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As a manuscript

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Talent management system in Russian IT companies

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1. General characteristics of thesis research

The relevance of research

At the present day, high-tech companies work in the context of tough competition for workers, not only at the local level (Russian context) but also global (world) level. That is why the tasks of attracting, developing, retaining key employees, which company managers regard as talents, are serious challenges. The complexity of the challenges becomes even more obvious in an unstable economy, situations of uncertainty for business, rapidly growing demographic problems, increased opportunities for specialists to find work through social networks, labor migration, etc. As noted in (Collings D.G., Scullion H., Vaiman V.), decision-making in the talent management and its quality depend on the context in conjunction with the development of a comprehensive framework which reflects the complex set of environmental factors that affect talent management. From the point of practical applications, this means that the talent management approach should be systemic, and should represent a solid part of a coherent system, but nonetheless flexible, in order to work in a rapidly changing environment and meet business needs.

The rapid growth of the publications on talent management subject over the past 10 years, including the growing interest of Russian scientists, has not diminish the problem of creating a substantial theoretical base in the field of talent management. The solid theoretical background would help the scientists and practitioners develop a theoretical model, based on which it would be possible to reflect the talent management system in Russian companies in general, and in Russian IT companies, in particular. The scientific literature on personnel management / human resources mainly describes the separate technologies, instruments and practices in the field of talent management. Insufficient empirical base of qualitative and quantitative research does not improve the situation in defining the boundaries of the talent management system and identifying any significant factors in organisations in general and in organisations in the information technology industry that affect their economic success.

Until recently, a universalistic approach prevailed in the study of talent management, suggesting that there is a single system that needs to be reproduced in all companies, regardless of country of origin and industry, and other characteristics. The problem of heterogeneity of talent management per se was not posed. Only with the development of research reflecting the national specifics of working with talented employees, and the ensuing discussion about the lack of information on talent management outside large companies, there was a request to take into account specific prerequisites and factors that determine the specific manifestations of the talent management system in different environmental conditions. The initial assumption of the thesis research was the assumption that the industry as a type of economic activity can serve as a basis for the formation of a specific

talent management system with respect to other sectors, common features of which are manifested in IT companies. In turn, descending from the meso-level (sectoral level) to the micro level (organisational level), you can find various configurations of the sectoral talent management system, since this level is affected by additional factors of the internal environment of the company.

Chosen as a focus of research, the information technology industry is of particular interest from the point of studying the talent management system. In this industry, talented employees as carriers of unique knowledge, are the main source of competitive advantages, and therefore IT companies are interested in attracting and retaining the best specialists in their field. The attention to talented employees who demonstrate a high level of performance, thus being important for a company's performance, is reinforced by the fact that the share of staff costs in operating expenses is very high. The fact that IT companies represent one of the fastest growing branches of the economy correlates with the problem of fast obsolescence of knowledge and skills of employees that requires constant attention. The length of the production cycle, which varies from a few weeks to several years, also leaves a peculiar mark on talent management practices. In this industry, there is a global labor market due to low country barriers for the transfer of knowledge and migration of their carriers. And Russian IT companies are becoming participants in this market, which is a source of serious challenges for the talent management system. The relevance of studying of the talent management system in Russian IT companies is also determined by its role in digital transformation of business. In this regard, it can be assumed that some talent management practices that are formed in the IT industry will be transferred to other companies of other industries. A peculiarity of Russian IT companies also includes a short historical past. Many of them were created by entrepreneurs as private companies, since the mid-1990s, which influences the formation of a special organisational environment and culture. Therefore, they are not burdened by the historical heritage frequently mentioned by researchers. The diverse context of talent management in the information technology industry mentioned above, as well as the state of the scientific and theoretical basis in this field, stipulate the relevance of the research on finding and systematising scientific information on talent management in Russian IT companies. Identification of factors that influence the formation of talent management system that let companies attract and develop, as well as to curtail the risks of loss of employees who are strategically important resources for the company are also the integral part of the current research.

Thus, the topic of talent management in a certain context is relevant both from a theoretical point of view, taking into consideration the wide field of unaffected by science issues related to the contextualisation of talent management, and from the point of practical application, given the lack of empirical studies of the functioning of the talent management system. Therefore, the topic of talent management in a certain context is relevant both from a theoretical point of view, and from the point

of practical application, given the wide field of unaffected issues related to the contextualisation of talent management, and the lack of empirical studies of the talent management system functioning.

The degree of the scientific development of the problem

Over the past two decades, the problem of talent management has attracted the attention of a significant number of researchers and has been reflected in foreign scientific literature. Scientists have attempted to systematise various definitions of talent for business, talent management trends. The advantages and disadvantages of managing the talent pool are analysed, which is the most common approach to managing talented employees. On the basis of qualitative research, “best practices” are demonstrated based on the cases of the world's leading companies, including IT companies.

These results give cause for the theoretical outline of the boundaries of the research object – the talent management system (TMS), which includes elements such as philosophy (Meyers K.E., van Woerkom M.) and strategy, and practices, such as attracting, selecting, developing and retaining of talents, and determine the subject of the thesis research. The content of the subject of the study is formed by those scientific problems that relate to the foundations of the most prevailing interpretation of the “talent” term, and the factors affecting the TMS. In addition to external and internal organisational factors that are traditionally considered in the frame of contingency theory (Woodward J.), the importance of historical, cultural (Holden N., Vaiman V.) and ethical (Swales S.) factors are mentioned. The foreign literature analysis makes it possible to single out the development of three main directions in building a talent management system based on a different understanding of talent for business: talents are leaders (Axelrod B., Björkman I., Dries N., Ehrnrooth M., Handfield-Jones H., Mäkelä K., Michaels E., Smale A., Sumelius J., Swales S.); talents are high-potential and / or high-performance employees (Dries N., Kim Y., Penaloza P., Rothwell W.J., Williams R.); talents are all employees of the company (Downs Y., Dries N., Orr K., Swales S.).

At the moment, contextualisation is one of the important components in the research on talent management especially in those industries of the economy and countries that are not sufficiently covered in the scientific literature, but the demand for a contextual approach developed in the world community of scientists has so far received a rather small response. The circle of interests related to the issues of contextualisation includes companies related to small and medium-sized businesses (Festing M., Ryan G., Schäfer L., Scullion H., Valverde M.), companies in particular industries (Latukha M., Selivanovskikh L.), companies represented in emerging economies and countries with national culture and business system peculiarities (Collings D.G., Cooke F.L., McDonnell, A., Saini D.S., Scullion H., Skuza A., Vaiman V., Wang J.). As a factor, the industry is often considered in the total number of external factors without a deep consideration of the structure and influence on the talent management system in the organisation (Cooke F.L., Saini D.S., Wang J.,

Schuler R.S.). Thus, a significant shortage of research papers that consider the sectoral context as an influential factor on the talent management system continues to be strongly pronounced.

Despite the fact that Russian companies demonstrate the growing interest in talent management practices, the subject of talent management remains a relatively new area of research for Russian scientists (Dymarskaya O., Eremina I., Kartashov S., Latukha M., Odegov Yu., Shatalov D.). A number of scientists have taken steps towards the systematisation of definitions of talent for business (Latukha M., Dymarskaya L.), revealing the cultural characteristics of talents in the Russian context (Latukha M.), and studying the practice of developing talented employees (Latukha M.). The problems of human resources management, and especially the management of talents in Russian companies of the IT industry are covered in a small number of papers. In most cases, there are a number of characteristics of the IT industry that affect the approaches to personnel management (Rosanova N.); separate issues of selection, motivation, retention and turnover of IT companies' personnel are considered (Giatsintova S.); the information on the toolkits used by Russian IT companies is offered, and attention to sectoral and national factors is paid (Latukha M., Selivanovskikh L.). To a lesser extent, these publications highlight the interrelation of factors within the organisation, there are no fully fledged studies on individual factors in talent management. The question of how the management practices of talented employees are implemented and the talent management system as a whole are functioning have yet to be answered. The issues of connection between the talent management system and the company's strategy, and talent management practices, as well as the interaction of the HRM system with the context factors of the organisation, remain unclear.

To further identification of the problematic field of research, it is necessary to point out the differences between the two concepts – the personnel / human resource management system and the talent management system, which are related as general and particular concepts. Thus, the personnel / human resources management system is a general category considers employees collectively as an object of management and indicates functions in the frame of attracting, selecting, developing, motivating and retaining practices (Armstrong M.). The talent management system as a private category is an additional management system (subsystem), its results manifests in additional opportunities for employees, who the leaders of the organisation consider as talents (Latukha M.). According to the author of the thesis research, in this system, talents can act not only as the object of management, but also as subjects, participating actively as the initiators and “designers” of management practices.

The research goal and tasks

The goal of the thesis research is to design an sectoral model of talent management system in IT companies, which reflects the functioning of the talent management system as an open system with external and internal factors of the company, industry-specific definitions of talents, management

practices and significant influencing factors as the basis for further diagnostic procedures of talent management in an organisation and identification of directions for developing talent management as a system.

To achieve the goal of the thesis research the following tasks were set:

1) Analyse the categories of “talent” and “talent management”, the existing scientific approaches to the study of talent management system in order to determine the theoretical framework of the research.

2) Identify individual, organisational, sectoral, national, global factors affecting the formation of a talent management system; to build a theoretical model of the talent management system, which reflects the interaction of the context with the elements of the talent management system and the relationship between talent management practices as a basis for conducting empirical research in IT companies.

3) Develop a sectoral model of talent management system based on the results of an empirical multiple case study; determine the specifics of the common talent management system elements for IT companies and interaction with external and internal factors; identify possible configurations of the sectoral talent management system based on the peculiarities of an organisation’s external and internal factors. Carry out approbation of a sectoral model, based on qualitative data of the international research on HR practices using the example of a talent development practice as the most frequently used by companies;

4) Develop practical recommendations as a basis for diagnostic procedures of talent management configuration within the organisation and implementation of a talent development practice based on the contextual approach to the development of the talent management system in the IT industry.

Object and subject of the thesis research

Object of the thesis research: talent management system in IT companies and its configurations.

The subject of the thesis research: the elements of the talent management system and the interaction of the talent management system with factors of the external and internal context of IT companies that are significant for the IT industry.

The methodological basis of the thesis research can be defined as a complex, including a theoretical analysis of scientific literature, qualitative research using the multiple case study methodology. This gives grounds for analysing the interaction of the talent management system and the organisation’s environment, and to consider the context, both external and internal, as a basis for interpreting common features and differences; a quantitative study conducted to confirm or disprove

the results of a qualitative analysis of the sectoral talent management model by the example of the most common practice of talent development.

The theoretical basis of the research is based on the results of research in the field of talent management. In the thesis research, the resource theory (Barney J.B., Penrose E.T.) was the origins of the definition of the “talents” concept, from the perspective of which talents are seen as unique and hard-to-replicate resources that companies need to achieve competitive advantages. Talent management was considered through the prism of the concept of strategic human resource management in its contextual version (Michailova S.), which is based on the system theory, as well as the ideas of the architecture of the HRM system. Strategic HRM is also based on system theory. In accordance with the system theory the HRM system includes elements such as strategy, practices and processes, recognises the link with the business strategy (vertical integration), the relationship between HRM practices (horizontal integration). The contextual approach takes into account both the external and internal environment of the organisation and involves an explanation that goes beyond the organisational level, integrating strategic HRM into the macrosocial context with which it interacts. In this interpretation, the context is both the condition and the result of a strategic approach to HRM (Brewster C.). The concept of the HRM system architecture recognises the need for differentiation of employees and the presence several HR systems simultaneously in which HRM practices target different groups of personnel (Beatty R.W., Becker B.E., Huselid M.A.). Particular attention to a group of employees with key competencies in terms of achieving the company's strategic goals is paid (Becker B.E., Huselid M.A., Lepak D.P., Snell S.A.), since effective management of such employees is more likely to have a stronger impact on creating value for the company.

In the thesis the author proceeds from the following definitions of the basic concepts of research. A talent is an employee who has (or has the potential) differentially contribute to the performance of the company, occupying and / or creating strategic jobs. Talent management is the managerial activity of attracting, selecting, developing, locating, motivating and retaining employees, whom company managers see as talents, while creating additional opportunities for them. The talent management system is an open system that consists of such key elements as philosophy, strategy and practices that, on the one hand, are influenced by multi-level factors of the external and internal context of the organisation, and on the other hand, can influence the context in which it functions. Context, being one of the central concepts in the study, is considered as a set of factors of different levels that interrelates with the object/subject of management. Contextualisation is the process of construction of an explanatory model of the talent management system formation in the company as a process of interaction of its elements and factors of the external and internal context of the organisation at the global, national, sectoral, organisational and individual levels.

The empirical base of the thesis research is divided into two stages:

1) qualitative analysis of the data collected by the author in 2015–2017. It includes materials from 33 in-depth interviews with managers of Russian IT companies (talent management decision makers) and other stakeholders of talent management processes (employees whom the companies consider as talents), participant observation, examination of documents and other artifacts that might be used for a contextualised approach to talent management;

2) quantitative analysis of data from the international study of human resource management practices conducted by members of the CRANET research network in 2014–2016. The database includes data from a survey of 360 companies in the telecommunications, information technology and other information services in 38 countries.

The objectives of the stages of the empirical research are as follows:

a) to identify variations and common features in the notions of talent(s) (groups of employees that the companies regard as talents) at the organisational level; taking into account the external and internal context of the company, to describe various configurations of talent management system, the basic element of which is the notion of talent; to identify the key elements and indicators of the talent management system in IT companies, as well as the factors that influence the formation of the talent management system, for their subsequent study by quantitative methods.

b) to conduct an approbation of the sectoral model of talent management system and to verify the significant factors influencing the formation of such a talent management practice as a talent development in information technology companies.

Conformity of the thesis research with the passport of a scientific specialty

The thesis research corresponds to the following requirements: paragraphs 3.1, 3.3, 3.4, 3.5, 3.6, 3.10 of “the Regulations of the National Research University “Higher School of Economics” on awarding academic degrees”, the passport of the scientific specialty “Management” in paragraphs 1.6. The process of managing an organisation, its individual subsystems and functions; 1.8. Organisational behavior, socio-psychological aspects of governance. Group and group behavior in the management process; 1.9. Organisational culture. The influence of organisational culture on the economic and social behavior of people; 1.10. Strategic management, methods and forms of its implementation. External and internal environment of the organisation; 1.14. Career management and professional-official promotion of management personnel; 1.15. Human resource management as a special kind of professional activity: goals, functions, principles, evolution of approaches; 6.1. Theoretical and methodological basis of human resources management.

Scientific novelty of the thesis research demonstrates in the author’s solution of a number of dilemmas widely discussed in the scientific literature, dichotomous categories, generating contradictions in attempts to describe the talent management system as universal. The decision is based on transition from the universal approach to the application of a contextual approach, taking into

account the specific conditions based on which a particular category of a dichotomous pair is applied. On the basis of the proposed solution, a theoretical model of a talent management system has been formed as an open system, including an internal and external context, which dynamically interacts with factors of different levels, and also a sectoral model of a talent management system is justified on the example of Russian IT companies as a special case of a theoretical model of a talent management system. The distinctive significant factors influencing the formation of the system in IT companies are verified. The configurations of the sectoral model of a talent management model were identified during the testing and verification of a part of the sectoral model through the prism of the talent development practice that confirm the previously obtained factors.

1. Dichotomic categories represent pairs of loci, such as the locus of nature (innate-acquired talent), the source locus (internal-external for the company), the locus of approach to talents (inclusive-exclusive), the locus of motivation (process-result), the locus of differentiation¹ (talent-strategic jobs), considered by companies not as a polar mutually exclusive categories, but in relation to different groups of employees. Within one company, a variety of loci configurations can be coexisted, chosen according to context.

2. Key elements of a talent management system are defined, such as philosophy and talent definition, strategy and talent management practices. At present, the most developed talent management practices are highlighted: attraction, selection, placement, evaluation, development, retention. A generalised theoretical model of a talent management system are developed as open and interacting with factors of individual, organizational, sectoral, national and global levels.

3. A sectoral model of talent management system is developed and substantiated based on the results of an empirical study of Russian IT companies. The presence of the practice of communication with employees, a more pronounced relationship between motivation, retention and the factor of intrinsic motivation of talents distinguish it from the general theoretical model. The interrelation between practices is revealed as one of the signs of a systemic approach to talent management in the IT industry that also distinguishes the sectoral model from the theoretical model of a talent management system. The context features of the IT industry were revealed: global (strong influence of a competitive labor market due to a shortage of talent, as well as the influence of international practices); national (institutional environment of Russia, expressed in the shortage of IT specialists in the labor market, a weak education system, government policy in relation to the IT industry); sectoral (product lifecycle, nature of labor and project-oriented style of work); organisational (the role of the founding leader of the organisation, which is the primary source of organisational values and culture, the creator

¹ The title “locus of differentiation” was first introduced in B (Cappelli P., Keller JR. Talent management: conceptual approaches and practical challenges // Annual review of organizational psychology and organizational behavior. – 2014. – Vol. 1. – P. 305–331.), taken by the author as a starting point for the development and construction of a theoretical model of the talent management system.

of the business strategy and business model, as well as the structure of the organisation and staff); individual (personal values of talents, intrinsic motivation of talents, personal brand, involvement). The identified differences in the sectoral model from the theoretical model provide grounds for confirming the assumption that belonging to a particular industry can be a source of diversity of talent management system's configurations within one country due to the differentiation of the external and internal environment for different industries and segments of economic sectors.

Arguments of the thesis research to be defended

1. The interpretations of the notion "talent in business" existing in scientific literature and approaches to talent management, presented as dichotomous categories based on a universal approach, cannot serve as a basis for development of a talent management system in companies. Dilemmas, considered as loci for the choice of managerial decisions are solved on the basis of taking into account the specific conditions applicable to different categories of talents. The general theoretical model of a talent management system is developed. It includes talent management system elements and their interconnection, as well as interaction with factors of individual, organisational, sectoral, national and global levels. The model gives grounds for applying a systematic and contextual approach to talent management in an organisation.

2. The sectoral model of a talent management system reflects the general features of the talent management system characteristic of the IT industry, specifies the significant factors of the context and the directions of their interaction with the talent management system and points out its differences in comparison with the generalised characteristics of the theoretical model.

3. The sectoral talent management system tested on quantitative data through the prism of the talent development practice, confirms the existence of interrelations between the talent management system elements, reveals a number of latent factors that are significant for the group of development and training practices, motivation and retention and communication with employees, which provides an opportunity to outline a range of practical toolkits and approaches required for the development of the talent management system in the organisation.

Theoretical significance

The author has expanded, supplemented and systematised the basic concepts and definitions in the developing scientific theoretical approach to talent management, has developed a general principle of classification and identification of signs of a talent management system in an organisation based on factors of individual, organisational, sectoral, national and global levels; the concepts of talent, talent management are systematised and classified, their place in the development of a systematic approach to talent management in an organisation is substantiated; a range of characteristics of sectoral model of a talent management system of the IT industry is identified that distinguish it from generalized features

of a theoretical talent management system; a number of configurations of the sectoral model of the talent management system are identified. It was confirmed that the industry as a type of economic activity may be a factor in the differentiation of talent management in companies within one country.

Practical significance

The developed model of a talent management system can be used in the preparation and implementation of talent management programs by organisations. Using the results obtained, it is possible to determine the main characteristics of a talent management system in IT companies, provide a diagnostic procedures of the current state of the talent management system, develop a strategy for developing talents and practices that need to be applied to perform a systematic approach to managing talents in an organisation.

The course “Talent Management in Organizations” is developed on the basis of the thesis research, which is included in the working curriculum of the bachelor’s study program Business Management at the School of Business and Business Administration of the Faculty of Business and Management of the Federal State Autonomous Educational Institution of Higher Education “National Research University “Higher School of Economics”.

A set of lectures and master classes developed in the course of the thesis research can be included in thematic plans of such disciplines as Human Resource Management, Organizational Behavior, Organization Theory, Organizational Conflict Management, and Business Ethics.

Approbation of the research results and degree of reliability of the research results

Degree of reliability of the research results

The reliability and validity of the results of the thesis research are achieved by a critical analysis of a wide range of scientific literature on the topic of talent management, as well as scientific literature from related scientific fields; careful elaboration of the strategy and a justified choice of methodology, methods and tools of theoretical and empirical research, as well as working with the database of empirical research, observing all stages and procedures of statistical data analysis. The degree of reliability can be determined as high, based on the results of approbation and verification of the results of qualitative research on the basis of quantitative data collected independently on the author of the thesis research. Also, the author’s participation in a wide range of Russian and foreign conferences and seminars, published papers in Russian peer-reviewed scientific journals and symposium of scientific papers, including those recommended by the Higher Attestation Commission of the Ministry of Science and Higher Education of Russia, are an evidence of reliability of the research results.

Approbation of the research results

The results of the thesis research have been repeatedly reported and discussed at Russian and international scientific conferences and seminars, extended meetings of the Human Resources

Management Department of the Federal State Autonomous Educational Institution of Higher Education “National Research University “Higher School of Economics”.

2. Arguments of the thesis research to be defended

1. The interpretations of the notion “talent in business” existing in scientific literature and approaches to talent management, presented as dichotomous categories based on a universal approach, cannot serve as a basis for development of a talent management system in companies. Dilemmas, considered as loci for the choice of managerial decisions are solved on the basis of taking into account the specific conditions applicable to different categories of talents. The general theoretical model of a talent management system is developed. It includes talent management system elements and their interconnection, as well as interaction with factors of individual, organisational, sectoral, national and global levels. The model gives grounds for applying a systematic and contextual approach to talent management in an organisation.

The stages of the theoretical background development on talent management in the scientific literature over the past 20 years can be characterised by the shift from attempts to find a universal definition of talent in business and to identify benchmarks among companies that successfully apply talent management, to the contextualisation of talent management. The contextualisation stipulates the conditions in which not only the talent definition itself of each particular organisation is developed, but also a talent management system and its particular practices are functioning. At the time of the change in the approach to talent management, a number of authors raised the issues of contradiction, both the definition of talent and the system formed for their management. The author of the thesis research shows the inconsistency of attempts to find a universal approach to the notion of talent in business, as well as to the talent management system. An approach to the definition of identified dichotomous categories is proposed, not as opposed concepts but as loci, and the method for the formation of a talent management strategy through the selection of loci is presented, as well as the possibility of combining them for different groups of talents in one organisation, taking into account the factors of the environment in which the organisation operates (Figure 1).

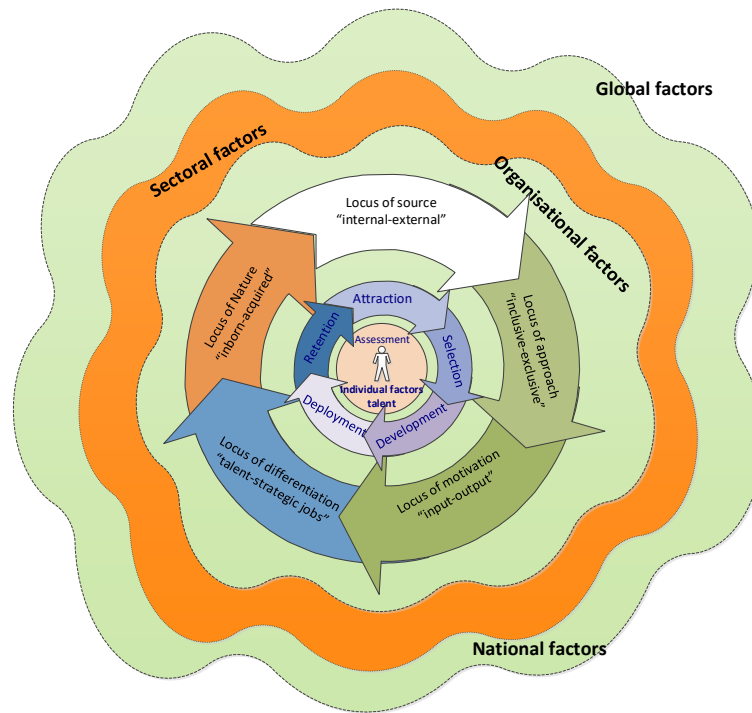


Figure 1 – Talent management model based on loci.

The source: developed by the author, based on [Mondrus, 2016].

Thus, the author emphasises the necessity to take into account the context not so much of the country, but of the global context, sectoral, organisational conditions and individual level factors that, when put together, form a unique configuration of talent management system in a particular organisation.

Analysis of existing sources of scientific literature on the basis of three scientific databases, such as Scopus, Web of Science (WoS) and the Russian Scientific Citation Index (RSCI), showed that the scientific field of talent management received a notable reflection in the literature only after 2000 (Figure 2). Based on the analysis of the literature, the author of the thesis research identifies 64 articles for the content analysis of fragments of the text of papers with characteristics of talent management factors, which indicate the existence of connections between them, and discuss the impact of these factors on both the talent management system and separate talent management practices.

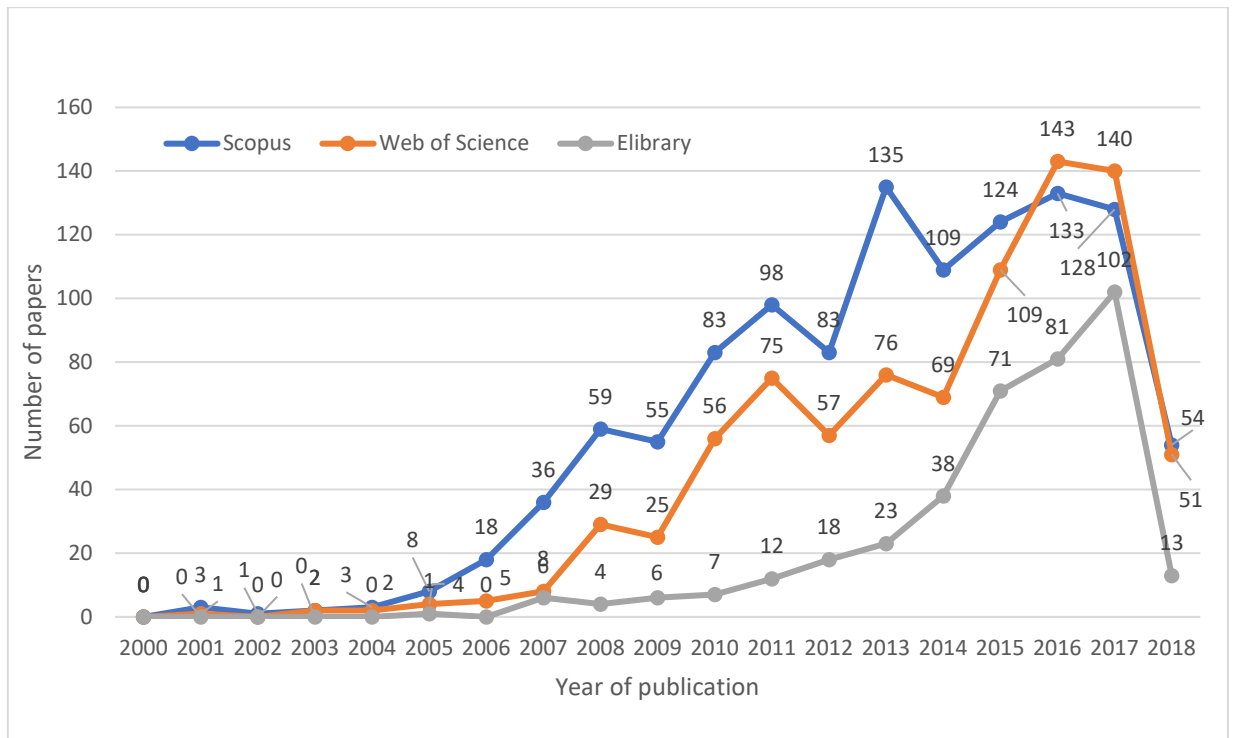


Figure 2 – Dynamics of publications on talent management (2000–2018)²

Source: compiled by the author, based on [Kabalina, Mondrus, 2017].

Based on the analysis of the literature, the author of the thesis identifies the main scientific papers for carrying out content analysis of fragments of the text of articles with definitions of talent, characteristics of talent management factors, indicating the existence of links between them, discussing the impact of these factors on both the talent management system and separate talent management practices. As a result of the three-stage content analysis, 17 articles were identified that became the basis for categorising and classifying the factors of individual, organisational, sectoral, national and global levels.

The theoretical model of the TMS, formed as a result of this research (Figure 3), demonstrates that the higher the level of factors is, the less opportunities to track the influence of these factors on the talent management system and particular practices. For example, studies on global factors in connection with the studies on global talent management contain assumptions about the origins and direction of the impact of the factors on the talent management system, but do not provide empirical evidence supporting these claims. Turning to the level of national factors, one can detect the influence of institutional and cultural factors on the talent management system. Sectoral factors, such as the labor market situation and the nature of the work of sectoral professionals, influence the development of talent management practices [Kabalina, Mondrus, 2018]. It can also be noted that factors that have been identified as external have a greater impact on the strategic components and practices of

² The data presented in Figure 2 was collected on 01.06.2018.

managing the “entry point” of talents in the company. With regard to the impact of the internal environment of the organisation, the susceptibility of the strategic level of the talent management system (philosophy and the definition of talents) to the influence of a number of organisational factors, such as the company's strategy, the role of leaders and organisational culture. The influence of organisational culture and values on attracting, selecting, assessing and retaining talents was also revealed. Values of talents are also an important individual factor that influences the definition of talent and all practices of talent management in the company [Kabalina, Mondrus, 2017; Kabalina, Mondrus, 2018].

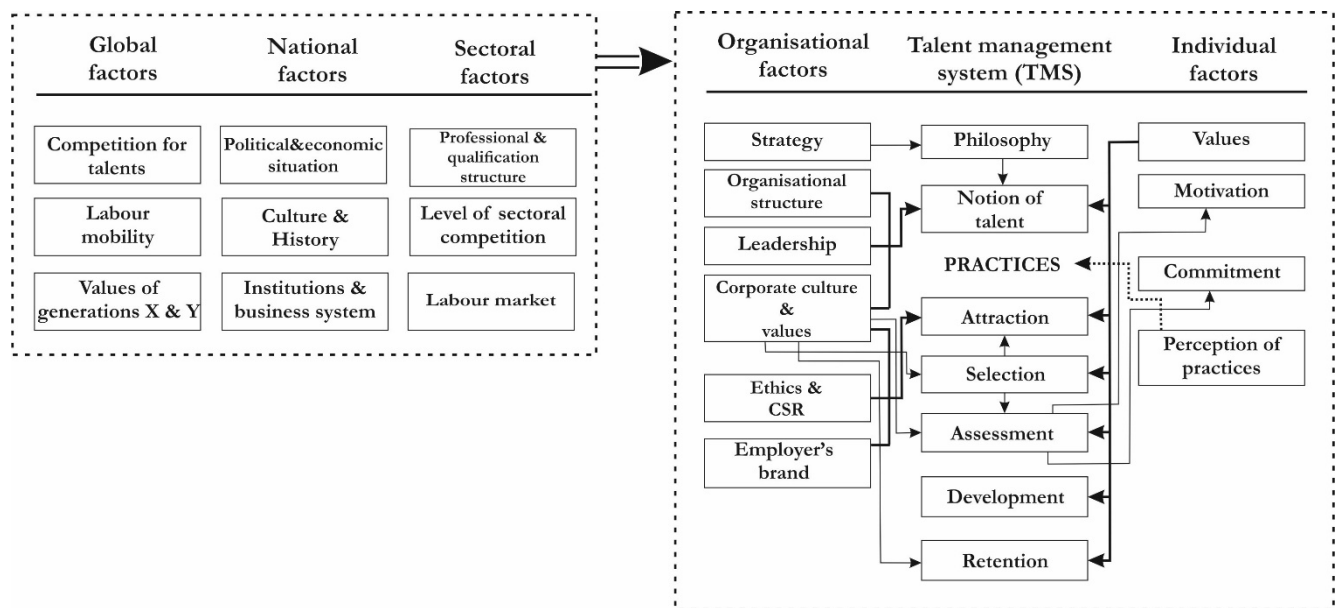


Figure 3 – Theoretical model of TMS with environmental factors

Source: [Kabalina, Mondrus, 2017].

2. The sectoral model of a talent management system reflects the general features of the talent management system characteristic of the IT industry, specifies the significant factors of the context and the directions of their interaction with the talent management system and points out its differences in comparison with the generalised characteristics of the theoretical model.

Focusing on such a factor of the external context, as an industry, the author conducted a qualitative study in six leading companies of the Russian IT industry to identify the specific features of the sectoral context and its impact on the development of talent management in organisations. The companies in frame of the the thesis research can be divided into three of the four key segments identified in the documents of the Russian government³: companies that represent IT services, in

³ Strategy for the development of the information technology sector in the Russian Federation for 2014–2020 and for the future until 2025”, 2013 [Electronic resource] access mode: [http:// minsvyaz.ru/ru/documents/4084] (appeal date – 06/01/2018).

particular customised software development, design, implementation and testing of IS, consulting on informatisation (two companies), developers of commercial software (two companies) and companies engaged in remote processing and provision of information via the Internet (two companies). At the state of the beginning of 2018, the surveyed companies employed more than 1,000 people, the largest of which numbered more than 5,000 people. The age of employees of companies in the study is on average 30 years, and is the most common in most organisations of the IT industry. In all of the organisations surveyed, about 80% of the staff are staff members with key IT competencies.

As a result of the content analysis of in-depth interviews, interviews taken from open sources, organisational documents, such enlarged factors as “talent definition”, “values”, “leaders”, “IT sector”, “IT companies”, “labor market”, “strategy”, “corporate culture”, “talent management practices”, “attraction”, “motivation”, “training and development”, “evaluation”, “performance evaluation”.

By analysing the definitions that IT companies give to talented employees, three basic definitions are identified, based on which three configurations of the talent management system in the IT companies are identified.

One of the revealed configurations of the talent management system is the “business incubator”⁴. This configuration is based on the definition of talent as a broad category, which includes all employees of the company, including potential employees in frame of the attraction practice. This means that the main efforts and large investments from the company are made at the stage of finding, attracting and selecting employees (the point of “entry level” into the organisation). Thus, in this configuration, attraction is noted as one of the most advanced talent management practices. The second practice that attracts attention in this configuration is the creation of an environment that allows the employee’s potential to be revealed, while the active phase of investments in the employee comes after he / she begins to show a result exceeding the expectations of the company's management. The main factors influencing the formation of this configuration are the industry segment, the lifecycle of the product (the duration of the project for development, implementation, support, etc.). Such a configuration of the talent management system and talent approach are characteristics of companies with a developed network structure, developed horizontal connections within the organisation. Among the companies studied by the author, such were the companies that belong to the segment “remote processing and provision of information, including on sites in the information and telecommunications network “Internet” of the information technology industry”⁵.

⁴ The titles of the configurations are chosen by the author based on the results of the in-depth interviews.

⁵ The division into segments of the information technology sector is based on the definition of the information technology sector given in “Strategy for the development of the information technology sector in the Russian Federation for 2014–2020 and for the future until 2025”, 2013 [Electronic resource] access mode: [<http://minsvyaz.ru/ru/documents/4084>] (appeal date – 06/01/2018).

Another configuration of the talent management system, “diversity”, also recognises the talents of all employees, but implies a more structured approach to the notion of talent based on the direction of career development (both vertical double-directional career paths and horizontal double-directional career paths) for different categories of employees. The main factor forming the approach is the global character of the company’s business and the practices of global management of international, multicultural teams, applied in connection with this condition. Employee development practices receive the most attention from the leaders of the organisation. Companies that practice this kind of talent management system belong to the segment of “development of commercial software” in the information technology industry.

The third configuration of the talent management system, “two different stories”, where the talent is two categories of employees (a “temporary talent pool” for young professionals and recognised professionals, “a constant talent pool” for middle managers), this configuration was formed in the company in which noticeable influence of the state as the main consumer of the company's services. For companies with a similar configuration of talent management system, the selection practice is one of the most developed and selective. For the temporary talent pool, external recruitment is provided, a “permanent talent pool” is formed by means of the company’s internal labor market. Different approaches to training and development are applied to these two talent pools. Companies that adhere to this approach in their practices belong to the “providers of services in the field of information technology, in particular customised software development, design, implementation and testing of information systems, advising on informatisation” of the information technology industry.

Despite the identified differences in basic definitions, all three configurations are similar in a flexible value-oriented approach to understanding talent, stating that the main differences between a talented employee from the “non-talent” are sharing the values proposed by the company, internal motivation, proactivity, demonstration of performance beyond the expectations of the company and the dynamics of individual performance. In addition, it is worth noting that, given the general characteristics of talent, taken as a basis in the organisations of the IT industry, talents are actively involved in the formation of talent management practices themselves.

The data collected as a result of qualitative research stipulates the determination of the most advanced talent management practices in Russian IT companies. Thus, it can be seen that the primary focus is on attracting, developing and retaining talents, and the practice of building internal communications and supporting team project work is intensively developing.

By using a multi-level contextual approach to the study of talent management in IT companies and orientation to common characteristics, an sectoral model of talent management was developed, reflecting the impact of five-level factors on the various elements of the TMS (Figure 4).

The research of organisations representing the selected industry, in this case, the information technology sector, makes it possible to consider the influence of sectoral factors on the management of talented employees from all sides, which has not been adequately reflected in the scientific literature. In particular, the impact of the features of business models (such as the products of the industry, the nature of the work and the project-oriented work style), on revealing talents in the organisation through the correspondence of its business model is demonstrated. Unlike the characteristics of the talent management system, reflected in the theoretical model, the new element of the sectoral model of the talent management system is the practice of internal and external communications. The role of a leader as an organisational factor manifests itself through the whole talent management system in IT companies more strongly and more consistently than the theoretical model suggests.

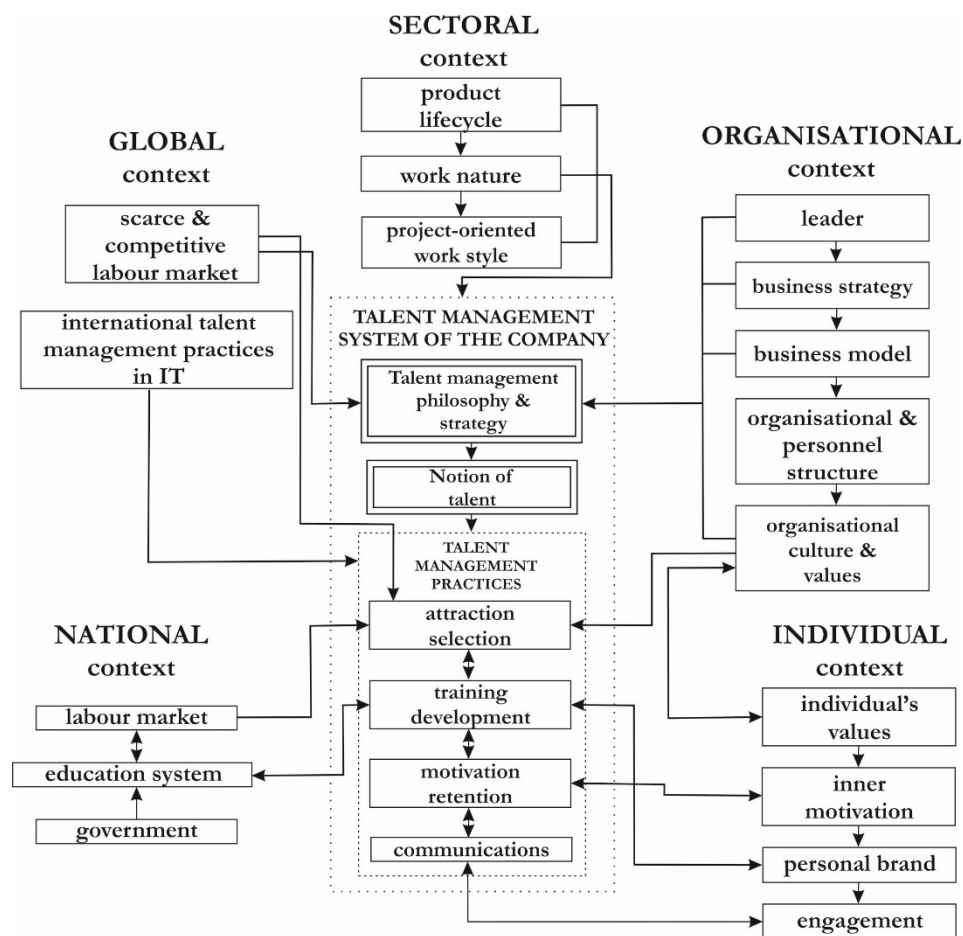


Figure 4 – Sectoral model of talent management in IT companies.

Source: [Kabalina, Mondrus, 2018].

3. The sectoral talent management system tested on quantitative data through the prism of the talent development practice, confirms the existence of interrelations between the talent management system elements, reveals a number of latent factors that are significant for the group of development and training practices, motivation and retention and communication

with employees, which provides an opportunity to outline a range of practical toolkits and approaches required for the development of the talent management system in the organisation.

The use of data from the international CRANET (The Cranfield Network on International Human Resource Management), based on a systemic approach to the study of HRM practices and is not intended for the study of talent management, imposed limitations in verifying the results of qualitative research. Thus, using the data obtained, it is not possible to verify the individual level factors, due to the absence of this section in the CRANET study, as well as global and national factors due to a small number of relevant indicators.

In the analysis of quantitative data, the methodology of statistical analysis of one of the HRM practices was used, such as the talent development practice as one of the talent management practices in the telecommunications, information technology and information services sector based on a survey of 360 respondents from 38 countries. To verify the available part of the model of talent management system in the IT industry, a number of methods are applied based on the IBM SPSS Statistics 21 package, including descriptive data analysis, correlation analysis, classification methods such as discriminant analysis, clustering, an attempt to categorise factors revealed by the principal component method.

Work with quantitative data was carried out in accordance with the algorithm, reflected in Figure 5. The algorithm was developed by the author of the thesis research, proceeding from the goals of the tasks of this part of the study.

As a result of approbation of the part of the sectoral model, latent factors are revealed, as well as interrelations with the practice of talent development in the organisation with other practices. Thus, the importance of a number of components for the group of practices, development and training, motivation and retention and communication with employees, which, in conjunction with the talent development practice, represent the ability to outline the toolkit and approaches necessary for further development of the talent management system within the organisation.

Such a component (a latent variable, a latent factor) as the principles of two-way communication, which includes communications with the immediate supervisor and senior management, as well as electronic communication with the employee, makes it possible to make an assumption about the importance of the role of leaders (managers) in the organisation.

An important component is the project-oriented work style, which includes projects that stimulate learning, special assignments, participation in project work and regular meetings. The second component demonstrates the importance of the interconnection of communication and development practices and the tools used to implement the project team activity. The component itself, the project-oriented work style, can also serve as a latent factor here. It is worthwhile to consider two other significant components, such as team communications and project motivation for managers and

specialists. In conjunction with the project-oriented work style, talking about building interaction within the IT organisation, team communications, as well as such motivation tools as bonuses on the results of team performance for managers and specialists and individual achievements of project managers, strengthen the industry component, and at the same time reflect the personnel structure of the organisation and the project-oriented work style.

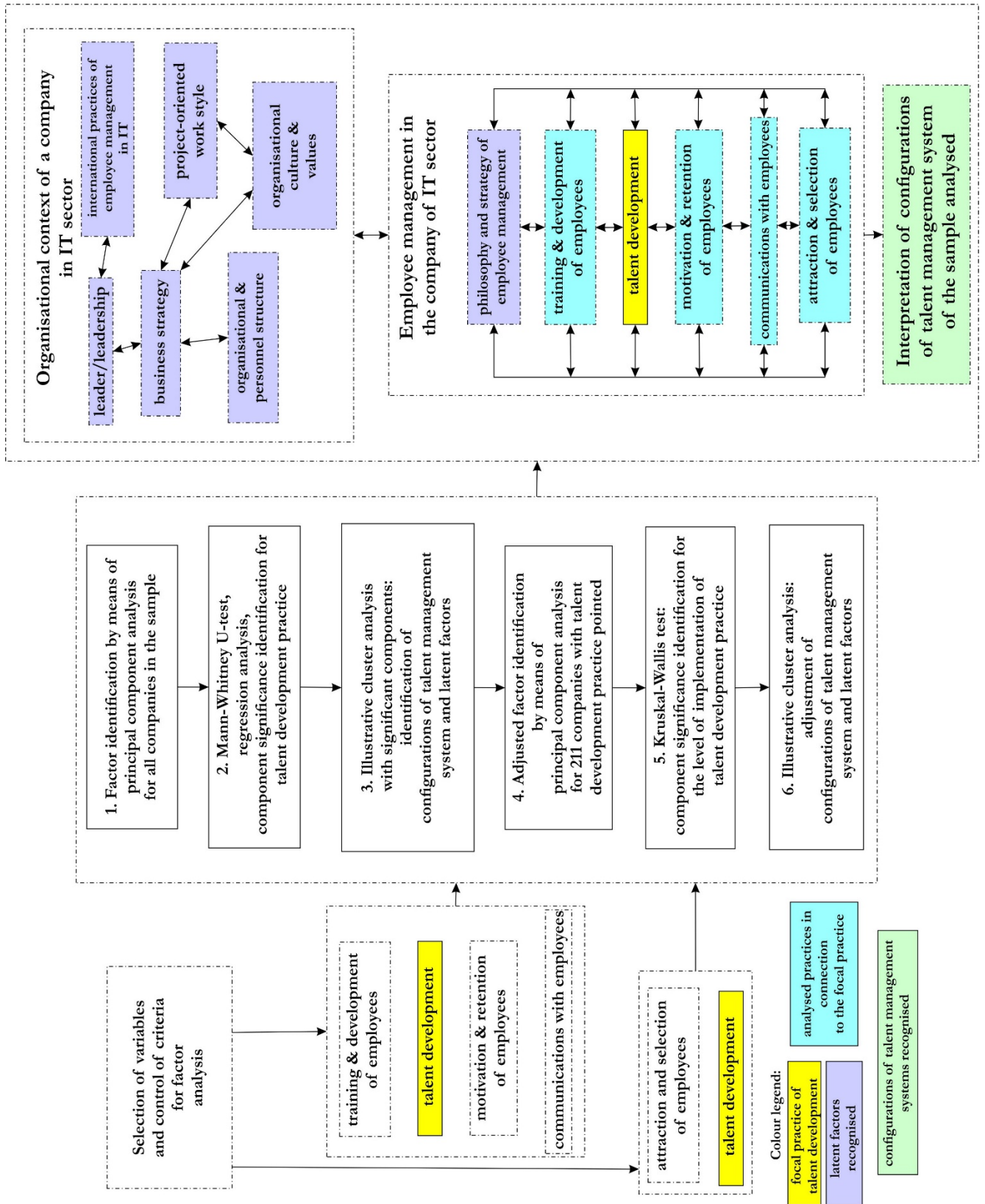


Figure 5 – Scheme-algorithm for performing quantitative research on CRANET data

Source: compiled by the author.

The next component of the analysis, non-monetary incentives, should be considered as a toolkit that emphasise the non-monetary stimulation of employees of all groups represented in the survey, on the other hand – as a latent factor in the structure of the personnel structure of the organisation. It is worth noting that the component of payments for individual performance for all categories of employees, which is an integral part of the work activity, and can hardly bear industry or other colouring. However, given the industry features, we can talk about the development of authentic KPI systems, which are specific to the information technology industry and intangible incentives, which are the peculiarities of the IT industry.

The component of the “bonus for organisational, team and individual goals for non-core employees” indirectly indicates the importance of the latent factor in employee management strategy of the organisation and, as a consequence, the development of talents, as well as the possible configuration of a talent management system in companies for which the component is most pronounced due to the choice of the locus of the approach (exclusivity / inclusiveness) of the talent management system of the organisation.

The “personnel reserve” component, including tools for formalised career development, planned rotations and succession planning, the “potential development” component, which includes coaching and mentoring as development techniques, as well as the “international career development for managers” component, indirectly indicate the company’s chosen strategy of talent development, and possible configurations of the talent management system represented by the set of loci such as the locus of motivation (process / outcome) and components of the potential development or the personnel reserve formation the most expressed in clusters, the approach locus (exclusive / inclusive), which also manifests the choice of those for whom the practices included in the certain components will be used (in this example, we can conclude that the talents are managers).

Significant components for the practice of talent development, and therefore for the configuration of the talent management system, in conjunction with the attraction and selection practice, are the additional 10 components.

The component of the “interview with several interviewers”, on the one hand, strengthens the latent factor of the project-oriented work style, and, on the other hand, indirectly indicates the organisational values and culture of selecting employees for teams in the organisation.

The components of “references”, as well as “referral programs for attracting managers and specialists” testify not only to the ways of attracting and selecting employees that are significant for the development of talents in the future, but also about the ways of motivating and retaining current employees within the organisation. It gives grounds for conclusion about the intersections with previous results, including toolkits of employees’ motivation.

The components of internal and external hiring of managers and specialists on the conditions of the competition testify to the importance of the adopted strategy of managing the employees of the organisation, and, as a consequence, the choice of the locus of talent sources (external / internal) depending on this strategy. A separate component of hiring managers, either on the basis of internal hiring or poaching from other organisations, once again confirms the strategic attitudes determined by the organisational and sectoral context. The components of the selection methods using questionnaires, performance of work assignments, single interviews for different groups of employees need to be taken into account as formed as a result of the strategy of the selection practices, implemented within the organisation, and also organisational culture.

The clusters formed as illustrative examples on the sample of companies that apply the focal talent development practice, let the author of the research outline a number of configurations of the talent management system inherent in companies which are included in the sample. Thus, on the group of practices, development and training, motivation and retention and communication with employees on a sample of companies applying the practice of talent development, it was possible to identify six configurations of the talent management system. Three of them “Inclusive development”⁶, “The talent pool for team leaders”, “The talent pool for managers” include components that are relevant for all companies applying the talent development practice, regardless of the specified level of application. The other three “Vertical career”, “Minimal support” and “Potential development” are illustrated by clusters built on components that are significant if the level of application of the talent development practice pointed by the respondents is taken into account. The group of practices of attracting and selecting employees on a sample of companies that implying the talent development practice has made it possible to add several other configurations for further analysis and interpretation. Such configurations are “Intensive filtering at the “entry”, “Open competition”, “Blurred hiring focus”.

A comparison of the configurations obtained based on qualitative research with the configurations obtained from the results of quantitative research within the framework of the sectoral model of the talent management system gives grounds for drawing a number of significant conclusions.

1) A systemic approach to talent management in IT companies is demonstrated, which is manifested in the interconnection of applied talent management practices, as well as the presence of factors at different levels which the talent management system interacts with.

2) The latent factors identified and relationships between practices, as well as the talent management system configurations generated by the CRANET database, indicate that the context and the organisation’s initial settings, expressed schematically in the model of talent management based on

⁶ All configurations are named by the author of research based on interpretative analysis.

loci, presented in the theoretical part of the dissertation research are of the prime criteria of talent management system formation.

3) The manifestation of the configurations filled with the components evaluated above demonstrates a number of loci configurations and gives grounds for identification of the initial settings of the leaders of the companies in the sample.

Thus, in order to provide practical recommendations, first of all with respect to the talent development, according to the truncated part of the sectoral model, it is worth taking into account the leadership attitudes and the organisational strategy formed on their basis, the project-oriented work style and the associated personnel structure of the organisation that set the preconditions for the development of a philosophy and the strategy of talent development. Strategies for the talent development can take various configurations, partially presented in the dissertation on the results of cluster analysis. The configuration of the loci with the set factors, the mind-set of managers of the organisation, the analysis of main components revealed give grounds for formulation of practical recommendations.

Based on the results of qualitative and quantitative analysis, the author of the thesis research proposes ways to apply the model of talent management system and provides the ways of diagnosing the configuration of the talent management system and making strategic decisions regarding the practice of talent development in the organisation.

Papers published by the author in leading peer-reviewed scientific journals, including those recommended by the Higher Attestation Commission of the Ministry of Education and Science of Russia:

1. Kabalina V. I., Mondrus O. V. Contextualisation of Talent Management in Russian IT Companies // Russian Journal of Management. – 2018. – Vol.16. – N 1. P. 5–36.

2. Kabalina V. I., Mondrus O. V. Factors of talent management in the company: contextual approach // Herald of the St. Petersburg University. Series 8. Management. – 2017. – Vol. 16. – N 2. – P. 268–298.

3. Mondrus O. V. Theoretical and practical dilemmas of talent management in organisations // Herald of Omsk University. Series: The Economy. – 2016. – N 3. – P. 115–124.

Other papers published by the author in scientific journals on the topic of dissertational research:

4. Kabalina V., Mondrus O. Contextual Factors of Talent Management in the Russian IT-Companies, in: GSOM EMERGING MARKETS CONFERENCE 2016. St. Petersburg. Petersburg: Graduate School of Management, St. Petersburg Petersburg State University, 2016. – P. 171–173.

5. Mondrus O. “Talent Management Strategies in the IT sector (the case of Russia)”. XVI April International Scientific Conference on the Development of Economics and Society: in 4 books / Ans.

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