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COGNITIVE TRANSFORMATIONS OF THE WORLD KNOWLEDGE MARKET

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КОГНИТИВНІ ТРАНСФОРМАЦІЇ СВІТОВОГО РИНКУ ЗНАНЬ

It is well-founded that a feature of the development of the knowledge economy is creativity, because if the key factor of the knowledge economy is an intellectual product, and the innovative economy focuses on the ways of using this knowledge, then the task of the creative economy is to provide conditions for the generation of ideas as means of transformation into a qualitatively new product. Since the second half of the 20th century, the global economy has undergone rapid transformational development from the economy of knowledge, through innovation, to the economy of creativity. At the same time, if such terms as "knowledge economy", "innovative, information and intellectual economy" are often used as synonyms, then the concept of creative economy is filled with new meaning and acquires new features and properties. It has been proven that in the modern world, a qualitatively new creatological formation is being formed at a rapid pace, the semantic core, organizing principle, essential criterion and highest goal of which is creativity. Creatological formation constitutes a complete fundamental education, a special cultural and creative space that includes such relatively independent spheres and autonomous worlds as creatogenic society, creative economy, total art and universal creative personality. The content of the latest trends in the development of the theory and practice of competition as a result of the evolution of modern scientific thought and contradictory processes of global world development leads to a conclusion about the qualitative nature of the changes that have taken place.

The synthesis of different approaches to the definition of the knowledge economy allows us to consider it as an institutional model of a modern economic system of the innovative type, based on the priority of intellectual property, creative work, knowledge-intensive production, continuous education and the growth of needs for self-realization. The knowledge economy is the newest stage of the institutional evolution of capitalism. For a more detailed understanding of the features of the knowledge economy, it is advisable to analyze the interpretation of the term "knowledge economy" by both domestic and foreign scientists. In the knowledge economy, the return, on the contrary, is increasing. This is due to the most important difference between knowledge and material objects, which is that knowledge and ideas are inexhaustible, and therefore the law of diminishing returns cannot be applied to them.

Обґрунтовано, що особливістю розвитку економіки знань є креативність, адже якщо ключовий фактор економіки знань — це інтелектуальний продукт, а інноваційна економіка акцентує увагу на шляхах використання цих знань, то завдання креативної економіки — забезпечення умов для генерування ідей засобами трансформації в якісно новий продукт. З другої половини ХХ століття глобальна економіка набула стрімкого трансформаційного розвитку від економіки знань, через інноваційну, в економіку творчості. При цьому, якщо такі терміни, як "економіка знань", "інноваційна, інформаційна та інтелектуальна економіка", часто використовуються як синоніми, то поняття креативної економіки наповнюється новим змістом і набуває нових ознак і властивостей. Доведено, що у сучасному світі швидкими темпами формується якісно нова креатологічна формація, смисловим ядром, організуючим принципом, сутнісним критерієм і вищою метою якої є творчість. Креатологічна формація становить цілісну фундаментальну освіту, особливий культурно-творчий простір, що вміщує такі відносно самостійні сфери і автономні світи, як креатогенне суспільство, креативна економіка, тотальне мистецтво і універсальна творча особистість. Вивчено зміст новітніх тенденцій розвитку теорії і практики конкуренції як результату еволюції сучасної наукової думки і суперечливих процесів глобального світового розвитку призводить до висновку про якісну природу змін, що відбулися.

Синтез різних підходів до визначення економіки знань дозволяє розглядати її як інституційну модель сучасної економічної системи інноваційного типу, засновану на пріоритетності інтелектуальної власності, креативній праці, наукомісткого виробництва, безперервної освіти і зростання потреб у самореалізації. Економіка знань — новітня стадія інституційної еволюції капіталізму. Для більш детального розуміння особливостей економіки знань, доцільно проаналізувати тлумачення терміну "економіка знань" як вітчизняними так і зарубіжними вченими. В економіці знань віддача, навпаки, зростає. Це обумовлено найважливішою відмінністю між знаннями і матеріальними об'єктами, яка полягає в тому, що знання та ідеї невичерпні, а отже, закон спадної віддачі до них не можна застосувати.

Key words: knowledge economy, knowledge, transformation, changes, global economy.

Ключові слова: економіка знань, знання, трансформація, зміни, глобальна економіка.

FORMULATION OF THE PROBLEM

In the conditions of the development of the knowledge economy, assets based on knowledge are turning into a key factor in the development of TNCs. Accordingly, a company's ability to manage its intellectual capital is one of the defining competencies that enable it to deliver increased value to business owners. Thus, the prospects for the development of TNCs in the knowledge economy largely depend on their ability to manage intellectual capital. Due to the fact that the share of tangible assets in the market capitalization of companies in developed markets decreased to 16% by the beginning of the 2021st (at the end of the 2000s it was 52%), the relevance of the study of intellectual capital as a key factor in the success of transnational corporations will only grow. It is obvious that in different industries the degree of influence of individual elements of intellectual capital on the performance of TNCs will be different, because even in developed markets, intellectual capital can play a diverse role in the activities of transnational corporations. That is why, in the conditions of the development of the knowledge economy, a necessary condition for the development of TNCs is the justification of the components of the universal model of TNC knowledge management.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

The analysis of recent studies and publications has shown that in multinational companies, the knowledge management system is one of the important assets that integrates databases, documents, policies, procedures, previously unstudied knowledge and experience of individual employees. This approach ensures sustainable socio-economic development and forms the competitiveness of TNCs. That is why it is extremely important to study the cognitive transformations of the global market of knowledge.

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The purpose of the article is the justification and description of the components of the universal model of knowledge management of TNCs, including the analysis of indicators and measurements of intellectual capital, the definition, definition and description of the components of the universal model of knowledge management of TNCs.

MATERIALS AND METHODS

The method of analysis and synthesis, the method of synthesis, description and dialectics was used to write the article. The research information base is scientific publications and statistical materials of leading TNCs.

RESEARCH RESULTS

The transformation of modern society began with the transition of the most developed countries to an economy based on knowledge, the foundation of which is the value realized in intangible assets. During the development of social production, knowledge in various forms turns into a systematic and continuous phenomenon, a characteristic feature of which is a fixed monopoly on rent factors; the economy, where intellectual rent begins to play a decisive role in the total amount of income, turns into an economy based on knowledge. Modern conditions for the use of knowledge as a resource envisage orientation primarily on market mechanisms of functioning and formation, equivalence, payment and specificity. One of the main tools of the knowledge economy is the functioning of the global knowledge market. The market is a system of economic relations based on exchange relations, that is, on the payment and price of purchased goods and services. It can be argued that the knowledge market is a set of economic relations that are established between producers and sellers of knowledge, affecting their supply, and buyers (consumers) of these goods and services, which form the demand for them through the purchase and sale of the latter. In our opinion, the market of knowledge and its exchange is a new market that can be classified according to several features, including:

- subjective belonging of knowledge: global knowledge market; knowledge market of national importance; market of corporate knowledge; the market of knowledge of individual individuals;

- nature of purpose of knowledge: scientific (fundamental and applied); ordinary; entertainment and leisure; moral and ethical;

- fields of knowledge: knowledge market segments in the field of economic, humanities, natural sciences, etc.;

- by the form of manifestation: market segments of explicit and implicit, codified and non-codified knowledge;

- by the method of formation: segments of the knowledge market formed on the basis of already existing knowledge, and knowledge generated independently by specialists on the basis of relatively little explicit (codified) knowledge;

- by the form of use: segments of the knowledge market alienated from the carrier (human) and non-alienable knowledge;

- forms of sale of knowledge, etc.

It is also important to note that the knowledge market as an institution is significantly different from traditional markets, as it is represented by the following components: knowledge ownership institutions (copyright and patent law, laws protecting intellectual property); the actual market (knowledge, services, labor, rights; market platforms, in particular the exchange of technological companies, peculiarities of pricing); innovative managers; consulting companies; judicial system (execution of contracts); incubators, innovation zones, technological parks, exhibitions.

As you know, according to the economic purpose of the objects of market relations, the following are distinguished: the commodity market, the resource market, and the financial market. We are used to perceiving these markets as separate elements of the market system. In fact, they are coherent. And an example of this is the market of knowledge, which permeates the entire system of markets: the commodity market as a good, the resource market as a resource, and the financial market as an intangible asset. The market of knowledge is a connecting link that unites the system into a single whole, the specificity of which is expressed in the following. First, this market is the most open compared to other types of markets in the single market system. Knowledge transfer can be carried out using information and telecommunication technologies practically in real time. This, on the one hand, creates enormous opportunities for the development of the knowledge market, and on the other hand, creates the problem of paid creation, distribution, replication and use of knowledge.

Secondly, knowledge assessment is characterized by multivariation. That is, from the position of the producer and the seller, knowledge as a product is evaluated at the time of sale, and the buyer (consumer) — with regard to the long-term perspective (for example, educational services, acquisition of patents, licenses, etc.). The importance of knowledge as a resource is growing rapidly, and its volume is increasing at such a speed that the knowledge market already has various organizational forms: a network of centers for the translation of various knowledge (inventions, discoveries, textbooks, etc.) into electronic form (content); creation of digital repositories; technology transfer; creation of "knowledge cities" and

"knowledge regions" that possess developed intellectual resources and are the main market players; knowledge auctions, knowledge exchanges; purchase or rental of specialists, provision of consulting services, in particular in real time; outsourcing. From our point of view, this is a form of relationship in the economy between those who produce and sell knowledge that affects the supply, and those who buy it, that is, consumers of this knowledge, who form the demand for their goods through the process of buying and selling [1].

The importance of knowledge as a resource is constantly growing, and its volume is increasing even faster. The newly created knowledge market has the most diverse forms of organization: centers are engaged in the translation of various new knowledge — inventions, developments, discoveries, manuals, textbooks, etc. — into electronic form: content, creation of special digital data repositories, implementation of technology transfer, creation of so-called knowledge cities and regions, which have powerful intellectual resources and are the main participants of such a market; auctions and knowledge exchanges; purchase or rental of specialists, provision of consulting services; transfer of company functions to independent contractors. The knowledge market contributes to the continuous and constant development of knowledge, as it can become morally obsolete very quickly, and therefore requires constant updating to a higher level that meets the needs of the consumer. The market of knowledge forms in consumers the same attitude to knowledge as to any other product, and the understanding that the knowledge economy is an economy where knowledge is a commodity.

The main participants of the knowledge market are buyers, brokers and sellers of knowledge. Buyers (seekers) of knowledge are specialists or organizations that try to solve problems, the complexity and uncertainty of which are higher than their a priori knowledge. Buyers of knowledge are looking for intuitive approaches, assessments, understanding of a problem because such information is of exceptional value to them. The acquired knowledge will allow to find the necessary solution to the problem, increase the efficiency of the activities of specialists, groups, teams, managers of one or another level. Sellers of knowledge are, as a rule, specialists (experts) with a high reputation in the domestic market, who possess significant resources of knowledge on certain problems and topics. Among them there are those who have qualifications, but are not able to clearly express their knowledge in a clear, marketable form. Others have deep, but highly specialized knowledge of a specific field of application, which significantly reduces their value on the knowledge market [2].

There are also those who consider it necessary to keep their implicit (hidden) knowledge to themselves. Such an opinion in some cases has certain grounds. If knowledge is power, then the owner of knowledge can lose this power if other specialists master his knowledge. Of course, this is not in his interests. One strategy of smart market behavior for knowledge sellers is to ensure that the sale of knowledge is rewarded more than its hidden accumulation. Knowledge brokers act as a link between those who need knowledge and those who have it, that is, between buyers and sellers. Their tasks are to investigate organizations, find out the

competences and specialization of employees, their subject area and level of knowledge. That is, these specialists have information, to whom and for what problems they can turn to in search of missing knowledge. Some informal knowledge brokers are essentially knowledge hunters. They deliberately become experts in the dislocation of knowledge in the organization and very often "sell" this knowledge and experience not for money, but for reputation, thereby serving the internal knowledge market.

Knowledge becomes a decisive economic resource on the basis of the following patterns of development of productive forces in the scientific and technological era: first, due to the replacement of natural resources with man-made resources; secondly, due to labor savings, its mechanization and automation: replacing workers with machines leads to labor savings, since the use of machines, as a rule, is more productive than non-mechanized labor; thirdly, due to the saving of physical capital: replacing less productive machines with more productive ones, and their, in turn, with high-tech equipment helps to save not only labor, but also investments, since each subsequent, more technological unit of physical capital is more efficient and more productive; fourth, due to the replacement of natural, material and labor components of production with intellectual ones (high technologies, computer support, etc.) [3].

It is important to note that the category of "knowledge" has always been of interest to researchers — representatives of economic science. They interpreted knowledge primarily in connection with the process of reproduction. Thus, A. Smith first indicated the role of knowledge in some types of activities in the doctrine of division of labor, suggesting that in some professions the division of labor is stronger than in others, others require only highly specialized skills, while others require a wider or more general set of skills. At the same time, K. Marx considered the category of "knowledge" in connection with the reproduction of fixed capital. He believed that "the development of fixed capital is an indicator of the extent to which social knowledge is transformed into a direct productive force, and hence — an indicator of the extent to which the conditions of the social life process itself are subject to the control of the general intelligence and are transformed in accordance with it. In this case, he attached great importance to "general public knowledge" as a direct productive force of society. The American scientist K. Menger considered knowledge about the effective use of production factors and resources to be the most important factor in economic progress. A. Marshall expressed the opinion that "a significant part of capital consists of knowledge and organization. Knowledge is the most powerful engine of production. He considered knowledge as a necessary factor in the implementation of entrepreneurial activity, which ensures the acceleration of changes "that are constructively maturing in society, investigated the importance of "technological improvements" and "new inventions" for expanding and increasing the efficiency of production.

In 1945, F.A. von Hayek suggested considering the impact of new knowledge on economic and production processes, and in 1957, A. Downson, based on Hayek's works, developed a classification of new knowledge. It should be noted that F. Hayek and J. Schumpeter,

representatives of the Austrian economic school, took into account the importance of using new knowledge in economic processes. The outstanding economist G. Simon also considered knowledge as a necessary condition and driving force of economic development. S. Kuznets emphasized that the growth of the baggage of useful knowledge and the expansion of the spheres of their application constitute the essence of modern economic growth. According to academician V. Makarov, "production of knowledge is a source of economic growth.

Already in the mid-70s of the 20th century, P. Drucker defined knowledge as the main resource that distinguishes business and gives it decisive competitive advantages. E. Toffler also believes that knowledge has a powerful creative potential and taking into account the trends, namely the struggle for the possession of information, it can completely replace material resources [4]

It is safe to say that by the 1980s, two main approaches to assessing the role of knowledge in the economy had developed in world economic thought. The first of them reflects the attempts of neoclassical economics to incorporate technological knowledge, which is generated through research activities, into the analysis of economic equilibrium. The second approach is based on the teachings of J. Schumpeter and highlights knowledge as a learning process, incorporating a set of abilities and competencies that contribute to economic changes.

The analysis of the evolution of the category "knowledge" shows that at the first stages of the development of economic thought, the object of research was a person and his personal knowledge. The subject of research was the accumulation of knowledge through education, its distribution and practical use. The role of knowledge as a factor of production grows significantly over time, and since the middle of the 20th century, knowledge has turned into the main driving force of socio-economic development, and the object of research is knowledge in the system of industrial relations, the subject of research is obtaining benefits from the use of knowledge and its transformation from intellectual to financial capital. Today, knowledge is not only the main value of any sector of the economy, but also the main resource that provides a strong competitive advantage to business entities at the micro— and global level.

CONCLUSIONS

The knowledge paradigm declares the defining features of innovative competition: first, the innovative character of competitive advantages, the priority role of knowledge accumulation, innovative activity for achieving market success; secondly, the non-conflictual, integrative character of the competitive interaction of the participants. Thus, it can be argued that cognitive competition is an inherent principle of integrative competitive interaction, which involves the predominance of integrative forms of competitive behavior ranging from coordination to constructive interaction and competitive cooperation. In practice, this principle leads to a change in the forms of competitive behavior, which is embodied in the competitive strategies of the subjects of the world economy, aimed at moving away from confrontation with the help of incorporating the strategies of competitors and taking

them into account in their activities, as well as in the strengthening of integration trends within the framework of the globalized world economy in the long term.

Summarizing the above, we can conclude that radical changes are taking place in modern society, leading to the dominance of knowledge as a factor of social development. At the beginning of the 21st century, it must be said that knowledge is becoming a decisive economic resource based on the following patterns of development of productive forces in the scientific and technological era: first, due to the replacement of natural resources with man-made resources; secondly, due to the saving of labor, its mechanization and automation: the replacement of working machines leads to labor savings, since machines, as a rule, are more productive than non-mechanized labor; thirdly, due to the saving of physical capital: replacing less productive machines with more productive ones, and replacing them with high-tech equipment leads to saving not only labor, but also investments, since each subsequent, more technological unit of material capital is more efficient and productive; fourth, due to the replacement of natural, material and labor components of production with intellectual ones (high technologies, computer support, etc.

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