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INTELLECTUAL CAPITAL AS A FACTOR OF INNOVATIVE DEVELOPMENT OF ENTERPRISES

ІНТЕЛЕКТУАЛЬНИЙ КАПІТАЛ ЯК ФАКТОР ІННОВАЦІЙНОГО РОЗВИТКУ ПІДПРИЄМСТВ

The article defines the intellectual potential of a company as a set of knowledge, information resources, intellectual products, personnel experience, which ensure its sustainable intellectual advantages in the market, and realization of organizational capabilities used in its production activities. Its main function is defined as increasing profits through the formation and implementation of knowledge systems, information and technological resources necessary for the enterprise, which ensure its highly efficient economic activity. Based on a review of literature and key management functions, the article forms an organizational and economic mechanism of intellectual capital, the implementation of which in practice can maintain and increase the level of competitiveness of market participants, and facilitate adaptation to changing environmental conditions. In the article, the intellectual potential of an individual is understood as a set of mental abilities of a person to cognitive activity aimed at assimilation, understanding of information, its systematization and transformation into knowledge. This includes the totality of intellectual assets available to an individual, including intellectual property, his/her natural and acquired intellectual abilities and skills, as well as the knowledge bases accumulated by him/her and useful relationships with other entities. It has been proved that the process of reproduction of the intellectual potential of managerial personnel includes the consistent implementation of the main stages that ensure the development of the manager's personality in the process of its socialization. The main stages of formation and development of the individual intellectual potential of managerial personnel are proposed and a substantive description of each of these stages is provided. It is determined that at each stage of reproduction of intellectual potential there are many external and internal factors that affect the intensity, scale, methods and techniques of the reproduction process. In the context of innovative economic development, when education becomes the most important prerogative of activity, the development of intellectual capital is carried out throughout the entire life cycle, both as a result of education and training and in everyday life.

Key words: intellectual capital, intellectual potential, innovative development, personality, development, economy.

В статті інтелектуальний потенціал компанії визначено як сукупність знань, інформаційних ресурсів, інтелектуальних продуктів, досвіду персоналу, що забезпечують її стійкі інтелектуальні переваги на ринку, реалізацію організаційних можливостей, що використовуються у своїй виробничій діяльності. Його головну функцію означено у збільшенні прибутку за рахунок формування та реалізації необхідних підприємству систем знань, інформаційних і технологічних ресурсів, які забезпечують його високоефективну господарську діяльність. На основі огляду літератури та ключових функцій менеджменту в статті було сформовано організаційно-економічний механізм інтелектуального капіталу, реалізація якого на практиці здатна підтримувати та підвищувати рівень конкурентоспроможності суб'єктів ринку, сприяти адаптації до змінних умов зовнішнього середовища. Під інтелектуальним потенціалом особистості в статті розуміється сукупність розумових здібностей людини до пізнавальної діяльності із засвоєння, усвідомлення інформації, її систематизації, перетворення на знання. Сюди включається сукупність наявних у неї інтелектуальних активів, включно з інтелектуальною власністю, її природними і набутими інтелектуальними здібностями та навичками, а також накопиченими нею базами знань і корисними відносинами з іншими суб'єктами. Доведено, що процес відтворення інтелектуального потенціалу управлінських кадрів включає в себе послідовну реалізацію основних етапів, що забезпечують розвиток особистості керівника в процесі її соціалізації. Запропоновано

основні етапи формування та розвитку індивідуального інтелектуального потенціалу управлінських кадрів та надано змістовну характеристику кожного з цих етапів. Визначено, що на кожному з етапів відтворення інтелектуального потенціалу діють безліч зовнішніх і внутрішніх факторів, що впливають на інтенсивність, масштаби, способи та прийоми відтворювального процесу. В умовах інноваційного розвитку економіки, коли освіта стає найважливішою прерогативою діяльності, розвиток інтелектуального капіталу здійснюється протягом усього життєвого циклу, як у результаті здобуття освіти та підвищення кваліфікації, так і в умовах повсякденного життя.

Ключові слова: інтелектуальний капітал, інтелектуальний потенціал, інноваційний розвиток, особистість, розвиток, економіка.

Formulation of the problem. Dynamic development of modern society is possible only on the basis of intensive, sustainable, targeted development and reproduction of the individual, his or her intellectual and creative capabilities. The world's leading corporations focus on the uniqueness and exceptional value of each employee's contribution and the targeted and maximum use of their intellectual potential, which is the basis for the reproduction of corporate capital.

The intellectual capital of individual employees forms the intellectual potential of society, which is a key factor in the formation of an innovative economy. In such an economy, the main strategic resource for development is people with knowledge, professional competences, capable of intellectual activity, continuous education and enhancing their creative potential. In the current national literature, there is no consensus among scholars in their approaches to understanding the concept of «intellectual potential». A number of researchers use the output approach as an indicator of the state of intellectual capital, which makes it possible to achieve strategic development goals. The resource approach is based on the thesis that the intellectual potential includes a special set of material, natural, labor, financial, and information resources that form the basis of social production and socio-economic development. The systemic evaluation approach focuses on the study of intellectual potential as a systemic unity of means and objects of labor, employees themselves and the relations between them, their skills, motives and incentives, labor traditions that have developed over many years, which determine the level of development of the economy and its ability to realize the intellectual capabilities of a person and society.

Analysis of recent achievements and publications.

The study of intellectual capital has been carried out by both foreign and domestic economists: E. Brookings, B. Leontief, L. Melnyk, D. Duffy, A. Zharinova, T. Stewart. The history of human capital assessment was studied by Y. Sokolov. Of particular importance is determining the role of intellectual capital in the basis of innovative development of an enterprise.

The purpose of the article is to study such phenomena as intellectual and human capital; to study the totality of intellectual resources and the ability to implement them; to determine the role of intellectual capital in the basis of the innovative development of the enterprise.

Presentation of the main material. In the era of knowledge-based economy formation, the first place is occupied by the appeal to a person and his/her potential as a source of national wealth, understood in a broad sense, and not as a factor of profit [8]. Under these conditions, intellectual potential should be considered as a strategic component of intellectual capital, a cumulative intellectual resource accumulated by society that has the ability to participate in labor activity, produce quality products, generate income, and successfully adapt to changing conditions through the use of modern technologies, management systems, improvement of equipment, development of new markets, and increase in production and sales. Intellectual potential, in its most general form, is the totality of human knowledge in various aspects of the development of nature, society, culture, science and technology. It can also be considered in the context of existing and potential opportunities for the development of an organization, provided that intellectual resources are used rationally to achieve the set goals.

The formation and development of the intellectual potential of society is ensured by the organization of the system of education, upbringing, scientific and research activities, advanced training and retraining of personnel, and self-education. Its functioning depends on the state governance system established in the country, the functioning of its institutions, financing of education, science, culture, healthcare, investment in improving labor conditions, employment, environment, and social infrastructure. environment, and social infrastructure. The creation of an effective system of intellectual potential management makes it possible to maintain the level of development of intellectual and creative capabilities, resources of the country, industry, and individual, and to preserve the genetic fund of society.

The company's intellectual potential is a set of knowledge, information resources, intellectual products, and personnel experience that ensure its sustainable intellectual advantages in the market and the realization of organizational capabilities used in its production activities. Its main function is to increase profits through the formation and implementation of knowledge systems, information and technological resources required by the company, which ensure its highly efficient business operations.

The company's intellectual potential is transformed and developed under the influence of the following components

- professional potential as «a set of specific knowledge, skills and abilities to perform managerial and production functions» [4];
- innovative potential, expressed in the ability of employees to implement innovative activities to put forward scientific ideas, develop technologies and mechanisms for intellectualizing labor processes, production of goods and services;
- spiritual and moral potential, which includes personal qualities, values of society, morality and norms, which, together with professionalism, knowledge and skills, can become effective regulators of activities,
- information potential, which determines the ability of an individual to perceive, process information, evaluate and work with information technologies.

Intellectual capital management as a factor of competitiveness was considered by such authors as [2; 5; 8]. Based on the literature review and the key management functions, we have formed an organizational and economic mechanism of intellectual capital, the implementation of which in practice can maintain and increase the level of competitiveness of market participants, and facilitate adaptation to changing

environmental conditions. This mechanism is presented in Figure 1.

The formation actively influences the intellectual potential of enterprises. The main factors of such influence are changes in the organizational structure of management, nature and content of investments. In the new conditions of functioning, knowledge rather than an official position becomes the leading source of management, which contributes to the transition of management activities from functional specialization to horizontal integration based on intellectual cooperation. The investment policy of enterprises is focused on staff training, professional development and retraining, knowledge transfer to employees (outsourcing, consulting services, provision of specialized literature, information and specialized sources), investment in R&D, information technology, equipment and tangible assets, planning and motivation of employees' career growth, healthcare and social security.

In recent years, the economic literature has increased the attention of scholars to understanding the substantive characteristics and a set of professionally important qualities required by management personnel for active innovation. According to most researchers, the professionally important qualities of a manager are understood as generalized, most stable characteristics of

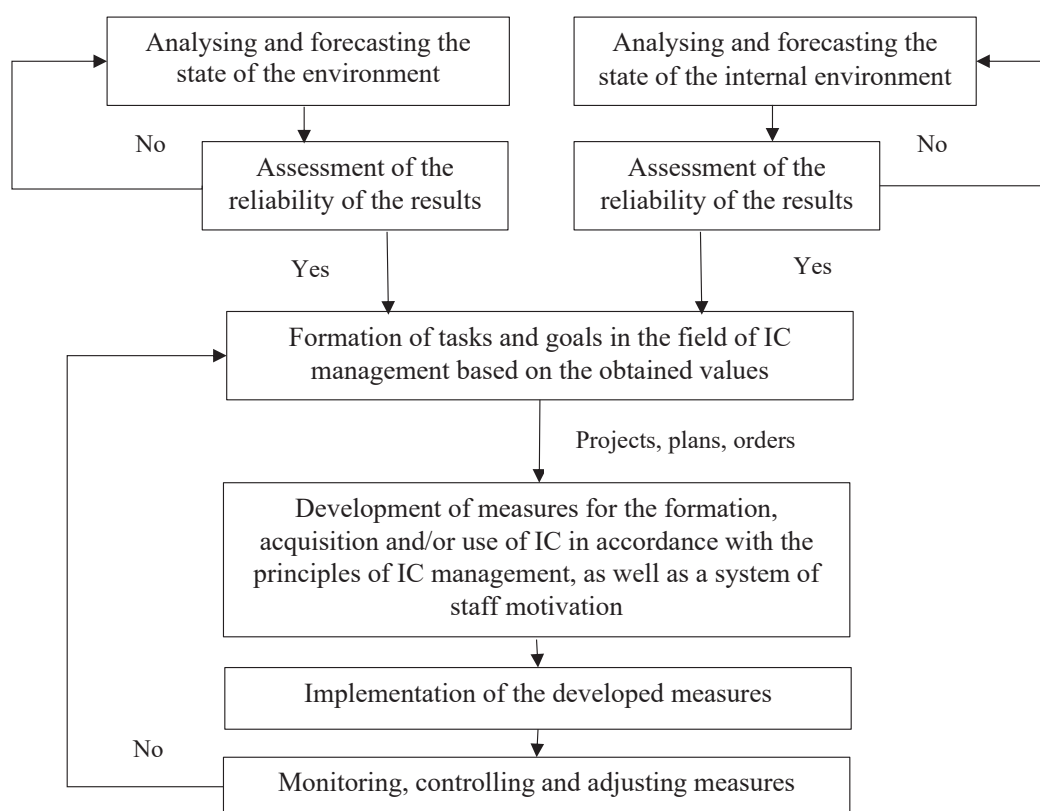


Figure 1. Organizational and economic mechanism of the intellectual capital of a regional enterprise [compiled by the author]

a personality that have an active influence on managerial activity and create an opportunity to achieve the set goals with positive results. They include qualities that affect the efficiency of work in terms of its main characteristics of productivity and reliability [5], which depend on individual personality traits, professional knowledge, skills and abilities, qualifications and professional orientation, accumulated experience, nature of work, socialization conditions, ability to communicate with the outside world.

According to a number of authors [3, 6], the most important professional qualities of management personnel that ensure the realization of the innovation potential and reproduction of corporate intellectual capital of an enterprise include

- professional, organizational and managerial competence;
- ability to act effectively and use intellectual potential in specific working conditions;
- the presence of a special type of perception and motivation, the ability to make decisions under conditions of risk and uncertainty;
- the ability to think strategically and analytically, to carry out a comprehensive analysis of the situation, to predict the consequences of decisions;
 - ingenuity and readiness for creative innovation;
 - readiness for continuous personal growth and professional training;
 - ability to form effective working groups for innovative activities and work in a team;
 - knowledge of modern management approaches;
 - organizational and communication skills;
 - ability to manage oneself, self-control and stress resistance;
 - confidence in their abilities and the capabilities of enterprises to successfully achieve their goals and objectives;
 - high moral and ethical qualities;
 - creative abilities, creativity, intellectual potential.

The analysis shows that innovative transformations at enterprises are usually accompanied by significant changes in the social and psychological environment, which becomes more anxious, aggressive and demanding towards participants in professional interaction. Under these conditions, the functional requirements for managerial personnel change significantly, bringing to the fore the implementation of explanatory, evaluative, regulatory, prognostic, informational and other communication actions aimed at transforming the conflict situation and building the organizational space correctly.

The personal factor plays an important role in the system of communication interaction. This factor determines the professional position of the individual in the process of communication, including in a conflict

situation, the development of a tactical line of behavior in a conflict, the formation of ways to achieve the goal, etc. The lack of professionally important personal qualities, low level of conflict competence and culture in general often leads to unproductive professional behavior, professional deformations, burnout, and an increase in the number of conflicts with others. The role of communication and socio-psychological competence in the innovative work of managerial personnel should be particularly noted, as this activity includes not only solving professional problems, but also the implementation of innovative technologies in production practices and justification of the need for decisions for the organization and employees.

The intellectual potential of a person is understood as a set of mental abilities of a person to cognitive activities for assimilation, understanding of information, its systematization, and transformation into knowledge. This includes the totality of intellectual assets available to a person, including intellectual property, his or her natural and acquired intellectual abilities and skills, as well as knowledge bases and useful relationships with other entities.

The main carrier of intellectual potential is the company's staff, whose qualitative characteristics, along with creative potential, form a kind of «creative creative mentality» that is the driving element of corporate intellectual capital. In general, intellectual potential is a human asset formed in the course of employment and professional training that consolidates not only the general scientific and professional knowledge of employees, but also their potential ability to solve complex thinking problems, enabling an individual to learn new knowledge, skills and intellectual abilities at a high rate [5].

The main characteristic features of the reproduction of the intellectual potential of a person include

- individual character and qualitative characteristics of intellectual potential accumulation related to natural qualities of a person, his/her socialization, creative and communication abilities, desire to systematically improve his/her qualification and cultural level;

- substantive characteristics of the reproduction of intellectual potential. They can be both simple and extended, with possible periods of not only competence accumulation, but also with elements of reduction and social degradation that occur in unfavorable social conditions of life. The scale, level and nature of reproduction depend on the strategic orientation of economic policy allocated to the development of the intellectual potential of financial and organizational resources. intellectual potential of financial and organizational resources of the state, efficiency of the state management system, interest of business structures and their financial and economic potential, level of

material capabilities of the family and the desire to invest in the professional growth of its members for the provision of quality education of children, individual abilities and The creative potential of an individual is influenced by the stability of the political system, the state of the economic and social spheres of society, the functioning of social institutions, the level and quality of governance, and human resources. governance, human resources, development of social infrastructure, and the quality of life of citizens;

– significant time and financial parameters of the process of reproduction of intellectual potential. As a rule, the duration of the investment cycle takes 16-25 years and includes the ever-increasing cost of education, healthcare and information support;

– the process of socialization of the individual, which includes both direct and indirect influence on the formation of reproduction of intellectual potential. The direct influence on the individual is exerted by the subjects of the management and education system, which use various social technologies and mechanisms for the purposeful formation and development of the intellectual, general cultural and professional level of the individual. External factors related to a person's environment and communications have an indirect impact on personality formation;

– expansion of communication opportunities through the development of information technologies and social networks. The technologies of distance learning, press mediation, publicity, marketing

communications, information management, obtaining and providing free consulting services in educational forums, blogs, online directories, encyclopedias and other resources are gaining ground [4].

The successful functioning of an enterprise largely depends on the reproduction of the intellectual potential of managerial personnel, which is carried out in the process of their institutional development. The main subjects of the reproduction process are:

1) households, where the foundations of socialization of the individual are laid, intellectual potential is formed at the individual level, and the individual develops as a subject of rational or irrational labor activity and accumulation of intellectual resources;

2) state institutions, organizations and agencies that provide professional knowledge and competence development of managerial personnel, organization of 'social investment' through the formation and implementation of public expenditures on social policy;

3) state-owned and non-state enterprises and organizations employing managerial personnel.

The process of reproduction of the intellectual potential of managerial personnel includes the consistent implementation of the main stages that ensure the development of the manager's personality in the process of its socialization (Table 1).

The first stage of primary socialization involves the formation of the physiological foundations of the organism and its individual consciousness, the

Table 1

Main stages of formation and development of individual intellectual potential of managerial personnel [developed by the author]

Formation of the IC	Stages of formation				
	Primary socialization	Basic intellectual	Vocational and educational	Accumulation and release	Return and depletion
Subjects of influence	Family, state			Enterprise, family, state	Family, state
Educational institutions	Preschool	School	Vocational education	Retraining and professional development	
Directions	Education	General education	Vocational education	Labor activity	Retirement period
Goals and objectives	General cultural, moral	Intellectual and educational	Vocational and educational	Labor, intellectual, organizational and professional activities	Transfer of experience and knowledge
Sources of investment	Expenditures of family (relatives), state budget expenditures			Own expenses, enterprise assets	Expenditures of family (relatives), state budget expenditures
Conditions for effective impact	Welfare, active social policy of the state, training of highly qualified personnel		Improving the quality of professional training, creating an effective system of teacher training and motivating teachers	Strong family relationships, opportunities for professional development and retraining, psychological climate at the enterprise, motivation for employee self-development	

formation of worldview and general cultural attitudes and norms of communication, the development of basic knowledge, skills and norms of human coexistence, and the establishment of behavioral attitudes. The most important subject of socialization of a person is the family, which instils in the child general cultural, moral and aesthetic values, life principles of behavior, and norms of communication interaction. The state creates the conditions and ensures effective socialization of the younger generation through the organization of the activities of relevant educational institutions, training of highly qualified educators and staff of pre-school and additional education institutions.

The second stage involves further socialization of the individual, forming the fundamental basis of his or her intellectual potential necessary for future management activities. Integrative personal characteristics (cognitive need, ability to predict and evaluate, expanding vocabulary), components of mental development (originality and flexibility of thinking, memory, concentration, ability to analyze and synthesize) are developed, worldview guidelines, skills of cultural, moral and aesthetic perception of the world around them are consolidated, and individual abilities and orientations of children are revealed. During this period, families and the state make active investments in children.

At the third stage, the fundamental foundations for the professional training of future managers are laid, their personal potential (intelligence, emotional stability, leadership skills, temperament, self-organization, creativity), social qualities (sociability, conflict culture, social responsibility and socio-psychological adaptation) are formed, and professional managerial competencies (organizational skills, management culture, efficiency, ability to make managerial decisions, stress resistance, rationality, and The formation of a knowledge-based society involves the formation of a system of continuous professional education aimed at developing professional and innovative competences of graduates with integrated knowledge, skills and abilities, competitive, fluent in their profession and oriented in related fields, ready for creative activity, research, erudite, free and critical thinkers.

At the same time, the analysis shows that a significant gap between the requirements of employers in the labor market and the knowledge, skills and abilities acquired by young professionals in the course of their studies has not yet been bridged.

At the fourth stage, the accumulation and realization of intellectual capital continues. This stage involves the development of an employee's professional and personal competences, their level of skills, qualifications and

experience, enhanced professional mobility, expansion of the range of specialization, and mastery of modern algorithms and methods of solving professional problems, which allows them to work with high productivity. At this stage, investments in human capital are made directly by an individual or an enterprise interested in improving the intellectual resources of employees.

The final stage is the return and depletion of intellectual capital. The end of working life and retirement are associated with a decrease in the physical and physiological capabilities of the human body, a reduction in its labor and creative activity, the ability to perceive new information, and the loss of certain professional skills and competences. The company's management should be sensitive to the period of decline in the employee's business activity, intensify the process of transferring the accumulated experience to the younger generation, allowing both to maintain proper interaction between generations and to reproduce the intellectual potential. During this period, the amount of investment by individuals and organizations decreases, and the state and family need to participate in supporting the individual's vital activity.

At each stage of the reproduction of intellectual potential, there are many external and internal factors that affect the intensity, scale, methods and techniques of the reproduction process. In the context of innovative economic development, when education becomes the most important prerogative of activity, the development of intellectual capital is carried out throughout the life cycle, both as a result of education and training and in everyday life.

Conclusions. Thus, the reproduction of intellectual potential is carried out by various social institutions that ensure the effective development of human abilities as a concentrated expression of knowledge, skills, competences and the level of motivation of the individual. This process is carried out through the creation and use of modern technologies for the development of creative abilities of the individual, the organization of a continuous education system, improvement of the infrastructure in the field of information and new technologies, etc.

Thus, the analysis made it possible to identify the moment when intellectual capital began to be seen as a competitive advantage. It is intellectual leadership as a combination of product functionality and core competencies that is becoming a key success factor. In view of this, we have developed an organizational and economic mechanism of intellectual capital, which aims to maintain and increase the level of competitiveness of market players.

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