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ІНТЕЛЕКТУАЛІЗАЦІЯ СОЦІАЛЬНО- ЕКОНОМІЧНИХ ПРОЦЕСІВ: ІНТЕЛЕКТУАЛЬНИЙ КАПІТАЛ

Концептуально обґрунтовано необхідність врахування важливих особливостей сучасних економічних закономірностей розвитку — інтелектуального потенціалу, як фактора інтелектуалізації соціально-економічних процесів.

Висунуте припущення, що конфліктогеном соціально-економічного циклу розвитку складних саморегулюючих соціально-економічних систем є інтелектуальний капітал.

Доведено недостатність теоретичних контекстів розвитку таких систем, що і зумовлює проблеми проектування цільової функції економічної політики.

Ключові слова: інтелектуальний капітал, економічний потенціал, інтелектуалізація розвитку, соціально-економічні системи.

1. Introduction

Special feature of social and economic researches nowadays became that they are, first, covered a wide range of human perception of the environment, its intentions to promote, resist or neutral attitude to events in public and private life; second, allowed clearer identify the reasons for the preservation of long-term and short-term life orientation mediated by event, actualized and quickly or slowly varying «routine»; thirdly, and this is especially important — with the spread of this kind of research, on the one hand, was needed methodologically clearer understanding of the huge amount of empirical data, on the other hand, the explanation of a new class of phenomena, which were not recorded previously or which were not drawn enough attention.

The problem of the role and scope of government regulation of economic processes in complex social and economic systems (region, corporation, firm) is controversial and makes debates among scientists from different scientific schools and directions. Analysis of scientific papers on the given problem shows that some methodological and theoretical aspects of development of such systems is still not developed, and some options need clarification as for specific social-economic conditions and reflection of their transformation. In our opinion, the weakest chain in economic researches is the lack of scientists' attention to the problem of designing of the objective function of economic policy, to factors affecting it's forming, matching of results of the economic policy to the goals.

2. Object of the study

An important peculiarity of modern economic regularities, in our view, is an intellectualization of social-economic processes. And, as a result, a number of problems are appeared, which did not previously have place in economic science. First of all, there are processes that lead to the creation and development of new institutions. This changes the priority: universities, academies, institutes, research organizations that conduct searching, perform

analysis and systematization of theoretical knowledge, become new subjects of complex self-regulating social-economic systems of macro- and meso- level. Moreover, there is a modification and some kind of transformation of the foundations of social forces that motivate qualitative changes in the economic system in a whole.

Economists, sociologists, political scientists gradually came to the conclusion that deal with not just some «logical constructs» of the type «cogito» (epistemological and ontological foundations of knowledge), but with something else, more properly called «real», actually functioning, practical consciousness, in which in the most bizarre form, in various proportions are intertwined scientific views and daily views, opinions and mythological thoughts, politicized setup and primitive orientation. However, when applied to different social groups; it refers to the varying degrees of presence in real awareness of constituent substance. Purely philosophical interpretation of nature, content and structure of social consciousness does not give sufficient reasons for its research in empirical terms, in terms of modeling the existing reality.

Thus, if in the industrial economy this schedule is determined by ownership of material and financial production factors, the new stage of development in the present demands to include into the famous list of capital in its various forms, a fundamentally new type also — «intellectual capital» in its various forms, which is the source of «additional product» and from now gets the main factor of economic growth.

If to analyze various practices of foreign sociologists researches, we must recognize that almost none of them could do (especially in empirical studies) without referring to phenomenon of social consciousness, to understanding by the people phenomena that is around them, without revealing their attitudes and evaluations of events and attempts to define their position while acknowledging the diversity of social relations. It happened along the way enriching of sociological and economic knowledge, have been made numerous attempts of empirical interpretation of components of social consciousness — knowledge, values, attitudes, needs and interests and so on and so on.

So, the result of the given tendency is the relevance of the present day – problems of definition of economic essence of intellectual capital; studying of the mechanism of its formation, evaluation and efficiency of use and also researching of its practical significance and place in the structure of labor potential, its accumulation and management of use.

3. Aims and tasks of the research

So the *aim of the study* is the determination of sociological and economic interpretation of the essence of intellectual capital.

But to access the sociological and economic interpretation of the essence of intellectual capital, identify causes of its emergence and dissemination, forms of its manifestation, difficulty in interpretation of its concepts, been got with philosophical thought, we should consider the merits of the following tasks:

- First, to the history of the term «intellectual capital».
- Second, theoretical study of content and essence of the concept «intellectual capital».
- Third, to prove the concept «intellectual capital» as an economic category.
- Fourth, to reveal social and economic nature of «intellectual capital».

4. Analysis of other studies and publications

Methodological basis of economic aspect researches of intellectual capital is theoretical and conceptual bases of [1, 2], certain problems showed by [3] and native scientists [4, 5].

In our view, the definition of the economic essence of the meaning of the category «intellectual capital» and its specifics and peculiarities should be started with general economic theory on capital, which allows to aware deeper social-economic nature of intellectual capital and mechanism of its operation.

The analysis of contradictions of modern society has gradually led to the need for analysis of specific group of contradictions – the paradox of social consciousness – whose number increases immeasurably in terms of radical transformations of society. History has repeatedly stated that during the period of social upheaval, revolutions, critical events paradox of consciousness and behavior escalates beyond all expectations, beyond every normal measure. This is not surprising. People's consciousness cannot be reconstructed immediately after the events that occur. Mankind is unable to escape from himself, from the experience gained in the past, from what he knew earlier, on what he focused when he wanted to achieve or to avoid.

Under these circumstances public consciousness undergoes to powerful influence of new social needs, which change the paradigm of social, economic and political development. Changes in public purposes have led to confusion in the attitudes and orientations of people, to reassess of previously professed ideals or at least to modify them. However, because of the great inertia of public awareness, it still keeps the old dogma, established orientations and preferences, values. It is not surprising that in the public mind under the influence of external and internal factors we see drastic changes, the product of which became the paradox of thinking, learning and assessment of surrounding human phenomena and processes [6, 7].

Capital at each stage of development is considered as the main factor of social state and is a fundamental category of economic theory. In broad terms capital (from lat. capitalis – main) means «everything that can give income or resources that are made by people to produce goods and services» [3]. Current studies define «capital as any resource, created in order to more economic wealth». In the economic encyclopedia capital is «that is able to generate income and resources, which are designed for manufacturing and services...».

In relation to the general definition of a concept «capital», intellectual capital is regarded as «accumulation of scientific, theoretical and practical knowledge of people, society in relevant issues, processes, activities». This categorical structure of thinking, which is formed on the basis of improvements and searching of a new on the base of universal forms of thinking and knowledge of unknown. Developing this idea, giving it a bioenergetics component the author says that every person at birth gets its program complex that allows him/her or does not allow to know the unknown, aware the needed and scientifically substantiate a conscious, thereby creating new knowledge and increase his/her level of intellectual capital [5].

5. Materials and methods of research

Analysis of characteristic features of development of scientific theory of economic management evolution proves that scientific theory of management is based on philosophy of systematic and synergetic integration of science, development of Prerequisites Law, Basic Genome evolution of the world through the application of methods of the system targeted approach to the development and innovation.

In the article it is shown that in modern philosophical interpretation evolutionary cycles are called historical periods of formation a system of knowledge: empirical, analytical, and systematic. But regardless of the name, their integration in combination into system-synergetic approach becomes even more powerful tool for the study of innovation than the use of each of them separately. So investigated factors that, we believe, contribute to or counteract the processes of innovation activity, summarized in three configurations: human resources, technical and technological potential, structural and organizational approaches to the system of innovations implementation.

Researching of phases, periods and concepts of development of scientific management theory were conducted using methods of chronology, comparatives and encyclopedia in the prism of scientific approach and classification that allows to reveal and compare general and specific in historical – panoramic phenomena, degrees and their trends of development, clearly distinguish between already known and firstly known, system research materials by the principle of industry knowledge as a function of time. It is also economic category in the form of cycles, phases, periods, stages and procedures of self-regulating complex of social and economic systems.

6. Main results of studies

Professor V. Tkachenko grounds that «intelligence – a program of life of every human being, his soul, which comes in womb with embryo of life. It is exposed to

the impact of environment, but it does not depend on this influence, and therefore the environment, in which is developing. Synergetic view upon its historical development means that the future is multidimensional, but not conditioned. The undeniable fate or urgent need in unique evolutionary factor does not exist, but the choice vector of our destiny, that is, the best way of development depends on us, on our mind — from the accumulated knowledge, experience, from our sense of responsibility to the future, of our spiritual condition, faith and freedom — all the components that accumulates our intellectual program (intelligence and its potential, which make intellectual capital)» [8].

This approach allows us to specify a new scientific paradigm of technological way of development. It makes dynamic system of technological relations. And this, in turn, determines the nature of the technological development of major social-economic systems as self organizing social formations that go by successive changes in technological mode of production, with the result that one system of technological relationship dialectically moves into another, higher level of development.

International organizations, such as UNESCO, UNO specialized institutions, Global Intellectual Property Organization, lead to the conclusion that «material essence of intellectual capital is not materialized, but the real creative achievement of individual, collective, as the subject of production and the entire social formation».

So, to give a clear and universal definition of «intellectual capital» is extremely difficult, since the content of this concept is changing with the development of social formation, legislation and its lifestyle between personal and industrial relations. So, perhaps, more correctly to talk about intellectual capital not as socially defined concept, but as a complex of self-regulating dynamic in development institute. That is, as about constantly regulating difficult social-economic system of rules and norms in relationship. It should be remembered, that every attempt to give a general and comprehensive definition of it is just an episode in the development of this institution.

The beginning of the XXI century is characterized by social-cultural transformations that define the global social order of the modern world. They are caused by the latest technological shifts that appear with every new ring of scientific and technological revolution and which are highly in need of awareness, conceptual definitions and scientific substantiation. Technological relations at this stage of development of any society must be seen not only as a certain interaction processes in society and the natural environment, but also as interpersonal interaction among people, individuals, with their intellectual potential and mechanisms (technologies) of its use.

Proceeding from the above, we conclude that the intellectual capital, unlike other forms of capital, has common features of all types of capital, and reflects typical only to it characteristic features.

Thus, in our view, the emergence of intellectual capital — is a natural result of the increasing role and importance of the «human factor», which is, in general, an intellectual potential of society, region, firm or company as a total creative factor of abilities, intelligence in the economy development at micro-, meso- and macro levels.

As for generalizations of economic essence of intellectual capital as the basis for dynamic development, it (its

essence) is inherent in all the general terms of institutional economic theory. This determines that we should be more focused on its structural elements. Furthermore, as intellectual capital has not its homogeneous structure, the majority of scientists on this category come to the conclusion that it is a component of three factor formations: «human factor», «structural capacity» and «market factor». From our point of view, this approach does not allow to reveal the natural essence of the concept «intellectual capital». That is, as in the definition of the concept «intellectual capital» does not have a common approach, and in the disclosure it there are different points of view.

Of course, the concept «human factor» as a capital is used by institutional theory of economics and in practice for the evaluation of intellectual capital as abilities (intelligence) of employees. Thus, at the present stage of development just the human factor is «the first and main» source of competitiveness, because its competitive components do not constitute the main difficulty for effective management. According to the World Bank's data development, in the present at about 64 % of global wealth is embodied in the human factor, the most part of which constitute knowledge, intelligence and creativity professionalism.

With the growth of technical equipment of production (and the whole social-economic) systems, each employee must actuate a growing mass of means of production, the cost of which is transferred to the created product. As a result, passive labor is multiplied by the growing rate that reflects the cost of material part of used technical means and the value of knowledge, which is materialized in the design, manufacture and operation. In some highly automated forms of social production cost of technology, created on the base of the latest knowledge, several times exceeds the amount of salary, which, working here employee, receives for work, at about for 30–40 years [9].

In these circumstances qualitatively change the criteria for evaluation of public works: if before its effectiveness was measured primarily, by cost of production, now not the least meaning has the preservation and efficient use of means of production. Work productivity itself and economical consumption of energy, raw materials, which are entirely dependent on the knowledge, professionalism and intellectual potential of the technology.

The process of continuous and rapid technical, technological and organizational renewal of social production is irreversible. In its course physical deterioration of technical means recedes into the background compared to obsolescence, rapid aging of embodied knowledge. During just few years of operation, and, sometimes even at the construction (establishment) of enterprises, intended for new products, equipment and technology become outdated. The process includes not only materialized in technical equipment, but also alive knowledge, whose carriers are people. Into a continuous cycle of renewal of subject-material and subjective-personal components of productive forces, scientific-technological revolution has brought unprecedented inversion: for the first time in the economic history of human speed of changes of technology generations became rapidly outpace the speed of changes of workers generations. Now in the range of one generation of people, during active labor activity of people, in the advanced fields of social production there is a change of several generations of technology. And this process begins to encompass all economic life of society.

Direct and the more distant social effects of this side of scientific-technological revolution till nowadays are not fully understood not by the general public, not by many business leaders and some scientists. Meanwhile, problems of economic reforms, both in our country and abroad urgently need to deepen scientific research. Its results in the last 5–6 years have shown that, not having understood questions of the theory, without making clear the concept of economics, organization and management, we cannot successfully decide practical improvement of organizational-economic activity at any level [10].

For the purposes-rational behavior of subjects in complex self-regulating socio-economic systems at the meso-level, for which principally constant is the intention to optimize the real version of social behavior: always definitely happens the perception and actualization of new information; is made addition of updated criteria by interdependent with each other; according to dynamic is modified hierarchy of situational advantages. And as a consequence, appear new, alternative and subjectively (perhaps and objectively, if are identified and justified possible risks) optimal (minimizing all kinds of expenses) variants of social behavior of individuals or entities.

Analyzes of these aspects leads to the conclusion that sustainable socio-economic development at the meso-level can be interpreted as a process that defines a new type of social production that requires not only the management of natural resources, but also social and cultural wealth of the region – intellectual capital.

7. Problem analysis and technological audit

The term «intellectual capital» was proposed in 1990 by Ralph Steyer. And despite the fact that the term originated not so long ago, however, as many scientists note, the theory of intellectual capital exists for a long period of time in the form of «common sense» – i. e. obvious truth for any manager – but theoretically began to be grounded only in the last decade of the twentieth century. That is what economic theory should be grateful to L. Edvinson and M. Malon, thanks to whom the concept of «intellectual capital» takes scientific theoretical status [1].

As any other immaterial object of research, intellectual capital is uniquely identifiable, which leads to different interpretations of it. As a result, in scientific literature is not formed a clear unambiguous definition of intellectual capital that causes various approaches to its analysis. It is grounded by the fact that some scholars come to it so, that you can analyze a set of intelligent components at the company level, the other at the meso-level (region), and others base their approach at the national level – the macro level while using the intellectual potential of the nation.

But, as an economic category, intellectual capital can be considered on the ground of intellectual property, which is in use for profit at the expense of added value [5].

As for philosophy, intellectual capital, as a category, is looked through as a capability of a human for ability to think, to know the unknown, understand it and justify a conscious, especially on a high theoretical level, as a consequence of own intelligence [4].

Thus, on the basis of economic and philosophical substance of a concept of the nature of intellectual capital, it can be explored as a level of knowledge, creativity,

formed on the systemic nature of natural thinking in order of selective approach to the subject in a dialectic interconnected contradictions, that are reflected in each other, summarized, confirmed and localized in new knowledge (identification of authors) [6].

L. Edvinson and M. Malone give a broader understanding of intellectual capital, as inhomogeneous natural phenomenon. In their opinion, one part of the intellectual capital includes knowledge, as an integral part of the subject, the rest part of this capital «recreates some kind of objective conditions of use of this knowledge to improve the efficiency and competitiveness of the company» [1]. But this is not the institutional theory, although this approach absolutely reflects its socio economic nature.

In some cases, under the intellectual capital is understood specific in its form and nature of participation in the production process substance of knowledge combined with information about the condition. That is, from this perspective, intellectual capital includes the product of mental activity and creative efforts of individuals.

V. Inozemtsev notes, that «intellectual capital is a bit of «collective brain» that accumulates scientific and general knowledge of workers, their intellectual property and experience, industrial relations and organizational structure and information network» [3].

At the beginning of the XXI century in our country have been attempts to uncover the economic substance of the concept «intellectual capital». A. Chukhno notes that «the emergence of the concept of intellectual capital – is a natural result of the development of science and technology, their deep penetration into the production process, increasing of the role and importance of science, human intelligence, information and knowledge in the development of economy and society as a whole».

V. Tkachenko made a scientific-conceptual almanac in 7 volumes «Technological imperative of intellectual potential development in Ukraine», in which he justifies the most important event of the early twenty-first century in the development of earthlings society – «world civilization moved to the third historical cycle of development, a characteristic feature of which is the process of transformation of fundamental science and innovative technologies of intellectual potential into decisive factor of evolution» [7].

So, according to his thought, intellectual capital – «is that logical beginning, the Logos of life, that plays back from the concrete and indivisible whole, which we call «knowledge», in which the beginning itself is logically impenetrable, not alien, transcendent idea, similar indivisible and not flushed away with the logical beginning – that generates a process of thinking, opinion, thinks and has its own identity, reflects and develops itself, has its framework from which it can not go, but within these limits it is inseparably reigns».

8. Conclusions

So, based on the above and making generalizations, we present our vision of the natural meaning of «intellectual capital», presented in Fig. 1.

First, is made the analysis of scientific, methodological, historical-panoramic and practically implemented sources in the research on the topic of the thesis regarding the evolution of the development of production at the macro-

meso- and micro levels of management theory, the evolution of the conceptual apparatus and normative documents on the organization of public production in the directions of «social economy», «labor potential management» and «fundamentals of innovation – investment potential of the region». The main idea of the analysis is historical chronological description of phenomena and events in the theory of social-economic processes at the meso-level.

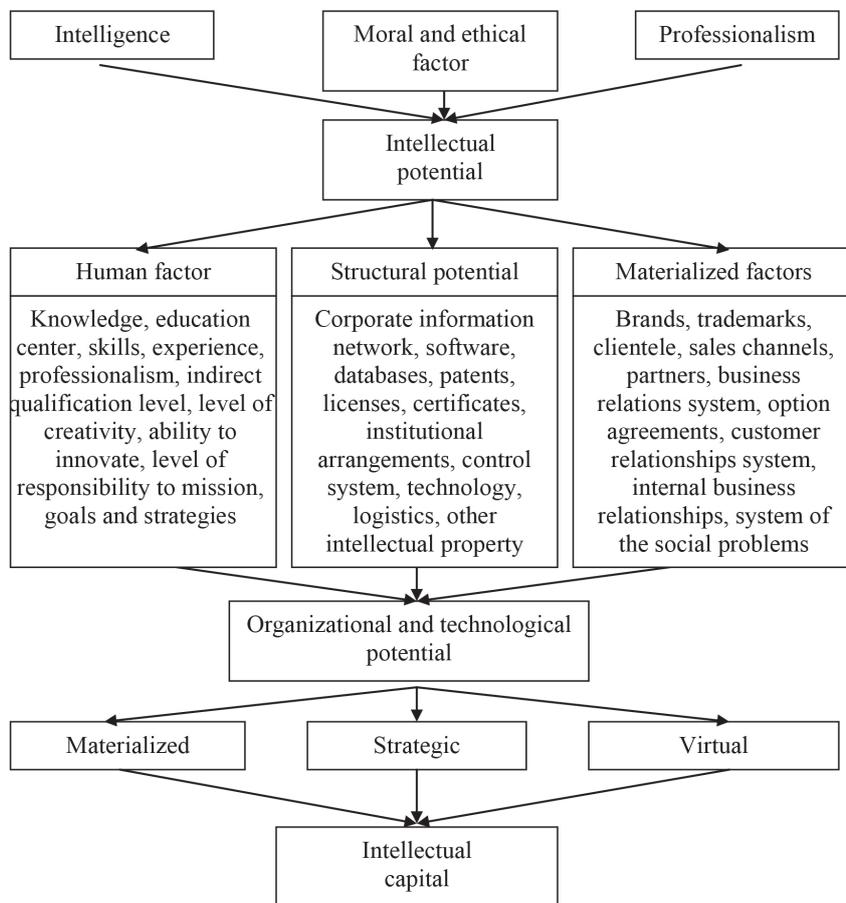


Fig. 1. Structure of intellectual capital

For formulation of working research hypotheses, in order to more clearly understand the meaning of problem situations, tasks and solve them, is conducted a detailed study phases, periods, stages of economic management theory; is shown that solving of given problems is slowing by the lack of a single methodological approach to the system of management by complex self-regulating socio-economic systems at the meso-level, which in this paper is implemented in the form of chronology methods and classification.

Secondly, research and analysis of historical – panoramic periods confirms the represent of the known and the hypothesis of the research that scientific knowledge on the development of management theory, development of material production and filling of intellectual capacity at various levels are formed in the process of human evolution phases and cycles, which in turn cyclically programs the development of theoretical treatments of scientific theory of management with vital functions of both individuals and subjects of business.

Processes of knowledge formation is a necessary determined response of science to the significance of ma-

agement processes and its quality as necessary factors of intensification and production development, its technological modernization and promotion of livelihoods.

Thirdly, describing the current social structure of our society, we must emphasize its amorphous nature. In a society in which there is no complete and absolute ownership (which we often wrongly associate with private, although its subject may be any legal person, for example, labor collective), no other way can be.

Naturally, in this situation, when one formational state collapsed and the other has not formed yet, we have really no economic and legal subjects. But dialectics of development shows that in «subjectless» society can not be valuable objects. In such society don't work economic (classes forming) mechanisms of social structuring. Their place is taken by non-economic, administrative – volitional mechanisms that form from this amorphous magma artificial community groups and functional distribution-consumption «castes». Internal crystal connections of clusters are destroyed and all their components are integrated into vertical corporate structures (departmental, regional, and so on.). Amorphous magma of atomized individuals is sorted in artificial cells.

Thus, discrepancy of modern human to the surrounding social and natural environment, potential of critical mass needed to understand the inevitability of the transition to a new social structure and its development, and the level of culture are obvious. But if social environment can change somehow, the state of the environment, which acts according to «first and fundamental» and «second» natural laws, leads to a change of the individual itself. And we speak not so much about any human biological mutation (current human body is quite perfect and according to the laws of nature is constantly improving), but about a significant change in its thinking, intellectual potential and lifestyle.

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ИНТЕЛЛЕКТУАЛИЗАЦИЯ СОЦИАЛЬНО-ЭКОНОМИЧЕСКИХ ПРОЦЕССОВ: ИНТЕЛЛЕКТУАЛЬНЫЙ КАПИТАЛ

Концептуально обоснована необходимость учета особенностей современных экономических закономерностей развития — интеллектуального потенциала, как фактора интеллектуализации социально-экономических процессов.

Выдвинуто предположение, что конфликтогенном социально-экономического цикла развития сложных саморегулирующихся

социально-экономических систем является интеллектуальный капитал.

Доказано недостаточность теоретических контекстов развития таких систем, что и обосновывает проблемы проектирования целевой функции экономической политики.

Ключевые слова: интеллектуальный капитал, экономический потенциал, интеллектуализация развития, социально-экономические системы.

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