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## **WORKING PAPER**

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# ASSESSING THE EFFICIENCY OF HRD TECHNOLOGIES IN KNOWLEDGE-INTENSIVE FIRMS

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**Abstract:** The paper presents the results of a comparative study of human resource management peculiarities in two groups of knowledge-intensive firms: those working in IT field and in advertising/PR field. 100 Russian medium size enterprises were the object of research. The questionnaire made on the basis of the European quality standard "Investors in People" was the research tool. The differences in HR practices aimed at personnel development and relevant to various human resource strategies have been proven to a statistically-valid degree. IT companies tend to realize the high performance strategy, whereas advertising and PR companies prefer the high involvement strategy.

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### Introduction

The problem of human resource management at companies which base their success on using their employees' intellectual work is becoming particularly meaningful at present. It can be considered from various positions of scientific knowledge: sociology, economics, and psychology. Multidimensionality, multifaceted character of analysis is connected with the complexity of the subject of research: intellectual capital presents the aggregate of human, organizational and economic components, their sciencebased management being the essential condition of efficiency and competitive ability of the companies. This study presents the results of research in the field of assessing the efficiency of HRD technologies in knowledgeintensive spheres. It features the organizational-psychological approach to the issue which is based on analyzing the specific character of intellectual activity and the results of the employees' subjective opinion polls concerning the peculiarities of HR practices in knowledge-intensive firms. Two groups of companies were selected as the object of research: those specializing in the sphere of IT and those working in PR and advertising field. In this work the authors have undertaken to give a successive answer to a number of interconnected research queries:

- which companies can be regarded as knowledge-intensive ones;
- what are the differences in HR-practices aimed at human resource development in various types of knowledge-intensive firms.

The results of data source analysis and own experience of working in the consulting sphere have given us the opportunity to formulate the main hypotheses of the present research:

- 1. there are differences in HR practices in various types of knowledge-intensive firms (IT and PR, advertising),
- 2. the differences in HR practices in various types of knowledge-intensive firms reflect the specific character of the basic HRM strategies: the high involvement strategy and the high performance strategy.

#### Literature review

### Specific character of knowledge-intensive firms

It must be emphasized that there is no universal definition of the notion "knowledge-intensive firms" either in the Russian or foreign literature. Such terms as "intellectual employees", "knowledge-intensive fields", "knowledge-intensive products", "knowledge-intensive technologies" are abundant but they do not reflect the essence of the issue which is of interest to us. Table 1 contains the description of the basic approaches to defining the notions "knowledge-intensive firms" and "intellectual employees" presented in international scientific literature.

 $Table\ 1$  Peculiarities of intellectual employees in knowledge-intensive firms

Definitions, main peculiarities	Source
Ability to generate, unite, develop new ideas	Vogt, 1995
People with special intellectual abilities capable	Jack, 1993
of enlarge the economic value (of a product?)	
Company income is defined by intellectual re-	Drucker, 1999; Ulrich, 1999
sources	
Work distinguished by multiple meaning and	Alvesson, 1993
intensity, oriented at achiving unique result	,
Ability to perform the work with high demands,	Kinnear and Sutherland, 2000
to work independently, to aim for development	·
and promotion. Opposition to traditional cul-	
tures using control and commands (directions)	
as means of management. Possessing core	
competencies	
Ability to generate and relay valuable	Alvesson, 2000, Watson
knowledge from generation to generation to	Wyatt, 2001
improve competitive ability	-
Achieving the result through working in alli-	Kerrin and Oliver, 2002;
ances is more important than mere organiza-	Bulter and Waldroop, 1999
tional loyalty	
Talent relevant to the business strategy, devel-	Hewitt Associates, 2001; Bar-
oping and adapting itself to changes, able to	on and Hannon, 2002, Alves-
achieve the work-life balance, flexible in job	son, 2000; Thomson and
selection and establishing relations	Heron, 2002
Job satisfaction in this group of employees de-	Economic Intelligence Unit,
pends on labor remuneration, work meaning,	and Andersen Consult-
decision making process, relations with top	ing/Accenture, 2001; Kinnear
management, employment prospects	and Sutherland, 2000; Alves-
	son, 2000; Thompson and
	Heron, 2002
Informal loyalty based on interpersonal rela-	Alvesson, 2000; Thompson
tions, common interests, as distinguished from	and Heron, 2002
formal loyalty based on culture, norms, symbols	
and practices	
Human resource management through HR-	Thompson and Heron, 2002
strategies supporting generation and demand for	
new ideas	D 1 1000 FF
Supporting, cross-cultural, network structures	Drucker, 1989; Thompson
with diffuse boundaries, providing decentraliza-	and Heron, 2002
tion in decision making process within subcul-	
tures and strategic alliances	

Table 1 continued

Definitions, main peculiarities	Source
Regulatory control by means of culture and	Herzenberg et al., 2000
self-identification as distinguished from directo-	
ry and command and controlling management	
mechanism	
People with highly developed abstract thinking	Stamps, 1996
and the ability to anticipate new prospects, gen-	
erate new solutions and create new processes	
Freethinking, able to share knowledge and	Herzenberg et al., 2000; Vogt,
adapt to hi-tec requirements, aiming for training	1995; Dessler, 2000; Stamps,
in new trends	1996
Working culture is intensified by the relevant	Hewitt Associates, 2001;
HR systems and practices	Robertson and O'Malley
	Hammerseley, 2000; Ulrich,
	1998
Flexible working time, relying on web-	Quinn and Anderson,1996;
technologies and outsourcing	Appiah-Mfodwo et al.,2000;
	Holland et al., 2002; Camer-
	on, 2002

Source: Horwitz et al.: "HR strategies for managing knowledge worker: an Afro-Asian comparative analysis", The International Journal of Human Resource management, 2006, V. 17, No 5, p.785–786.

The content of the table indicates that there are no universal and clear definitions of the peculiarities of knowledge-intensive firms, they are frequently described through the specific character of intellectual employees' activity. A different viewpoint reflecting the value approach to the subject of research is represented in the Russian literature. According to this viewpoint the share of the intellectual capital in the formation of the company market value must be the assessment criterion (Gaponenko, 2006; Ivanov, 2006).

We consider the approach presented in the works of Alvesson (1995) more productive for achieving the goals of the present research, as the average Russian companies with the market value and the share of intellectual capital in it which is rather hard to define are the object of research.

Thus, the literature analysis allows to draw a conclusion that knowledge-intensive firms are those companies where and for which the intellectual employees are of special significance — they either present a considerable share in the quantity of personnel on the whole or they are key employees and they set the pace in the significance of their contribution to profit earning and long-term company development.

# Peculiarities of intellectual activity performed by the employees of knowledge-intensive firms

A common feature of key employees in knowledge-intensive firms is those employees' ability, depending on the position, to create some sort of intellectual product or provide conditions for the creation and utilization of the created intellectual products. Products of intellectual activity — inventions, innovation proposals, models and specimens, publications etc., are results of intellectual processes which can be classified by various attributes. In the context of the present research we are largely interested in the degree of creativity, innovation, creative work differing the employees' labor activity depending on the company field of activity.

There exist various approaches to classifying intellectual activity by the creativity indicator. One of the first creativity typologies was put forward by W. Ostwald in early XX century (Ostwald, 1910). In his paper he assessed the creativity by the originality criterion, interpreting it as the ability to create something independently.

Since the middle of the XX century J. Guilford's model where he noted the distinction in kind between two types of intellectual operations — convergence and divergence, was the basis for studying peculiarities of creative thinking (Guilford, 1967).

Convergent thinking becomes actual when a person solving a problem has to find the only correct solution based on multiple conditions. He defined divergent thinking as thinking searching (acting) in different directions, based on variation in ways of problem solving leading to unexpected conclusions and results. Guilford considered such thinking the basis of creativity.

Guilford singled out the basic parameters of creativity: fluency — generating a large number of ideas within a unit of time; flexibility — ability to switch from one idea to another; originality — generating unusual ideas different from commonly accepted ones; readiness — detailed elaboration of produced ideas

At the end of the XX century Guilbert's model was challenged by the president of American Psychological Association (Sternberg, Grigorenko, 1997). In his work he attempted to prove the insufficient information value of creativity tests in relation to real life. D. B. Bogoyavlenskaya, a well-known Russian specialist in the field of psychology of thinking, supported her foreign colleagues and called to abandon assessing creativity only by the indicator of ability to combine elements. In her works she maintains that creative activity is always of personalized nature and finds its realization in the phenomenon of intellectual initiative having three quality level: stimulus-productive, heuristic and creative (Bogoyavlenskaya, 1983). By the author's opinion, formation of intellectual initiative is possible only un-

der conditions contributive to the formation of internal motivation and the value system supporting the talent development (Bogoyavlenskaya, 2004).

Correlating this theoretical knowledge with HRD practice one can assume that the specific character of professional tasks and the requirements to the anticipated products of intellectual activity define the level of intellectual initiative needed by the employees to perform their working duties efficiently. The higher the requirements to the innovative character of the product, the higher the demands to the level of intellectual initiative. HRD strategy and practices must act as the tools allowing to form the required level of intellectual initiative.

# Peculiarities of managing the employees' intellectual initiative in knowledge-intensive firms

In their analytical study Horwitz et al (2006) note that whereas a sufficient number of papers are devoted to attempts to define the essence of intellectual employees' and knowledge-intensive firms activity, considerably less attention is paid to studying HR-practices contributing t the realization of this activity. The authors emphasize that nevertheless there are serious complexities in attracting, retaining and motivating the employees of the intellectual field. Information sources provide data concerning the significance of the difficulty level of issues being solved, the availability of autonomy in goal-setting and selecting the methods of finding solutions (Thompson and Heron, 2002). The authors of a number of works emphasize the importance of participation in profit-sharing, communication efficiency, respect for the individual, availability of information sources, supporting the possibility to obtain new skills (Robertson and Hammerseley, 2000; Ulrich, 1998). Practices providing for personal and professional development are important for employees from the intellectual field (Balter and Waldroop, 1999; Becker et al., 2000; Desper and Hiltrop, 1995; Jackson, 2000; Kinnear and Sutherland, 2000; Mellander, 2001; Tampoe, 1993). Some studies state that remuneration systems can affect goal achievement, although they are not as important as growth prospects and act as a sort of support of important corporate goals (Bogdanovitcz and Bailey, 2002; Carter and Scarborough, 2001; Kerr, 2002; Lee and Maurer, 1997). Capelli (2001) studied the influence provided by the employer's brand on attracting talented employees. He considers expert using the tools of online recruiting, ability to choose progressive strategies and flexibly modify the traditional practices to suit the intellectual employees' needs the essential condition of recruiting the best talents. Some authors single out tactical options contributing to the creation of conditions for the support of creative atmosphere in a company (Jones G., McFadzen E., 1997; MacFadzen, 2004; Amabile, 2006).

C.Warner (2008) also emphasizes the difficulties in managing intellectual employees. He states that it is insufficient to create something new and different. The ideas should be practical, it should be possible to use them to solve some problems. The author states that often a company takes on an idea only because it is new (it is considered creative) and it hasn't existed before. At that, it does not contribute to achieving the company goals or solve any practical problems. In this case the idea can not only be called creative, it can simply be regarded useless.

Thus, it can be concluded that various authors have put forward their opinions concerning the efficiency of separate practices of managing the employees' intellectual activity within the framework of various schools of thought and approaches. However, we have not found out any attempts to solve this problem systematically. That is why we conducted our own research based on the methodology of complex assessment of HRD quality.

### Organization and methods of research

The paper presents the results of a comparative study of human resource management peculiarities in two groups of knowledge-intensive firms: those working in IT field and in advertising/PR field. 100 Russian medium size enterprises were the object of research. The research sampling included two groups of companies.

The first group: 50 medium-size companies from IT sphere. The respondents were employees who had worked in this company full-time for over 6 months, presented by 10 people from every company, 2 of them being managers (including project managers), 8 people — specialists, engineers, consultants, programmers, technical writers. The companies specialized in the following business activities: development, distribution and support of software and complex information systems; complex automation and system integration; implementation of automatic design systems.

The second group: 50 medium-size companies from advertising and PR sphere. The respondents were employees who had worked in this company full-time for over 6 months, presented by 10 people from every company, 2 of them being managers (including project managers), 8 people — specialists involved in the core activities of the company (marketing specialists, analysts, advertising and PR specialists, creators etc.) In some companies the number of respondents exceeded 10 people. The companies specialized in: marketing and advertising services, PR campaigns.

The companies are situated in Moscow (50% of the sampling), St. Petersburg (30% of the sampling) and also in the Russian cities with over one million citizens from the European part of Russia (20% of the sampling). Total number of the sampling made 1056 people.

The questionnaire developed by the authors and based on the European quality standard "Investors in People" was used as the method of research (Collins, 2004). This standard is meant to assess the HRM&D quality in the organization by the following 11 criteria:

- involvement of personnel in achieving the company goals,
- correlation of individual and company values,
- participation in decision making,
- stimulating initiative,
- organizational communication and knowledge exchange,
- priority of individual or team work,
- methods of personnel training and development,
- leadership peculiarities,
- assessing individual contribution,
- methods of motivation and incentivising,
- technologies of attracting, selection and retaining of personnel.

The questionnaire included 38 questions related to the stated 11 criteria. Within the framework of the present research we have conducted a sampling comparison by 12 questions related to assessing the company managers' activity in HRD.

For the sake of content analysis the questions were united in 4 groups:

- The first group included 3 questions dealing with assessing the HRM efficiency of the companies: assessment of leadership efficiency, assessment of HRM efficiency, HRM executive.
- The second group united 4 questions connected with assessing the employees' activity and performance: ways of giving feedback to the employees by the results of assessing their activity, frequency of giving feedback on activity assessment to the employees, constructiveness of assessing the employees' activity by the managers, ways of recognition and assessment of the employees' individual contribution to the company activity.
- The third group included 2 questions connected with assessing the employees' involvement in decision-making process: ways of involving employees in the decision making process, ways of informing the employees about the forthcoming decisions.
- The fourth group contained 3 questions directly aimed at assessing the efficiency of the employees' development: HRD efficiency, ways of utilizing the results of assessing the investments in staff training, the degree to which the assessment of investment in the employee influences their career.

The method of calculating Fisher's slope correlation coefficient was used as the mathematical-statistical tool of assessing the results.

### **Results of research**

Assessment of leadership efficiency. Both groups of companies have demonstrated similar results by this criterion. Thus, 44% of respondents from the first group of companies have assessed their company managers as "highly efficient" and 44% as "rather efficient" in the leadership sphere, only 10% have assessed their managers' leadership as "insufficiently efficient" and 1.5% as "inefficient". The situation was slightly different in the second group. Thus, the largest share of the respondent (46%) have stated that the level of their managers' leadership is largely relevant to "rather efficient" variant and 44% have estimated their managers' leadership as "highly efficient". However, statistically valid differences have not been found, which gives ground for a conclusion about the general tendency to assess the managers' leadership as "highly efficient" or "rather efficient" in both groups of companies. This can be connected with the fact that the managers' and the employees' functions are clearly defined and are assessed by criteria which are understandable to the managers and the employees.

Assessment of HRM efficiency. Two basic conclusions obtained during data processing must be noted at this point. Firstly, we must note a high percentage of responses "rather efficient" (49% in both groups of companies), which demonstrates the general level of incomplete satisfaction by this area of the managers' activity. Secondly, considerable differences in the number of high and low appraisals of the managers' efficiency in HRM are within the two groups of companies have been found. Thus, 36% of respondents from the second group of companies have given "highly efficient" appraisal and only 27% in the first group of companies did so, 20% of respondents from the first group of companies have given "insufficiently efficient" appraisal and 13% in the second group of companies. The comparison results of the two groups of companies by this criterion have been confirmed as statistically valid. These results demonstrate that the level of dissatisfaction by the efficiency of HRM is higher in the first group of companies than in the second one.

HRD efficiency. Equal percentage of respondents in both groups of companies give the answer "rather efficient" — 42%, which proves that companies spare important attention for personnel development. However, there are illustrative differences in the responses within the two groups of companies. Thus, 32% of respondents from the second group of companies give a high appraisal to their managers in HRD sphere ("highly efficient") and only 22% of respondents from the first group of companies do so. Vice versa, representatives of the first group of companies give negative appraisals to their managers concerning HRD sphere ("insufficiently efficient" and "inefficient") — accordingly 23% and 15% against 17%

and 5%. It must be noted here that the differences in data by the responses "highly efficient", "insufficiently efficient" and "inefficient" for the two groups of companies have been confirmed as statistically valid. This gives ground to draw a conclusion about considerably differences in human resource development in different groups of companies. In particular, more attention is paid to human resource development in advertising and PR companies.

Ways of giving feedback to the employees by the results of assessing their activity. Individual conversation and public announcement as a method of communicating information about the assessment of the employees' activity is more frequently used in the companies of the second groups than in the first group — 81% and 32% against 74% and 23% accordingly (the differences are statistically valid). Besides, the variant "written feedback" is encountered twice as frequently in IT companies, and the variants "feedback through the web site", "other" or "not communicated at all" are also more frequent, which proves that the employees from these companies are more comfortable with receiving assessment of their activity in written form and personal contact with the management is less important for them.

Frequency of giving feedback on activity assessment to the employees. The results of the poll indicate that the largest number of respondents in both groups of companies have mentioned that the assessment of their activity is communicated to them regularly (40% and 42% accordingly). However, statistically valid differences by the responses "regularly" and "rarely" have been found in the two groups of companies (error probability less than 0.01%). Thus, the responses "rarely" are met almost 1.5 times as often in the first group of companies (28% against 19%) and there are more responses "periodically" in the companies of the second group (39% against 32%). Based on that, one can draw a conclusion that the discussion of the employees' work efficiency is conducted more often in the companies of the second group than in the first group.

Constructiveness of assessing the employees' activity by the managers. The research has revealed rather high indicators in the variant "rather constructive" in both groups of companies (56% and 58% accordingly). However, statistically valid differences have been found by this criterion as well. Thus, the response "highly constructive" is more characteristic of the second group of companies than of the first group (20% and 13% accordingly) and the response "unconstructive" is more characteristic of the first group of companies (13% and 6% accordingly). This allows to draw a conclusion about a relatively high level of constructivity concerning the assessment of the employees' activity on the part of the managers in both groups of companies (the pooled estimates by the first and second group

make 69% and 78% accordingly) and to mark its higher importance and influence for the employees of PR and advertising companies.

Ways of recognition and assessment of the employees' individual contribution to the company activity. The research has demonstrated that such ways of recognition as "salary rise" (39–42%), "one-time bonus" (35–42%), "monthly bonus" (30–39%) and "promotion" (28–30%) are most popular with the employees from both groups of companies. It must be noted that the employees from IT companies gave demonstrated a higher interest in various forms and methods of recognition and assessment of their individual contribution compared to the employees of PR and advertising companies. This manifested itself in the fact that more responses by practically all indicators was given in the first group of companies than in the second one. However, statistically valid are differences only by the responses "one-time bonus" (p  $\leq$  0,01%). It is worth noting that around 15% of respondents from both groups of companies have responded "don't know".

Ways of involving employees in the decision making process. Three responses having statistically valid divergences when comparing the two groups of companies demonstrated that the companies of the first group are more characterized by the degree of the employees' involvement in decision making through "participation in managerial meetings" (18% against 13%). The employees from the second group of companies are far ahead of their counterparts in terms of participation in making managerial decisions "within workgroups" (49% against 42%). It is also important to mark the difference in the number of employees not participating in the decision making process in the company in any way. Their share is higher in the companies of the first group (30% in the companies of the first group against 23% in the companies of the second group). Approximately 21% of employees in both companies participate in "making managerial decisions". Thus, over 80% of intellectual employees in both groups of companies participate in making decisions in some way.

Ways of informing the employees about the forthcoming decisions. The collected data allow to state with a high degree of reliability that the two groups of companies are different in terms of responses "orally" and "newsletter". Both of these ways are used most often for the employees of the first group of companies (49.5% and 50% accordingly). However, when drawing comparison with the answers of the employees from the second group of companies one can observe that the oral form of communication is more typical for the second group of companies (20% more responses — 50% and 70% accordingly). Informing the employees in writing is used considerably less frequently for the employees of the second group of companies (21% fewer responses — 29% and 50% accordingly).

Such responses as "newsboard" and "intranet site" also demonstrate statistically valid divergence. By these indicators one can conclude that for the companies of the first type the newsboard is least popular and intranet site is most popular. The opposite statement is correct for the companies of the second type. It is also worth noting that there is quite a large number of responses "not inform in any way" for both companies (17% for the first group and 13% for the second group of companies) which proves that in some companies the managers still don't consider it necessary to inform the employees about the forthcoming decisions.

HRM executive. The results of research demonstrate that for the companies of the first group human resource management is more characteristic through the HRM department (26%) and personnel department (33%). Creation of specialized structures (departments) is conditioned by the fact that there is a possibility of a standardized approach to managing large groups of employees in these companies. Companies of the second type are characterized to a greater extent by performing HRM functions through a personnel manager or director general (37%). In the second group this function is entrusted to one specialist (39%) or to a manager who is not a professional in the HRM sphere (18%). Also involving medium-level managers in HRM is more widely spread in the first group of companies (12 % against 4% accordingly).

Ways of utilizing the results of assessing the investments in staff training. Statistically valid for the comparison of the two groups of companies are the responses "based on the evaluation plans and budgets of training for the forthcoming period are formed" and "based on the evaluation the decision about staff promotion is made". Thus, for the employees working in the company of the first group the first response is most widely spread (37% against 23% accordingly). This can signify that in the companies of this type there is the need in the constant update of the employees' knowledge and skills and in case of achieving the expected results the company makes a decision to send other employees for the similar kind of training. For the second group of companies personified forms of making a decision about promoting the employee by the results of assessing the investments in training are more characteristic (42% against 31% accordingly). In both groups of companies the decision on opening new areas of activity is made in 15% of cases on the basis of assessing the investments in training. It is worth noting that there are some employees in the companies who are not informed at all about what decisions the managers make by the results of the conducted training (5% and 9% in the first and second groups of companies accordingly).

The degree to which the assessment of investment in the employee influences their career. The obtained data demonstrate how much the assessment of investment in staff training influences further career of the employees. The most widespread response is "influences moderately" (39% in the first group of companies and 42% in the second one). 10% (the first group of companies) to 12% (the second group of companies) of the employees note strong influence of investment assessment on their career. This indicates that there are similar tendencies for all the types of companies and it also allows to draw a conclusion that the largest part of the employees in both groups of companies admit that the assessment of investment in staff training exerts influence on their career.

### **Results discussion**

Obtained results allowed to prove the first hypothesis of our research: the differences in HRM and HRD practices in knowledge-intensive firms working in various fields of activity really exist. A number of differences can be singled out:

- 1. Taking into account general moderate attitude of the employees from both groups of knowledge-intensive firms to the efficiency of the managers' leadership the assessment of HRM efficiency is higher for the companies working in the sphere of advertising and PR than for IT companies.
- 2. In IT companies the HRM and HRD functions are more often entrusted to a specialized department whereas in advertising and PR companies these functions are entrusted to a specialist manager or a top manager.
- 3. In advertising and PR companies the HRD work is perceived by the employees as more effective.
- 4. In advertising and PR companies the managerial communication with the employees (feedback, informing employees, ways of recognition and incentivising, making decisions about further development) has a more direct, personified and personally oriented form. In IT companies these processes are more formalized and oriented at achieving the results and using the financial and remote control tools.
- 5. IT companies largely rely on individual responsibility in making decisions, in advertising and PR companies the managers prefer collective forms of making managerial decision within working groups.
- 6. The differences in HR practices aimed at personnel development and relevant to various human resource strategies have been proven to a statistically-valid degree. IT companies tend to realize the high performance strategy, whereas advertising and PR companies prefer the high involvement strategy.

Summarizing the peculiarities of the practices in use, one can conclude that they are based on various HRM strategies. It is accepted to single out three key HRM strategies:

- the high involvement model (Lawler, 1986)
- the high commitment management model (Walton, 1985),
- the high performance work system (US Department of Labor, 1993).

The involvement strategy assumes the existence of flexible approaches to forming a team of likeminded people, developing a dialogue in the sphere of forming the company mission, organization goals and values between the managers and the employees, cooperation between departments. The principles of the high commitment strategy are largely similar to the involvement strategy.

The high performance work system is oriented at achieving results: performance, quality, profit, shareholder value. The HRM technologies are largely formalized and based on the key efficiency indicators which are the basis for staff evaluation, for forming the incentivising and training systems (Zelenova, 2004; Joy-Mathews et al., 2006; Gurkov, 2002; Gurkov et. al., 2009).

The obtained data allowed to draw a conclusion supporting our second hypothesis: HRM and HRD practices in IT companies correlate with the high performance strategy and HRM practices in advertising and PR companies are conditioned by the involvement strategy.

### **Conclusion**

The present research aimed to demonstrate (to single out and describe) the differences in HRM and HRD strategy and practices characteristic of knowledge-intensive firms working in various fields. The obtained empirical data allow to conclude that these differences really exist. They are supposedly connected with the specific character of professional activity requiring different levels of intellectual initiative. The obtained results can be useful to top managers and heads of HRM departments when selecting and forming efficient HRM and HRD technologies. The companies where the activity requires a high level of intellectual initiative from the core employees must focus more on realizing the involvement strategy and HRD practices.

It is worth emphasizing that the results of our research at this stage allow only to state the differences in HRM strategies and practices in different knowledge-intensive firms. The issue of economic efficiency of these companies remains open for future research.

### References

- Amabile, T. (2006). *How to kill creative initiative*. In: *Creative thought in business*. Moscow: Alpina Business Book, 9–35.
- Alvesson, M. (1995). *Management of Knowledge-Intensive Companies*. Berlin/New York: de Gruyter.
- Becker B.E., & Huselid M.A., Ulrich D. (2001). *The HR Scorecard*. Boston, MA: Harvard Business School Press.
- Bogdanovitcz M.S., & Bailey E.K. (2002). The Value of Knowledge and the Values of the New Knowledge Worker: Generation X in the New Economy. *Journal of European Industrial Training*. 26 (2,3,4), 125–129.
- Bogoyavlenskaya, D. (1983). Intellectual'naya activnost' kak problema tvorchestva [Intellectual activity as a problem of creativity]. Rostov na Donu: RGU Publisher.
- Bogoyavlenskaya, D. (2004). Chto viyavlyayut testi intellecta i creativnosti? [What do the intellectual and creativity tests reveal?]. *Psihologiya. Zhurnal Visshey shcoli economiki [Psychology. Journal of Graduate economic school].* 1 (2), 54–65.
- Bulter T., & Waldroop J. (1999). Job Sculpting: The Art of Retaining Your Best People. *Harvard Business Review*. September–October, 179–203.
- Capelli P. (2001). Making the Most of Online Recruiting. *Harvard Business Review*. March, 45–58.
- Carter C., & Scarborough H. (2001). Towards a Second Generation of KM? The People Management Challenge. *Educational and Training* .43(4/5), 215–224.
- Collins, L. (2004). Understanding the new Investors in People standard lessons from experience. *Personnel Review*, *33*(5), 583–604.
- Despres C., & Hiltrop M. (1995). Human Resource Management in the Knowledge Age: Current Practice and Perspectives on the Future. *Employee Relations*.17 (1), 9–23.
- Gaponenko, A. (2006). *Intellectual'niy capital [Intellectual capital]*, from <a href="http://www.koism.rags.ru./publ/articles/25.php">http://www.koism.rags.ru./publ/articles/25.php</a>.
- Guilford, J.P. (1967). The nature of human intelligence: McGraw-Hill.
- Gurkov, I. (2002). Innovations and legacies in Russian Human Resource Management practices: Surveys of 700 chief executive officers. *Post-Communist Economies*, 14(1), 137–144.
- Gurkov I.B., Zelenova O.I., Gol'dberg A.S., & Saidov Z. B. (2009). Sistema Upravleniya personalom na rossijskih firmah v zerkale mezhdunarodnogo sravneniya [Personnel management system in Russian firms in the mirror of international Comparison]. *Mir Rossii [World of Russia]*, 3, 132–150.

- Horwitz et al. (2006). HR strategies for managing knowledge worker: an Afro-Asian comparative analysis. *The International Journal of Human Resource management*. 17 (5), 785–786.
- Ivanov P. (2006) *Era intellectual'nogo capitalizma [Era of intellectual capitalism]* from: <a href="http://www.management.com.ua/notes/intellectual-era.html?print">http://www.management.com.ua/notes/intellectual-era.html?print</a>.
- Investors in people. <a href="http://www.investorsinpeople.co.uk">http://www.investorsinpeople.co.uk</a>.
- Jackson S. (2000). The IT Employee Hanging on the High-tech Employee. *Climate Magazine*. 11 (6), 1–4.
- Jones G., & McFadzen E. (1997). How can Reboredo Foster creativity in her current employees and nurture creative individuals who join the company in the future? *Harvard Business Review*. 75 (5), 50.
- Joy-Mathews D., Megginson D., & Surte M. (2006). *Human Resource Development*. Moscow: ECSMO.
- Kerrin M., & Oliver N. (2002). Collective and Individual Improvement Activities: the role of Reward Systems. *Personnel Review*. *3* (2), 320–337.
- Kinnear L., & Sutherland M. (2000). Determination of Organizational Commitment amongst Knowledge Workers. *South African Journal of Business Management*. 31 (3), .261–271.
- Lawler E.E. (1986). *High Involvement Management*. San Francisco, CA: Jossey-Bass.
- Lee T.V., & Maurer S.D. (1997). The Retention of Knowledge Workers with the Unfolding Model of Voluntary Turnover. *Human Resource Management Review*. 7 (3), 247–275.
- McFadzen E. (2004). Development of creative mentality in organization. Management digest. 2/02. from: <a href="http://grebennikov.ru/article-o3Lo-205.html">http://grebennikov.ru/article-o3Lo-205.html</a>.
- Mellander K. (2001). Engaging the Human Spirit: A Knowledge Evolution Demands the Right Conditions for Learning. *Journal of Intellectual Capital*. 2 (2), 165–72.
- Ostwald, V. (1910). Grate people. St.Petersburg.
- Robertson M., & O'Malley Hammersley (2000). Knowledge Management Practices Within a Knowledge-Intensive Firm: The Significance of the People Management Dimension. *Journal of Industrial Training*. 25 (2,3,4), 241–243.
- Sternberg R, & Grigorenko E. (1997). Model' structuri intellecta Gilforda: structura bez fundamenta [Model of Gilfords' intellectual structure: structure without foundation]. In: *Osnovnie sovremennie concepcii tvorchestva i odarennosti [Main modern concepts of creativity and talent]*. Bogoyavlenskaya D. (Ed.), 111–127. Moscow: Molodaya gvardia.

- Tampoe M. (1993). Motivating Knowledge Workers The Challenge for the 1990's. Long Range Planning. 26 (3), 49–55.
- Thomson M., & Heron P. (2002). Knowledge Management: The Employment Relationship and Knowledge Creation: Evidence From R&D Based High Technology Firms. Proceeding of *EURAM Conference*, *Stockholm*. May 2002. (pp.1–10).
- Ulrich D. (1998). Intellectual Capital=Competence x Commitment. *Sloan Management Review.39* (2), 15–26.
- US Department of Labor (1993). High Performance Work Practices. Washington, DC: US Department of Labor.
- Walton R.E. (1985). From "Control" to "Commitment" in the Workplace. *Harvard Business Review*. 63, 77–84.
- Warner C. (2008). *How to manage creative people*. Charles Warner, personal site. From: http://www.charleswarner.us/mgtcreat.html.
- Zelenova O. (2004). Strategiya upravleniya personalom delovoi organisazii. [Strategy of personnel management in business organizations]. Moscow: NIGO.

# Опубликованные научные доклады

№ 1 (R)–2005	А.В.Бухвалов Д.Л.Волков	Фундаментальная ценность собственного капитала: использование в управлении компанией
№ 2 (R)–2005	В. М. Полтерович О. Ю. Старков	Создание массовой ипотеки в России: проблема трансплантации
# 1 (E)–2006	I. S. Merkuryeva	The Structure and Determinants of Informal Employment in Russia: Evidence From NOBUS Data
№ 2 (R)–2006	Т. Е. Андреева В. А. Чайка	Динамические способности фирмы: что необходимо, чтобы они были динамическими?
№ 3 (R)–2006	Д. Л. Волков И. В. Березинец	Управление ценностью: анализ основанных на бухгалтерских показателях моделей оценки
№ 4 (R)–2006	С. А. Вавилов К. Ю. Ермоленко	Управление инвестиционным портфелем на финансовых рынках в рамках подхода, альтернативного стратегии самофинансирования
№ 5 (R)–2006	Г. В. Широкова	Стратегии российских компаний на разных стадиях жизненного цикла: попытка эмпирического анализа
№ 6 (R)–2006	Д. В. Овсянко В. А. Чайка	Особенности организации процесса непрерывного улучшения качества в российских компаниях и его связь с процессами стратегического поведения
№ 7 (R)–2006	А. Н. Козырев	Экономика интеллектуального капитала
№ 8 (R)–2006	H. А. Зенкевич, Л. А. Петросян	Проблема временной состоятельности кооперативных решений
№ 9 (R)–2006	Е. А. Дорофеев, О. А. Лапшина	Облигации с переменным купоном: принципы ценообразования
# 10 (E)–2006	T. E. Andreeva V. A. Chaika	Dynamic Capabilities: what they need to be dynamic?
№ 11 (E)–200	6 G. V. Shirokova	Strategies of Russian Companies at Different Stages of Organizational Life Cycle: an Attempt of Empirical Analysis
№ 12 (R)–200	6 А. Е. Лукьянова, Т. Г. Тумарова	Хеджевые фонды как инструменты снижения рисков и роста ценности компании
№ 13 (R)–200	6 Л. Н. Богомолова	Применение этнографических методов для изучения процессов принятия потребительских решений

№ 14 (R)–2006	Е. К. Завьялова	Особенности профессионально- личностного потенциала и развития карьеры линейных менеджеров отечественных производственных предприятий
№ 15 (R)–2006	С. В. Кошелева	Удовлетворенность трудом как комплексный диагностический показатель организационных проблем в управлении персоналом
№ 16 (R)–2006	А. А. Румянцев, Ю. В. Федотов	Экономико-статистический анализ результатов инновационной деятельности в промышленности Санкт-Петербурга
№ 17 (R)–2006	Е. К. Завьялова	Взаимосвязь организационной культуры и систем мотивации и стимулирования персонала
№ 18 (R)–2006	А. Д. Чанько	Алгебра и гармония HR-менеджмента. Эффективность обучения персонала и диагностика организационной культуры
№ 19 (E)–2006	T. E. Andreeva	Organizational change in Russian companies: findings from research project
# 20 (E)–2006	N. E. Zenkevich, L. A. Petrosjan	Time-consistency of Cooperative Solutions
№ 21 (R)–2006	Т. Е. Андреева	Организационные изменения в российских компаниях: результаты эмпирического исследования
№ 22 (R)–2006	Д. Л. Волков, Т. А. Гаранина	Оценивание интеллектуального капитала российских компаний
№ 23 (R)–2006	А. В. Бухвалов, Ю. Б. Ильина, О. В. Бандалюк	Электронное корпоративное управление и проблемы раскрытия информации: сравнительное пилотное исследование
№ 24 (R)–2006	С. В. Кошелева	Особенности командно-ролевого взаимодействия менеджеров среднего и высшего звена международной и российских компаний
№ 25 (R)–2006	Ю. В. Федотов, Н. В. Хованов	Методы построения сводных оценок эффективности деятельности сложных производственных систем
# 26 (E)–2006	S. Kouchtch, M. Smirnova, K. Krotov, A. Starkov	Managing Relationships in Russian Companies: Results of an Empirical Study
№ 27 (R)–2006	А. Н. Андреева	Портфельный подход к управлению люксовыми брендами в фэшн-бизнесе: базовые концепции, ретроспектива и возможные сценарии

№ 28 (R)–2006	<ul><li>Н. В. Хованов,</li><li>Ю. В. Федотов</li></ul>	Модели учета неопределенности при построении сводных показателей эффективности деятельности сложных производственных систем
№ 29 (R)–2006	<ul><li>Е. В. Соколова,</li><li>Ю. В. Федотов,</li><li>Н. В. Хованов.</li></ul>	Построение сводной оценки эффективности комплексов мероприятий по повышению надежности функционирования объектов электроэнергетики
# 30 (E)–2006	M. Smirnova	Managing Buyer-Seller Relationships in Industrial Markets: A Value Creation Perspective
№ 31 (R)–2006	С. П. Кущ, М. М. Смирнова	Управление взаимоотношениями в российских компаниях: разработка концептуальной модели исследования
№ 32 (R)–2006	М. О. Латуха, В. А. Чайка, А. И. Шаталов	Влияние «жестких» и «мягких» факторов на успешность внедрения системы менеджмента качества: опыт российских компаний
№ 33 (R)–2006	<ul><li>А. К. Казанцев,</li><li>Л. С. Серова,</li><li>Е. Г. Серова,</li><li>Е. А. Руденко</li></ul>	Индикаторы мониторинга информационно-технологических ресурсов регионов России
№ 34 (R)–2006	<ul><li>Т. Е. Андреева,</li><li>Е. Е. Юртайкин,</li><li>Т. А. Солтицкая</li></ul>	Практики развития персонала как инструмент привлечения, мотивации и удержания интеллектуальных работников
# 35 (E)–2006	<ul><li>T. Andreeva,</li><li>E. Yurtaikin,</li><li>T. Soltitskaya</li></ul>	Human resources development practices as a key tool to attract, motivate and retain knowledge workers
№ 36 (R)–2006	А. В. Бухвалов, В. Л. Окулов.	Классические модели ценообразования на капитальные активы и российский финансовый рынок. Часть 1. Эмпирическая проверка модели САРМ. Часть 2. Возможность применения вариантов модели САРМ
№ 37 (R)–2006	Е. Л. Шекова	Развитие корпоративной социальной ответственности в России: позиция бизнеса (на примере благотворительной деятельности компаний Северо-Западного региона)
№ 38 (R)–2006	Н. А. Зенкевич, Л. А. Петросян	Дифференциальные игры в менеджменте

№ 39 (R)–2006	<ul><li>В. Г. Беляков,</li><li>О. Р. Верховская,</li><li>В. К. Дерманов,</li><li>М. Н. Румянцева</li></ul>	Глобальный мониторинг предпринимательской активности Россия: итоги 2006 года
№ 40 (R)–2006	В. А. Чайка, А. В. Куликов	Динамические способности компании: введение в проблему
№ 41 (R)–2006	Ю. Е. Благов	Институционализация менеджмента заинтересованных сторон в российских компаниях: проблемы и перспективы использования модели «Арктурус»
№ 42 (R)–2006	И. С. Меркурьева, Е. Н. Парамонова, Ю. М. Битина, В. Л. Гильченок	Экономический анализ на основе связанных данных по занятым и работодателям: методология сбора и использования данных
# 43 (E)–2006	<ul><li>I. Merkuryeva,</li><li>E. Paramonova,</li><li>J. Bitina,</li><li>V. Gilchenok</li></ul>	Economic Analysis Based on Matched Employer-Employee Data: Methodology of Data Collection and Research
№ 44 (R)–2006	Н. П. Дроздова	Российская «артельность» — мифологема или реальность' (Артельные формы хозяйства в России в XIX — начале XX в.: историко-институциональный анализ)
№ 1 (R)–2007	Е. В. Соколова	Бенчмаркинг в инфраструктурных отраслях: анализ методологии и практики применения (на примере электроэнергетики)
№ 2 (R)–2007	С. П. Кущ, М. М. Смирнова	Управление поставками в российских компаниях: стратегия или тактика
№ 3 (R)–2007	Т. М. Скляр	Проблема ленивой монополии в российском здравоохранении
№ 4 (R)–2007	Т. Е. Андреева	Индивидуальные предпочтения работников к созданию и обмену знаниями: первые результаты исследования
№ 5 (R)–2007	А. А. Голубева	Оценка порталов органов государственного управления на основе концепции общественной ценности
№ 6 (R)–2007	С. П. Кущ, М. М. Смирнова	Механизм координации процессов управления взаимоотношениями компании с партнерами
#7(E)–2007	<ul><li>D. Volkov,</li><li>I. Berezinets</li></ul>	Accounting-based valuations and market prices of equity: case of Russian market

№ 8 (R)–2007	М. Н. Барышников	Баланс интересов в структуре собственности и управления российской фирмы в XIX – начале XX века
# 9 (E)–2007	<ul><li>D. Volkov,</li><li>T. Garanina</li></ul>	Intellectual capital valuation: case of Russian companies
№ 10 (R)–2007	К. В. Кротов	Управление цепями поставок: изучение концепции в контексте теории стратегического управления и маркетинга.
№ 11 (R)–2007	Г.В.Широкова, А.И.Шаталов	Характеристики компаний на ранних стадиях жизненного цикла: анализ факторов, влияющих на показатели результативности их деятельности
№ 12 (R)–2007	А. Е. Иванов	Размещение государственного заказа как задача разработки и принятия управленческого решения
№ 13 (R)-2007	О. М. Удовиченко	Понятие, классификация, измерение и оценка нематериальных активов (объектов) компании: подходы к проблеме
№ 14 (R)–2007	Г.В.Широкова, Д.М.Кнатько	Влияние основателя на развитие организации: сравнительный анализ компаний управляемых основателями и наемными менеджерами
# 15 (E)–2007	G. Shirokova, A. Shatalov	Characteristics of companies at the early stages of the lifecycle: analysis of factors influencing new venture performance in Russia
# 16 (E)–2007	N. Drozdova	Russian "Artel'nost" — Myth or Reality' Artel' as an Organizational Form in the XIX — Early XX Century Russian Economy: Comparative and Historical Institutional Analysis
# 1 (E)–2008	S. Commander, J. Svejnar, K. Tinn	Explaining the Performance of Firms and Countries: What Does the Business Environment Play'
№ 1 (R)–2008	Г. В. Широкова, В. А. Сарычева, Е. Ю. Благов, А. В. Куликов	Внутрифирменное предпринимательство: подходы к изучению вопроса
№ 1A(R)–2008	Г.В.Широкова, А.И.Шаталов, Д.М.Кнатько	Факторы, влияющие на принятие решения основателем компании о передаче полномочий профессиональному менеджеру: опыт стран СНГ и Центральной и Восточной Европы

№ 2 (R)–2008	Г.В.Широкова, А.И.Шаталов	Факторы роста российских предпринимательских фирм: результаты эмпирического анализа
№ 1 (R)–2009	Н. А. Зенкевич	Моделирование устойчивого совместного предприятия
№ 2 (R)–2009	Г.В.Широкова, И.В.Березинец, А.И.Шаталов	Влияние организационных изменений на рост фирмы
№ 3 (R)–2009	Г.В.Широкова, М.Ю.Молодцова, М.А.Арепьева	Влияние социальных сетей на разных этапах развития предпринимательской фирмы: результаты анализа данных Глобального мониторинга предпринимательства в России
# 4 (E)–2009	N. Drozdova	Russian Artel Revisited through the Lens of the New Institutional Economics
№ 5 (R)–2009	Л. Е. Шепелёв	Проблемы организации нефтяного производства в дореволюционной России
№ 6 (R)–2009	Е. В. Соколова	Влияние государственной политики на инновационность рынков: постановка проблемы
№ 7 (R)–2009	<ul><li>А. А. Голубева,</li><li>Е. В. Соколова</li></ul>	Инновации в общественном секторе: введение в проблему
# 8 (E)–2009	A. Damodaran	Climate Financing Approaches and Systems: An Emerging Country Perspective
№ 1 (R)–2010	И. Н. Баранов	Конкуренция в сфере здравоохранения
№ 2 (R)–2010	Т. А. Пустовалова	Построение модели оценки кредитного риска кредитного портфеля коммерческого банка (на основе методологии VAR)
№ 3 (R)–2010	Ю. В.Лаптев	Влияние кризиса на стратегии развития российских МНК
№ 4 (R)–2010	А. В. Куликов,	Внутрифирменные ориентации и их
	Г. В. Широкова	влияние на рост: опыт российских малых и средних предприятий
# 5 (E)–2010	M. Storchevoy	A General Theory of the Firm: From Knight to Relationship Marketing
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#7(E)–2010	D. Ivanov	An optimal-control based integrated model of supply chain scheduling
№ 8 (R)–2010	Н. П. Дроздова, И. Г. Кормилицына	Экономическая политика государства и формирование инвестиционного климата: опыт России конца XIX — начала XX вв.

№ 9 (R)–2010	Д. В. Овсянко	Направления применения компонентов менеджмента качества в стратегическом управлении компаниями
# 10 (E)–2010	V. Cherenkov	Toward the General Theory of Marketing: The State of the Art and One More Approach
№ 11 (R)–2010	В. Н. Тишков	Экономические реформы и деловая среда: опыт Китая
№ 12 (R)–2010	Т. Н. Клёмина	Исследовательские школы в организационной теории: факторы формирования и развития
№ 13 (R)–2010	И. Я. Чуракова	Направления использования методик выявления аномальных наблюдений при решении задач операционного менеджмента
№ 14 (R)–2010	К. В. Кротов	Направления развития концепции управления цепями поставок
№ 15 (R)–2010	А. Г. Медведев	Стратегические роли дочерних предприятий многонациональных корпораций в России
№ 16 (R)–2010	А. Н. Андреева	Влияние печатной рекламы на восприятие бренда Shalimar (1925 – 2010)
№ 17 (R)–2010	В. Л. Окулов	Ценность хеджирования для корпорации и рыночные ожидания
№ 1 (R)–2011	А. А. Муравьев	О российской экономической науке сквозь призму публикаций российских ученых в отечественных и зарубежных журналах за 2000–2009 гг.
№ 2 (R)–2011	С. И. Кирюков	Становление и развитие теории управления маркетинговыми каналами
№ 3 (R)–2011	Д. И. Баркан	Общая теория продаж в контексте дихотомии «развитие – рост»
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№ 1 (R)–2012	А. Л. Замулин	Лидерство в эпоху знаний

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№ 5 (R)–2012	Г. В. Широкова, М. А. Сторчевой	Влияние социальных сетей на выход на зарубежные рынки: из опыта трех российских предпринимательских фирм
№ 6 (R)–2012	А. К. Казанцев	Инновационное развитие университетов: аналитический обзор ведущих российских вузов
№ 7 (R)–2012	Д.В.Муравский, М.М.Смирнова, О.Н.Алканова	Капитал бренда в современной теории маркетинга
# 8 (E)–2012	<ul><li>E. B. Samuylova,</li><li>D. V. Muravskii,</li><li>M. M. Smirnova,</li><li>O. N. Alkanova</li></ul>	The role of brand characteristics in brand alliance engagement with different types of partners: an exploratory study
№ 9 (R)–2012	Е. Ю. Благов	Факторы ценообразования многосторонних платформ: современное состояние и перспективы исследований