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**Strategies of human resources management
at IT enterprises**

Specialty 5.2.6. «Management»

Abstract

of the dissertation in support of candidature for a degree
in Economics

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Topicality of the research topic. Under the conditions of the post-pandemic crisis and military-political conflict in the global economic space, the IT industry in Russia has faced serious challenges, including the increasing trend towards the transition to a full remote format of personnel work, the partial suspension of activities and complete withdrawal from the domestic market of some leading international companies, and an aggressive increase in the migration of domestic IT - specialists. In this regard, there is an urgent need to rethink the role of strategic human resource development to ensure the effective functioning of IT-sphere enterprises. Competently developed human resource management strategy allows to use the potential of talented employees with maximum benefit, to develop new competencies, to increase motivation to achieve goals. Employees have a status of a strategic resource for the IT-sphere, as intellectual capital is a key element of this sphere. In this regard, the strategy becomes a key element of human resource management, contributes to the development of personal characteristics, team, project groups in organizations. Moreover, stable functioning and development of the IT-sphere enterprise can be provided only at integration of strategic tasks of personnel policy into the general strategy of the organization. In this regard, only the presence of scientifically substantiated concept of strategic human resources management at the IT-sphere enterprises forms effective mechanisms for implementing common strategic tasks.

In the applied aspect, a significant problem of human resource management in IT-sphere enterprises is their significant outflow from the country and low qualification level. Effective methodological approaches to the development, preservation and stabilization of talented employees in the long term are necessary.

The variety of foreign and domestic studies of human resource management practically does not reflect scientifically grounded approaches to the development and implementation of human resource management strategy for high-tech, knowledge-intensive business - structures, the most important representatives of which are IT - enterprises. Thus, the topic of the dissertation research acquires relevance and scientific and practical significance.

The aim of the dissertation research is to develop theoretical provisions and to develop scientific and methodological recommendations on the formation of human resource management strategies in IT-enterprises.

Within the framework of the goal of the dissertation research the tasks were solved:

- to clarify the conceptual provisions for the formation of human resource management strategy at the enterprises of IT - sphere in the conditions of modern global challenges;
- to substantiate the necessity of altering approaches to human resources management strategy formation considering the specifics of IT-industry;
- to offer a toolkit of human resources strategy realization at the enterprises of IT-sphere, including the diagnostics of organizational culture as a leading strategic tool
- to develop and test the model of management decisions implementation according to the human resources management strategy choice at the IT-sphere enterprises
- propose a methodical approach to evaluating the effectiveness of human resource management strategy realization at IT-sphere enterprises.

The object of the dissertation research are methods, mechanisms and tools for strategic human resource management at IT-sphere enterprises in the Russian Federation.

The subject of the research are organizational and managerial relations arising in the process of formation and implementation of human resource management strategies.

The methodological basis of the study was a systematic approach using methods of deduction, induction, analysis, synthesis, expert, retrospective assessment, case - method, methods of economic and mathematical modeling, Kendell M.J. concordance coefficient, matrix games based on the Lagrange method and Brown-Robinson technique and other methods of economic research.

Scientific novelty of the dissertation research consists in the development of theoretical, methodological and practical provisions for the formation and implementation of human resource management strategy, taking into account the peculiarities of life of information technology enterprises in the global challenges.

The most significant scientific results obtained personally by the applicant include:

1. The necessity of transformation of human capital theory to the level of IT-sphere enterprise for formation and implementation of human resources management strategy has been proved. The basis of the modern concept that meets the global challenges faced by Russian IT-industry should be a human-centered approach, which is based on duality, which includes an active search, preservation and development of highly qualified employees, as well as humanization of HR - processes and care about the personnel of IT - companies. Human resource management strategy is an integrated system of interrelated elements formed from a set of principles, goals, objectives, interactions and interrelationships of subjects and objects of the IT - sphere, aimed at improving the working conditions of its personnel for the subsequent solution of the strategic objectives of the enterprise. In the context of the study, human resource management strategy has signs of duality, because on the one hand - it is a long-term action plan for the formation, use and development of human resources to achieve global goals and objectives of the enterprise (macro level), and on the other hand - it is a long-term process of working with personnel at each stage of formation, use and development of human resources (micro level).

The refined concept is necessary for rational and effective use of favorable market opportunities (system measures of state support of the industry and IT - specialists) and solution of strategic tasks by reducing the impact of negative consequences (sanctions of foreign countries, aggressive migration of IT - specialists, post-covision syndrome) at the stages of strategy implementation (p. 14 specialty 5.2.6. of Passport of specialties of VAK RF).

2. It has been determined that the main obstacle to the activation of IT-enterprises and the development of innovative products within the framework of

import substitution in Russia is the limited and insufficient number of talented employees, as well as their aggressive migration. In order to attract, retain and develop unique highly-qualified IT-specialists, the content of the process of forming and implementing human resource management strategy, distinguished by the use of the talent-management concept, in which the author highlights a triad of talent assessment indicators for IT enterprises (personal indicators, professional indicators, talent - indicators) and developed its methodology based on the modeling technique and application of Kendell M.J. concordance coefficient. We suggest To apply the concept of talent-management in the system of strategic human resource management it is suggested to use the module of digital industrial platform, which will allow not only to unite various business - processes, but also to create conditions for convergent convergence of international and national norms and standards of human resource management; it is also necessary to ensure transition from IT - employees training to knowledge management in conditions of turbulent external environment; to form integral and flexible incentive systems, which will help to.

It is recommended to integrate the talent management concept into human resource management strategy of IT-enterprises based on the principles of commensurability, compatibility and individualization. The implementation of the proposed approach will solve the problems of IT-organizations in human capital divestment; provide a competitive advantage in today's business environment (pp. 14, 23 of specialty 5.2.6. of Passport of specialties of VAK RF).

3. The key role of organizational culture in the implementation of IT-enterprise personnel strategy is proved, as its inconsistency with the macroeconomic situation restrains the pace and quality of its activities. The step-by-step methodology of organizational culture diagnostics is offered. The principal difference of the author's approach consists in including analysis of employees' loyalty in its step as one of the most important strategic goals of human resources management at the enterprises of IT-sphere is the retention of talented employees. Corporate personnel loyalty acts as a basic direction that shapes the development of innovation-oriented enterprises. Management of organizational culture of IT-sphere

enterprises provides development of human resources loyalty and combines disparate values of individual employees with values of IT-enterprise, which form a group system of values through motivation of talents. Combination and synergy of values becomes a strategic tool for accomplishment of IT-enterprise mission, achievement of competitive advantages, implementation of development strategy (pp. 11, 14 of specialty 5.2.6. of Passport of specialties of VAK RF).

4. The model of implementation of managerial decisions on the choice of human resource management strategy at IT-sphere enterprises, which is based on the allocation of two levels of strategy: the first level (macro level) - HR strategy at the corporate level, enterprise-wide level and in accordance with the overall business development strategy; the second level (micro level) - HR strategy of key functionalities of human resource management system at the enterprise. As for the microlevel, it is proposed to use three types of talent management strategies (development, preservation, stabilization of human resources) and corresponding tools for formation, use and development of human resources and construction of effective choice matrix. In order to assess and select the most optimal type of talent management strategy, the author proposed a methodology for determining private indicators of strategic management, namely, a set of indicators including human resource potential of human resources; indicators of educational potential of human resources; indicators of professional potential of human resources; indicators of innovative potential of human resources; indicators of social potential of human resources. The set of indicators reflects knowledge-intensive and innovative orientation of IT-enterprises, dynamic requirements to the qualification of IT-specialists in the modern labor market, high competition for talented employees among IT-organizations. The choice of functional strategy within the proposed typification should be based on the determination of homogeneity of managerial functions, establishment of their chain, as well as correlation of trends and prospects of talent development in IT-organization (pp.14, 23 of specialty 5.2.6. of Passport of specialties of VAK RF).

5. The methodological approach to assessing the effectiveness of implementation of the functional strategy of human resource management in the enterprises of IT-sphere, the difference of which consists in the application of methods of mathematical modeling and economic-mathematical game theory is developed. The methodological content of this approach is applicable to the conditions of uncertainty in which the IT-enterprise functions and makes a strategic decision when it does not have a full amount of information to choose from. To implement the methodology the author has proposed a step-by-step algorithm for solving matrix games based on the Lagrange method and Brown-Robinson technique which is adapted to the conditions of risk and ambient uncertainty; limited availability of highly qualified specialists in the labor market. The application of the methodology as applied to microlevel personnel strategies increases the awareness of IT-sphere enterprises management, which creates prerequisites for making more grounded strategic managerial decisions (pp. 14, 23 of specialty 5.2.6 of Passport of specialties of VAK RF).

Theoretical significance of the study lies in clarifying and developing the categorical framework within the theory of human-centeredness, as a development of a humanistic approach to human capital, principles, essence and characteristics of strategic human resource management in the enterprises of IT- sphere in the global challenges, developing methodological approaches to change human resource management strategies, clarifying the strategic tools, implementation models for managerial decisions on the choice of management strategy.

Practical significance of the research lies in the possibility of application of conclusions and recommendations of the author by IT-sphere enterprises in the process of improving human resource management strategies. Applied recommendations on the use of modern forms and methods of strategic human resource management will improve the quality of existing HR-processes, increase the efficiency and productivity of human resources as a factor of production, the validity of management decisions taken by the management of enterprises. The main provisions and conclusions contained in the thesis can be used by the top

management of Russian IT-enterprises to develop a system of measures to improve strategic human resource management (as evidenced by the acts of implementation at the enterprises, in which the approbation of the author's scientific proposals, including a certificate of implementation of the dissertation implementation in LLC "INVEN-TOS", LLC "Casey-Systems Orel", LLC "Itimus").

Certain proposals of scientific qualification work may be of interest for the employees of educational, research institutions dealing with the problems of strategic human resource management, as well as in teaching the academic disciplines "Strategic Management", "Human Resource Management".

Area of research. Scientific and qualification work was carried out in accordance with the Passport of specialties of VAK of the Ministry of Science and Higher Education of the RF 5.2.6. Management: 11. Organizational behavior, socio-psychological aspects of management. Leadership in the organization. Management of conflicts. Organizational culture. 14. Strategic management, methods and forms of its implementation. Business models of an organization. Corporate strategies. Strategic resources and organizational capabilities of a firm. 23. Theoretical and methodological foundations of human resource management. Economic and social objectives of human resource management. Technologies of human resources management.

Approbation of the results of the study. The results of dissertation research were presented at the following conferences: II International scientific-practical conference "Science and education: current issues, achievements and innovations" (30 may, 2020, Penza); International scientific-practical conference "Society - science - innovation" (9 may, 2020, Ufa); III All-Russian scientific-practical conference with international participation "Challenges of digital economy: development of comfortable urban environment" (21-22 may 2020, Bryansk); All-Russian full-time scientific-practical conference "Contemporary urban environment" (9 may , 2020, Bryansk); All-Russian full-time scientific-practical conference "Modern tendencies of development of management and public administration" (3 december, 2020, Orel); II International scientific-practical

conference "Modern technologies of personnel management: from problems to solutions" (23 april, 2020, Chelyabinsk); IX International scientific-practical conference "Innovative development of social and economic systems: conditions, results and opportunities" (30 april, 2021, Orekhovo-Zuyevo); All-Russian scientific-practical conference "Modern tendencies of development of social and economic systems" (30 april, 2020, Orekhovo-Zuyevo). The main provisions of the dissertation work have been implemented in the activities of "Inventos", "AITIMUS", "Casistems Orel".

Following the research, 18 scientific papers have been published with a total volume of 8,64 printers sheets (with the author's contribution of 5,29 printers sheets), including 6 articles published in peer-reviewed scientific publications, 1 article published in journals indexed in the international citation databases Scopus.

Scope and structure of the dissertation. The dissertation has an introduction, 3 chapters (9 paragraphs), a conclusion, 214 pages of text, 22 tables, 25 figures and 237 reference sources.

