu integracije sistema menadžmenta u organizaciji.

dr Milan Kukrika, red. prof.
Geografski fakultet Univerziteta u Beogradu

BOOK REVIEW / PRIKAZ KNJIGE**„TEHNIČKI SISTEMI ZAŠTITE 2“**
dr Žarka Jankovića

Udžbenik „Tehnički sistemi zaštite 2“ sistematizovan je u dva poglavlja. Prvo poglavlje čine sistemi zaštite od mehaničkih povreda, drugo sistemi zaštite na sredstvima rada.

Prvo poglavlje obrađuje razvoj sistema tehničke zaštite od perida maufakturne proizvodnje do računarskog sistema upravljanja mašinama. Definisan je stepen zaštite u zavisnosti od vrste tehničkih sistema (univerzalne, poluatomske i automatske mašine). Podelu tehničkih sistema zaštite od mehaničkog povređivanja karakterišu tri koncepta: manufakturni, industrijski i računarsko-industrijski koncept. Za rešenja sistema zaštite od mehaničkog povređivanja uzeta su u obzir dva bitna faktora i to: objektivni (tehnički) faktor i subjektivni (ljudski) faktor. Analizom ovih faktora predložena su različita tehnička rešenja sistema zaštite, kao što je sistem zaštite od mehaničkog povređivanja: konstrukcijom zaštitnog oklopa, ugradnjom zaštitnih uređaja i zaštitnih blokada. Poseban akcent je dat analizi rizika od mehaničkih povreda i njegovom smanjenju ugradnjom sistema tehničke zaštite. Na primeru visokorizičnih mašina, gde se ulaganje i vađenje predmeta obrade obavlja ručno, data su konceptijska rešenja sistema zaštite. Ova konceptijska rešenja se odnose na mašine sa valjcima. Posebno su definisane obaveze proizvođača mašina, koje mora ostvariti prilikom projektovanja, a posebno obaveze korisnika mašina u cilju smanjenja rizika, njegovog eliminisanja ili svođenja na prihvatljiv nivo.

Drugo poglavlje obrađuje tehničke sisteme zaštite na sredstvima rada, pri čemu su data konceptijska rešenja sistema zaštite. Ova rešenja se odnose na uređaje za upravljanje gde su postavljeni konstruktivni zahtevi bezbednosti za komande i signalne uređaje. Posebno su obrađeni uređaji za blokiranje rada mašine, kontrolni instrumenti i signalni uređaji. Dat je prikaz tehničkih

rešenja sistema zaštite na mašinama i uređajima pri čijem radu nastaju gasovi, prašina i štetna isparenja. Zavisno od procenjenog rizika svake mašine definisani su zahtevi bezbednosti pri konstruisanju mašine koji mogu biti neznatni, povećani ili visoki. Na primeru za ostvarivanje potpune funkcije sistema tehničke zaštite, zahtevi bezbednosti su određeni u zavisnosti od načina ulaganja i vađenja obratka iz opasne radne zone na mašini. Na osnovu klasifikacije sistema zaštite od preopterećenja mašina opisani su tehnički sistemi zaštite prekidnog dejstva i neprekidnog dejstva. S obzirom da prese u pogledu bezbednosti pripadaju grupaciji mašina sa povećanim rizikom, one su posebno obrađene sa predlozima mogućih konceptijskih rešenja tehničke zaštite. Primena prikazanih tehničkih rešenja zaštite na presama zavisi od načina obrade predmeta, tako da je u knjizi dat prikaz pokretnih zaštitnih ograda, dvoručnih komandi i svetlosne zaštitne zavese. Izbor datih sistema tehničke zaštite na mašinama zavisi od početnog konstruktivnog rešenja o čemu posebno treba voditi računa u početnoj fazi projektovanja.

Sadržaj knjige je usklađen sa nastavnim planom i programom predmeta „Tehnički sistemi zaštite“ koji se izučava na trećoj godini Osnovni akademskih studija.

Autor je na originalan način prezentovao sadržaj iz naučne discipline tehnologije i tehnički sistemi zaštite..

dr Dragan Cvetković, red. prof.
dr Milan Blagojević, red. prof.
Fakultet zaštite na radu u Nišu

**REPORT ON THE 7TH SCIENTIFIC AND
PROFESSIONAL CONFERENCE
"MANAGEMENT AND SAFETY"****(M&S 2012)**

The 7th *Management & Safety (M&S 2012) Conference*, organized by the Croatian Association of Safety Engineers and the University College of Applied Sciences in Safety from Zagreb, was held on June 14-15 at the Sveti Martin Spa & Golf Resort in Međimurje (Croatia). The topic of this year's conference was *Human Resources Management and Safety*, thus actually continuing the Conference's program cycle entitled *Basic Management & Safety Functions*. It was dedicated to human resources as the most significant protection and safety factor and envisaged as an opportunity to supplement and articulate more strongly the discussions started at the previous conferences in order to examine more clearly their practical implications on continuous improvement of the condition of the field of management and safety in a wider social context.



Image: Joint photo of the participants to the M&S 2012 Conference in front of the Sveti Martin Spa & Golf Resort

The *Management & Safety (M&S 2012) Conference* represents the largest conference of the 5-year *Basic Management and Safety Functions* program cycle held so far. It is considered a great success that the Conference managed to gather scientists, professionals and creators of various profiles (118 authors from 4 countries) determined in their intention to offer to the society a human resources development scenario that would, with an adequate human resources strategy and management policy, lead to the creation of a safer society. The works by professionals and researchers from various scientific domains illustrate the attitude and the interest awakened by the topic of this year's Conference.

The general introductory essays of an invitational character were submitted by Prof. Vesna Nikolić, Ph.D (Serbia), Prof. Mirko Markič, Ph.D (Slovenia) and Prof. Ksenija Klasić, Ph.D (Croatia). In addition to these invitational lectures, the Conference's Proceedings includes 11 original scientific papers, 6 previous reports, 15 reviewed scientific papers, 8 presentations from a scientific gathering and 29 professional papers that were subject to international review by the members of the Conference Program Committee. Considering the complexity and scope of the issue of human resources management, the topic of the *M&S 2012 Conference* encompassed various aspects and problems associated with human resources management in various protection and safety areas.

Human Resources Management is a complex and responsible function that significantly influences the efficiency of other functions within an organization, and thus the Safety Management function as well. It refers to all areas of contemporary business and public safety of people, property and living environment (safety at work, protection against fires and explosions, physical and technical protection of people and property, civil protection, defense, protection of information systems, financial protection, insurance, etc.). The participants to the *M&S 2012 Conference* expanded and deepened the basis for defining the human resources management policy and strategy within the protection and safety domain with their essays, reports and discussions. The scientific and professional significance, value and applicability of international co-authorial works of a comparative nature showed that the participants to the Conference share a common view that there is a need to further expand international cooperation and initiate international research projects in their area of competence.

The great interest of the authors indicated the significance of a conference defined in terms of the topic and cycle as well as the need to continue realizing the program cycle of the Conference entitled *Basic Management & Safety Functions*. The next, 8th consecutive *M&S 2013 Conference*, this time on the topic of *Governance and Safety*, will be held on June 13-14, 2013 in Trakošćan, Zagorje, Croatia (<http://www.hotel-trakoscan.hr/>)



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Bilsom HOWARD LEIGHT

Bilsom antifoni i Howard Leight čepovi za uši su sinonim za tehnološke inovacije, fleksibilnost i nenadmašnu udobnost uz maksimalnu zaštitu.



BACOU

Bacou, vodeća kompanija u razvoju jedinstvenih i inovativnih koncepata, nudi širok izbor ultra udobne obuće prilagođene delatnostima i inspirisane poslednjim modnim trendovima uz kombinaciju bezbednosti, udobnosti i stila.



Miller kao sinonim za bezbednost

Kao globalni lider na polju opreme za zaštitu od pada, Bacou-Daloz već više od pedeset godina razvija rešenja kako bi učinio bezbednijim rad na visini.

Miller, kao najinovativnije priznato svetsko ime u zaštiti od pada, nudi širok izbor proizvoda koji poboljšavaju zaštitu, udobnost i performanse korisnika, i ohrabruju ga da koristi opremu 100% vremena u toku rada.



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TERMOVIZIJSKE KAMERE Instrumenti za termovizijsku dijagnostiku



Termovizijska dijagnostika se koristi u tehničke i medicinske svrhe, a posebno je našla primenu u zaštiti i bezbednosnim sistemima. Termovizijske kamere omogućavaju da ljudsko oko sagleda ono što ne može da vidi. Svako telo emituje određenu količinu energije koja može da se registruje kamerom za termoviziju.

Na osnovu rezultata snimanja ili posmatranja kroz objektiv kamere, registruje se infracrveno ili toplotno zračenje i najnižeg stepena, a omogućava se izuzetno precizno merenje temperature bez ikakvog kontakta sa objektom čije se fizičke karakteristike mere. Na osnovu rezultata dobijenih testiranjem moguće je napraviti preciznu evaluaciju mehaničkih, termičkih, električnih i bioloških procesa. Informacije o struji, voltaži, otporu i energiji su dragoceni za adekvatno postavljanje električnih instalacija i njihovo puštanje u rad.

Kineska kompanija Wuhan Guide Infrared, koju na našem tržištu zastupa "Aleksandar Inženjering", godinama unapređuje tehnologiju registrovanja termalne, odnosno infracrvene energije. Termovizijske kamere "Wuhan Guide Infrared" su tehnološki superiorni proizvodi, visokih performansi i za životnu sredinu neškodljivi.

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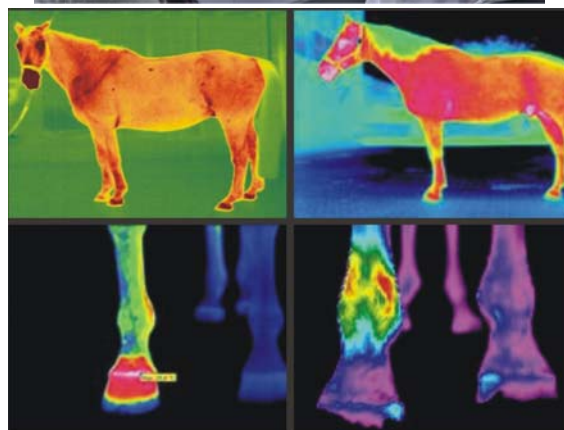
EasiR Serija je nova infracrvena kamera proizvođača Guide, koja pomera granice infracrvenog snimanja svojim odličnim karakteristikama i niskom cenom. Dizajnirana je za rad pod teškim radnim uslovima i za korisnike, koji ne moraju biti visoko obučeni, EasiR Serija je otporna na udarce i robusna i pod najtežim radnim uslovima.



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Za zaštitu od požara, zaštitu radne i životne sredine

Protivpožarna ručna termička kamera IR1190 je opremljena sa detektorom ultravisoke rezolucije, što joj omogućuje prikazivanje slike besprekorne jasnoće, a time se pomaže vatrogascima da vide kroz oblake dima i da identifikuju moguće žrtve pre nego što do dođe do povrede, ili smrti



Napredna tehnologija infracrvenog merenja temperature vam pomaže da odredite tačan izvor vatre, a time da donesete tačnu i blagovremenu odluku, koja neće biti ugrožena od strane nepreciznosti merenja detektora. Na raspolaganju je i bežični prenos video informacija, kojim se može ostvariti slanje žive slike iz prve ruke u komandni centar, gde se onda mogu doneti brze i precizne odluke.

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