2. СВІТОВЕ ГОСПОДАРСТВО І МІЖНАРОДНІ ЕКОНОМІЧНІ ВІДНОСИНИ

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THE CORRELATION BETWEEN THE CONCEPTS OF "KNOWLEDGE" AND "INFORMATION"

The transformation of modern society began with the transition of most developed countries to the knowledge-based economy, the foundation of which is intangible value, implemented in intangible assets. In the course of development of social production, knowledge in various forms turns into the system and continuous phenomenon, a characteristic feature, which is a fixed monopoly on rental factors. It can be argued that the knowledge market is a knowledge-based set of economic relations established between producers and sellers of knowledge that shape their supply, and buyers (consumers) of these goods and services that shape demand for them through buying and selling the latter. From our point of view, the knowledge market is a new market that can be classified on several grounds.

Key words: *knowedge economy, knowledge, information, transformation.*

Actuality of the problem. The analysis of the evolution of the category of "knowledge" shows that in the early stages of economic thought, the object of the study has been the person and his or her personal knowledge. The subject of the study is the accumulation of knowledge by means of training, their spread and practice, their use. The role of knowledge as a factor of production over time has substantially increased, and already from the middle of the 20th century, knowledge has become a major driving force of social and economic development, and the objects of research are 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 a major resource that provides a strong competitive advantage to economic entities micro- and global level. Despite the analytical materials that are presented, there is no obvious difference between the term "knowledge" and "information".

Analysis of recent research and publications. Among the authors, whose works largely represent the differeces and similar characteristics of the methodological analyses of the terms "knowledge" and "information", it is necessary to mention D. Bell, T. Gryhiles, U. Dyzard, J. Martine, E. Masudu, F. Makhlup, E. Mansfield, R. Nelson, I. Nikolov, T. Stouniere, E. Toffler, J. Schumpeter, J. Ellul, A. Anchishkina, L. Veger, L. Gatovsky, L. Glyazer.

The aim of the article is to come up with the differences in the interpretation of the terms "knowledge" and "information".

The presentation of the main materials. To characterize the post-industrial society from the economic point of view, to use scientific knowledge as independent economic resource seems the most significant. Analyzing the definition, we can assert, that from our point of view, knowledge is the result of mapping information (data) intellectual entity in time and context, which the knowledge owned in a certain individual context – dependent information images.

Another aspect that is paid attention to in identifying the nature of knowledge is the connection with person, his or her cognitive, intellectual activity. Previously, this aspect was the privilege of philosophy and psychology. Domestic philosophical science defines knowledge as "a practical result of knowledge of reality, its correct reflection in human thinking". In the development of this approach, the knowledge that the person accumulates during the hour of work is interpreted as the result of individual cognitive activity, inextricably linked with human intelligence. At

the same time, information is defined as the exchange of signals, the transmission exists in both animate and inanimate nature, i.e. may be independent of the individual.

From our point of view, knowledge in the knowledge economy plays the following role:

– along with labor and capital, knowledge plays a role in economic growth – the resource concept of knowledge;

– production of knowledge is evaluated as quality, which determines the shape of the economy – productive concept of knowledge;

– codified knowledge becomes the main component of economic relations – the codified concept of knowledge;

– knowledge development is based on information and communication tools – a concept that regulates the development of the information society.

The presented data show that researchers nature and role of knowledge and information do not follow a single approach but a few, which is quite justified, because only by combining different approaches, the basic properties of knowledge and information, which impact on the processes of production, distribution and application, can be detected. The emphasis on one aspect limits the understanding of these phenomena and narrows the ability to manage them [1, p. 46–49].

It is important to note that in the opinion of experts, the universally accepted system of classification of knowledge has not been created. However, it is possible to identify a number of existing approaches, which are used in both the scientific literature and in the practice of knowledge management. From historical times, knowledge has been the subject of scientific interest. One of the most early classifications of knowledge belonged to Aristotle, who identified the following types of knowledge: – knowledge of both theoretical and universal (know – why, "I know why"); – knowledge of how the technology works, which is based on practice (know – how, "know how"); – knowledge as a standard activity, which is based on life experience and specific context (practical wisdom – common sense).

M. Polanyi introduced the concept of "indirect" knowledge "we may, we know more, than we can say". Assumed to knowledge are personal in nature, they are tied to the context, so it is difficult to convey to others. Explicit or codified knowledge indicate knowledge, which can be transformed into officially recognized, systematic language".

Considering the knowledge-based economy, such related concepts as "information" and "knowledge" should be clarified. As it turns out, there is a fundamental difference between them. For example, K. Arrow builds the following logical chain: "Information creates a productive field for inventions, stimulating the production of new knowledge, which helps to optimize the allocation of material resources and the emergence of other inventions". A. Fosket offered to distinguish the category "information" and "knowledge", defining its difference in the following way: "Knowledge is the fact that I "know", but information defines "who knows". At the same time F. Machlup proposed his point of view: "Production of new knowledge is not complete until they are transferred to another person and are not the property of one person. Information meanwhile transfers the knowledge which may be the result of the received information. Information is carried out in order to invest knowledge in the mind of another" [2, p. 74–78].

A somewhat different interpretation of these categories is given George R. Hodgson : the concepts of "knowledge" and "information" can be equated. Availability of information does not mean widespread knowledge. Information – a set of data that has already been interpreted, which managed to give some meaning. And knowledge is a product of the use of information. Knowledge is not separate from social or other context. The application and dissemination of knowledge depends significantly not only on technology but also on social institutions. His position that "the availability of information does not mean the widespread dissemination of knowledge" shows the lack of ITT development alone. The interpretation of the concept of "knowledge" by K. Vig is quite close to George R. Hodgson: "Knowledge consists of truth and ideas, points of view and concepts, judgments and propositions, methodologies and know-how. We accumulate knowledge, organize it, integrate it and store it for a long time in order to apply it to specific situations or problems. Information consists of facts and data that describe a particular situation or problem.

Consistent application of knowledge of the appropriate understanding of the available information on a particular situation and the coming up with the decision how to approach it. We can state that the concept of "information" is interpreted very broadly, almost every science has its own definition. This understanding of information persisted for a long time, until the middle of the 20th century.

The first scientific direction in the study of this phenomenon is information theory. Publications on these issues appeared in the early 20th century, but the most famous and scientifically sound concepts are associated with the names of scientists who worked in the middle of the 20th century. Information theory has created a basis for the development of the production of computers, many means of communication and information technology, which are becoming the main means of production in terms of informatization. At the same time, information theory has laid the foundation for the development not only of cybernetics, but also a number of other sciences. K. Shannon also noted that information theory has found application in biology, psychology, linguistics, theoretical physics, economics, theory of production organization and in many other fields of science and technology. In the beginning of the 21st century, the category "information" attracts the attention of scientists and experts from various disciplines. Information becomes the subject of study of many sciences, as a consequence, there are many definitions of information that carry different semantic load. As a result, there is currently no generally accepted definition of information [3, p. 343–352].

Systematization of most approaches to the definition of "information" was carried out by D.I. Bljumenau, grouping them into two main directions: practical and philosophical.

Within the practical direction, the theory of information is of the greatest interest to us. In information theory, there are two aspects in the study of the concept of "information": quantitative and qualitative. From the very beginning in the development of information theory there was a contradiction between the well-developed first and almost unexplored second aspect.

The founders of quantitative theory of information are K. Shannon, R.A. Fisher and N. Wiener. They proposed a statistical theory of the amount of information in the early 1950s. In this case, R.A. Fischer proceeded from the classical statistical theory, K. Shannon – from the problem of information coding, and N. Wiener – from the problem of communication and noise in electric filters.

In quantitative theory of information, the concept of "information" is opposed to the concept of "entropy" (a measure of uncertainty). Entropy is associated with chaos and information can reduce the entropy of a system in order to return it to equilibrium. The amount of information in the system is a measure of organization, and entropy is a measure of disorganization of the system; "One to another, taken with the opposite sign". Subsequently, these theories were developed in the works of W. Ashby, L. Brillouin, A. Turing. An algorithmic approach to the concept of information was proposed by the Soviet mathematician A.N. Kolmogorov in the late 60s, according to which the definition of information is based on mathematical (probable) approaches. In this regard, attempts have been made to develop a qualitative theory of information, where the main element of the study is the value of information for the recipient. One of the founders of qualitative theory of information, A.A. Kharkevich, determined the value of information by increasing the probability of achieving the purpose for which information is collected. Information that increases the probability of achieving a goal has a positive value, and information that reduces it has a negative value. The disadvantage of this approach is the excessive use of quantitative ratios in determining the value of information. Therefore, the very concept of information quality is not amenable to detailed study [4, p. 161–166].

Further analysis of the value characteristics of information has led to the emergence of two approaches in the framework of qualitative theory of information: semantic and pragmatic. The first approach evaluates the information obtained taking into account the content, the second – taking into account the subjective value for a particular individual. The pragmatic (value) concept of information theory takes into account the substantive side of the information received, but also assesses its need for the recipient at a certain point in time.

The study of the nature of information in the philosophical field is of great importance in theoretical and methodological terms. From a philosophical point of view, we can distinguish two approaches. Researchers of the first approach (R.M. Nizhegorodtsev, A.V. Sokolov, A.D. Ursul) associate information with reflection and consider it an integral part of matter (attributive concept). For example, "information is a reflected diversity" or "information – a general, universal property of matter, which expresses the nature and degree of its order." This approach implies that information is contained in all material objects and is their integral property, i.e. information does not arise for the first time at the level of life, but exists and has always existed.

Scientists of the second approach (V.G. Afanasyev, D.I. Bljumenau, M.I. Setrov) consider information as an element of self-governing systems or their function (functional-cybernetic concept). Proponents of this approach do not recognize the presence of information in inanimate nature and associate it with management. Here information is a property of only living beings, which distinguishes them from inanimate nature. Thus, D.I. Bljumenau writes that "information does not exist at all in the objective reality given outside and independently of the knowing subject."

In our study, we will adhere to the attributive concept in understanding the nature of information. Information is intangible in nature, but at the same time it is contained in any tangible object. Information underlies matter. Every phenomenon carries information about its essence. But the process of using information, of course, is available only to living beings. For example, the laws of nature exist independently of human activity, but person discovers them.

In economics, the concept of "information" is quite diverse. They can be divided into two groups. The first group includes studies of a general methodological nature. Here the information is considered from the point of view of its role in activity of firm, in the market, in formation of a society of new type.

Information as an economic category that affects the functioning of the firm, studied A. Hart, F. Knight. Thus, F. Knight pointed out the dependence of the efficiency of the firm on its information security and defined the information as a value inversely proportional to the uncertainty. A. Hart considered information as one of the reasons for success in the activities of the firm [5, p. 37–39].

Quantitative approach to the definition of "information" is fully disclosed in the works of K. Shannon, R.A. Fischer, N. Wiener, W. Ashby, A. Turing, and A.N. Kolmogorov. The qualitative side of the phenomenon of information is considered in the works of A. Kharkevich, A. Schreider, E. Yasun. It should be noted that information as a technical phenomenon has been studied in great detail, but the justification of its qualitative characteristics has not yet been completed. Followers of the concept of post-industrial development and the information economy itself are the following foreign scientists: D. Bell, P. Drucker, M. Castells, J. Masuda, F. Machlup, M. Porat, T. Stoner, E. Toffler, T. Umesao, K. Arrow etc. In their works, the role of information and knowledge in social development is studied, and such aspects as the socio-economic consequences of the information revolution, information production, information resources, mechanisms of the functioning of the network economy, and others are analyzed.

A new concept of "information resource" has appeared in the economic literature, and a whole galaxy of different definitions of this concept has already been formed. For example, B.M. Rudzitsky under information resources

means "a set of fundamental and applied scientific knowledge, engineering and management solutions, all professional, creative and educational potential of the population". From this point of view, information resources are in the form of knowledge that exists independently in objective reality. At the same time, without any consolidation of knowledge on a tangible medium, it may be lost or not communicated to most people. Therefore, in our opinion, such a definition requires clarification, as knowledge, also being an ideal category, needs a carrier in order to act as a material productive force [6, p. 12–21].

There is a broader interpretation of information resources, proposed by A.D. Ursul. He defines them as information in the form of conceptual knowledge. As a result, the information resource is all the scientific and technical information presented in the form of a document (including on computer media). However, A.D. Ursul writes, the concept of information resources in a broad sense includes information tools, as well as includes personnel who have mastered computer and information literacy and culture. In our opinion, information resources are mainly products of applied research – patents, licenses, various current scientific and technical information (know-how, copyright certificates, etc.), which contains a description of new technical achievements and technological solutions.

The study of various aspects of the use of the categories "knowledge" and "information" has started from the 1960s. in research, these concepts were often used if not as identical, but very close in nature. The paper divides the concepts into "data", "information" and "knowledge", which are presented in the following logical sequence: source data – information (the context in which the data is used) – knowledge (conclusions based on data and information). Thus, the main difference between knowledge and information is to some extent the organization and consciousness of primary data.

It can be concluded that any information in the ordinary sense of the word is knowledge, although not all knowledge can be called information. Thus, information is defined by some set of knowledge, and the latter is a broader concept in relation to the concept of information. It is important to note that there is a wide variety of knowledge, but the following are the most used: explicitly encoded (codifiable, explicit knowledge), implicit, secret implicit (implicit, tacit knowledge) [7, p. 19–28].

The study identified the need for data category analysis, as a large number of scientists identify the concepts of "knowledge" and "data". From our point of view, data is a set of objective facts about objects, events, phenomena, processes, it is all that is registered, described and perceived by a person. Qualitative measures for data are timeliness, compliance and accuracy. Data is transformed into information by contextualization, categorization, calculation, correction, compression. The very concept of "knowledge" is much deeper and broader than just data or information. Data is just code, it does not make any sense in itself. Information is meaningful data decoded with a context key. In turn, knowledge is the information that an individual or organization can transform into action, build their vision of the future on it. The data only partially describe objects, phenomena, facts and processes. They do not provide assessments or interpretations and, therefore, are not always an acceptable basis for action. Although decision-making material may include data, it will not tell you what to do. Data is important to an organization mainly because it is the source material for creating information. Data is converted into information by:

contextualization: we know why the data is needed;

categorization: we break down data into types and components;

calculation: we process data mathematically;

correction: we correct mistakes and eliminate omissions;

compression: we compress, concentrate, aggregate data.

Just as information arises from data, knowledge arises from information through comparison, definition of the area of comparison (with information about other, similar objects); establishing links (with other information about this object); evaluations (how this information can be evaluated and how it is evaluated by others); determining the scope of information to certain decisions or actions.

Conclusion. Thus, knowledge plays more important role than the information, contributes to economic results in the following ways:

firstly, knowledge is the basis of any production process, creating added value, as the simplest form of production requires special knowledge;

secondly, knowledge, embodied in capital, provides an increase in the efficiency of production and management processes, allowing to increase productivity and save costs;

thirdly, the competence of workers, supported by knowledge, ensures the normal course of the production process, as the necessary correspondence between the technological level of production and the quality of workers;

fourthly, knowledge is the basis for improving existing and creating new products and services that allow you to expand existing markets and form new ones. Not all knowledge is economically used as an economic resource. Therefore, it is necessary to identify an array of knowledge that is important in the economic sense as a resource of production, as capital.

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СПІВВІДНОШЕННЯ КОНЦЕПТІВ «ЗНАННЯ» ТА «ІНФОРМАЦІЯ»

Трансформація сучасного суспільства почалася з переходу найбільш розвинених країн до економіки, заснованої на знаннях, основою яких є нематеріальна цінність, яка реалізується в нематеріальних активах. У процесі розвитку суспільного виробництва знання в різних формах перетворюються на системне і безперервне явище, характерну особливість. яка є фіксованою монополією на фактори оренди; економіка, де загальна сума доходу вирішальну роль починає грати інтелектуальна рента, перетворюється в економіці, спираючись на знання. У сучасних умовах використання знань як ресурсу передбачає орієнтацію насамперед на ринкові механізми функціонування та формування, еквівалентність, оплату та конкурентоспроможність. Значимість знань як ресурсу стрімко зростає, а їх обсяг збільшується з такою швидкістю, що зароджується ринок знань вже має різноманітні організаційні форми: мережа центрів з перекладу різних знань (винаходів, відкриттів, підручників тощо) в електронний вигляд (контент); створення цифрових репозитаріїв; здійснення трансферту технологій; створення «міст знань» і «регіонів знань», що володіють розвиненими інтелектуальними ресурсами і є основними гравцями цього ринку; аукціони знань, біржі знань; придбання або оренда фахівців, надання консалтингових послуг, в тому числі і в режимі реального часу; аутсорсинг. Можна стверджувати, що ринок знань є сукупністю економічних відносин, які встановлюються між виробниками і продавцями знань, що формують їх пропозицію, і покупцями (споживачами) даних товарів і послуг, які формують попит на них через купівлю продаж останніх. З нашої точки зору ринок знань та обмін ними – це нови й ринок, який можна класифікувати за кількома ознаками. Послідовно застосування знання для інтерпретації наявної інформації щодо окремої ситуації і для прийняття рішення про те, як до неї підходити. Ми можемо констатувати, що поняття «інформація» трактується дуже широко, практично в кожній науці є своє визначення цього поняття. Незважаючи на те, що з наукової точки зору воно стало досліджуватися відносно недавно. Спочатку поняття «інформація» ототожнювалося з якимись відомостями.

Ключові слова: *інформація, знання, знанева економіка, трансформація, тлумачення терміну.*

СООТНОШЕНИЕ КОНЦЕПТОВ «ЗНАНИЕ» И «ИНФОРМАЦИЯ»

Трансформация современного общества началась с перехода большинства развитых стран мира к экономике, основанной на знаниях, основой которых является нематериальная стоимость, которая реализована в нематериальных активах. В ходе развития общественного производства знания в различных формах превращаются в системное и непрерывное явление, характерной чертой которого является фиксированная монополия на факторы аренды; Экономика, где в общей сумме доходов решающую роль начинает играть интеллектуальная рента, превращается в экономику, основанную на знаниях. Можно утверждать, что рынок знаний – это совокупность экономических отношений, установленных между производителями и продавцами знаний, которые формируют их предложение, и покупателями (потребителями) этих товаров и услуг, которые формируют спрос на них посредством покупки и продажи последних. С нашей точки зрения, рынок знаний и их обмен – это новый рынок, который можно классифицировать по нескольким признакам.

Ключевые слова: *информация, знания, знанева экономика, трансформация, толкование термина.*