CONCENTRATION OF REGION INTELLECTUAL CAPITAL WITHIN THE BOUNDARIES OF A LEADING UNIVERSITY: JUSTIFICATION OF EXPEDIENCY

^aANNA MALTSEVA, ^bTATYANA KUZMINA, ^cMIKHAIL KUTERNIN, ^dTATYANA OGNEVA, ^cLARISA MIKHALEVICH, ^fOLGA DANILINA, ^sOLGA AZOEVA, ^bSERGEY RYASOV

^aLurye Scientific and Methodological Center for Higher School Innovative Activity, Tver State University, Tver, Russian Federation

^bDepartment of world economy, Plekhanov Russian University of Economics, Moscow, Russian Federation

^cDepartment of Mathematics and Informatics, State University of Management, Russian Federation

^dAcademic of Foreign Languages N3,

Plekhanov Russian University of Economics, Moscow, Russian Federation

^eDepartment of Economic policy and economic dimensions, State University of Management, Moscow, Russian Federation ^fDepartment of Information Systems, State University of

Management, Moscow, Russian Federation

⁸Department of Economic policy and economic dimensions, State University of Management, Moscow, Russian Federation ^hMoscow Polytechnic University, Moscow, Russian Federation email: ^a80179@list.ru, ^btutor007@list.ru ^ckadet503122@list.ru, ^dt-ognyova@yandex.ru, ^eMikhalevich_1@mail.ru, ^finf@guu.ru, ^go.azoeva@mail.ru

Abstract: The aim of the work is based on objective evaluations show the role and importance of the intellectual capital of the territory, as well as its concentration within the structure, is the owner of its maximum volume and is able to its permanent generation - leading University. As a key result, the article presents the theoretical justification of a complex structure that provides integration and concentration of intellectual capital of individual regional structures. The scientific novelty of the exploition is the very important research task associated with the justification of the expediency of the concentration of intellectual capital, as well as the justification of the proposed format of the organization of intellectual capital management in the region within the structure of the leading University.

Keywords: intellectual capital, region, development, competitiveness, knowledge, innovative economy

1 Introduction

The issues of relevance of the development of intellectual capital issues at micro - and meso-level are considered in the author's works over the past seven years (Maltseva, Monakhov, Klyushnikova, 2015; Maltseva, 2018). Despite the fact that the topic is not completely new, it has not lost its relevance and is finding more and more practical applications related to the practical application of intellectual resources, which requires their identification and concentration.

The direct relationship between individual elements of the intellectual capital of universities and regions has been demonstrated in a number of studies, including an analysis based on the processing of data arrays on the formalized values of integrated indicators of the intellectual capital of domestic universities and Russian regions (Maltseva and Veselov, 2018).

The results of the analysis showed the presence of statistically significant relationships primarily between the human capital of universities and the region, while in some cases, the assessment of other types of intellectual capital is also a sufficient correlation.

Thus, taking into account the results obtained in the research, a hypothesis was put forward about the feasibility of concentrating the region's intellectual capital within a specific structure that has its maximum volume and is able to "pull" the intellectual capital of other enterprises and organizations both physically (for example, attracting specialists) and virtually (for example, forming an information resource with systematized information about intellectual property objects).

The theoretical justifications of this hypothesis are given below, based on the systematization of the opinions of scientists and specialists on this issue.

2 Background and Methodology

In the theory of material production, the concentration and centralization of capital is recognized as the basis for the formation of large business units that can provide solutions to a wide range of tasks and maintain stability in the market. In the theory of intellectual capital, this trend also occurs, which is especially significant given the synergy effect that is created in the process of interaction of various elements of intellectual capital with each other.

In the work of Gordeeva (2012), it was noted that for the Russian Federation, the highest concentration of capital is characteristic of industries that are of strategic importance to the state. Taking into account the increasing role of knowledge, science and technology in the socio-economic development of the country, which is enshrined in the strategy of innovative development of the Russian Federation. The strategy of scientific and technological development of the Russian Federation and other regulatory and policy documents, the concentration of intellectual capital can create the effect of growth points for high-tech products and intellectual services.

Additional advantages of capital concentration, which can also be translated to the specifics of intellectual capital, are the possibility of identifying and rational use of excess resources, reducing the risks of functioning of socio-economic systems, which is noted in the work of Vavilova (2008).

These theses are theoretical prerequisites for the feasibility of concentrating intellectual capital within specific structures, including within the borders of the region. All this makes it possible to ensure more effective management of intellectual capital at the meso-level and get the greatest effect that can have a significant impact on regional development.

In the work of Chub and Makarov (2015), the role of intellectual capital and the degree of its concentration in the processes of increasing the stability of the development of spatial formations is clearly indicated, which requires the assessment and optimization of the processes of distribution and redistribution of intellectual capital of territories, i.e., its management.

Intellectual capital management at the micro level is the placement and use of intellectual capital resources, as well as the management of them and their transformation (into other intellectual capital resources or into traditional economic resources) in order to maximize the current value of the organization in the eyes of stakeholders (Ruus, et al., 2008).

At the meso-level, the process of managing intellectual capital is a set of actions and measures aimed at ensuring effective planning, organization and control of the processes of formation, development and use of intellectual capital in the region, as well as motivation of its accumulation and multiplication (Lukicheva, 2009).

The goal of intellectual capital management is to accumulate intellectual capital, identify and disseminate information and experience, and create conditions for the dissemination and transfer of knowledge (Krakovskaya, 2009).

Within the framework of intellectual capital management, tasks are solved to ensure its growth, expand opportunities for its use, and increase returns.

Prikhach et al. (2014) point to the need to take into account the state aspect in the process of managing intellectual capital in

combination with territorial, i.e. actions in line with national efforts, but in combination with territorial specifics and features.

Makarov (2012) identifies the following areas of development of the region's intellectual capital:

- concentration of efforts-creating a competitive advantage through the formation of regional specialization;
- uniform development of the region's intellectual capital structure and creation of a competitive advantage on this basis;
- moving towards balance-eliminating imbalances in the structure of intellectual capital.

Thus, the concentration of intellectual capital in specific areas and areas is one of the promising regional strategies.

In accordance with the Strategy of spatial development of the Russian Federation for the period until 2025 (2019) stands out clearly a list of promising economic specialization of the Russian regions, which further emphasizes the strategy of intellectual capital.

The document also states that the promotion of the development of promising economic specializations of the Russian Federation subjects will be carried out through the introduction of the concept of "smart specialization" into management practice.

The concept was formulated by the expert group of the European Commission "Knowledge for growth" as a strategy for innovative development of regions, which assumes the most effective use of their features and development of competitive advantages. Smart specialization combines industrial, innovative, and educational policies aimed at selecting a limited number of priority areas for investment within a region, focusing on its strengths and comparative advantages (Egorova, 2017).

This approach is largely related to the development of the intellectual capital of the regions, since it is the intangible components that can provide their own unique special development strategies for the subjects of the Federation.

In Alasheev et al. work (2016) highlighted the increased importance of higher education for the development of regions and industrial growth, including through resource provision and competitiveness performance.

The spatial development Strategy of the Russian Federation for the period up to 2025 (2019) also pays special attention to the development of universities in the regions.

Thus, the document points to the need to ensure the acceleration of economic, scientific, technological and innovative development of territories by promoting cooperation between scientific institutions and higher education institutions with business, including the formation of at least 15 world-class scientific and educational centers that unite the leading Russian Federation educational organizations of higher education and science institutions, research centers, centers of competence of the National technological initiative, as well as creating interregional competence centers on the basis of leading professional educational organizations; creating large interregional centers for identifying, supporting and developing abilities and talents in children and young people, etc.

In addition, the issues of development of social sphere sectors through the creation and development of interregional centers for rendering services in large urban agglomerations of Federal significance through the development of leading educational institutions of higher education and the use of their potential in providing services in the field of innovative development of agglomerations are highlighted.

The role of universities in the development of regional intellectual capital is indicated in the works of Golubkin and Svetlov (2011). Based on the analysis of world practice, the

author argues that intellectual capital becomes the basis on which long-term strategies of all subjects of innovative development are based, since the strategic goals of the organization of educational institutions are correlated with the strategic needs of enterprises in personnel and innovative developments.

Justifying the need to concentrate intellectual capital on the platform of a leading University, we can refer to the theses given in the works of Makarov (2015) that at the regional level, the significance of the total intellectual capital of organizations is not too significant and is largely derived from the total human capital. The exception will be regions where the role of a particular organization or organizational cluster is too high. For the rest, consideration of the intellectual capital of organizations in the region can be attributed more to the study of economic growth factors than to the management of the region's intellectual capital. This seems to be true even if the scale of the system is further increased, although it certainly requires further verification.

3 Discussion and Results

The concentration of intellectual capital in the region within the boundaries of the host university may actually represent the presence of systematic information about the existing intellectual capital, as well as an efficient system of reproduction, expansion and improvement of qualitative characteristics of intellectual capital in the region that is created as part of an organized system of training, retraining, advanced training, and perform applied research and providing expert analytical services, it allows you to find tools and methods for the growth of intellectual capital and improving the efficiency of its operation.

Important attention is paid to the environmental paradigm, which defines the conditions under which the region's intellectual capital functions. As an additional component of intellectual capital, the author identifies a new dimension – issues of spatial distribution and concentration. The presence of a regional environment that promotes the development of intellectual capital of economic entities within the territory is a significant factor in its advanced development.

The subjects of intellectual capital management in a region are a set of legal entities and individuals that own it. A comprehensive effect of intellectual capital management in the region is achieved only if the efforts of individual economic entities are coordinated, which can only be achieved if a single platform is formed that provides systematization of information about available intellectual capital and implements recommendations for its effective integrated use. Obviously, such a platform should have the most significant intellectual capital, which can distinguish it from other economic entities.

The design of the competence center should be based on the following basic principles: conceptuality; distributed leadership; management based on basic values; interaction and partnership with innovative business.

Based on the results of the analysis of theoretical, methodological and practical aspects, proposals were formed for the organizational and economic model of the competence center on the platform of the leading university.

For the purposes of the study, the following definition of the competence center is proposed: the regional competence center on the platform of a leading university is a specially designated structure, which main purpose is to coordinate the management of intellectual capital in the region and promote its formation, multiplication and effective use.

The model of the regional competence center is given above, which can be implemented practically taking into account the specifics of specific regions and leading universities, their specialization, key types of practical activities, etc. (Fig. 1).

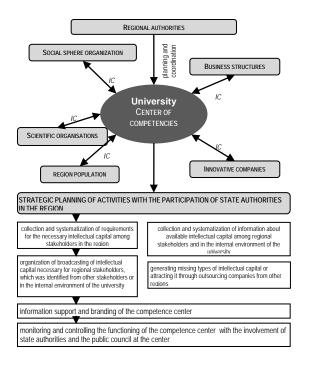


Figure 1. The model of regional centre of competence Compiled by the authors

The literature describes other approaches to the formation of similar structures that have their own specifics and can be used as alternatives for this model.

The concept outlined in the work of Serdyukova (2013) can be used as a basis for the organizational and economic model of concentration and management of intellectual capital on the platform of a leading university. According to the author, the main driver of the development of innovative systems is an adequate understanding, coordination and stimulation of relationships between participants in the innovation process.

Thought factories, which are research organizations that carry out information– analytical, expert and indirect lobbying activities, correlate quite closely with the format of the organization of competence centers (Krakovskaya, 2009).

Depending on the goals of the factory, thoughts can have different formats of activity (Krakovskaya, 2009):

- analytical center;
- virtual team-a working group that includes participants from different cities and countries who interact exclusively via the Internet or special software. This format allows you to attract high-level specialists who are quite specific in their field of activity.

Structuring existing expert communities around the client allows you to implement your information policy with their help, as well as identify high-level narrow professionals for involvement in the client's strategic projects.

In the work of Gitelman and Kozhevnikov (2013). the definition of the competence center as a structure of the sector of highly professional services is given.

The competence center is a structure aimed at finding new knowledge, actively transferring it, and providing consulting, service, and highly professional services. The competitiveness of the competence center is determined by the first-class level and creativity of employees, their motivation to self-development and increase of intellectual capital.

The authors identify the mechanism for creating, updating, storing and distributing new knowledge as an essential

characteristic of competence centers, their identifier, and their difference from other structures. Additional characteristics of the competence centers are the interdisciplinarity of the tasks to be solved, the involvement of specialists from different fields of knowledge, continuous self-training of employees, the use of special methods: teamwork, organizational and activity games, foresights.

4 Conclusions

The concentration of intellectual capital in a leading University, which plays an important role in the regional socio-economic system, is the basis for the development of the total intellectual capital of the territory, which increases its importance and provides a much greater effect than its diversification in various organizations in the region.

The presented model can be implemented to ensure the goals of concentration, coordination, translation and generation of intellectual capital in the region and provide the necessary prerequisites for its effective use.

Literature:

1. Order of the Government of the Russian Federation dated 13.02.2019, No. 207-r (ed. from 31.08.2019) "On approval of the spatial development Strategy of the Russian Federation for the period up to 2025". URL: http://www.consultan t.ru/document/cons_doc_LAW_318094/006fb940f95ef67a1a3fa 7973b5a39f78dac5681/

2. Alasheev, S.Y., Kogan, E.Y., Tyurina, N.V. (2016). *Employer attractiveness of Universities, measurement approaches*, Education Issues, 4, 186–205.

3. Vavilova, E.V. (2008). Competitive behavior of banks in the conditions of increasing concentration and centralization of Bank's capital, abstract of dissertation, Samara state economic university, Samara, 19 p.

4. Golubkin, I.V. and Svetlov, I.E. (2011). The role of intellectual capital of universities in the formation of innovative economy, Statistics and Economics, 5, 9–13.

5. Gordeeva, E.S. (2012). *Concentration of capital in companies with state participation,* abstract of dissertation, Lomonosov Moscow state university, Moscow, 33 p.

6. Egorova, A. (2017). "Smart specialization" is a new round of cluster policy? OECD Russia. URL: http://oecd-russia.org/analytics/umnaya-spetsializatsiya-novyj-vitok-klasternoj-politiki.html

7. Krakovskaya, I.N. (2009). Processes of investing in human capital in the organization's management system, Creative economy, 3(27), 32–43

8. Lukicheva, L.I. (2009). Intellectual capital management, Moscow, Omega-L, 551 p.

9. Makarov, P.Y. (2012). Mechanism of intellectual capital management in the region in the interests of innovative development, abstract of dissertation, Vladimir state university named after Alexander and Nikolay Stoletovs, Vladimir, 155 p.

10. Makarov, P.Y. (2015). *System model of the region's intellectual capital*, Financial Analytics: problems and solutions, 24(258), 45–55.

11. Maltseva, A.A., Monakhov, I.A., Klyushnikova, E.V. (2015). *Intellectual capital management of technology park structures: theoretical and methodological bases*, Tver state university, Tver, 206 p.

12. Maltseva, A.A. (2018). The role of intellectual capital in the development of regions: a review of the results of modern researches. Herald of Tver state university, Series "Economics and management", 1, 242-250.

13. Maltseva, A.A., Veselov, I.N. (2018). Assessment of influence of intellectual capital factors on the activity results of domestic universities, Heralf of Omsk university, Series "Economics", 1(61), 88-105.

14. Prikhach, A.Y., Kyrkalov, V.D., Popova, N.V. (2014). *Allocation of tasks and principles of intellectual capital management in the regional aspect*, XXI century: results of the past and problems of the present plus, 2(18), 191-197.

15. Ruus, J., Pike, S., Fehrnstrom, L. (2008). *Intellectual capital: management practice*. Saint Petersburg: Higher School of management, 436 p.

16. Chub, A.A. and Makarov, P.Y. (2015). Intellectual capital as a factor of sustainable development of Russian regions, Business strategies, 6(14), 24-32. DOI:10.17747/2311-7184-2015-6-5.

17. Gitelman, L.D. and Kozhevnikov, M.V. (2013). *Competence centers are a progressive form of organizing innovative activities*, Innovations, 10(180), 92-98.

18. Serdukova, L.O. (2013). Formation, development and use of intellectual capital in the innovation system, abstract of dissertation, Saratov state technical university named after Gagarin, Saratov, 367 p.

19. Sitnikov, A. (2019). *Think Tanks*. URL: http://www.sitnikov.com/activity/fabriki-mysli-think-tanks/

Primary Paper Section: A

Secondary Paper Section: AH