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**FORMATION OF PREREQUISITES FOR THE INNOVATION –  
DRIVEN DEVELOPMENT OF ENTERPRISES  
BASED ON THE INTELLECTUAL CAPITAL OF THE REGION**

***Abstract.** A promising model for the national economy is the trajectory of an intellectual and innovation-driven type of enterprise development. Only by taking into account regional characteristics of innovation activity and leveraging regional innovation initiatives can the state achieve a breakthrough into the group of highly developed countries. A distinctive feature of the trends in building an information society is the emphasis on information and knowledge, which are possessed and owned by individuals. The intellectual capital generated by them attains a higher level of development compared to traditional forms of enterprise capital. Therefore, its formation, the tools for successful utilization and development, in the context of promoting high-tech adoption, become key factors in building a highly developed society. In such a society, traditional economic concepts of maximizing benefits from limited material resources are being replaced by concepts of continuous scientific and technological advancement, balanced development, and increased competitiveness based on intellectual capital. Thus, intellectual capital is a decisive factor in the activation of innovation-oriented enterprises. The prerequisites for the innovative development of enterprises based on the intellectual capital of the region include the development of the production sector through the enhancement of competitive potential, continuous employee training and education, investment in research and development, the implementation of the latest scientific and technological achievements, the formation of future values and interests of stakeholders, and the development of the information and communication sector.*

**Key words:** enterprise development, innovations, intellectual capital, human potential, prerequisites for innovative development.

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## ФОРМУВАННЯ ПЕРЕДУМОВ ІННОВАЦІЙНОГО РОЗВИТКУ ПІДПРИЄМСТВ НА ОСНОВІ ІНТЕЛЕКТУАЛЬНОГО КАПІТАЛУ РЕГІОНУ

***Анотація.** Перспективною моделлю національної економіки стає траєкторія інтелектуально-інноваційного типу розвитку підприємств. Лише врахування регіональних особливостей інноваційної діяльності, використання регіональних інноваційних ініціатив дає державі шанс для «прориву» до групи високорозвинених країн світу. Відмінною особливістю тенденцій розбудови інформаційного суспільства виступають інформація та знання, носієм і власником яких є особистість. Генерований ними інтелектуальний капітал набуває більш високого ступеня розвитку у порівнянні із традиційними формами капіталу підприємств, тому його формування, інструментарій успішного використання та розвитку в контексті активізації запровадження високих технологій постають ключовими факторами розбудови високорозвиненого суспільства, де на зміну традиційним економічним концепціям одержання максимальних вигод від використання обмежених матеріальних ресурсів формуються концепції безперервного науково-технічного, збалансованого розвитку та зростання конкурентоспроможності на основі інтелектуального капіталу. Тому інтелектуальний капітал є вирішальною умовою активізації діяльності інноваційно орієнтованих підприємств. Передумовами інноваційного розвитку підприємств на основі інтелектуального капіталу регіону є розвиток виробничої сфери через підвищення конкурентного потенціалу, безперервне підвищення кваліфікації та навчання працівників, інвестиції в науково-дослідні роботи, впровадження новітніх досягнень науки і техніки; формування майбутніх цінностей та інтересів стейкхолдерів; розвиток інформаційно-комунікаційної сфери.*

**Ключові слова:** розвиток підприємства, інновації, інтелектуальний капітал, людський потенціал, передумовами інноваційного розвитку.

**Formulation of the problem.** Ukraine entered the 21st century as a dynamically developing state, striving to actively engage in the socio-economic processes of the modern world and integrate into the European community. This direction of development requires central and local authorities to adopt new approaches to the utilization of innovation and human potential, achieving a qualitatively new level of efficiency and competitiveness in the economy and improving the living conditions of the country's and regions' population.

The key to realizing these strategic factors lies in the strong potential of education and fundamental science, new areas of economic activity, human capital, creative abilities, innovation quality, intellectual capital, and innovation culture. Only by considering the regional characteristics of innovation activity and utilizing regional innovation initiatives can the state achieve a "breakthrough" into the group of highly developed countries [6]. Thus, the trajectory of an intellectual and innovation-driven type of enterprise development is becoming a promising model for the national economy.

**Highlighting previously unresolved parts of the overall problem.** The concept of intellectual

and innovation-driven development differs from existing approaches in its prioritization of socio-humanistic orientations, national traditions, and innovation culture. It is characterized by the presence of two groups of factors that influence the features, dynamics, and effectiveness of intellectual and innovation-driven development: direct sources and driving forces. This area of research focuses on strengthening the human factor in scientific, technological, and social transformations within regions. Currently, at the global and European levels, the "education – science – innovation" triangle stands out in societal transformations, and it will become increasingly crucial in shaping the spiritual and intellectual potential of individuals as well as in implementing Ukraine's European integration strategy. Clearly, effective innovations – whether socio-economic, technical, informational, cultural, or political, and whether they are original or borrowed – will not only strengthen the foundations of a knowledge-based economy but will also influence all socio-cultural changes in the country, regions, and individuals during the European integration process.

Despite a significant number of scientific publications on the functioning and development

of social institutions, their impact on innovation processes in the economy, and the formation of intellectual and innovation potential, at the regional level as well, the issues of institutional support for intellectual and innovation-driven development of regional enterprises remain insufficiently explored. This underscores the need to develop conceptual and theoretical foundations for the institutional support of such a development vector for regional enterprises, to identify forms and methods for creating an institutional environment conducive to the stable intellectual and innovation-driven development of regional enterprises, based on an activity-institutional approach, and to formulate recommendations for its practical application in Ukraine's regions.

**The aim of the article:** to characterize the prerequisites for the innovation-driven development of enterprises based on the intellectual capital of the region.

**Presentation of the main research material.**

A distinguishing feature of the trends in building an information society is the prominence of information and knowledge, which are possessed and owned by individuals. The intellectual capital generated by them achieves a higher degree of development compared to traditional forms of enterprise capital. Therefore, its formation, the tools for its successful utilization and development in the context of fostering the implementation of advanced technologies, become key factors in the construction of a highly developed society. In this society, traditional economic concepts of maximizing benefits from the use of limited material resources are being replaced by concepts of continuous scientific and technological, balanced development and the enhancement of competitiveness based on intellectual capital. Consequently, intellectual capital is a decisive condition for the activation of innovation-oriented enterprises, necessitating the identification of new approaches to managing the interaction of production and economic factors based on modern mechanisms for the growth of intellectual capital. This reflects the need of contemporary practice for theoretical frameworks built on the analysis of the development of national intellectual capital concepts within the context of global trends in the intellectualization of the economy and the creative use of existing historical experience.

In the context of global competition, intellectual capital is a decisive factor for the

highly effective development of production and business systems. The management of their development involves the continual generation of new ideas, the stimulation and implementation of innovations across all functional areas, and the updating of technologies in accordance with changes in technological paradigms. Therefore, within this context, the economic capability of an industrial enterprise to develop intellectual capital is of particular relevance, utilizing its own tools and mechanisms that should form the foundation for the enterprise's further development as a complex socio-economic system. Consequently, the issue of directing intellectual capital towards achieving a high level of technological advancement in enterprises requires further scientific investigation.

Today, the identification and effective management of intellectual capital are crucial strategic tasks not only for a country but also for each individual enterprise, considering the importance of its individual level. An individualized approach implies that the value of an entity as a source and owner of intellectual capital is manifested in the results of its intellectual activities, which are transformed into system-forming elements of the value of produced goods or performed services. However, this value can have varying impacts on production processes and factors, depending on employees' roles. Specifically, at an enterprise, the use of intellectual capital of employees engaged in operational activities (production) is distinct, with a separate focus on groups of intellectual labor, such as managers, while also recognizing groups of enterprise owners created by their talent and knowledge. Thus, in this context, intellectual capital is formed as the abilities, talents, and knowledge of the individual (personality).

Intellectual capital of an enterprise is understood as the value of the sum of its intangible assets, including intellectual property, its actual and created intellectual resources, as well as its accumulated knowledge bases and beneficial relationships with other market participants. Therefore, from a practical standpoint, it can be concluded that personal intellectual capital is an integral component of the enterprise's intellectual capital, as it is shaped by a combination of factors and the environment in which the enterprise operates (it is practically impossible to develop such capital at the individual level alone). Thus, only through the collective efforts of the enterprise's employees can intellectual

capital develop and grow, meeting the needs of solving complex operational and strategic tasks. Accordingly, intellectual capital is a leading form of capital and constitutes the foundation of any enterprise. As a result, the primary function of intellectual capital is to significantly accelerate profit growth by forming a system of knowledge, values, and relationships that, in turn, ensure its high-efficiency performance and define the quality of its management system. On the one hand, individual capital arises from the personal ability to develop, and on the other hand, from the conditions created within the enterprise to realize such abilities. Therefore, intellectual capital cannot fully transfer to the ownership of the enterprise, and not all components of the enterprise's intellectual capital involving a particular individual can transfer to them as ownership due to practical issues (such as the complexity of identification, differentiation, and valuation) and the complexity of their solution.

We have concluded that intellectual capital can be viewed as a system of enduring intellectual advantages of a particular enterprise or firm in the market. The more successful the enterprise, the greater the proportion of its intellectual property within its asset structure. Accordingly, the aggregate intellectual capital of enterprises, industries, and regions, through the interaction of various institutions, forms the intellectual capital of the country, the level of which determines its share in global financial flows and global production.

There is a close relationship between innovation, technological development, and intellectual capital – technological development provides innovations with the necessary material and technical resources, while intellectual capital determines the directions and tools for implementing innovations based on lean technologies for utilizing material and technical resources.

Therefore, an important aspect, in our opinion, is creating conditions for the formation of intellectual capital based on a systematic approach. This includes establishing communications both within and outside the enterprise that facilitate the transformation of intellectual potential into intellectual products by creating conditions for intellectual and innovative work, developing highly skilled specialists with strong ethical qualities who are capable of designing and implementing innovations and high technologies across all areas of the enterprise's

activities. It is worth noting that the construction of a communication system should not be based on rigid conditions, as this would ensure a creative approach to the interactions between the system-forming components of intellectual capital. This is because new forms of interaction between economic entities arise daily within the enterprise, organizational structures of various systems are transformed, and new information channels emerge, with their effectiveness translating into profitable activities. Moreover, the effectiveness of communications will also manifest in the functioning of intellectual capital through anticipatory capabilities – developing the ability of highly skilled specialists to rapidly form and implement innovative technologies. This will lead to a set of positive socio-economic outcomes.

Thus, to ensure sustainable development within an enterprise, there is a need to balance scientific, informational, technological, innovative, and communication strategies. These strategies form the basis for the development of intellectual capital and define the tools for its utilization. Such alignment will allow for the establishment of conceptual frameworks for the effective use of components of intellectual capital in an industrial enterprise, which should create a system that is interconnected and integrated into the enterprise's socio-economic processes.

Therefore, the prerequisites for the innovative development of enterprises based on the regional intellectual capital are as follows:

development of the production sector – staying ahead of market trends; increasing production and sales volumes; enhancing competitive potential; continuous improvement of employee qualifications and training; regular updating of technologies; production of new types of products; investment in research and development; implementation of the latest scientific and technological achievements;

formation of future values and interests of stakeholders – creating conditions to ensure consumer loyalty; ensuring satisfaction of owners and shareholders; accelerating the renewal of the social-professional structure of staff; emergence of new progressive forms of professional activity organization; organizing mutually beneficial cooperation with suppliers and buyers;

development of the information and communication sector – increasing production efficiency through digital technologies; network interaction; enhancing the quality of social

capital through improved relationships within the team and automation of production and business processes; accumulating scientific and professional-technical knowledge; conducting activities to foster team cohesion and enhance intellectual and emotional intelligence.

**Discussion.** The increasing role of knowledge and information in socio-economic development has led to significant paradigm shifts in economic research. Through the lens of the spatial paradigm of economics, within the framework of the economic space concept, the development of intellectual and innovative processes is explored, and the impact of economic concentration on the intellectual and innovative development of Ukraine's regions is assessed.

The definition of intellectual capital, along with the structure and interactions of its elements, is reflected in the works of scholars from various countries. Its essence manifests not only in the theoretical representation of numerous economic phenomena and processes but also in its significant practical implications. The approach that views intellectual capital as an integral component of a company allows for an expanded view of its structure. For example, A. Chukhno's conclusion that intellectual capital embodies intangible assets essential for a company's existence in the market, thus strengthening its competitive position, is quite objective [1]. Scholars identify the primary components of a company's intellectual capital as: human capital, structural capital, organizational capital, and consumer capital [3; 5; 8]. Almost all positions considered by scholars agree that the main structural element of intellectual capital is human capital, which encompasses the collective knowledge of employees, their creative abilities, problem-solving skills, leadership qualities, and entrepreneurial and managerial skills. We concur with the author who associates a company's intellectual capital with information and knowledge characterized by their unique role in the production process and specific factors of their use [2]. A.A. Chukhno argues that intellectual capital accumulates scientific and everyday knowledge of employees, intellectual property, accumulated experience, communication and organizational structure, information networks, and the company's image. Consequently, scholars highlight three main components of a company's intellectual capital: human capital, embodied in the employees' experience, knowledge, skills, and innovative abilities, as well as in the company's overall culture, philosophy, and

internal values; structural capital, which includes patents, licenses, trademarks, organizational structure, databases, electronic networks, and technological capital [1].

The experience of developed countries such as Japan, the USA, Switzerland, Denmark, Germany, and others confirms the conclusions of scholars [2; 4; 8] that today the primary wealth of a country lies in its intellectual capital and the organizational mechanisms for shaping societal attitudes towards intellectual values. These values can ensure high economic development, technological advancement, and socio-economic relations even with minimal reserves of fossil fuels and other natural resources. Such countries are capable of creating daily competitive advantages in the scientific, innovative, and technological spheres.

Our research aligns with the thesis that under the implementation of Ukraine's European integration strategy, the role of interregional connections is increasing. Understanding the directions and scales of spatial transformations of the economy in Ukrainian regions is crucial, as this research should support the intellectual and innovative development of regions and the formation of an integrated economic space for the state as a whole. Indeed, the ideas of forming a strong intellectual and innovative potential in Ukraine's regions and their socio-economic integration should become the prerequisites and factors for the further establishment of statehood and strengthening of Ukraine's economic power [7]. In the context of the formation of a pan-European educational and scientific space, and Ukraine's entry into the Bologna Process, the significance of research grows: the potential of higher education in the region; the development of the regional scientific sphere; and the mechanisms for implementing continuous education in the region amid European integration. Additionally, it is essential to substantiate the socio-economic mechanism for improving the quality of higher education, which affects the prospects of state-building innovative processes in Ukraine's regions. The formation of "knowledge regions" based on competitive innovative and educational clusters is also an important issue.

**Conclusions.** Thus, a company's market value and its image in the market are determined not only by the value of its tangible and intangible assets but also by the presence of operational and effective methods and mechanisms for forming,

enhancing, and utilizing intellectual capital compared to competitors. This ensures a strategy for sustainable economic development. It is crucial that the use of intellectual capital and the value it adds should be directed toward achieving goals in innovation and technological development. Therefore, choosing strategic management technologies for intellectual capital within the context of technological development becomes vital for the company. Intellectual capital dictates the pace and nature of technological updates in the company's production and products, which then become the main competitive advantage in the market. Globally, countries that have reached high levels of development are those with advanced education and science, actively implementing high technologies and innovations across all sectors of the economy.

### REFERENCES

1. Chukhno A. A. (2002). Intellectual capital: the essence of form and patterns of development. *Ekonomika Ukrainy*, vol. 11, pp. 48–55.
2. Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance, *Benchmarking: An International Journal*, Vol. 27 No. 4, pp. 1289–1318. DOI:<https://doi.org/10.1108/BIJ-02-2018-0034>
3. Kirdina, O.G., Utkina, Yu.M., Kondratiuk, M.V. (2020). Upravlinnya innovacijnoy diyalnistyu pidpriyemstv v umovax globalnoyi konkurentospromozhnosti [Management of innovative activity of enterprises in the conditions of global competitiveness]. *Visnyk ekonomiky transportu i promyslovosti*, 69, 193–200. [in Ukrainian]
4. Muharam, H., Andria, F., Tosida, E. T. (2020). Effect of process innovation and market innovation on financial performance with moderating role of disruptive technology. *Systematic Reviews in Pharmacy*, 11(1), 223–232.
5. Sokolova, L. V., Veryasova, G. M., Ivanova, V. B., Sokolov, O. Ye. (2020). Teoretyko-metodologichni aspekty pryjnyattya strategichnyx rishen u sferi innovacijno-investycejnoyi diyalnosti promyslovyx pidpriyemstv: situacijnyj pidxid: monografiya [Theoretical and methodological aspects of strategic decision-making in the field of innovation and investment activities of industrial enterprises: a situational approach]. Sumy: Trytoriya, 275–305. [in Ukrainian]
6. Statystychnyj zbirnyk «Regiony Ukrayiny» [Statistical collection "Regions of Ukraine"]. Derzhavna sluzhba statystyky Ukrayiny, 2020, Kyiv, 272 s. [in Ukrainian]
7. Stiuart, T. A. (1999), Yntellektual'nyj kapytal. Novye bohatstva orhanyzatsyj [Intellectual capital. New Wealth of Organizations], New York, London.
8. Xu, X. L., Shen, T., Zhang, X., & Chen, H. H. (2020). The role of innovation investment and executive incentive on financial sustainability in tech-capital-labor intensive energy company: Moderate effect. *Energy Reports*, 6, 2667–2675. DOI: <https://doi.org/10.1016/j.egyr.2020.09.011>

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