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TALENT MANAGEMENT PRACTICES IN RUSSIAN INNOVATION-ACTIVE COMPANIES

Master's Thesis by the 2nd year student

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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АННОТАЦИЯ

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Описание цели, задач и основных результатов	Инновации являются драйверами долгосрочного успеха компании. Основным источником инноваций является человеческий капитал, который может служить конкурентным преимуществом компаний, особенно, если это касается инновационно-активных компаний. Инновационное мышление должно стимулироваться эффективными практиками УЧР, которые обеспечивают благоприятную среду для сотрудников с высоким потенциалом. Задачи данного исследования включают выявление наиболее часто используемых практик управления талантливыми сотрудниками и факторов, влияющих на использование процесса управления талантливыми сотрудниками в российских инновационно-активных компаниях. Выявленные в ходе исследования практики могут быть использованы в контексте инновационно-активных предприятий России при условии выявленных определенных факторов.
Ключевые слова	талантливые сотрудники, управление талантливыми сотрудниками, управление человеческими ресурсами, инновации, инновационная активность, инновационно-активные компании, Россия

ABSTRACT

Master Student's Name	Kim Evgeniya
Master Thesis Title	Talent Management Practices in Russian Innovation-Active Companies
Faculty	Graduate School of Management
Main field of study	Management
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Academic Advisor's Name	M.O. Latukha
Description of the goal, tasks and main results	Innovations are drivers for company's long-term success. The main source of innovations is human capital which may serve as competitive advantage of organization especially when it comes to innovation-active companies. The innovative thinking should be stimulated by effective HR practices which provide favorable environment for employees with high potential. The present study provides an insight into talent management practices within the context of innovation active companies operating in Russia. The research tasks include identification of the most frequently used Talent Management practices and factors influencing the implementation of Talent Management process in Russian innovation-active companies. The identified within present research Talent Management practices may be used in the context of Russian innovation-active companies with regards to the identified certain factors.
Keywords	talented employees, Talent Management, Human Resource Management, innovations, innovation activeness, innovation-active companies, Russia

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INTRODUCTION

Throughout the history human resource management systems were subject for evolvement due to variety of economic, political and socio-cultural factors. These changes influenced on activities of employees who provide non-standardized labor services which is linked to art and innovations. Therefore managers of innovative companies recognized the need of searching for the right balance between traditional employee control system and provision of opportunities for self decision-making stimulating development of innovation thinking. This assumes current concern of innovation active companies about designing Talent Management systems and finding quality approaches for managing key employees.

The topicality of this research is based on the fact that the issue of talent management within innovation development framework is becoming more and more popular. For innovation active companies effective talent management represents high significance because success of their performance directly depends on innovative personalities who possess creative potential.

Research subject is talent management practices in innovation active companies in Russia

Research object is innovation active companies in Russia.

Research tasks include:

- study Talent Management practices in innovation active companies in context of Russian business framework

- analyze Russian and foreign literature for identifying peculiarities of innovation active companies and their talent management specifics

- provision of case-studies about innovation active companies in pharmaceutical branch in Russia and identification of the most frequently used Talent Management practices and factors driving the use of Talent Management practices within the context of innovation active companies.

Managerial implication of current research: importance of using the provided results of analysis for successful and efficient implementation of talent management practices in innovation active organizations with regards to certain factors.

CHAPTER 1. THEORETICAL BACKGROUND

1.1. Talent Management

1.1.1. Concept and main definitions

Some of the authors refer the increasing attention to talent management after World War II while the economic conditions were improving, but this concept became its most popularity after the research held by the McKinsey consultants "The War for Talent" (Michaels, Handfels-Jones & Axelrod, 2001). The review of foreign and local literature showed that there is no universal definition for talent. In the study of Iles, Chuai and Preece (2010) 87% of the companies who took part in surveys provided their own definition for talent but none of them were identical. As Ewerlin (2013) observed talent is often used as synonym to "high performer" or high "potential". It is notable that in the extant articles focusing on talent there is a compromise on the research subject: some of the authors characterize the talent as a person, others define it as person's characteristics. There exists some kind of unity in the two main elements of talent. The first element is referred to person's capabilities (Ready, Hill and Conger, 2008; Grossman, 2004). Grossman believes that talented person having these special capabilities can achieve more than the one without them. These capabilities, according to Ready, Hill and Conger, may include leadership skills, creativity, and innovativeness and performance flexibility. The second element points out the performance which according to Darrough and Melumad (1995) and Davis et al. (2007) is defined by handling the responsibilities by using special competences. Talent is defined by most of the scholars as stable demonstration of individual's high performance (Stahl et al., 2007, Tansley et al., 2007, Williams, 2000).

There are two categories of the main approaches in defining the talent: objective and subjective. Objective approach defines talent as person's characteristics which are separated by identifying talent as: natural ability (Davies, Davies, 2010; Buckingham, Vosburgh, 2001), mastery (Ericsson, Prietula, Cokely, 2007; Pfeffer, Sutton, 2006), commitment (Pruis, 2011; Nieto, Hernández-Maestro, Muñoz-Gallego, 2011), fit (González-Cruz, Martínez-Fuentes, Pardo-del-Val, 2009; Pfeffer, 2001). Subjective approach characterizes talent as person. It proposes inclusive and exclusive approaches. Inclusive approach supposes using the talent definition to all employees of the company including potential ones (Leigh, 2009; Peters, 2006; Buckingham, Vosburgh, 2001). While in exclusive approach talent is distinguished as a separate group of employees, who demonstrate high performance (Smart, 2005; Michaels, Handfield-

Jones, Axelrod, 2001; Williams, 2000) or possess big potential (Tansley, Harris, Stewart, Turner, 2006; Williams, 2000).

According to Michaels et al (2001) 10-20% of employees are of most value for the company. Naqvi (2009) claims that in any firm 20% of employees provide 80% of the result. As Huselid et al. (2005) proposed that talented employees are referred to "A players" and add more value to the company comparing to other employee categories (See Figure 1). Activities performed by "A players" is of big importance for implementation of company's strategy and their efficiency positively affects the company's indicators. Category B of employees includes 64% average executors whose contribution is only 16%. Category C contains 16% of employees who provide 4% of the result.

	A Position STRATEGIC	B Position SUPPORT	C Position SURPLUS
DEFINING CHARACTERISTICS	**Has a direct strategic impact** AND **Exhibits high performance variability among those in the position, representing upside potential**	**Has an indirect strategic impact by supporting strategic positions and minimizes downside risk by providing a foundation for strategic efforts.** OR **Has a potential strategic impact, but exhibits little performance variability among those in the position**	**May be required for the firm to function but has little strategic impact**
Scope of authority	Autonomous decision making	Specific processes or procedures typically must be followed	Little discretion in work
Primary determinant of compensation	Performance	Job level	Market price
Effect on value creation	Creates value by substantially enhancing revenue or reducing costs	Supports value-creating positions	Has little positive economic impact
Consequences of mistakes	May be very costly, but missed revenue opportunities are a greater loss to the firm	May be very costly and can destroy value	Not necessarily costly
Consequences of hiring wrong person	Significant expense in terms of lost training investment and revenue opportunities	Fairly easily remedied through hiring of replacement	Easily remedied through hiring of replacement

Figure 1 Position categories
(Source: Huselid M. A., Beatty R.W., Becker E. B., 2005)

Huselid et al. (2005) drive the attention of managers to the importance of designing a general HR framework as well as talent management. It should be mentioned that comparing to other categories "A players" require disproportionally higher investment therefore its necessary to assist them in developing their professional skills, providing them with fair reward, more independence in decision-making and more possibilities for expression of their ideas. Besides it

is crucial to foresee and prepare a full replacement of key employees in case of leaving by one of them.

For the current research talented employees will be defined as employees who contribute most into value creation of the company by demonstrating high performance, using the knowledge, capabilities and skills relevant to current and future needs of the company and possessing high potential for professional growth and development.

Talent Management (further regarded as "TM") was recently accepted as key practices in management activities within a company. This was motivated by the research held in 1990s by consultants at McKinsey who invented the popular phrase "the war for talent" in order to highlight the importance of key employees who contribute most to the success of the company (Michaels, Handfield-Jones, & Axelrod, 2001) .

The early descriptions of talent management were focused on recruitment, attraction and selection of the most intelligent and skilled talents, recognition and evaluation – all that mainly for managerial positions (Miner, 1973). The extant literature shows that there is still no universal understanding of talent management.

Lewis and Heckman (2006) distinguish three ways of interpreting talent management in practice:

1) talent management as a newly adopted term for HR practices;

2) it is a concept referring to succession-planning practices and development of talented employee pools;

3) it is referred to management of talented employees.

The additional fourth way to explain the concept of TM is based on identification of key positions within the company to be filled with the talents (Huselid et al., 2005).

Other debates for what talent management is about, presented by Iles, Preece and Chuai (2010), consider inclusive approach where TM is focused on managing the talent of all employees, and exclusive approach where it is about managing talent of high-performers only.

The most commonly used definition of TM was proposed by Collings and Mellahi (2009, p.42) – it refers to "activities and processes that involve the systematic identification of key positions that differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high-potential and high-performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents, and to ensure their continued commitment to the organization".

As the businesses were internationalized there appeared a new global framework for talent management (i.e. Global talent Management, or GTM). On the global scale there is a number of comparative studies focused on talent management practices within national contexts, like Indian (Doh et al., 2009), Chinese (Iles et al., 2009) or Irish (McDonnell et al., 2009) ones. Scullion, Collings and Caligiuri (2010) in their article "Global Talent Management" developed their view on the definition of GTM which is represented as practices of attraction, selection, development and retention of key employees who strategically contribute into company's performance in the global context. This definition highlights the main focus on a group of high performing employees rather than all employees within the multinational enterprise.

Contemporary business is constantly searching for new resources for optimization and boosting efficiency of its business processes. From this perspective much attention is paid to human resources and more precisely to its development – human resource management and development remains one of the key tasks of any employer. As mentioned in PWC express research the connection between human resource development and organizational performance was recognized in 1970s. CEOs of the biggest companies started to consider retention policies for most perspective and efficient employees, their motivation and creation development opportunities for them.

As noted by M. Latukha (2014) the concept of talent management is "rooted in the concept of HRM but it has more of a specified focus". A number of definitions of talent Management refer to HRM, defining it as a set of HR practices aimed on a special employee group who possess a high potential for outstanding performance (Hilton, 2000; Heinen and O'Neill, 2004; Mercer, 2005; Lewis and Heckman, 2006). The focus on this special group of employees provides the clear border between HRM approach and TM approach (Stavrou, Charalambous and Spiliotis, 2007; Ruse and Jansen, 2008; Williams-Lee, 2008; Briscoe, Schuler and Claus, 2009).

Talent management is linked to human resource management but at the same time it gets a more precise focus. Human resource management is a process of managing the whole employee pool within the organization which includes activities aimed on employee development (Armstrong, 2006). It is mostly oriented on such functions as attraction, development, training and retention, support of the whole system, while talent management is responsible only for its separate part. According to Blass (2007) it is described as additional managerial process which provides variable possibilities for employees who are considered to be talented or in other words who demonstrate their extra-ordinary capabilities and achievements

and potential for further development systematically. In this perspective talent management is included in human resource management as one of its processes.

1.1.2. Talent Management practices

Considering talent management systems it is necessary to describe the main talent management practices. The modern literature highlights three main categories of practices focused on attraction, development and retention of talented employees.

Talent attraction contains a wide variety of activities as creation and development of positive reputation of organization in the field of human resource management, attraction of capable employees by means of interesting job offer, selection of employees for key positions. Reputation and brand of the employer were subject for research linked to talent management issues. Vaiman et al. prove the importance of employer's brand which is formed as a consequence of all company's efforts to be perceived as desired workplace which pays attention not only to attraction but also to retention of talented employees (Vaiman, Scullion, Collings, 2012). Beside the research works in the field of employer's brand and reputation there is a number of papers concentrated on a more simplified model of company's attractiveness on labor market. This issues are described in the work by Chapman, Uggerslev, Carroll, Piasentin, Jones, (2005). Some papers study certain organizational and individual level factors which affect on final decision of the candidate in choosing the company for employment (Lievens, Decaesteker, Coetsier, Geirnaert, 2001).

Talent development includes a variety of components: learning, career development and career management, organizational development. According to Garavan et al. (2012) there exist 4 program types for talent development: formal development programs, relationship based developmental experiences, job-based developmental experiences, informal developmental activities. The first type is designed for top and middle level managers as well as for talented employees possessing relevant expert knowledge. It contains a number of programs such as professional skills development, personal development (Conger, 2010; Garavan, Carbery, Rock, 2012). Second direction includes working communication with colleagues, mentors, managers of higher levels, clients and suppliers. It is considered to be the key in talent development as the practices within this framework help employees to explore new horizons and get a fresh look on usual things (Rock, Garavan, 2006; McCauley, Douglas, 2004). The third type of programs is available under certain conditions: breaking the comfort zone of the employee and provision of cross-functional job character (Ohlott, 2004; Lombardo, Eichinger, 1989) The fourth type is

related to training which hasn't been planned and does not suppose a concrete result (Marsick, Watkins, 2001).

As to retention of talent there is a set of papers devoted to employee engagement methods into company's operation. Mostly interesting are the works representing wide range of general practices for increasing employee engagement where the main one is recognition of cultural and national peculiarities of a country for which those methods are developed as for example an academic paper by Lockwood (2008) . Besides many works are devoted to retention of talented employees in the context of international business especially decreasing the turnover rate as a result of return in home country. This critical issue is described by Lazarova, Cerdin (2007) Yan, Zhu, Hall (2002) Lazarova, Caligiuri (2001). Other classical practices for talent retention include performance management and reward systems and present the main focus in the articles by DeTuncq, Schmidt (2013), Stahl, Björkman, Farndale, et al. (2012).

Not only the practices but also their perception by the employees play an important role in talent management. In research held by Hoglund (2012) he assesses employees' perception of the reward for demonstrating their capabilities and its influence on employees' eagerness to develop their skills. The research results showed that breaking the psychological contract with employees leads to undermining the trust between the employer and employee and increasing the opportunity of losing key employees. Beside assessing the influence of perception of talent management practices by employees on such indicators like engagement or desire to quit the company the author proves that discrepancies of views by employees and employer on employee's belonging to talent pool is median.

Schuler proposed a model for talent management "5-C" (Schuler, 2015) (See Figure 2). Schuler assumes that all programs linked to talent management may be described as 5 elements: choices, considerations, challenges, contexts and consequences. One of the main choices the company faces is the choice of the object to be managed. It can be represented by the whole employee pool of the organization (inclusive approach of talent definition) or defined group as "A players" operating on A positions (exclusive approach).

Next choices about talent employees are divided according to the elements of this model. Those are number of employees who are directly involved into talent management system and also those who are informed about it; zones to which talent management practices are related to, among which Schuler distinguishes separate department, division in a certain country or a company in a global context. The author describes a number of challenges in the process of talent management. It is quite notable that those challenges are partly contradictory on the first glance: one is talent shortage whereas there is also talent surplus. He explains this contradiction

by looking closer on the reasons for those challenges. The issue of talent shortage is relevant for the early stages of company's globalization and for the countries with developing markets, the talent surplus issue is determined by economic instability in the world which leads to company's budget reductions. In other words while the talent shortage is caused by natural needs of the firm, the talent surplus is defined by external factors. Schuler recognizes other challenges like higher investments for talented employees in order to sustain their motivation and engagement, need for a more precise selection of the place for business due to variable labor costs of talented employees of the same qualification, higher requirements for talented employees' capabilities to adapt for constantly changing organizational conditions.

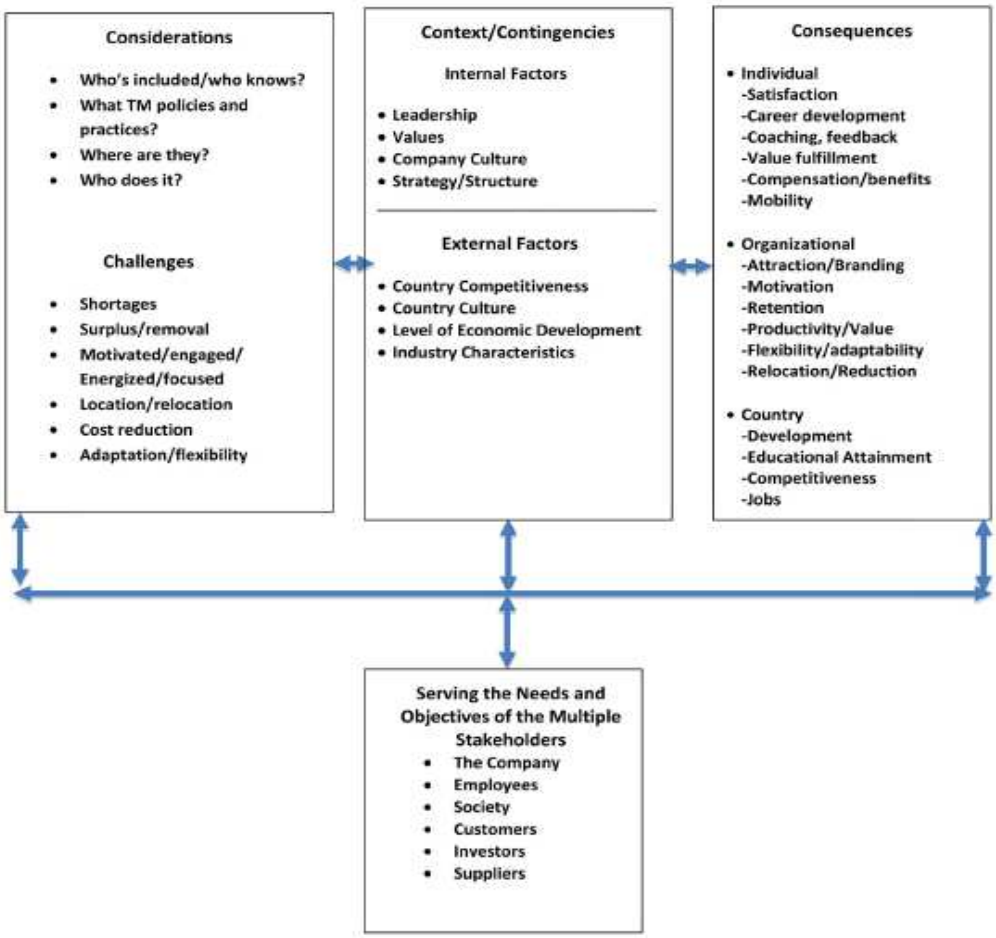

Figure 2. Model for talent management "5-C" by Schuler
(Source: Schuler, 2015)

Next element of the model is context, the author examines internal and external factors influencing on the talent management programs. Internal factors include leadership style corporate values and organizational structure of the company. External factors contain competitive ability of a country where the company operates. According to Porter's model it is defined by the size of labor market including the size of talent market, unemployment rate,

quality of education, wages level, labor regulations, quality of infrastructure, level of innovations (Porter, 1990). Besides external factors also contain cultural peculiarities of the country, level of its economic development, as well as branch characteristics, specific knowledge and skills.

The last element is consequences which are divided in 3 levels: individual, organizational and regional. According to the author by managing all three levels the company can response to the expectations of all stakeholders, company itself, its employees and clients, as well as its suppliers, society and others.

The applicability of the proposed model is represented in provision of concrete set of aspects requiring attention in the process of development and implementation of talent management system in the organization. This model does not suppose blind copying of talent management practices of other successful companies, but focuses the management view on the most important details and business specifics.

1.1.3 Talent Management in Russia

According to M. Latukha (2014) talent management in Russian companies has a number of peculiarities in using HR practices as well as how various organization practices influence them, they either may stimulate effective talent management or hurdle its realization. Talent management is quite a new concept in Russia. Murtazin and Lutskina (2010) characterize the situation on Russian labor market as “war for talents”: the role of intangible assets is increasing which influences on level of demand for highly qualified employees, globalization and business extension lead to the need in professional leaders; employee loyalty is decreasing and they easily change job places in search for better positions.

PricewaterhouseCoopers conducted a research among Russian and international companies on the topic “Talent Management and Employee Value Proposition” (PWC, 2013), were 53% were Russian companies and 47% international companies. According to results of the research 86% of the respondents replied that Talent Management programs were targeted on all level employees and only 14% of the respondents who mostly included Russian companies, answered that Talent Management programs were targeted on managerial staff. The most frequently used instruments for development and motivation in Russian companies are individual development plans, training programs and leadership development, vertical and horizontal career growth. Though such effective instrument as coaching/mentoring is not widely used in Russian market. Least used instruments in both Russian and international companies are international assignments and MBA/EMBA, because this type of programs are expensive and do not

guarantee that after acquisition of new knowledge and experience the employees will stay at the company for long-term.

The research study of talent management in Russia by Latukha (2014) demonstrated that comparing to foreign companies the level of awareness and interest in talent management in Russian companies is quite low. The development of talent pool as one of derivatives of talent management is a more understandable feature for Russian companies rather than talent management. The main task of talent pool management is to fulfill the open vacancies as soon as possible without breaks in business process which is quite close to succession planning (Sokolova, 2006, Lutskina, 2007). As the aim of talent management consists in identification of talents and use of talent pool for the sake of company's success, managing talent pool can be considered as a talent management practice.

The fact that not enough attention is paid to talent management practices is also related to small amount of studies devoted to talent management analysis in emerging markets including Russian business (Holden, Vaiman, 2013). The study by M. Latukha (2014) showed that there is a "fuzzy" understanding of talent within Russian organizations. There are no clear criteria for defining a talent and thus no clear strategy for using talent management practices. Besides the efforts to copy talent management practices used in international companies are not always successful due to absence not only adaptation mechanisms but also a clear vision of which talent management practices may be most significant and efficient. As a consequence of fuzzy understanding of talent in Russian organizations the system of talent management can not work efficiently and in most cases is not aligned with the goals. The main focus in realization of talent management practices is made on recruitment and succession planning added with employee training.

M. Latukha (2014) describes the reasons for not quite developed system of talent management practices in Russian companies, which include specifics of business development in Russia, quite long-term backwardness of management practices, orientation on operational level of planning and realization of tactical decisions. This provides a significant influence on development speed of talent management practices. By successful implementation of talent management practices in Russian companies it is very important to use systemic strategic approach which supposes assimilation of these practices among all organizational business processes.

1.2. Innovation-active companies

1.2.1 Definitions and classification

An important task for transition economies is modernization of industry, increasing the efficiency and quality of production to the levels of developed countries. In the beginning of 1990s Russian industry significantly fell behind from industries of developed countries by range and quality of products. Besides for sustaining the competitiveness it is necessary that innovation activity becomes a permanent process. In general government may stimulate that by pursuing a relevant policy. But for that it should be mentioned that there are various types of economic policies and other factors which influence the innovation activity of the companies.

Innovation as a term was introduced in scientific field in the beginning of the 20th century by J. Schumpeter (1951). He underlined the combination of formalized knowledge and noticed that introduction of various innovations: new products and markets, production methods, materials and organizations are the result of new "combinations" of knowledge. It is a concept which contains following aspects:

1) new product development which is new for customers, or quality improvement of the existing product;

2) designing new production method which hasn't been tested in the given field of production;

3) exploration of a new market where the given production branch hasn't yet operated regardless the fact of past existence of this market;

4) exploration of a new production factor source regardless to the fact whether it has been existed earlier or was newly created;

5) creation of a new form of organization

In order to consider the term "innovation" in the framework of firm's innovation activeness and for its further definition one should refer to methodological document "Oslo manual" where the innovation means a final result of innovative activity which was realized as new or improved products or services, new production methods and ways for its organization used in practice, new markets and ways for product promotion.

Oslo manual distinguishes 4 types of innovations:

- product innovations, which represent introduction of a new or significantly improved product or service. This category includes significant improvements of technical characteristics of the product, its components as well as other functional characteristics;
- process innovations, which assume introduction or improvement of the existing production method or product delivery. These are significant changes in technology, production equipment or software

- marketing innovations include implementation of a new marketing method, implying significant changes in design and packaging of a product as well as its positioning and market promotion

- organizational innovations imply the use of a new organizational method in business practice including creation of new job places.

According to Goffin and Mitchell (2010) innovation includes incremental change or radical change thus innovations may be classified by the level of “innovation achieved”.

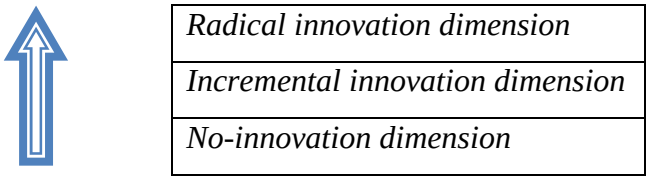

Figure 3. Dimensions of innovations

(Source: Goffin, Mitchell, 2010)

Incremental innovation can be described as a consistent organized process which leads to some changes in production and business processes which lead to improvements of development indicators. It doesn’t require big investments; both levels are involved – managerial and technical staff. (Marin-Garcia, Aznar-Mas, Ladrón de Guevara, 2011)

Radical innovation is about inventing something totally new (products, process, technology etc.) and this significantly provides influence on the market (Stopford & Baden-Fuller, 1994; Leifer, 2000). This innovation category requires laboratory research as radical innovation becomes a result of that research. Radical innovations may serve as a component for long-term success of an organization (Leifer, 2000; McDermott & O’Connor, 2002).

Innovations have various meanings for different groups. Consumers perceive innovations as products and services of high quality. For the companies innovation is an opportunity of sustainable growth and development as well as a competitive advantage in some cases. From the perspective of employees in an organization innovations are perceived as a more interesting job connected to intellectual and creative activities and leading to a higher level of salary. For the economy as a whole innovation represents a source of economic growth and prosperity through increasing the productivity level of economic subjects.

Beside the research studies of innovations in foreign and Russian literature there are also works devoted to research of innovation processes. Innovation and innovation process have different meanings in the theory of innovation management. Damanpour and Aravind (2011) propose that innovation process is represented by process of creation, development,

commercialization, distribution, implementation and realization of innovation. These authors also explain the innovation process as consisting of several stages which they unify in two main ones: generation and implementation of innovations. The generation process comprises all efforts and activities directed on creation of new ideas, their improvement as well as their transfer and use by other external companies. The generation stage consists of identification of opportunity, research, design, commercial development, marketing and distribution of innovation. The implementation stage in its turn contains such aspects like acquisition of information about new ideas by the company, assimilation, transformation and exploitation and includes following phases: initiation, making a decision about adaptation and use of innovation. Some scholars highlight that these two stages of innovation process may be fulfilled within one organization but also in some cases when idea generation happens in one company and its transfer to market, implementation and consumption is done by external organizations.

There is another term which is underlined in this subject field – it is innovation activity. According to Gorodnikova et al. (2009) narrow description of this term is realization of innovation processes by an organization. A wider description proposes that innovation activity is a type of activity which is referred to transformation of ideas into technologically new or improved products or services, new or improved technological processes or ways of service production which can be used in practice.

In the theory of innovation management there are presented following types of innovation activity:

- Research and Development;
- technological works, preparation of production and production testing;
- acquisition of patents, licenses or know-how;
- investment activity needed for realization of innovation projects;
- certification and standardization of innovation products and materials necessary for their production;
- marketing and organization of markets for innovation products;
- training and retraining of employees for innovation activity etc.

Innovation activeness of an organization is a measurement indicating the level of organization's involvement into innovation activities.

Surovushkina (2014) proposes a complex view on innovation activeness of a company. It is described by a set of interdependent elements which reflect organization's opportunities for

realization of innovation activity, intensity of development and implementation of new products and technologies and efficiency of innovation activity realization.

This author proposes a complex approach for assessing the level of organization's innovation activeness. It is based on the main three components specifically it assesses the possibilities for realization of innovation activities, intensity and efficiency of innovation implementation.

The various approaches for defining and methodology of identification of innovation-active companies will be described more detailed in Chapter 2.

1.2.2 Peculiarities of TM in innovation active companies

In modern studies the issue of interaction of HRM practices and innovation activeness was represented by a number of theoretical research and cases which analyze certain special situations. The results of theoretical analysis of foreign experience and empirical studies of Russian companies will be discussed in this subchapter.

The studies of HRM influence on organizational performance, like efficiency, productivity and profitability were completed by many authors, for example, MacDuffie (1995), Yound et al. (1996), Pfeffer (1998), Collins & Clark (2003). But for the current research it is important to extend this understanding to studies of interdependence of HRM and company's innovation activeness according to Laursen and Foss (2003). The research in this field started from designing a model of interrelation between HRM and innovations which was described by Leede and Looise (2005). During that time other researchers started studying the issue of mutual influence of HRM and innovations (Jimenez-Jimenez, Sanz-Valle, 2005). Today there is a number of studies devoted to correlation between HRM and innovations, but at the same time various authors focus their attention on importance of different HRM aspects which influence innovation results of a company. Some researchers (Jorgensen, Becker, Matthews, 2011) identified not only presence of the same or similar HRM practices in traditional manufacturing companies and innovative scientific enterprises but also important differences, especially in practices of staffing.

Though the issue of correlation between HRM and innovativeness of organizations became quite relevant not long ago, many foreign studies tried to identify innovative human resource practices. In some studies authors referred following practices to this special category: hiring, compensations, bonuses, recruitment and employee selection, teamwork, flexible workload, employment guarantees, communications and training (Ichniowski et al. 1997). Some authors like Yound et al. (1996) placed there staffing, training, attestations, compensations. A

number of researchers call HR practices affecting organizational performance as “strategic HRM practices”. In the study conducted by Delery and Doty (1996) they highlight seven main practices: career growth, training, performance appraisal, compensations, employment guarantee, voting right, job places. Later Currie and Kerrin (2003) referred performance control, recruitment and selection, employee interaction, career growth, knowledge transfer within the company. The authors consider that companies can identify and use strategic HR practices aiming to increase employees’ motivation to strive for innovative results of the company (Swanson, 1994; Jacobs, Jones, 1995).

Chen and Huang (2009) propose that such practices should be directed on development, transformation and assimilation of expert knowledge within the organization in order for company to get innovative results.

Comparing to other authors MacDuffie (1995) has got certain combinations of HRM practices which contribute into improvement of organizational performance indicators. Some other authors decided to implement the term “best HRM practices”. Like Pfeffer (1998) who considered following practices as “best HRM practices”: employment guarantee; selective recruitment; self-managing groups; performance appraisal; professional training for supplying organization with qualified and motivated employees; decreasing the status differences; cooperative use of information.

Later Guest (1999) highlights 5 “best HRM practices” according to the results of his empirical study:

1) proper selection by using selective tests for those who can make a certain contribution;

2) consistent professional training;

3) designing the work types for achieving flexibility, commitment and motivation of employees, including means considering the responsibility of using their knowledge and skills to the full providing certain level of independence;

4) two-ways communications which provide full information capacity;

5) employee self-management training programs which aim to increase the employee’s responsibility, and its mains tasks: informing employees about consequences of their activities for the company including cases when they are absent on the job place and in conditions of employee turnover, demonstrating the peculiarities of how their work affects financial results of the company.

The above mentioned studies used a universal approach which allows to consider the possibility to identify a set of HRM practices which will be aligned to organizational business strategy and hence innovation strategy.

But empirical studies in this sphere were mainly focused on separate HRM practices (Jimenez-Jimenez, Sanz-Valle, 2005; Shipton et al., 2006; Mate et al., 2010). Thus a number of authors study the role of organizational learning in correlation between HRM and innovations; they also propose that receiving innovative results may be only there where HRM practices are directed on managing three stages of organizational learning cycle – creation, transfer and use of knowledge (Shipton et al., 2005). At the same time some of the authors try to study and get understanding of dynamic, multicomponent non-linear correlation between how companies create and manage knowledge and how they are capable to innovations. They study the correlation between structural and dynamic components of organizational HR strategies for training and development, and innovation efficiency of an organization (Mate et al., 2010).

Laursen (2002) in his study focuses on "new" HRM practices thus meaning the changes of modern employee relations within the organizations. He refers following practices to the "new" ones: team-work, continuous learning, decentralization of decision-making, focus on internal knowledge assimilation and other. Then he notes that the mentioned practices may stimulate innovation activeness of the company for at least three following reasons: use of those HRM practices may increase the level of decentralization and this environment is more favorable for acquisition, transformation and exploitation of knowledge in the organization; team-work practices including employee rotations should stimulate the most efficient work coordination (for example, employees complete several various tasks which allows them to better understand technological problems of their colleagues); 3) teams often are united by knowledge and experience which separately existed in the organization, this may potentially lead to improvements of processes and products.

In the studies of this field authors Lau and Ngo (2004) distinguish three characteristics to which innovation-directed HRM system should conform. Firstly it should be oriented on training: improvement of qualification and investments in human capital. Second, rewards should be based on performance results of the employees. Third, team's development: there should be organized events aimed on leadership development and supporting team spirit of employees, especially, creation of cross-functional teams. Thus a number of authors suppose that HRM practices which make accent on intensive training, performance appraisal and teams

development, represent an HRM system and influence the innovation results of a company (Lau, Ngo, 2004).

Moreover a number of research studies show that HRM system may have a positive correlation with organizational performance. This HRM system should include use of the following HRM practices: flexible work schedule, teamwork, long-term employment of high qualified employees, various long-term training, career growth, assessment of employee behavior, compensation system (Jiménez-Jiménez, Sanz-Valle, 2008).

Perspectives of Russian specialists in the field of scientific and practical management the HRM strategies in innovative development of companies are quite different. According to the results of research study "Innovation activeness of large business in Russia: mechanisms, barriers, perspectives" which was prepared by the experts of Russian School of Economics, PricewaterhouseCoopers company in Russia and Center of technologies and innovations PwC in cooperation with Russian Venture Company and Russian Corporation for Nanotechnologies, lack of employees capable for innovation activities and managerial staff who can realize innovation projects are considered to be least important issues for the Russian companies comparing to foreign companies. Russian companies tend to seek those barriers for innovation processes in macroeconomic conditions rather than in inefficiency of their management. According to this research study 35% of the surveyed companies have top-managers responsible for innovations, 17% organized special procedures for collecting innovative ideas and 7% implemented systems of monetary rewarding for innovation activities.

Academic studies like for example by Soldatova (2010), showed that in process of innovation implementation in Russian enterprises the problems arise not only in lack of financial support but in organizational managers lacking innovation management skills. The role of HR departments in managing innovation processes is extremely poor: in most cases there are no specially trained employees and no decision-making rights. Traditionally the staff is considered to be a cost factor and not as the resource of competitive advantage. At the same time the innovation activeness of a company can be provided only by a strategic role of HRM which may be called innovative and formed on the joint of managerial science and practice: innovation management and human resource management.

As Fernandez March (2010) proposed in his study there are three categories of complexity for a know-how: competencies, capacities and skills. A competency is comprised by a number of capacities which in their turn are formed by a number of skills required for

complicated professional routines. Capacity is in the middle of know-how complexity and includes skills for procedural knowledge. Skills are considered to be simple know-how.

According to Sinov (2007) the innovative human resource management may be defined as specialized professional activity which is directed on improvement of management system in the field of working with people in order to develop creative and innovative potential and thus to stimulate innovative work behavior of employees. The main factor of successful innovation management is balancing the relations among members of innovation process which is concluded in creation and support of favorable innovation climate in an organization.

According to Roth (2010) the key to success of innovation development is in the systematic approach to this process which can't always be achieved by organizational management. "The managers should exemplify the way of thinking and behavioral model which they want to see in their employees. The employees need to get an allowance from management to deny the rules which they had accepted earlier. Everything which surrounds them in daily work routine only supports the perceived stereotypes of doing business. Those inconspicuous limitations comprise all fields of activities – career paths, remuneration system and of course operational indicators. Only with certain instructions mainly from the CEO the companies can break the usual routines and create space or radical changes" (Roth, 2010, p.43). The idea is that management should possess a systematic model for managing human capital which includes effective organizational structure, communication system, personnel diversity (age, sex, knowledge and experience), rewards and remuneration systems who achieved good results in the innovation field.

The peculiarities of talent management in innovation active companies can be considered through the lens of challenges which human resource specialists face while working in this type of organizations (Berezhnov, 2008):

1) Forecasting employee pool size. Innovative companies face challenges of precise forecasting of the future need in human resources in general and particularly talented employees. Comparing to traditional companies which define the labor force need as difference between working employees and future demand for labor force, innovative companies face high level of uncertainty of results which complicates forecasting the needs in labor force.

2) Additional requirements for candidates. Beside widespread required qualities the talented employees within innovative companies should possess flexibility and mobility of thinking, artistic potential, need in artistic self-actualization, adoption capability to fast changing working conditions and capability for learning and re-training, which makes the selection process more complicated.

3) Need for complex methods for employee selection. HR specialists have not only to define professional skills of the candidate but also his artistic potential, therefore beside usual methods of selection HR specialists use a qualitative assessment of the candidate which includes a system of special tests as well as analysis of patents and publications of the candidate.

4) Working schedule optimization. Periods of brain activity of employees within such organizations differ from others and depend on personal qualities of each employee. While intellectual and artistic activities play an important role for development of these companies the innovators need to be provided with flexible schedule.

5) Provision of constant growth and development for employees. Training issue is very important for innovative companies. The process of increasing their professional level must be accompanied with development of artistic potential, because company's activity implies not only using tacit knowledge, but also organization of ideas generation process.

6) Shortage of "innovation HR specialists. Searching for the HR specialist in the field of management the talent which is responsible for innovative company's specifics is much more complicated comparing to search of HR specialist for a traditional company.

7) Prevailing of non-monetary method of motivation in employee reward system. Innovators working in innovative environment have a need for self-actualization, recognition of his personal achievements and professional development. HR managers should support internal motivation of these employees by designing an effective reward system, relevant to expectation of talented employees.

8) Issues of interpersonal and group conflicts. There is a need for a special control of organizational behavior in innovative companies.

9) Increasing role of informal groups. Managers of non-innovative companies negatively accept existence of informal groups, while managers in innovative companies believe that their presence positively affects company's operations.

10) Complexity of assessing contribution of each employee. The efficiency of R&D is achieved due to collective efforts of employees.

11) Increasing significance of new employees' adaptation. The adaptation system of new employees in innovative companies should take into account personal specifics of talented employees. Tendency of talented employee to generate new ideas, self-actualization and achievement of good results in many ways depends on how comfortable he feels on a new workplace.

Summary of Chapter 1

- Some of the authors refer the increasing attention to talent management after WWII while the economic conditions were improving, but this concept became its most popularity after the research held by the McKinsey consultants “The War for Talent” in 1997 (Michaels, Handfels-Jones & Axelrod, 2001) . The review of foreign and local literature showed that there is no universal definition for talent. In the study of Iles, Chuai and Preece (2010) 87% of the companies who took part in surveys provided their own definition for talent but none of them were identical.
- Talent management is linked to human resource management but at the same time it gets a more precise focus. According to Blass (2007) it is described as additional managerial process which provides variable possibilities for employees who are considered to be talented or in other words who demonstrate their extra-ordinary capabilities and achievements and potential for further development systematically. In this perspective talent management is included in human resource management as one of its processes.
- The reasons for not quite developed system of talent management practices in Russian companies are specifics of business development in Russia, quite long-term backwardness of management practices, orientation on operational level of planning and realization of tactical decisions. This provides a significant influence on development speed of talent management practices.
- Innovations have various meanings for different groups. Consumers perceive innovations as products and services of high quality. For the companies innovation is an opportunity of sustainable growth and development as well as a competitive advantage in some cases. From the perspective of employees in an organization innovations are perceived as a more interesting job connected to intellectual and creative activities and leading to a higher level of salary. For the economy as a whole innovation represents a source of economic growth and prosperity through increasing the productivity level of economic subjects.
- According to Gorodnikova et al. (2009) narrow description of innovation activity is realization of innovation processes by an organization. A wider description proposes that innovation activity is a type of activity which is referred to transformation of ideas into technologically new or improved products or services, new or improved technological processes or ways of service production which can be used in practice.

- Empirical studies in this sphere were mainly focused on separate HRM practices (Jimenez-Jimenez, Sanz-Valle, 2005; Shipton et al., 2006; Mate et al., 2010). At the same time some of the authors try to study and get understanding of dynamic, multicomponent non-linear correlation between how companies create and manage knowledge and how they are capable to innovations. They study the correlation between structural and dynamic components of organizational HR strategies for training and development, and innovation efficiency of an organization (Mate et al., 2010).

As approaches to Talent Management as specific and more focused direction of HRM (Hilton, 2000; Mercer, 2005; Lewis and Heckman 2006) in various organizations may be referred to company's specifics and correspond to a certain business and context (Heinen and O'Neill, 2004) and there is a positive correlation between HRM and company's innovation activeness and performance (Laursen and Foss, 2003; Leede and Looise, 2005; Jimenez-Jimenez, Sanz-Valle, 2005) there is a **research gap** for studying the Talent Management practices in the context of innovation active companies.

From the research of Talent Management practices in Russian companies conducted by M. Latukha (2014) it can be inferred that some talent management practices can to some degree stimulate the talent development but approaches to talent management in various organizations may differ which should be studied more deeply. In the process of studying the theoretical base for the current research there can be identified that HRM practices within the context of innovation active companies operating in Russia were subject for studies of many Russian researchers but Talent Management practices as specific and more focused direction of HRM within that specific category of companies in Russia were not studied yet. As highly qualified employees are considered to be a strategic sources especially for the knowledge driven companies it is worth studying more deeply the issue of Talent Management practices in innovation-active companies. These prerequisites lead to the following **research questions** of the current study:

1) Which talent management practices are most frequently used by Russian innovation-active companies?

2) What factors drive Russian innovation active companies for using Talent Management practices?

CHAPTER 2. METHODOLOGY

2.1 Innovation Activeness of organization

There has not been invented a universal systemic approach for assessing innovation activeness of an organization because the definition of innovation activeness is complicated and multi-faceted. Many authors identify innovation active companies basing on ratings created by leading expert organizations and also by the snowball method when a known innovative company informs the researchers about other innovative companies within its field. Besides other authors demonstrated benefits of using a multifactor assessment of innovation activeness (Hagedoorn, Cloodt, 2003). Many Russian and foreign researchers are working on this issue and propose their methods of assessment and identification of innovation active companies.

Thus Netshepurenko (2006) proposes to measure innovation activeness of a company basing on calculations of certain indexes represented by proportion of indicators of current and previous periods. He uses the following indexes: index of innovation expenses capacity – proportion of innovation expenses to sales volume, index of renewal (proportion of new products in the overall production volume) and index of products novelty which is represented by average level of novelty of all new products.

Pavlova (2011) in her research study writes that in order to measure the innovation activeness of a company there are used following indicators of innovation activities: cost per unit of R&D, license, patent and know-how acquisition in sales volume, duration of the process of new product development, preparation of new product and production cycle of new product; indicators of renewal dynamics of product portfolio, volume of export of innovation products and etc.

Kotova (2007) in her research proposes her own integral model of assessment of innovation activeness of a company which consists of the following indicators:

- indicator of product innovativeness which is defined as the ratio of shipped innovative products and overall volume of shipped products;
- indicator of innovative orientation of capital expenditures which is defined as ratio of expenditures on equipment acquisition in technological innovations and overall volume of capital expenditures;
- demand for objects of intellectual property which is defined as ratio of funds invested in patents licenses, know-how property rights and total sum of intangible assets;
- indicator of employee development which is calculated as ratio of expenditures on training and development of the employees working with innovations and wage fund of an organization.

Pitshin (2009) proposes other indicators of company's innovation activeness:

- innovation perceptibility – innovation activeness of the consumer in using new technologies, methods of development organization, supply of new products and services;
- innovative resource – innovation activeness in search, preparation and use of resources for innovations realization including budget expenses;
- good organization of innovative process and internal marketing – innovation activeness in organization of processes and organizational forms;
- innovation management – level of employee competency who participate in the innovation management process;
- innovation competency of operator – innovation activeness of supplier;
- effectiveness of innovation activity – periodic results of economic efficiency of innovation implementation.

In the work by Nikitina (2007) there is an analysis of existing methods of assessing the innovation activeness of a company based on which she develops a complex assessment. It is based on three criteria of innovation activeness: intelligence, innovativeness and innovation capability. Intelligence means possessing achievements in R&D and intellectual results of commercial realization, innovativeness means company's ability to work in conditions of turbulent environment and innovation capability is a capability to transform intellectual product into new product and striving for innovation leadership.

Some other researchers build their system of assessment on calculation of economic indicators such as R&D expenditures, number of patents and production volume of products (Hagedoorn, Cloodt, 2003).

Besides the issue of designing the methodology for assessing and identifying innovation active companies are studied by governmental agencies. State Committee for Statistics of Russian Federation while assessing innovation activeness of companies consider possession of finished innovations, R&D expenditures and R&D staff as the main indicators. The Center of Economic Environment by State Administration of Russian Federation use following indicators for analysis of innovation activeness level:

- share of companies realizing those or other types of innovations by branches;
- structure of innovation activities;
- share of intangible assets and level of legal protection of R&D results;
- share of innovation products on internal and external markets in total sales volume;
- level of competitiveness of the companies etc.

From the above mentioned review it can be inferred that there are a number of methods for assessment of innovation activeness which firstly are based on various approaches to calculation systems and secondly are based on various innovativeness criteria. But the most complete and complex system of identification of innovation active companies is considered to be “Methodology of attribution of organizations to innovation type” which was designed for identification of organizations of innovative type for realization of innovative policy in Saint Petersburg by governmental support of Committee for Economic Policy and Strategic Planning of Saint Petersburg for subjects of innovation activity. This methodology was used as a manual for collection and use of data about innovation active companies by branches in Saint Petersburg.

According to the Methodology the values of indicators of innovation activity are compared to the coefficients of indicators of innovation activity. The indicators are divided into obligatory and selective ones. To the obligatory values of indicators are referred:

- share of expenditures for R&D, developmental activity and technological works and/or share of expenditures for acquisition of new technologies in total expenditures volume.
- share of innovation products in total volume of shipped products.

The values of each obligatory indicator should be not less than 10%.

The selective coefficients are: expenses efficiency of R&D, share of R&D staff in the average number of employees (%), number of patents, share of created job places in main production of average number of employees (%), share of royalty and lump sum payments in revenue (%) etc.

2.2. Research methodology

The research design used in the current study is multiple case study design data collection and analysis described by Yin (1994). As Herriott and Firestone (1983) noted that evidence from several cases is more compelling the two cases of Russian innovation active companies are described in the current research. The logic of multiple case study design is replication: either each case predicts similar results or contrasting results. The theoretical base can be traced along the stages of case-study design process.

Data was collected through in-depth interviewing of the major stakeholders in HR and middle-management. The interview was conducted using a question guide (Appendix 1) which was developed on the basis of questionnaire designed by professors of Graduate School of Management (Latukha, M., 2015). Secondary level of data collection was done by examining presentations and documents provided by the companies.

The set of factors driving companies to use Talent Management practices was collected from the extant studies presented in the Table 1:

Table 1

Factors influencing the use of Talent Management and literature

Factors	**Authors**
Business strategy realization	Michaels, Handfels-Jones & Axelrod, 2001
Scarce talent and capabilities	Holden, Vaiman, 2013
Business competition	Schuler, 2015; Latukha, 2014
Retention	Taleo Research, 2009
Need for innovations	Collins, Clark, 2003
Corporate culture	Schuler, 2015
Cost of Human capital	Feldman, 2000
New technologies	Laursen, Foss, 2003
Globalization	Latukha, 2014
Specifics of organizational structure (flexibility/flatness)	Schuler, 2015
Staff diversity	Roth, 2010
Work/life balance	Evert Pruis, 2011

(Source: developed for this research)

The companies were chosen according to Methodology of attribution of organizations to innovation active companies. In the current research the Methodology of attribution of organizations to innovation active companies modified by Tsybova (2014) was used for identification of innovation active companies (See Table 2).

Table 2

Indicators of company's innovation activeness

No.	**Title of innovation activeness (IA) indicator**	**The set value of company's IA indicator**	**Coefficient of company's IA indicator**
1	Share of R&D staff from average number of employees, %	not less than 15%	1
2	Number of patents, pcs.	not less than 1	2
3	Number of applications for patents, pcs.	not less than 1	1
4	Share of shipped innovative products on export in total volume of shipped products	not less than 10%	1

5	Share of intangible assets in total assets, %	not less than 2%	1

(Source: Tsybova, 2014)

Tsybova (2014) decreased the number of indicators of innovation activeness to core five for simplifying procedure of calculation of innovation activeness of a company. According to modified Methodology the total sum of coefficients of any indicators of innovation activity should be not less than 5.

Summary of Chapter 2

- There has not been invented a universal systemic approach for assessing innovation activeness of an organization because the definition of innovation activeness is complicated and multi-faceted. Many authors identify innovation active companies basing on ratings created by leading expert organizations and also by the snowball method when a known innovative company informs the researchers about other innovative companies within its field.

- The research design used in the current study is case study design data collection and analysis and practically to get a more evident results a multiple case study design was used. There are two case studies subject for replication: either each case predicts similar results or contrasting results. The theoretical base can be traced along the stages of case-study design process.

- The companies were chosen according to Methodology of attribution of organizations to innovation active companies which was modified by Tsybova. The 5 main indicators are proposed for attributing organization to innovation-active category.

CHAPTER 3. EMPIRICAL PART OF THE RESEARCH

From the research of Talent Management practices in Russian companies conducted by M. Latukha (2014) it can be inferred that some talent management practices can to some degree stimulate the talent development but approaches to talent management in various organizations may differ which should be studied more deeply. All talent management practices which create a sustainable competitive advantage are bound to company's specifics and are relevant to certain business and context (Heinen, O'Neill, 2004).

The object of the current study is represented by two innovation-active companies operating in Russia, both from the pharmaceutical business:

- "BIOCAD" Company (See Appendix 2 for detailed company overview)
- "Geropharm" Company (See Appendix 3 for detailed company overview)

"BIOCAD" is an international innovative company which united Research and Development Center of world-class level, modern pharmaceutical and biotechnological production, pre-clinical and international clinical research which correspond to international standards.

"Geropharm" is a dynamically growing group of companies which operates in development and production of high quality local medicines, invests in technological development and creation of innovative pharmaceutical infrastructure.

Both companies are subject of analysis according to the Methodology of attribution of organizations to innovation active companies, which was described in Chapter 2.

The purpose of the Chapter 3 is to identify most frequently used talent management practices in these companies as well as distinguish the factors driving the companies to implement talent management.

3.1 Talent Management in "BIOCAD" Company

3.1.1 Company overview and level of innovation activeness

BIOCAD is an international innovative biotechnological company specializing in world-class research, modern pharmaceutical production, pre-clinical and clinical studies. BIOCAD possesses the largest R&D center in Russia, which is included in 30 leading R&D centers in the world. The investments comprised 100 mln. US dollars. There are 375 specialists working in the

fields of molecular biology, cellular engineering, genetics, chemical synthesis, bioinformatics and chemoinformatics.

Innovation activeness indicators of BIOCAD Company is presented in Table 3:

Table 3

Indicators of innovation activeness of BIOCAD Company

No.	Title of innovation activeness (IA) indicator	The set value of company's IA indicator	Coefficient of company's IA indicator
1	Share of R&D staff from average number of employees, %	42%	1
2	Number of patents, pcs.	46	2
3	Number of applications for patents, pcs.	150	1
4	Share of shipped innovative products on export in total volume of shipped products	12%	1
5	Share of intangible assets in total assets, %	20%	1

(Source: developed for this research)

According to the Methodology of attributionof organizations to innovation active category it can be inferred that BIOCAD company is considered to be innovation-active company. Some of the indicators such as share of R&D staff, number of patents and share of intangible assets are higher than minimum required in the Methodology. The data for analysis was provided by BIOCAD Company.

3.1.2 Human Resources in BIOCAD Company

The employee pool of BIOCAD company is comprised by 1300 employees in 9 countries. HR statistics of BIOCAD company is presented in the Table 9:

Table 4

Employee pool statistics at BIOCAD Company

Department	Percentage	Average age	Women/Men, %
Research & Development	40%	32 years	59% / 41%
Manufacturing and Quality	25%	33 years	65% / 35%
Supporting units	24%	32 years	51% / 49%

Sales and Marketing	11%	35 years	69% / 31%

(Source: provided by HR Department of BIOCAD Company)

The employee pool at BIOCAD is quite young as the average age is between 32 and 35 years. The biggest share of employees is concentrated in Research and Development as this cluster is the most important for bioengineering and pharmaceuticals.

The positions following positions are in high demand: biotechnologists, research associates, analytical chemists, synthetic chemists.

Human Resource Management at BIOCAD is built on the following bases:

- A unique business culture to cultivate success
- Employees with high potential ("for the future")
- Flexible organizational structure
- Personal responsibility of every employee
- Work with different generations
- Ability to apply knowledge in various areas

The above mentioned bases are rooted in the corporate values of the company which are presented in Table 5:

Table 5

Corporate values at BIOCAD Company

Corporate Values	**Description**
Teamwork	Respect and trust to colleagues Providing and receiving feedback Cooperation with colleagues Understanding and acceptance of other people Tolerate mistakes of others Striving to work in a team by not objecting personal responsibility
Integrity	Openness Fairness Sincerity
Consciousness	Conscious and clear thinking Live and flexible intellect Understanding own role in achieving the strategy Self-confidence Readiness to support own actions and point of view

	Challenging established rules Non-conformal and critical thinking Outspoken and honest acceptance and announcement about impossibility to complete something
Engagement	Positive thinking Initiative and pro-activeness Understanding the company's strategy Deep study of any issue
Purposefulness	Orientation on result Habit to think that everything is possible Skill to overcome obstacles
Responsibility	Rational use of company's resources Readiness to take responsibility and make own decisions Proper attitude toward details
Self-improvement	Continuous improvement of professional level and use of new knowledge on practice Continuous development of own range of interests

(Source: provided by HR Department of BIOCAD Company)

Corporate values at BIOCAD are diverse and in some ways specific which is stipulated by the business context and company's strategy.

One of the most significant company's achievements is corporate university CUB – Corporate university of BIOCAD. CUB aims in developing knowledge and skills of employees to achieve strategic goals of BIOCAD. CUB includes:

Welcome center — adaptation and training for new employees

Expert center — teaching specific knowledge

Open center — teaching general knowledge

The corporate events at BIOCAD are designed for letting employees get to know each other and also increase the work efficiency. They include: BIOCAD guest club – meeting with celebrities (special guest in 2014 was Zhores Alferov, a Nobel Prize laureate in Physics for the development of semiconductor heterostructures used in high-speed- and optoelectronics), company birthday party, "Wake the spring up" party, meetings with the President of BIOCAD, holidays like Family Day, Victory Day, New Year, Children's Day.

BIOCAD collaborates with 16 leading Russian universities and supports promising students. Over 100 graduates of Chemical Pharmaceutical Academy work for BIOCAD. Every year, BIOCAD hires 10–15 graduates.

3.1.3 Peculiarities of Talent Management and factors. Case study of BIOCAD

The question guide for interviewing the company representatives was developed on the basis of questionnaire created by the professors of Graduate School of Management. The main three blocks of questions were added with open questions in order to get deeper understanding of the specifics of business context.

The main 3 blocks included:

- questions about business strategy
- questions about Talent Management approach
- question about factors

The in-depth interview was conducted with 2 representatives of HR-department and 3 representatives of middle-management.

1) Discussions of Business strategy

From the results of interviews it can be inferred that the company is focused on innovation management and growing on the new markets. Since 2013 BIOCAD transfers technologies for development and production of reagents on the basis of monoclonal antibodies to Brazil, Turkey, Marocco, Indonesia and Malaysia. In the production process company pays much attention to the speed of production as it is a very important criterion for this type of business.

The mission, employer's brand, CSR, values and leader's behavior are equally important components for the company's success. The main idea for the company is to help people in struggle with complicated disease and the mission consists in prolongation of people's life span and improvement of quality of life. BIOCAD is an active participant of various charity programs and was included in the list of companies with CSR in 2013.

As key to success of innovation development is in the systematic approach to this process which can be achieved by organizational management as well as by managers exemplifying the way of thinking and behavioral model which they want to see in their employees (Roth, 2010). Dmitriy Morozov, the President of BIOCAD, is one of the best examples of such leaders who founded a biotechnological company without special experience in this field and after graduating from KEIO Business School in Japan where he came to decision about investing in risky but

potentially growing pharmaceutical business in Russia. The initial purpose of founding this company was not only profitability, but transforming it into sustainable and perspective business.

The main focus of the business strategy of the company is adaptability to turbulent environment and implementation of innovations, while the company's representatives noted that the openness to new ideas and thinking "out of the box" is rooted in the corporate culture.

2) Discussions of Talent Management Approach

The level of using the Talent Management in the company can be considered as high and at the same time it is quite specific. The talent management at BIOCAD is characterized by individual approach to every employee.

There is no clear definition of talent in the company. Since they use individual approach to each employee which is considered to be unique personality, they consider every employee as a talent. It is important to note that referral to all employees means employees of the main departments: R&D, production, Sales and Marketing, Business Operations, IT. Even though there is still distinguishing highly qualified employees who possess expert knowledge, education and experience, and they are also defined as key employees. These employees are defined as talents but also possess expertise. These are mainly employees from the bioengineering, bioinformatics and other specific spheres which can be described as key positions.

It is necessary to note that company considers employees first as individuals who could fit their corporate culture and whose individual values are similar to the corporate values. In 90% cases they would hire an ambitious employee with not enough professional competencies rather than vice versa. The most valuable qualities for the company are ambitiousness, striving for self-development and consciousness. The potential candidate should be able to assimilate in corporate culture.

The following components of Talent Management were marked by the respondents in the questionnaire: leadership development, development of employees with high potential, succession management, competency management, retention, professional development, and identification of key positions, feedback for employees, culture and values, international assignments. Additional components proposed by the HR representatives were: trainings R&D, new technologies, creation of comfortable environment for knowledge transfer within the company. From that it can be inferred that company has a wide range of HR practices for Talent Management which are not limited to only succession planning as it was identified by many other Russian companies in the survey by PwC (2013).

The Talent Management strategy is focused on uniqueness of each employee and knowledge transfer. The TM strategy is fully aligned with other business processes within the organization.

The responsible roles of implementation of Talent Management are taken by HR-department, Training and Development Department, HR-Partners and managerial staff. Talent Management is considered as high priority by the President, HR-specialists, top-managers, middle level managers and less by line-managers and ordinary staff.

Talent Management was introduced since the start up of the company. The main drive for using these practices came from the founder and General Director of the BIOCAD Company. He even sets the special pace of the work within the company which may be perceived as quite fast for new hires in the company.

Structure of HR department is also quite unique, where HR partners play a significant role. That works as “one-window” principle where the communication and provision of necessary HR tools are done through HR partners who connect main departments with HR expert centers.

The HR-representatives described Talent Management practices which they use within the company in details. They are divided into 3 main groups: attraction, learning and development and retention.

Talent attraction practices

1) Collaboration with universities and schools

2) Participation in scientific conferences

3) Internships

Nowadays BIOCAD company doesn’t suffer talent shortage and doesn’t have any problems with recruitment of talented employees.

During the interview process HR-specialists again emphasize that they pay much attention to individual competences of the candidates. Every employee is unique and should be interested personality and denying conformity. HR specialists believe that it is easier to train a new employee who fits the corporate culture but lacks professional skills, rather than develop necessary soft-skills of a professional who doesn’t fit their values.

For unique positions the company either consults with professional communities or in some cases raise their own specialists by creating special learning programs at Russian universities which cooperate with BIOCAD. For example nowadays they plan to build another manufacturing facility and there will be necessity in some specialists, so they design a special learning program or faculty in cooperation with universities and in 5 years BIOCAD will be supplied with the ready specialists in the needed fields.

The collaboration with universities and schools serves as base for attracting talented employees into the company. BIOCAD provides support with necessary equipment, organizes conferences and internships for the students. BIOCAD participates in preparing high-qualified specialists in technologies for producing recombinant proteins for pharmaceutical use.

Since 2015 BIOCAD started collaboration with Ioffe Physics And Technics High School Of Russian Academy Of Sciences. Leading specialists of BIOCAD give lectures at Biomedical Informatics Course for high school students at the Ioffe Physics and Technics High School of Russian Academy of Sciences. BIOCAD opened a chemistry class, where its specialists give lectures, and students do research in laboratories and present their results in international conferences. BIOCAD promotes bioinformatics, and the most active students take part in real projects.

Learning and Development practices

Training and Development department is responsible for talent development practices. BIOCAD created its own Corporate university BIOCAD ("CUB") which works with the 3 main directions:

1) Welcome center – here newcomers are going through adaptation process, they are taught corporate values and stud production and R&D processes. The average on boarding practice lasts for 3 months. New employees are going to sightseeing on the production sites and participate in trainings. Here the new employees meet their mentors, who closely works with the department manager and HR-partners. Department managers and HR partners always work at improving the processes along with the Department of Business Process Management.

2) Expert center – here employees participate in trainings for developing their professional skills. The leaders annually provide professional development plan for the employees, some of them are assigned to participate in international conferences and seminars. In the expert center employees share their experience with other employees. The practice is

called “Went abroad – share the experience”. They communicate their new knowledge with colleagues, identify what may be used in the company and then prepare a final presentation for department managers.

3) Open center – social learning process internal online platform, where employees can share their knowledge in different fields which do not concern their work. The company provides 3 types of libraries:

- periodic publishings
- “Mann, Ivanov, Ferber” – for business development
- Cross-booking or “Live library”

BIOCAD provides an effective communication channels for employees using corporate magazine and TV channel on YouTube. Here HR specialists again remind employees to share knowledge with others. Besides for general development Training and Development department provides weekly mailing to all employees with 3 main selected topics which are interesting for their employees.

Big share of investments is made for participation of BIOCAD employees in international conferences and seminars. But the participation in such highly expensive conferences and seminars provides responsibility of each participant from the company to share the knowledge with the colleagues and managers. The process is done in several stages: 1) presentation of new knowledge; 2) discussion with colleagues and managers on how to use this knowledge within the company; 3) presentation of discussions results to top-managers and Vice Presidents of R&D Department and IT (operational management) Department. This process is described as set of effective practices of development, transformation and assimilation of expert knowledge within the organization for achieving innovative results Chen and Huang (2009).

The company is highly focused on knowledge transfer within the company. They teach their employees presentation skills, to provide lively and exciting presentations. Company invites professionals in public speaking who conducts trainings tailored for adult people. Then participants get video-lectures: 2 topics for 2 weeks. Then goes seminar where participants have to present their topic and assessed by experts of public speaking and Training and Development Department representatives. This process is tailored for internal knowledge transfer and proves that receiving innovative results may be only there where HRM practices are directed on managing three stages of organizational learning cycle – creation, transfer and use of knowledge (Shipton et al., 2005).

Another Development practice is Idea-sharing. These are two programs:

1) idea database – ideas from employees which are not related to working processes

2) innovation group – ideas from employees for improving working processes. These ideas are assessed by the field experts and representatives from the IT Operational Management Department.

Rewards for good ideas is received in “cookies” – virtual currency of BIOCAD, which may be exchanged on monetary rewards or gift certificates.

Lately BIOCAD introduced “Management Sustainability Program” which is similar to succession planning program.

Another Development practice is horizontal development possibility for employees. They can participate in cross-functional projects and get new knowledge and experience thus adding value to themselves as employees. BIOCAD identified a practical proportion for motivation of employees (See Figure 4):

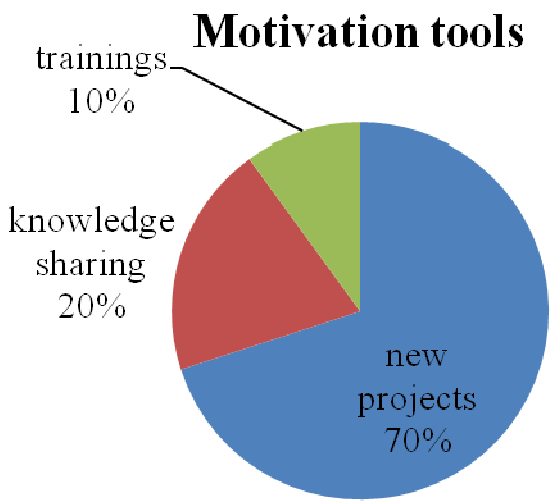

Figure 4 Motivation tools effectiveness at BIOCAD Company

(Source: provided by HR Department of BIOCAD Company)

Talent retention practices

For the 16 year of company’s existence there is no employee who had been fired. The turnover rate is very low, the single cases are concerned with changing of the sales and marketing strategies, moving of employees in other cities or rarely employees cannot catch up with the working pace within the company.

The main achievement is the corporate culture and democratic environment within the company. Employees know and feel that they can change something and influence something. Environment is ever evolving, developing and liberal. Expert employees can share and acquire knowledge and challenge themselves with new projects. Since the employee pool is mostly specific – scientists and doctors, they tend to always grow and develop and also share their experience. Employees from R&D are loyal, they value the culture and environment within the company.

HR specialists understand that monetary rewards are short-term decisions, while admitting that salaries in their company are higher than industry average. That means that when basic needs of their employees are satisfied employees can and will strive for development and improvement.

The strategies for improving talent management process which the company consistently follows include improvement of quality of all components of TM, measurement connected to TM and use new technologies of improvement of Talent Management process.

3) Discussions of Factors driving the use of Talent Management

Among the factors which positively influenced the successful implementation of Talent Management company representatives marked company's strategy, top-management involvement, corporate culture and systemic approach of all business processes. This is supported by the idea of M. Latukha that successful implementation of talent management practices in Russian companies depends much on the use systemic strategic approach which supposes assimilation of these practices among all organizational business processes.

The factors which influence the necessity of using Talent Management in the company nowadays according to the answers include: realization of business strategies, need for innovations, corporate culture, new technologies, global market, flexibility of organizational structure, diversity of employee pool, work/life balance.

Internal factors which help the company to attract talents are business ethics (specific branch of pharmaceutical production and biotechnology), attractiveness of employer's brand, challenging projects, competitive salary. Business ethics in biotechnologies and pharmaceutics is very specific, stakeholders within that kind of business are people with high morals and consciousness. BIOCAD is listed on the TOP-50 best employers in Russia which proves that it invests much efforts in supporting its brand as attractive employer.

To the external factors HR representatives referred import substitution policies and partnership with government. As the company is included in the governmental program “Pharma 2020” according to which half of the consumed medicines in Russia should be produced locally, it is a high stimulus for production of import substitution reagents. In 2014 the company received invitation for building its facilities in special economic zone Neudorf in Strelna where the necessary infrastructure, customs station, special tax regime are provided. The earnings overcame a billion rubles. The amount of contracts signed with the government amounted to 2,6 bln. rubles in 2012, 1,1 bln rubles in 2013. In 2014 the earnings amounted to 8,4 bln rubles and in 2015 – 8,9 bln rubles[1]. Nowadays BIOCAD confidently competes with foreign pharmaceutical giants. These factors provide a sense of stability of the business which is attractive for the potential employees.

3.2 Talent Management in “Geropharm” Company

3.2.1 Company overview and level of innovation activeness

Geropharm is dynamic growing group of companies which works on development and manufacturing of high quality local medicine, invests in technological development and creation of innovative pharmaceutical infrastructure. The company operates 16 years in the Russian market. The Geropharm group includes:

Geropharm LLC – head company: development strategy, production and distribution of medicines. Registration in 14 countries.

Geropharm-Bio OJSC – modern biotechnological manufacturing of the full cycle. It is certified by Russian and international standards GMP.

Pharm-Holding CJSC – R&D center: full cycle of development of medicines from molecule to registration.

Total investments in technological innovations and R&D amounted more than 4,7 bln. Russian rubles from 2013 to 2016.

Innovation activeness indicators of Geropharm Company are presented in Table 6:

[1] https://www.dp.ru/a/2016/11/23/Cel__pobedit_rak_uchast

Table 6

Indicators of innovation activeness at Geropharm Company

No.	Title of innovation activeness (IA) indicator	The set value of company's IA indicator	Coefficient of company's IA indicator
1	Share of R&D staff from average number of employees, %	20%	1
2	Number of patents, pcs.	13	2
3	Number of applications for patents, pcs.	3	1
4	Share of shipped innovative products on export in total volume of shipped products	12%	1
5	Share of intangible assets in total assets, %	2%	1

(Source: developed for this research)

According to the Methodology of attributionof organizations to innovation active category it can be inferred that BIOCAD company is considered to be innovation-active company. Some of the indicatorssuch as share of R&D staff, number of patents and share of intangible assets are higher than minimum required. The company provided the data for the above mentioned analysis.

3.2.2 Human Resources in Geropharm Company

People are the most valuable resource of the company. All employees at the company receive a competitive social package. The company provides voluntary medical insurance as well as accident insurance. Share of the sports subscription is also covered by the company thus they support healthy life style of their employees.

Company cares about employee's development and therefore pay much attention to development of the training and development system. All work places are designed according to modern technologies. Employees also are granted with corporate mobiles and compensations of transport and food expenses.

Corporate culture is based on the folowing ideas:

- Efficiency of the company is directly dependent on personal contribution of each employee;
- The teamwork is built on the principles of transparency, goal orientation, inspiration and responsibility;
- All employees have the opportunity to complete not only their job but also participate in various projects in working and initiative groups.

The basis for HR management at Geropharm is presented by the corporate values which are described in Table 7:

Table 7

Corporate values at Geropharm Company

Corporate Values	**Description**
Care	consciousness responsibility integrity care about each other
Openness	flexibility non-conformity
Inspiration	thinking out of the box inspire others to improve
Purposefulness	orientation on result

(Source: provided by HR Department of Geropharm Company)

The company supports the atmosphere where each employee can share his ideas and offers by cintributing to overall result of the company. The environment of trust, upport and mutual aid leads to increasing motivation and work comittment. The opportunity to freely discuss new ideas and exchange opinions lets the company develop and grow further.

Company always actively supports inovation projects including projects devoted to working with students. They do not want to create a team which will work on pharmaceutical research, but to unite and gain interest ofprogressive, proactive generation, to create atmoshpere which promotes creation and implementation of new and unique projects. Students are the most open minded and brave specialists who are ready to move and challenge themselves.

At Geropharm there is a program of cooperation with leading profile universities where the company supports new specialists who work on scoentific research in medical field. Annually the company attracts students of pre-graduate courses for internships. Students who show their capabilities at best get the real opportunity to become an employee at Geropharm and contribute into development of Russian pharmaceutical industry.

The main partner-universities are:

- Saint Petersburg Chemical-Pharmaceutical Academy
- Northern State Medical University
- Russian chemical- technological University named after Mendeleev D.I.
- Moscow State University of light chemical technologies
- Moscow State University of Nutritional Production

3.2.3 Peculiarities of Talent Management and factors. Case study of Geropharm

The question guide for interviewing the company representatives was developed on the basis of questionnaire created by the professors of Graduate School of Management. The main three blocks of questions were added with open questions regarding the practices of Talent Management used within the company.

The main 3 blocks included:

- questions about business strategy
- questions about Talent Management approach
- question about factors

The in-depth interview was conducted with 2 representatives of HR-department and 2 representatives of middle-management.

1) Discussions of Business strategy

From the results of interview it can be inferred that the Geropharm company nowadays is focused on innovation management and growing on the new markets. In the production process the main objective is high quality of products. The most successful project of production is local insulin which is produced from the initial stages to registration of reagents.

The mission, values and leader's behavior are equally important for the company. The Head of Geropharm Group, Peter Rodionov, is a dynamic and effective leader who exemplifies the working behavior of the employees within the company, inspires them for innovative behavior and along with his management team builds an effective environment for the employees.

The main focus of the business strategy of the company is openness to new ideas and implementation of innovations. Openness to new ideas is one of the corporate values within the company.

2) Discussions of Talent Management Approach

The **definition of talent** given by the respondents is described as highly qualified, flexible, opened to new knowledge and capable for thinking out of the box employee.

Talent Management is described as set of strategic HR practices targeted on the talented employees group.

The company representatives answered that they have a clear talent management strategy for all organizational levels. The responsible staff for Talent Management is HR-specialists and department managers. As HR representatives explained they provide the tools for the managers and managers provide feedback from employees as they are in constant communication.

Talent Management is priority firstly for General Director, HR specialists, less important for top-managers, middle-level managers, line-managers and other staff.

At the same time Human Resource Management as a separate strategic department was created only 6 years ago. Many HR issues were solved for this short period of time (compensation packages, corporate PR elements, corporate values etc.). There is no clearly defined talent pool, but rather identified key employees in departments. In the context of the whole company there is no clearly defined talent pool.

Talent attraction practices

Collaboration with universities: internships and conferences.

Company is interested in young talents and searches for them by organizing challenging projects for students.

The recruitment is point-like and not massive. As it depends on the company's strategy.

Nowadays company does not suffer talent shortage since all the key positions are filled.

Learning and Development Practices

External learning comprises conferences, seminars for training and acquiring knowledge for professional objectives and improving hard-skills.

Internal learning: improving soft-skills, public speaking, project management etc.

Knowledge transfer is paid much attention in the company.

Geropharm created a "school of internal trainers" where employees learn how to share their knowledge with others.

Mentorship programs are used for newly attracted employees while on-boarding process.

Key employees have their own plans for development and are included in the programs of succession planning.

There is also the program of innovation ideas, where each employee can share an idea for process optimization. The ideas which provide the best fit for the organization are taken into consideration and further implemented. The authors of good ideas are then rewarded with compensations.

The company focuses much attention to development and training, rewards systems and teamwork of the employees which is described as effective for innovative results as described by Lau and Ngo (2004): they are oriented on training: improvement of qualification and investments in human capital; second, rewards are based on performance results of the employees; third, team's development: there are organized events aimed on leadership development and supporting team spirit of employees, especially, creation of cross-functional teams.

Retention Practices

Turnover rate within the company is lower than 10%.

According to answers by HR specialists and managers retention practices are actually not existing since the practices of attraction and development contribute to increasing the retention.

3) Discussions of Factors driving the use of Talent Management

Factors influencing the successful use of Talent Management at Geropharm include: top-management involvement, strategy of the company, budget. The talent management process is aligned with overall strategy of the company according to the results of interview. Budget as described by the HR specialists plays a significant role for implementation of talent management practices and is very much supported by the top-management initiatives.

Internal factors which help to attract the talented employees: employer's brand, special projects. Company invests much efforts into building a positive brand as an attractive employer and can provide unique opportunities for young specialists to participate in the projects of insulin pipeline, because Geropharm is the only Russian company working at insulin production from the initial stages till the registration stage.

External factors include: import substitution. In 2010 Geropharm became a resident of special economic zone Neudorf in Strelna, Saint Petersburg, where they founded a R&D complex "Geropharm-Bio". All scientific testing and developments are conducted in this complex. In 2013 Geropharm became the only producer of pipeline insulin in Russia. Being the resident of this special pharmaceutical cluster in Neudorf, the company is provided with special infrastructure, special tax tariffs and customs station facilities.

Among factors which influence the use of Talent Management are: strategy realization, business competition, need for innovations, corporate culture, cost of human capital, new technologies, flexibility of organizational structure, work/life balance

3.3 Discussions (cross-case summary)

Both companies have a number of similarities. BIOCAD and Geropharm started their operation in 2001, having own R&D centers they provide a pipeline of new developments which are realized in various stages from creation of molecule to clinical testing which is the base for biotechnological business in Western countries. The beginning of 21st century on the pharmaceutical market in Russian was characterized by collapse: most of the medicines were imported and there was no local production. The emerging two companies BIOCAD and Geropharm are good examples of creating radical innovation (Leifer, 2000) which significantly

provided influence on the Russian market. The parallel can be also seen in the management-style within the companies. Both companies have young and creative presidents who set the pace and innovative culture within the companies which positively contributes to the employer's brand. But business strategies are different even though both business strategies favor using Talent Management process. BIOCAD has a strategy of dynamic accelerated growth, while Geropharm chose a gradual growth strategy, which leads to different styles in recruiting the talents: BIOCAD conducts massive recruitment while Geropharm recruit by necessity and pointwise. Both companies are focused on innovations either product-oriented or business processes-oriented. Development of HR as one of the core directions in both companies were different. As BIOCAD started from the beginning as a big company the HR department was formed from the beginning while Geropharm was started as an "experiment" which no one believed would work out, the HR department was created only 6 years ago as the employee pool reached 150 people. Anyway for those 6 years a lot achievements were done at Geropharm by HR department, like for example, values system, corporate PR elements, compensation and rewards systems, training and development programs and other.

The contextual summary describing two cases are presented in Table 8:

Table 8

Contextual summary

Context	**BIOCAD**	**Geropharm**
Talent approach	inclusive	exclusive
Talent definition	all employees are unique and high performers	flexible, open to new knowledge, with positive mindset, out of the box thinking
Corporate culture	democratic, trustful	democratic, comfort of employees is priority
Corporate values	teamwork, integrity, consciousness, engagement, purposefulness, responsibility, self-improvement	care, openness, inspiration, purposefulness
HR role in TM	partner	partner
Recruitment	massive	point-like
Innovativeness as competency	measured by all employees	measured by managerial staff

(Source: developed for this research)

Both companies understand HR function as the core provider of effective tools to manage human capital. HR department closely cooperates with middle managers and provides them with necessary instruments at the same time by receiving feedback from them about ordinary employees' issues.

The two cases provided replication results which are represented in the Table 9. The most frequently used TM practices in both companies are: collaboration with universities (as internships, support) and participation in scientific conferences for talent attraction. This indicates how knowledge economy depends on pipeline of intelligent graduates from local universities. Collaboration with universities is one of the best examples of cooperation between business and science. Onboarding programs, mentorship, participation in international seminars (international assignments), trainings for enhancing presentation skills, ideas sharing and succession planning are considered to be most frequently used for learning and development of talents in innovation-active companies.

Table 9

Talent Management practices replication analysis

Type	Talent Management Practices	BIOCAD	Geropharm
A	**Collaboration with universities (internships)**	v	v
A	Collaboration with universities (creation of special programs)	v	
A	**Participation in scientific conferences**	v	v
L&D	**Onboarding programs**	v	v
L&D	**Metorship programs**	v	v
L&D	**Participation in international seminars**	v	v
L&D	**Trainings for enhancing presentation skills**	v	v
L&D	Corporate university	v	
L&D	Internal general knowledge sharing platform	v	
L&D	Corporate libraries	v	
L&D	**Ideas sharing framework**	v	v
L&D	**Succession planning**	v	v
L&D	Horizontal development programs	v	

(Source: developed for this research)

These practices according to comments provided by the HR specialists are also effective for retention as engagement tools, as the unique employee pool in the context of bioengineering and pharmaceutical productions are very focused on development and enhancement of their skills and sharing knowledge with others.

The main factors which drive the use of TM discussed in both case-studies are represented in Table 10:

Table 10

Factors influencing the use of TM in innovation-active companies

Factors	BIOCAD	Geropharm
Business strategy realization	v	v
Scarce talent and capabilities		
Business competition		v
Retention		
Need for innovations	v	v
Corporate culture	v	v
Cost of human capital		v
New technologies	v	v
Global market	v	
Specifics of organizational structure	v	v
Staff diversity	v	
Work/life balance	v	v

(Source: developed for this research)

The replicated factors include business strategy realization, need for innovations, corporate culture, new technologies, specifics of organizational structure, work/life balance.

Business strategy realization is one of the main factors driving companies to use Talent Management practices, as key employees or in case of BIOCAD all employees are the main source of innovations and providers of competitive advantage. Talent Management at both companies is aligned with business strategy.

Need for innovations as well as corporate culture contribute much into use of talent management practices because talented employees are those who create innovations and TM enhances the innovation process within the organizations. Corporate culture which is saturated by innovativeness at both companies and developed to provide comfortable environment for creative and unique employees leads to necessity of using Talent Management practices. New technologies which are one of the core elements within the pharmaceutical business also necessities the use of Talent Management because innovation companies should always be ahead with new technologies and for that they need talented professionals who would know how to operate with technological know-how.

Specifics of organizational structure which is defined as “flexibility” in the cases of BIOCAD and Geropharm as companies focus the development of their employees not only in professional sphere but also very much at individual improvements which is part of corporate values.

Work/life balance is an important element for both companies as their employee pool is comprised mainly by generation Y, who value not only professional and individual skills development but also need proper time out of work to devote it to themselves or their families.

From the analysis of factors enhancing the talent attraction in both companies the following factors are distinguished in the Table 11:

Table 11

Factors positively influencing talent attraction

Factors	**BIOCAD**	**Geropharm**
Internal		
Business ethics (pharmaceutical bus.)	v	
Employer's brand	v	v
Special projects framework	v	v
Competitive salary	v	
Top-management involvement	v	
External		
Import substitution policies	v	v
Partnership with government	v	

(Source: developed for this research)

Employer's brands at both companies is very strong and provides great support by attracting young talents. Companies pay much attention to support and enhance their brands as best employer, which is proved by the fact that both are listed in the TOP-50 best Russian employers.

Both companies emphasize the opportunities which are presented at their companies to potential candidates. The projects which are challenging and therefore very interesting for young specialists are good opportunity to enhance professional skills and learn something new. Geropharm for example provides unique opportunity to work at Insulin production projects which include the stages from creation of molecule till the production of the finished medicine, as this company is the only Russian producer of insulin.

External factors which may support the talent attraction for BIOCAD and Geropharm is import substitution. As both companies have good cooperation with government due to their high level of competency, they support the local pharmaceutical industry and receive also governmental support for big projects.

3.4. Conclusion

The extant studies on the topics of talent management and HR drivers for innovations provided the base for identifying the research questions for the current study of Talent Management practices and factors influencing the use of them in the context of innovation active

companies in Russia. The cases of two big biotechnological and pharmaceutical companies of Russia were used to analyze the peculiarities of Talent Management systems in innovation active companies. The practices and factors identified during the research were subject of various studies about correlation between company's talent management practices and firm's innovativeness. It is important to note that the findings of the current research as most frequently used practices in innovation active companies should not be blindly copied by other organizations as identified internal and external factors of successful implementation should be taken into consideration.

In the context of innovation active companies talented human capital which represents a competitive advantage of the company is the main source of innovations which may provide sustainable success for the organization. Managers at this category of companies focus their efforts on development of hard and soft-skills as well as stimulate talented employees for self-improvement by providing open and democratic corporate culture for supporting innovative atmosphere within the organization.

3.5 Theoretical contribution and Managerial Implications

The current study observed two cases of innovation-active companies which were identified by the special methodology of attribution of companies to innovation active category. The practices described in the cases provided literal replication and were subject of research of a number of authors who assessed the correlation between HR practices and firm's innovativeness. These cases provide practical support for that research.

Understanding the main factors for successful implementation of Talent Management practices in the context of innovation active companies, managers can analyze more deeply the needed conditions for implementing Talent Management process. Knowing the set of practices of Talent Management which are more frequently used in this specific category of firms may serve as the basis for building an effective Talent Management strategy within innovation active companies which haven't yet applied it in practice.

3.6 Prospects for future studies and limitations

The current study of the Talent Management practices and factors in the context of innovation-active companies in Russia was designed through descriptive multiple (2 cases) case studies conducted in bio-engineering and pharmaceutical-production companies. The future studies may be extended to a richer basis of cases and using companies from different industries

within the context of innovation activeness in Russia. The current study was limited to only two certain cases which replicate each other while using more cases for multiple case study design would be more compelling and may provide more accurate and generalized results.

LIST OF REFERENCES:

1 Armstrong, M. A. (2006). Handbook of Human Resource Management Practice. London: Kogan Page

2 Blass, E. (2007) Talent Management: maximizing talent for business performance, Chartered Management Institute and Ashridge Consulting

3 Briscoe, D., Schuler, R., and Claus, E. (2009), International Human Resource Management (3rd ed.), London: Routledge.

4 Buckingham, M., & Vosburgh, R. M. (2001). The 21st century human resources function: It's the talent, stupid! Human Resource Planning, 24(4), 17–23.

5 Clark, K. B. (1991) Product development performance/K. B. Clark, T. Fujimoto//Harvard Business School Press.

6 Cohen, W. M. (1989) Innovation and learning: The two faces of R&D/W. M. Cohen, D. A. Levinthal, Economic Journal, 99, 569-596

7 Collings, D.G., Mellahi, K. (2009). Strategic talent management: A review and research agenda. Human Resource Management Review, 19(4), 304-313

8 Collins C. J., Clark K. D. (2003). Strategic Human Resource Practices, Top Management Team Social Networks, and Firm Performance: The Role of Human Resource Practices in Creating Organizational Competitive Advantage. The Academy of Management Journal, 46 N 6, 740–751.

9 Conger J.A., Sitzer, R., Dowell, D.E. (2010) Developing leadership talent: delivering on the promise of structured programmes. Strategy-Driven Talent Management, Jossey-Bass, CA, 281-312

10 Currie G., Kerrin M. (2003). Human Resource Management and Knowledge Management: Enhancing Knowledge Sharing in a Pharmaceutical Company // International Journal of Human Resource Management, 14. N 6, 1027–1045.

11 Cyert, R. (1963) A behavioral theory of the firm/R. Cyert,J. March//Englewood Cliffs, NJ: Prentice-Hall.

12 Darrough, M.N., Melumad, N.D. (1995). Divisional versus company-wide focus: The trade-off between allocation of managerial attention and screening of talent. Journal of Accounting Research, 33(1), 65-94

13 Davies, B., Davies, B. J. (2010). Talent management in academies. International Journal of Educational Management, 24(5), 418–426

14 De Leede J., Looise J. K. (2005). Innovation and HRM: Towards an Integrated

Framework. Creativity and Innovation Management, Innovation and HRM, 14. N 2, 108–117.

15 Delery E. J., Doty D. H. (1996). Modes of Theorizing in Strategic Human Resource Management: Test of Universalistic, Contingency and Configurational Performance. Academy of Management Journal, 39. N 4., 802–835.

16 DeTuncq, T. H. (2013) Examining integrated talent management/T. H. DeTuncq, L. Schmidt T+D. Human Capital, 24 (5), 31-35

17 Ewerlin D. (2013) The influence of global talent management on employer attractiveness: An experimental study. Zeitschrift für Personalforschung, 27(3), 279-304

18 Farndale, E., Scullion, H., & Sparrow, P. (2010). The role of the corporate HR function in global talent management. Journal of World Business, 45(2), 161-168

19 Fey, C. F. (2009) Opening the Black Box of the Relationship Between HRM Practices and Firm Performance: A Comparison of MNE Subsidiaries in the USA, Finland, and Russia/C. F. Fey, S. Morgulis-Yakushev, H. J. Park, I. Björkman//Journal of International Business Studies, 40, 690-712

20 Garavan T.N., Carbery R., Rock A. (2012) Mapping talent development: definition, scope and architecture. European Journal of Training and Development,.36 Issue:1, 5-24

21 Goffin, K.; Mitchell, R. (2010). Innovation management. Palgrave-MacMillan.

22 Gorodnikova, N., Gokhberg, L., Ditkovskiy, K. et al. (2015) Indicators of Innovation in the Russian Federation. Data Book / National Research University Higher School of Economics. – Moscow: HSE.

23 Grossman, G.M. (2004). The distribution of talent and the pattern of consequences of international trade. Journal of Political Economy, 112(1), 206-239

24 Guest D. E. (1999) Human Resource Management: The Workers' Verdict', Human Resource Management Journal. Vol. 9. N 3. P. 5–25.

25 Hagedoorn, J. (2003) Measuring innovative performance: is there an advantage in using multiple indicators? Research Policy. Vol. 32, 1365–1379

26 Hansen, M. T. (1999) The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits/M. T. Hansen. Administrative science quarterly, 44 (1). – P. 82-111

27 Heinen, J., and O'Neill, C. (2004), 'Managing Talent to Maximize Performance,' Employment Relations Today, 31, 67–82.

28 Hilton, D. (2000), 'Hiring and Retaining Top Talent,' Credit Union Executive Journal, 40,

12–16.

29 Holden N., Vaiman V. (2013) Talent Management in Russia: Not So Much War for Talent as Wariness of Talent. Critical Perspectives on International Business, 9. N 1–2. P. 129–146.

30 Huselid M. A., Becker E. B.,(2005) The Workforce Scorecard. Boston, Mass.: Harvard Business School Press P. 115

31 Huselid M. A., Beatty R.W., Becker E. B. (2005) "A Players" or "A positions"? The strategic logic of Workforce Management. Harvard Business Review OnPoint

32 Iles, P., Chuai, X., Preece, D. (2009). Talent management in HRM in multinational companies in Beijing: Definitions, differences and drivers. Journal of World Business, 45(2), 179-189

33 Jacobs R. L., Jones M. J. (1995) Structured On-the-Job Training: Unleashing Employee Expertise in the Workplace. San Francisco: Berrett-Koehler.

34 Jiménez-Jiménez D., Sanz-Valle R. (2008) Could HRM Support Organizational Innovation? The International Journal of Human Resource Management. Vol. 19. N 7. P. 1208–1221.

35 Jørgensen F., Becker K., Matthews J. (2011) The HRM Practices of Innovative Knowledge-Intensive Firms. International Journal of Technology Management. Vol. 56. N 2/3/4. P. 123–137.

36 Juan A. Marin-Garcia, Lourdes Aznar-Mas, Fernando González Ladrón de Guevara, (2011) Innovation Types and Talent Management for Innovation, Working Papers on Operations Management Vol 2, Nº 2 (25-31)

37 Kang, S. C. (2007) Relational archetypes, organizational learning, and value creation: Extending the human resource architecture/S. C. Kang, S. S. Morris, S. A. Snell. Academy of management review, 32(1). – P. 236-256

38 Kostova, T. (2002) Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects/T. Kostova, K. Roth. Academy of management journal, 45 (1). – P. 215-233

39 Latukha, M. (2015) Talent management in Russian companies: domestic challenges and international experience. The International Journal of Human Resource Management, 26, 1051-1075

40 Latukha, M. (2014). Talent Management: Theoretical Approaches and Russian Companies' Experience. Bulletin of SPBU, 4, 46-67

41 Lau C-M., Ngo H-Y. (2004). The HR System, Organizational Culture, and Product Innovation. International Business Review. Vol. 13. N 6. P. 685–703.

42 Laursen K. (2002) The Importance of Sectoral Differences in the Application of Complementary HRM Practices for Innovation Performance. International Journal of the Economics of Business. Vol. 9. N 1. P. 139–156.

43 Laursen K., Foss N. J. (2003). New Human Resource Management Practices, Complementarities and the Impact on Innovation Performance. Cambridge Journal of Economics. Vol. 27. N 2. P. 243–263.

44 Lazarova, M. (2001) Retaining repatriates: The role of organization support practices/M. Lazarova, P. Caligiuri. Journal of World Business, 36, 389-401

45 Lazarova, M. (2007). Revising repatriation concerns: Organizational sup- port versus career and contextual influences. M. Lazarova, J. Cerdin. Journal of International Business Studies, 38, 404-429.

46 Leifer, R. (2000). Radical innovation: how mature companies can outsmart upstarts. Harvard Business Press.

47 Leigh, A. (2009). Research topic: Talent management. People Management, 33.

48 Lewis, R.E., and Heckman, R.J. (2006), Talent Management: A Critical Review. Human Resource Management Review, 16, 139–154.

49 Lockwood, N. (2008). Leveraging employee engagement for competitive advantage: HR's strategic role. Society for Human Resource Management, 22.

50 Lutskina V. (2007). Employee's unsinkiness. Staff training, 8, 23-28

51 MacDuffie J. (1995). Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry. Industrial and Labor Relations Review. Vol. 48. N 2. P. 197–221.

52 Feldman, M. S. (2000) School of Public Policy Organizational Routines as a Source of Continuous Change ORGANIZATION SCIENCE, INFORMS Vol. 11, No. 6, 611–629

53 Mate D., Carpaneto A., Tirassa C. et al. (2010). Opening the Black Box: How Staff Training and Development May Affect Innovation. Proceedings of the 21st Conference of the International Society for Professional Innovation Management Bilbao, Spain

54 McDonnel, A., Lamare, R., Gunnigle, P., & Lavelle, J. (2009). Developing tomorrow's leaders - Evidence of global talent management in multinational enterprises. Jurnal of World Business

55 McGrath, R. G. (2000). The entrepreneurial mindset Harvard Business School Press

56 Mercer, S. (2005), Best-in-Class Leadership. Leadership Excellence, 22, 17.

57 Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001). The war for talent. Boston: Harvard Business School Press

58 Murtazin, R, Lutskina, V. (2010). Focus on talents. Technologies of corporate management

59 Naqvi F. (2009). Competency Mapping and Managing Talent. ICFAI Journal of Management Research. Vol. 8, No 1. P. 85 — 94.

60 Nieto, J., Hernández-Maestro, R. M., & Muñoz-Gallego, A. (2011). The influence of entrepreneurial and website type on business performance by rural tourism establishments in Spain. International Journal of Tourism Research, 13, 17–31.

61 Nikitina, O.V. (2004) Methods of assessment of innovation activeness of production enterprise. St.Petersburg

62 Pfeffer J. (1998). The Human Equation: Building Profits by Putting People First. Boston, MA: Harvard Business School Press.

63 Pfeffer, J. (2001). Fighting the war for talent is hazardous to your organization's health. Organizational Dynamics, 29(4), 248–259

64 Pfeffer, J., & Sutton, R. I. (2006). Hard facts, dangerous half-truths, and total nonsense: Profiting from evidence-based management. Boston: Harvard Business School Press

65 PricewaterhouseCoopers (2013) Talent Management and Employee Value Proposition

66 Pruis, E. (2011). The five key principles for talent development. Industrial and Commercial Training, 43(4), 206–216.

67 PWC, Center of technologies and innovations PWC, Russian Venture Company, Russian corporation of nanotechnologies for St. Petersburg International Economic Forum. Innovation activeness of large business in Russia

68 Ready, D.A., Hill, L.A., Conger, J.A. (2008). Winning the race for talent in emerging markets. Harvard Business Review, 86(11), 62-72

69 Rock A.D., Garavan T.N. (2006). Reconceptualizing developmental relatinships. Human Resource Development Review Vol.5 No. 3, pp.330-54

70 Roth, E. (2010). Innovations way to enhancing efficiency. McKinsey bulletin, 21, 37-54

71 Ruse, D.H., and Jansen, K.E. (2008). Stay in Front of Talent Curve. Research Technology Management, 38–43.

72 Schumpeter, J.A. (1951). Theory of economic development. Progress, Moscow

73 Scullion, H., Collings, D.G., Caligiuri, P. (2010). Global talent management. Journal of

World Business, 45(2), 105-108

74 Shipton H., Fay D., West M., Patterson M., Birdi K. (2005). Managing People to Promote Innovation. Creativity and Innovation Management, 14. N 2. P. 118–128.

75 Shipton H., West M., Dawson J., Birdi K., Patterson M. (2006). HRM as a Predictor of Innovation. Human Resource Management Journal. Vol. 16. N 1. P. 3–27.

76 Sinov, V.V. (2007). Human resource of innovation activity. Creative Economy, 5, 58-65

77 Smart, B. D. (2005). Topgrading: How leading companies win by hiring, coaching, and keeping the best people (Rev. ed.)New York: Portfolio (Penguin Group).

78 Smith, K. A. (2002) Bisociation, discovery, and entrepreneurial action. Strategic entrepreneurship: Creating an integrated mindset

79 Sokolova, E. (2006). Talent pool: effective instrument of increasing the company's potential. Human potential management, 3, 184-189

80 Stahl, G. K., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., et al. (2007). Global talent management: How leading multinationals build and sustain their talent pipeline. INSEAD Faculty and Research Working Papers, 2007/24/OB

81 Stavrou, E.T., Charalambous, C., and Spiliotis, S. (2007). Human Resource Management and Performance: A Neural Network Analysis. European Journal of Operational Research, 181, 453–467.

82 Stopford, J; Baden-Fuller, C.W.F. (1994). Creating Corporate Entrepreneurship. Strategic Management Journal 15, 521-536

83 Surovushkina, E.N. (2014). Essence and methods of assessment of organizational innovation activeness. Economic science, 04, 78-81

84 Swanson R. A. (1994) Analysis for Improving Performance: Tools for Diagnosing Organizations and Documenting Workplace Expertise. San Francisco: Berrett-Koehler

85 Taleo Research with Human Capital Institute (HCI), Business Intelligence, and Markess International, (2008) Quantum Market Research Global Unified Talent Management Survey

86 Tansley, C., Harris, L., Stewart, J., & Turner, P. (2006). Talent management: Understanding the dimensions. Change Agenda. London: Chartered Institute of Personnel and Development (CIPD).

87 Tansley, C., Turner, P., Carley, F., Harris, L., Sempik, A., Stewart, J., et al. (2007). Talent: Strategy, management, measurement. London: Chartered Institute of Personnel and Development (CIPD)

88 Tiemessen, I. (1997) Knowledge management in international joint ventures/I. Tiemessen, H. W. Lane, M. Crossan, A. C. Inkpen. Cooperative strategies: North American perspective, 370-399

89 Tsybova, V.S. (2014). Development pf management model of HR in innovation active companies. Dissertation SPBU

90 Veugelers, R. (1997). Internal R&D expenditures and external technology sourcing/R. Veugelers//Research Policy, 26, 303-315

91 Williams, M. (2000). The war for talent: Getting the best from the best. London: Chartered Institute of Personnel and Development (CIPD).

92 Williams-Lee, A. (2008) Accelerated Leadership Development: Tops the Talent Management. Menu at McDonald's. Global Business and International Excellence, 15–31.

93 Youndt M. A., Snell S. A., Dean J. W., Jr., Lepak D. P.(1996). Human Resource Management, Manufacturing Strategy, and Firm Performance. The Academy of Management Journal. Vol. 39. N 4. P. 836–866

94 Gorshkov, P. Earned on antibodies. 2016, Delovoy Peterburg, November, 24. https://www.dp.ru/a/2016/11/23/Cel__pobedit_rak_uchast (accessed April 20, 2017)

Appendix 1

Question guide[2]

Part I: Company Information and Business Strategy

Company Information

Introduction
Your position
Your Management Level
Other Details:
Male/Female
Industry

Please choose business objective (s) in terms of current level of influence
1. Organic growth (within current business model)
2. Partnering (collaborating across business unit boundaries)
3. Globalization (through new market around the globe)
4. Acquisition (purchasing new businesses)
5. Managing innovation (utilizing new technologies/trends)
Of the 5 topics above, which is most important?
1. Quality (Products of "benchmark status")
2. Speed (delivering product in timely fashion)
3. Cost (making products that are superior value for money)
4. Simplicity (providing easy, multiple services to clients)
Of the four topics above, which is most important?

[2] Based on the questionnaire developed by Latukha M. (2015). Talent management in Russian companies: domestic challenges and international experience. International Journal of Human Resource Management 26 (8):1051-1075.

1. Purpose (shared sense of meaning/mission)
2. Employer Brand (globally known as employer of choice)
3. Governance/ Social Responsibility (clear view of responsibilities to all stakeholders)
4. Values (code of conduct that reflects company)
5. Leader Behaviors (leaving and demonstrating behaviors of company)
Of the 5 topics above, which is most important?
1. Encouraging Diverse Perspectives (actively seeking differing views)
2. Openness to New Ideas (encourage "out of box" thinking)
3. Adaptability to "New Realities" (ability to change business model based on new trends)
4. Leading Innovation (male new ideas a commercial reality)
5. Making the "Tough Calls" (difficult decisions that lead to positive change)
Of the 5 topics above, which is most important?

Part II: Talent Management Approaches

1. What is the degree of emphasize on talent management in your organization? ***Please tick the statement that best describes your organization's situation***
A. Talent management is decided on an individual-by-individual basis
B. We have a clear talent management strategy and regularly send individuals on off the shelves programs to meet their individual needs
C. We have a clear talent management strategy for different levels in the organization and want to use/plan to use customized programs for each level
D. We have a clear talent management strategy and have our own in house university dedicated to achieving our strategy
E. We have our own in house university dedicated to achieving our strategy but we also use/plan to use external providers to supplement in-house resources
2. What do you mean by "talent"?
3. Please define "talent management"
4. Does your organization have an agreed-on definition of talent management?
5. How would you rate your organization's ability to manage talent? (1-nonexist, 2-poor,3-

average,4-good,5-excellent)
6. Which of these components do you think are included in talent management? - leadership development - career planning - high-potential employee development - performance management - succession management - learning and training - competency management - retention - professional development - critical job identification - recruitment - compensation and rewards - employee feedback - workforce planning - culture and values - diversity management - integrated HR management systems - international assignments - benefits - labor relations - other (please specify)
7. To what extent would you describe talent management as integrated with other human capital processes and strategies in your organization? (1- very little; 5- very high)
8. What is the focus of your talent management strategy?
9. What are your propositions for attracting and retaining talent?
10. Who is responsible for the execution of talent management in your organization?
11. To what extent do you think talent management is a priority for the following groups (1-very low; 5-very high): - Executives - HR practitioners - Senior managers - Middle managers - First-level managers - Non-managerial employees
12. What Talent Attraction practices are used in your organization?
13. What Talent Development practices are used in your organization?
14. What Talent Retention practices are used in your organization?

Part III: Factors

1. Please define factors influencing on the successfulness of talent management implementation
2. What are internal and external factors contributing to attract talent in your organization?
3. Which of the following factors drive the need to manage talent in your organization today? Why? - need to execute strategies - talent and skills shortages - business competition - retention and retention issues - need for customer service - need for innovation - corporate culture - cost of human capital - new technologies - global marketplace - the flattening of organization - diverse workforce - work/life balance issues - compliance and regulatory issues - outsourcing and/or offshoring

Appendix 2

Overview of BIOCAD Company

BIOCAD is an international innovative biotech company specializing in world-class research, modern pharmaceutical production, pre-clinical and clinical studies.

The company was founded in 2001 nowadays BIOCAD became a leading Russia's pharmaceutical company ranked First in Russian Rating of High Growth Technology Companies 2016 and also awarded as Company of the Year 2016 by SNOB Magazine.

BIOCAD possesses the largest R&D center in Russia, which is included in 30 leading R&D centers in the world. The investments comprised 100 mln. US dollars. There are 375 specialists working in their fields of molecular biology, cellular engineering, genetics, chemical synthesis, bioinformatics and chemoinformatics.

BIOCAD has created its own infrastructure to develop innovative drugs: today, over 40 drugs are at various stages of development, of those – 37 biologics and 8 drugs of chemical origin.

BIOCAD has the center of bioinformatics which is the only such center in Russia among pharmaceutical companies. The mathematical modeling of molecules allows to decrease the duration of medicines development and increase its quality.

BIOCAD has 4 modern automated manufacturing sites while the fifth one is going to be constructed by 2019.

1) Moscow, Petrovo Dalneye (Building 1)
   Manufacturing of biological substances in E. coli
   Manufacturing of substances by chemical synthesis
   Manufacturing of drug products
2) Moscow, Petrovo Dalneye (Building 2)
   Manufacturing of drug products
3) Saint Petersburg, Strelna
   Manufacturing of substances of monoclonal antibodies
4) Moscow, Lyubuchany
   Pilot manufacturing for scale-up and technology transfer

General Director of BIOCAD Dmitriy Morozov is the co-author of the federal target program “Pharma-2020”.

In 2014 he presented the initiative and proposal for the Ministry of Health Protection of Russian Federation with the decision for research and registration of bioanaloguous medicines (bio-analogues).

The company was included in the list of the companies which significantly contribute in the industrial branches and trade.

BIOCAD cooperates with Russian government in development of documents portfolio for unified pharmaceutical market of Eurasian Economic Union.

The company also receives governmental subsidies for clinical research of medicines and organization of manufacturing in the volume of 400 mln. Russian rubles.

BIOCAD university partners are:

- St. Petersburg State Chemical Pharmaceutical Academy;
- St. Petersburg Alferov Academic University
- St. Petersburg State University
- St. Petersburg Pavlov State Medical University
- Moscow State University
- Kazan State Medical University
- Mendeleev Chemical Technology University of Russia
- Novosibirsk State University
- Siberian State Medical University
- St. Petersburg State Technology Institute
- ITMO University, St. Petersburg
- POLITECH, Peter the Great St. Petersburg Polytechnic University
- Irkutsk State Medical University
- Voronezh State Engineering University
- Sechenov First State Medical University
- Skolkovo Science and Technology Institute

International cooperation

From 2014 to 2015 BIOCAD signed a number of long-term export contracts for the total of 700 mln. US dollars.

The main trade partners of BIOCAD are Egypt, Belorussia, Vietnam, Argentina, SAR, Paraguay, Peru and other countries. The company plans to actively promote itself not only on emerging markets but also on markets of developed European states.

(Source: BIOCAD presentation)

Company's achievements

BIOCAD climbed from 10th to the 1st place in TOP-10 of the largest companies of "TechSuccess-2015" rating

BIOCAD in the person of its general Director Dmitriy Morozov was rewarded with Gratitude of the Ministry of Industry and Trade of Russian Federation for contribution into development of pharmaceutical and medical industries and long-term diligent work.

In 2014 BIOCAD was awarded with the first national reward "Industry" for realization of a unique project MabNext in development of innovative medicines based on monoclonal antibodies for curing oncological autoimmune diseases.

BIOCAD received an award in the branch competition "Platinum ounce 2015" in nomination "Vector of the year" – sub-nomination "Dynamics of the year: company" and "Dynamics of the year: Trademark in governmental segment" where the medicine "Novotex" was distinguished.

Besides BIOCAD is listed in TOP-100 best employers in Russia according to hh.ru ratings.

The company was titled the best employer in Russia according to the research done by the largest HR-consulting company in the world Aon Hewitt. The basis of the research by Aon Hewitt consisted of detailed developed questionnaires which were fulfilled by managers, employees and HR-specialists of the company. They considered such indicators as: employee involvement, trust to management, efficiency culture, trust to employer's brand, sustainable development and consistency of strategy.

Appendix 3

Overview of Geropharm Company

Geropharm is dynamic growing group of companies which works on development and manufacturing of high quality local medicine, invests in technological development and creation of innovative pharmaceutical infrastructure. The company operates 16 years in the Russian market. The Geropharm group includes:

Geropharm LLC – head company: development strategy, production and distribution of medicines. Registration in 14 countries.

Geropharm-Bio OJSC – modern biotechnological manufacturing of the full cycle. It is certified by Russian and international standards GMP.

Pharm-Holding CJSC – R&D center: full cycle of development of medicines from molecule to registration.

Total investments in technological innovations and R&D amounted more than 4,7 bln. Russian rubles from 2013 to 2016.

The company's employee pool is comprised by more than 650 highly qualified employees.

Nowadays Geropharm-Bio is a modern technological platform which allows to produce various recombinant medicines. In 2014 new laboratories of biotechnological block for strengthening the direction of development of medicines were opened in Special Economic Zone Neudorf in St. Petersburg. Nowadays all companies efforts are directed on creation of critical technologies, in other words, complicated complex technologies which have high social significance and stimulate medicine safety in the country.

Nowadays the company realizes the project for construction of new production complex in Pushkin. The plant will produce full cycle of insulin and insulin analogues as well as pharmaceutical substances and medicines based on them which do not have analogues on the localization level in Russian Federation.

Awards:

For the last 5 years the company is listed on TOP-30 Russian highly technological fast growing companies ("TechSuccess" rating).

In 2015 the group of companies became the laureate of award in the field of import substitution "Prioritet" in the nomination "Pharmaceutials", was awarded by Ministry of Industry and Trade for contribution into development of Russian industry and solving the task of import substitution.

In 2016 the company became the winner of competitions “Leader of Russian Business” in special nomination “Best project in the field of import substitution”, “Development Award” in nomination of “Best project in industry branches”, “Gazelle of business in 2016” for achievements in the field of pharmaceuticals and import substitution, “Company of the year – 2016” by choice of newspaper “Delovoy Sankt-Peterburg”.

General Director of Geropharm Group P.P. Rodionov became the laureate of the award “Director of the year” in the nomination “Leader-Innovation”, was listed on TOP-250 General Directors of Russia, was recognized as “Expert of the Year in the field of biomedical technologies”.