PLANNING ON THE BASE OF HUMAN-POTENTIAL EFFECTIVENESS

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Abstract

This article deals about implantation of information about dynamic human-potential system to planning process in Slovak enterprises. Two re-bound parts are joined in this paper – results of research and proposed model. Research has been oriented on next areas: identification of personnel-specialist's post in Slovak enterprises, detection of source areas and information about human potential which are used in planning process by managers, investigation of dependency between cooperation of personnel specialists with managers and engagement of employees in planning process. Results of research and analyses of domestic and foreign information resources have been a source for creation of model of planning on the base of human-potential effectiveness.

The proposed model is a composition in which are synthesized four base components: comprehensive effectiveness-evaluation process, conceptions of human-potential effectiveness, human-potential processes and enterprise planning process. In the end, there are some advises how to make planning process more qualitative on the base of human-potential effectiveness.

Key words: human-potential effectiveness, planning process, research, indicators, dependency, implementation of strategy, model of planning on the base of human-potential effectiveness.

Classification JEL: M12 Personnel Management

1. Introduction

Nowadays the tension on effect maximizing graduates in any area of business planning. Purposefulness, rationality, and system in all planned activities are being more and more important. One way how to improve the quality of planning process is to implant dynamic influences of human-potential effectiveness into preparation and realization of planning process.

The need to make human-potential system more effective in business praxis is reflected in progressive tendency to practice various concepts and methods of human-potential-effectiveness measuring for example the Model of Engagement practiced overall in Great Britain, personnel controlling, personnel audit, Balanced Scorecard, models of quality (like EFQM), talent management, etc.

The base of the most those concepts is *adherence of a strategic setting* and *system approach with human-potential accent*. The adherence of strategy-setting means doing planned and thought-out activities across the all enterprise to achieve the goals and meet the vision and the mission. The system approach means that an enterprise is open live dynamic system. Any change in external environment of an enterprise even any change in internal environment causes changes in all subsystems of the enterprise. The human potential accent means changeover static measuring and comparing of financial indicators in relation with past performance to activating dynamic manpower as a factor of successful implementation of corporative strategy.

The common principle of effectiveness and performance increase by means of humanpotential management is next: STRATEGY (goals \rightarrow strategy \rightarrow factors of achievement \rightarrow indicators \rightarrow methodology of calculation \rightarrow planned values) \rightarrow REALITY (calculating and comparing with planned values, in time-series and by benchmarking) \rightarrow ANALYSIS (search of positive and negative causal factors, plans for next improvement of positive or negative results) \rightarrow ACTION (implementation of improvement plans) \rightarrow FEEDBACK (effect of action and effectiveness of meeting the goals), (remolded by: Kolláriková, 2008, p. 37). A strategy as "a plan or course of action which is vital, pervasive, or continuing importance to the organization as Before creating the model of planning on the base of human-potential effectiveness is necessary to analyze and compare theoretical science sources from domestic and foreign authors and to find out realistic situation in Slovak enterprises through empirical research. There exist two main forms of data gathering and processing: qualitative and quantitative research. P. Gavora (2006, p. 22) specifies the purpose of quantitative research as the theory verification; and the purpose of qualitative research as formulation of new theory. In the case of planning on the base of human-potential effectiveness has been quantitative empirical research chosen.

2. Specification of problem

Specification of problem belongs to a preliminary phase of empirical research. Problem definition is the main presumption of successful realization and acquiring of relevant results. (Kozel et al., 2006, p. 71)

The problem joins two disciplines: planning in management and human-resource effectiveness. The main purpose of empirical research is to analyze and find out the current level of business planning in interaction with human-potential effectiveness of Slovak enterprises and to identify causal factors on exploitation of information about changeable quality of personnel processes.

By the main purpose of empirical research next research questions have been formulated:

- What approaches, methods and techniques of human-resource effectiveness are used in planning process nowadays?
- What relation is between setting of objectives and exploitation of information about human-potential effectiveness?
- What is the main obstruction of implantation of dynamic changes in human-potential effectiveness into planning process?
- What factors to make planning process more qualitative by exploitation of humanpotential effectiveness are by managers the most important?

Hypothesis of research are proposed answers on research questions. C. Soans and A. Stevenson (2003, p. 398) characterize hypothesis like:

- a) a supposition or proposed explanation made on the basis of limited evidence as a starting point for further investigation,
- b) *Philosophy:* a proposition made as a basis for reasoning, without any assumption of its truth.

By the research questions have been formulated next hypotheses:

- H1 More than 60% managers exploit human-resource effectiveness most in implementation of strategy.
- H2 More than 60 % top-managers target to measure performance of enterprise by financial indicators in the planning phase of setting objectives and strategies.
- H3 There exists correlation between measure of cooperation with personnel specialist and engagement of employees in planning process.

Research should be focused on search of number, frequency, intensity or strength of researched events or indicators (Nový et al., 1997, p. 75). Researched indicators must be properly chosen. It means that (Lukášová et al., 2004, p. 101):

- It is necessary to reduce multidimensional surveyed area in limited number of indicators,
- It is necessary to decide, what indicators are the most relevant about selected area.

In research about planning on the base of human-potential effectiveness the surveyed indicators to evaluate the set hypotheses have been focused on:

- 1. Measure of cooperation between managers and human-potential specialists,
- 2. Information level about objectives and plans of enterprise,
- 3. Form of communication between managers and human-potential specialists,
- 4. Degree of personnel-indicator-score in enterprises,
- 5. Measure of signification about some personnel appropriateness exploited in planning process.

The choice of research method means setting of way of data acquisition. The most used methods are: questionnaire, interview, observation, scale, experiment, analysis of contents, sociometric analysis, projective method... (www.pedelsp94.info, cit. 20.2.2010)

Managers of all levels in Slovak enterprises have been chosen as the object of survey. While the role of personnel professional is divided between an owner and some employees in micro enterprises (Byers, 1997, p. 8), this kind of enterprises has been not included in research sample. As a way of selection of survey sample has been used the technique of current selection by the size-distribution of Slovak enterprises (Source: Statistical Office of Slovak Republic).

Size of enterprise	Number of employees				
10-49 employees	37 262				
50 – 99 employees	2 905				
100 – 249 employees	4 171				
250 and more employees	828				
Number of all enterprises	45 166				

Table 1: Division of Slovak enterprises by size to 11/2009

Source: Statistical Office of Slovak Republic

Representative sample should be in size 0,045% of basic sample (Katriak, 1975, p. 55) that means 203 enterprises. Planned size of sample was 420 enterprises; by the application of technique of personnel questioning 363 questionnaires have been returned. Return of questionnaires is 86%. 18 questionnaires were rejected; net sample has been in size of 345 respondents, this sample is by Katriak representative (345 > 203). Filled questionnaires were evaluated by computer techniques. Data were compiled into database available in the programs MS Excel and MS Word.

3. Results of empirical research

Percentage representation of managers by size of enterprises and by management position is illustrated in Table 2 and Figure 1.

	10 – 49 employees	50 – 99 employees	100 – 249 employees	250 and more employees
Top management	44	26	33	28
Middle management	31	38	39	51
Executive management	11	8	9	27
Total number	86	72	81	106

Source: own

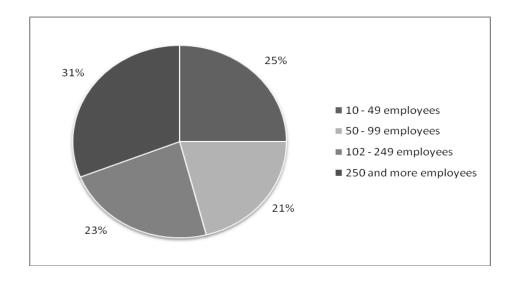


Figure 1: Percentage representation of respondents, segmentation by size of enterprises Source: own

4. Hypotheses verification

H1 More than 60% managers exploit human-resource effectiveness most in implementation of strategy.

This hypothesis has been verified on the base of answers about these selected indicators:

- **1.** Positive rating on improving quality of planning process through human-potential effectiveness
 - The highest positive rating on improving quality of partial planning phases through human-potential effectiveness by improving quality of management position or size of an enterprise obtained the phases of strategy implementation: setting targets and plans of units, departments, teams, collectives (it means creating of policies, programs, rules, budgets) and performance of the tasks in the term of sett plans and harmonizing of enterprise goals with goals of individuals. These three highly rated answers are a part of implementation of strategy (see Table 3).

Table 3: Percentage of "yes" answers if phase of planning process should be more qualitative by increase of human-potential effectiveness [in %]

Planning phase Respondent segmentation	Analyzing of the market- position and success	Setting objectives	Creating strategy	Setting targets and plans of departments, teams	Harmonizing of enterprise goals with individual goals	Performance of the tasks	Evaluating of meeting targets and objectives
Top managers	69	71	72	86	80	84	79
Middle managers	60	69	62	74	66	67	68
Executive managers	62	64	55	78	76	73	69
Average	63	68	63	80	74	75	72

10 – 49 employees	60	65	64	70	66	70	70
50 – 99 employees	63	71	65	86	82	74	65
100 – 249 employees	67	81	73	83	74	80	79
250 and more employees	64	61	58	80	72	75	75

65

80

73

75

Source: own

2. Measure of signification of particular human-potential areas in planning process

70

More than 66% respondents use by planning process these personnel information:

- Performance,

Average

- Abilities, skills, knowledge,
- Compensation,

Interpersonal relationship and satisfaction of employees.

63

This type of information is needed by setting tasks and the soft factors make human potential initiative and cooperative. Both of these human-potential areas impact primarily in the phase of strategy implementation (see Table 4).

Table 4: Exploitation of human-potential information in planning process [in %]

Percentage rated 3 and more (important to fundamental important)													
	Number	Satisfaction	Structure	Information	Performance	Development	Professionalism	Relationship	Compensation	Price of work	Legislative Changes	Demography	Motivation
Top managers	76	80	72	66	85	72	81	76	77	73	66	34	63
Middle managers	71	65	60	64	80	64	75	65	70	55	52	25	45
Executive managers	58	60	58	55	71	49	75	65	64	40	44	22	56
Average	68	69	63	61	79	61	77	69	70	56	54	27	55

Source: own

Requirements of verification H1 hypothesis have been fulfilled. Hypothesis H1 is accepted.

H2 More than 60 % top-managers target to measure performance of enterprise by financial indicators in the planning phase of setting objectives and strategies.

This hypothesis has been verified on the base of answers about these selected indicators:

1. Measure of importance of human-potential areas by planning process

Top managers had to evaluate importance of human-potential areas by planning in rating scale from 1 (absolutely not important information) to 5 (fundamentally important information). The highest rated Appraisal of human-potential performance as important to fundamentally important has been rated by 85% top-managers (Table 5), the average rating of this area is 4 (very important information).

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	Number of employees	Satisfaction	Structure of human potential	Information	Performance	Development	Abilities, skills, knowledge	Relationship	Compensation	Price of work	Legislative changes	Demography prognoses	Aptitudes, ambitions, priorities of individuals
Significance	3,83	3,57	3,33	3,10	3,98	3,20	3,92	3,51	3,44	3,42	3,34	2,16	3,03
Top-manager percentage	76	80	72	66	85	72	81	76	77	73	66	34	63

Table 5: Measure of importance of human-potential areas by planning process, top managers

Source: own

2. Significance or personnel indicators in planning process

Financial indicators together with performance appraisal indicators as important to fundamentally important have been rated by 85% top managers. Financial indicators have been rated with the highest average score up 4 (very important indicators) – see Table 6. There is irrelevant difference between answers managers of various hierarchal levels (see Figure 2).

Table 6: Measure of personnel-indicator importance, answers of top managers

	Motivation and satisfactory indicators	Structure and state indicators	Financial indicators	Indicators of abilities, skills and knowledge	Mobility indicators	Performance appraisal indicators
Significance	3,60	3,46	4,08	3,36	2,92	3,74
Top-manager percentage	81	82	85	75	65	85

Source: own

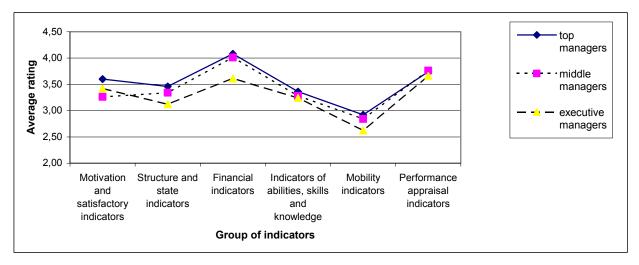


Figure 2: Importance of various groups of personnel indicators Source: own

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3. Measure of exploitation of personnel indicators

Supplemental verification of hypothesis H3 is finding out measure of exploitation of personnel indicators. The most respondents answered, that important personnel indicators are monitored irregularly that is a sign of existing human-potential system but weak control. Managers prefer monitoring other functional areas and indicators than human potential. Just only 24% respondents do corrective actions on the base of found deviation. When there are monitored changes in human-potential system, response in action plans is law (see Table 7).

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	Monitored regularly	Monitored irregularly	Monitored and benchmarked	Monitored and compared with plans	Monitored and given response
Percentage	12%	37%	12%	15%	24%

Source: own

Requirements of verification H2 hypothesis have been fulfilled. Hypothesis H2 is accepted.

H3 There exists correlation between measure of cooperation with personnel specialist and engagement of employees in planning process.

This hypothesis has been verified on the base of answers about these selected indicators:

- Measure of mission-knowledge,
- Measure of strategy-communication,
- Measure of employee-engagement on setting plans,
- Measure of communication with personnel specialist in planning process,
- Measure of cooperation with personnel specialist in planning process.

In statistical hypothesis testing two hypotheses are compared, which are called the null hypothesis and the alternative hypothesis. The null hypothesis is the hypothesis that states that there is no relation between measure of cooperation with personnel specialist and engagement of employees in planning process. The alternative hypothesis, as the name suggests, is the alternative to the null hypothesis: it states that there *is* some kind of relation (Wikipedia, cit. April 30, 2010).

The investigated indicators were tested on dependence by Pearson correlation index (Mikolaj, 2000, p. 50) and results are in Table 8.

	Communica	tion – value:	Dependence,	Cooperation	Dependence,	
	calculated	tabled	by χ^2 test	calculated	tabled	by χ^2 test
Mission	15.16	18.3	No	8.31	38.9	No
Strategy	69.23	43.8	Yes	23.9	50.9	No
Engagement	31.35	50.9	No	25.09	50.9	No

Table 8: Dependence examination by the method: Pearson χ^2 *test, Significance level* $\alpha = 0$, 05 *with n-1, m-1 degrees of freedom*

Source: own

In Table 8 is found dependence between strategy-communication and communication with personnel specialist in planning process. For finding of correlation is calculated Cramer V index = 0, 20; the correlation is not significant. Hypothesis H3 is rejected.

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Detailed evaluation

Just a third of respondents from small enterprises know written formulated mission, the same result is by less than 50 percent of respondents from medium enterprise and 50 percent of respondents from big enterprises to 249 employees. In big enterprises of size 250 employees and more written formulated mission know 55% respondents and no respond answer that the mission is not formulated. It is probably thanks to building corporate culture with preference of high information. 8% managers from small business answered that the mission is not formulated. This type of answer is possible in enterprises with few employees and strong position of an owner (see Figure 3).

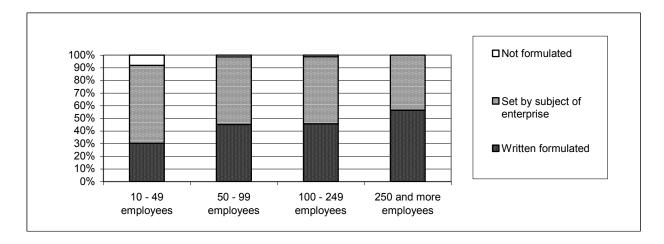


Figure 3: Knowledge of mission, aspect of enterprise size Source: own

Forms and availability of strategy are described by respondents next (Figure 4). The most managers of all enterprises answered that the strategy is written formulated and available to all managers. Strategy in verbal form was stronger marked in small enterprises. Some small enterprises have probably not formulated strategy because their priority is flexibility in customization and market demand.

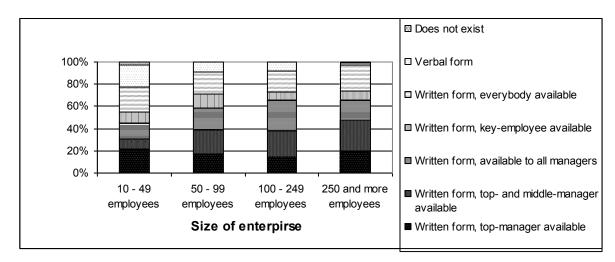


Figure 4: Form and availability of strategy, aspect of enterprise size Source: own

Managers rated as the most important areas of cooperation between managers and personnel specialists in a work with human-potential (scale: 1 point – "no cooperation" to 5 points "process is provided by personal specialist"):

- 1. Industrial law (average rating: 3,17 points, modus = 5: process is provided by personal specialist),
- 2. Recruiting (average rating: 3,17 points, modus = 4: process is coordinated by personnel specialist),
- 3. Intake (average 3.15 points, modus = 3: process is consulted with personnel specialist).

Managers rated as the least important areas of cooperation between managers and personnel specialists in a work with human-potential: job redesign (modus = 1: no cooperation), evaluating, compensation, profiling of employees and managers (each process: modus = 3: personnel specialist is an advisor) – see Figure 5.

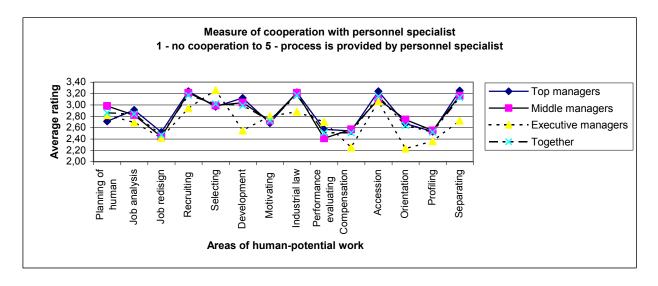


Figure 5: Measure of cooperation between managers and personnel specialist Source: own

Summary

By the investigation between Slovak managers there were found next facts:

- More than 60% managers exploit human-resource effectiveness most in implementation of strategy.
- More than 60% top-managers target to measure performance of enterprise by financial indicators in the planning phase of setting objectives and strategies.
- There exists just weak correlation between measure of cooperation with personnel specialist and engagement of employees in planning process.

Slovak managers usually know the mission and the strategy of enterprise and they use to cooperate together by vertical and horizontal line by planning process. They use to cooperate with personnel specialists, even by planning process. Just less than 10% of (executive) managers rated satisfaction with personnel-specialist cooperation as below standard. The higher management position, the better satisfaction with services, advisory and information from personnel specialists. On the other hand the active response on changes in human-potential system is not adequate, managers use to control human-potential system, but not implant the changes in plans. This is the area for making proposition for improvement in planning process.

5. Planning model on the base of human-potential effectiveness

The model in Figure 6 is created by syntheses of four components composed in planning process on the base of human-potential effectiveness:

 The central part of model represents comprehensive effectiveness-evaluation process, which logical connects other three parts together in one unit. This process consists of next steps: input analyses – data selection – calculation of indicators – comparison, deviation identification – measure suggestions – realization (action) – effectiveness evaluation. (Majerová, 2008, p. 269)

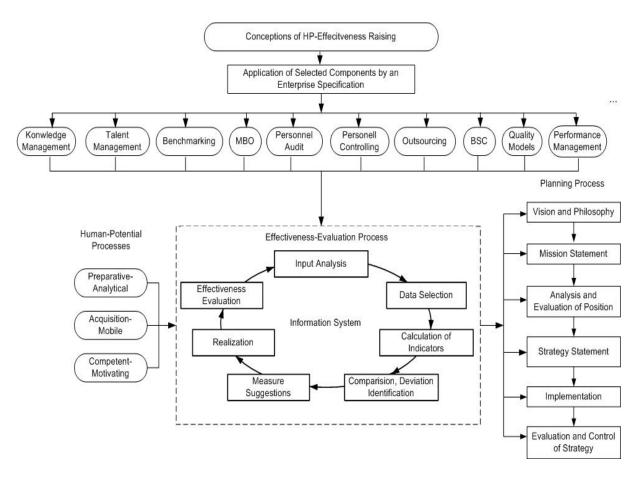


Figure 6: Planning Model on the base of human-potential effectiveness Source: own

2. The part above the effectiveness-evaluation process represent various conceptions of humanpotential effectiveness raising like Talent Management, Knowledge Management, Benchmarking, MBO, Personnel Audit, Personnel Controlling, Balanced Scorecard etc. These conceptions create a base for application of selected ideal parts of human-potential effectiveness rising in enterprise planning by specific unique position and characteristics of an enterprise. Implemented and practiced selected conceptions become a part of: enterprise plans (must be thoroughly prepared), human-potential system (the purpose is to raise humanpotential effectiveness), and their effectiveness-evaluation is inevitable (by what costs have been human-potential effectiveness increased).

- Preparative-analytical: for example strategic human-potential management, planning of human potential, job inventory, job analysis, job design...
- Acquisition-mobile: for example human-potential profile, recruitment, selection, orientation, human-potential separation, retention, internal movement...
- Competent-Motivating: for example development (training and education), creative leading, motivation, evaluation and compensation, employee relations...

All personnel processes should be permanent evaluated in effectiveness in particular steps (right decision-making) and in the end of a process (meeting the goal).

4. The right part represents enterprise planning process consisting next steps: vision and philosophy statement or update – mission statement or update – analysis and evaluation of enterprise position in the market – strategy statement – implementation and realization – evaluation and control of strategy + feedback.

6. Conclusion

In the end here are some recommendations how to make planning process more qualitative on the base human-potential effectiveness. They relate to personnel system, planning process and development and motivation of human-potential:

- The co-operation of managers and personnel specialists by planning especially long-term activities is necessary.
- Suggest and build sophisticated human-potential system and complete personnel information system to make and report transparent personnel analyses (compared with plans, past trend in time series and benchmarked) to managers.
- Monitor human-potential processes (choose main indicators by strategic goals and human-potential goals), report negative and positive changes in personnel system to managers regularly.
- Think and record by planning about costs and contribution of human-potential activities.
- Select just the right recruits.
- Invest in development of human potential not only in professionally skills, even in personnel development e.g. to support open communication and cooperation.
- Involve people in making suggestions and planning activities to implement strategy right.
- Motivate people even by their individually preferences. Encourage human potential in suggestions of improvements and innovations.
- Train managers in creative leading based on individual maturity of their subordinates.

References:

- [1] BYARS, L. L., RUE, L. W.: *Human Resource Management. Fifth edition.* Boston: IRWIN. 1997, s. 560. ISBN 0-256-20193-5
- [2] BARTÁK, M.: Úspešní pracujú koncepčnejšie. 2005. In: www.hn-online.sk
- [3] GAVORA, P.: Sprievodca metodológiou kvalitatívneho výskumu. Bratislava. Regent. 2006, 239 p. ISBN 80-88904-46-3
- [4] HITKA, M.: *Model analýzy motivácie zamestnancov výrobných podnikov*. Zvolen. Technická univerzita vo Zvolene. 2009, 150 p. ISBN 978-80-228-1998-5
- [5] HRONÍK, F.: *Rozvoj a vzdělávání pracovníků*. Praha. Grada. 2007, 240 p. ISBN 978-80-247-1457-8
- [6] KATRIAK, M: Metódy a techniky sociologického výskumu. Bratislava. Veda. 1975, 267 p.

- [7] KOL.: Ottova všeobecná encyklopédia. Bratislava. Agentúra Cesty. 2006, 509 p. ISBN 80-969159-3-2
- [8] KOLLÁRIKOVÁ, M.: Zamestnanecká perspektíva Balanced Scorecard a Balanced Scorecard pre riadenie ľudských zdrojov. In: Proceedings of International Scientific Conference Human Potential Management in a Company. Zvolen, May 21-22, 2008. Technická univerzita vo Zvolene. 2008, 184 p. ISBN 978-80-228-1871-1
- KOUBEK, J.: *Řízení pracovního výkonu*. Praha. Management Press. 2004, 209 p. ISBN 80-7261-116-X
- [10] KOZEL, R. a kol.: Moderní marketingový výzkum. Praha. Grada Publishing. 2006, 277 p. ISBN 80-247-0966-X
- [11] LUKÁŠOVÁ, R. NOVÝ, I. et al.: Organizační kultura. Praha. Grada. 2004. ISBN 80-247-0648-2
- [12] MEŠKO, D. KATUŠČÁK, D. et al.: Akademická príručka. Bratislava. Osveta. 2004, 317
 p. ISBN 80-8063-150-6
- [13] MAJEROVÁ, R.: Effectiveness Evaluating of Human Resources as Dynamic Process Model. In: The international Conference on Economic Development of the Society: Innovations, Information Technologies, System Thinking. Minsk. Belarusian State University of Informatics and Radioelectronics. April 22 -23, 2008, p. 268 – 271. ISBN 978-985-451-206-8
- [14] MIKOLAJ, J. VANČO, B.: Štatistika pre manažérov. Žilina. RVS FŠI ŽU v Žiline. 2000, 222 p. ISBN 80-88829-63-1
- [15] NOVÝ, I. a kol.: Sociologie pro ekonomy. Praha. Grada Publishing. 1997, 164 p. ISBN 80-7169-433-9
- [16] ONDREJKOVIČ, P.: Úvod do metodológie sociálnych vied. Bratislava. Regent. 2005
- [17] SHARPLIN, A.: Strategic management. Northeast Louisiana University. McGraw-Hill. 1985, 588 p. ISBN 0-07-056513-9
- [18] SOANES, C., STEVENSON, A.: Oxford Dictionary English, 2nd edition. Oxford University Press. 2003, p. 855. ISBN 0-19-8613474
- [19] *Charakteristika výskumu a základných pojmov*, on-line: www.pedelsp94.info/files/struktura_empirickejcasti.doc
- [20] http://en.wikipedia.org/wiki/Hypothesis

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