

# KNOWLEDGE, CREATIVITY AND INNOVATION IN KNOWLEDGE SOCIETY FORMATION

## ЗНАНИЯ, КРЕАТИВНОСТЬ И ИННОВАЦИИ В ФОРМИРОВАНИИ ОБЩЕСТВА ЗНАНИЙ

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**Annotation** *The concept of a society of knowledge is considered in the article. It is proved that the knowledge economy, the core of which is the creative economy, provides the formation of a knowledge society. Today, the cultural industry, or creative economy, is considered as a new type of industry. The essence and peculiarities of the creative potential of a specialist are determined. The forecast indicators of Ukraine's creative potential development are presented. It is revealed that modern problems of economic development are connected with the intellectualization of labor, giving the highest priority to the processes of producing new knowledge. To achieve predictive indicators of intellectual and creative activity in Ukraine, it is necessary to fulfill certain tasks.*

**KEYWORDS:** KNOWLEDGE SOCIETY, KNOWLEDGE ECONOMY, CREATIVE CORE OF KNOWLEDGE ECONOMY, CREATIVE POTENTIAL, INNOVATIVE WORK.

### 1. Introduction

Today, the knowledge intensity of manufactured products is complicated, and the market for intellectual goods and services is growing. The growth of technologies in the broad sense comes at the same time as the growth of the role of knowledge-intensive technologies in the economic space; the system of education itself is transformed by the emergence of new educational technologies that change the nature of the object being studied. The need for continuous education throughout the working life faces workers in a context of constant renewal of knowledge, innovation transformations and tough competition. The above features are characteristics of the knowledge society. This concept postulates the development of ideas and approaches of T. Husen [1], who was the first to propose a model of a "learning society," and where "lifelong learning" is the necessity for every person throughout his or her life!

The trend towards the formation of a knowledge society and creative economy, carrying creative, complex and integrative nature, is clearly traced today in the leading countries of the world. Scientists put in the notion of creativity such characteristics that are inherent in the national economy as a whole, and not only in its separate areas, which are associated with purely creative activities. The creative economy is able to integrate culture, innovation, information and entrepreneurship into the overall technology of development and, on this basis, ensure the competitiveness of social systems [2]. Focusing on the long-term perspective is a key aspect in the implementation of creative development technologies. Moreover, the main emphasis should be on stimulating cultural and creative activity, establishing interaction between actors and means of their activity in the process of realizing creative potential.

### 2. The creative potential of the knowledge economy

Creative activity and the person's ability to creativity in socially useful activities become crucial in the knowledge economy. The purpose of this activity is the reproduction of intellectual capital. Accordingly, the agent of ownership also changes. "Homo creator", an agent with another system of values, needs and motives, is replacing rational "homo economicus". From the standpoint of the methodology, it is important to use the socio-personal approach in which the individual's mental capacities, creativity, initiative, the system of preferences and internal

orientations, system thinking, analytical abilities, information susceptibility, etc. should serve as the object of analysis.

Today, commerce and creativity are so united and so inseparably linked with each other in the economy, which is almost impossible to distinguish between them. After all, cultural production leads to fusion, blurring of borders and mixing of genres - at the level of works, and at the level of professional activity. As a result, the borders between commerce and creativity, advertising and art, etc. are erased. So, a writer or scriptwriter can work as a copywriter in an advertising agency, filmmakers can create promotional and popular videos, and composers can write music screensavers or music for computer games. [3].

Large corporations are engaged in the financing of the production and distribution of a huge amount of commercial goods of culture, bringing incredible income. These companies occupy strategically beneficial countries and regions, provide an impact and have such an infrastructure that allows them to accumulate capital in accordance with their own payment systems and copyright. In other words, these companies have a definitive effect on the way of contracting with authors, contracting with contractors, as well as on economic recognition and reward for creativity.

In addition, large corporations have a significant influence on the formation of consumer preferences, their habits, professional assessment of marketers, and ultimately they are "talent hunters." Today, the cultural industry (creative economy) is recognized as a new type of industry. J. O'Connor writes that people who work in the cultural industry make a more significant contribution to the social changes in our era, which he called "an epoch of post-deficiency," when "cultural hierarchies are much fragmented and numerous" [4]. Cultural works are becoming commercial in the economy through a process that involves many people in marketing, advertising and public relations.

The planned indicators of Ukraine's creative development are determined on the basis of indicators for the leading countries by the end of 2010 (Table 1).

The analysis of the considered categories shows that the innovative potential of the individual is impossible without creative potential. In our context, creative potential is characterized as a combination of opportunities for purposeful transforming activity, the realization of the essential forces of the individual, depending on the activity of the agent, its target settings and external conditions. One can determine the essence and peculiarities of the creative potential of a specialist as a dynamic personality structure,

which includes a set of creative instincts that manifest and develop themselves in innovative professional activities.

**Table 1** Forecast indicators of Ukraine's creative potential development

Показник	2010		2020 (forecast)
	Leader countries	Ukraine	Ukraine
Number of creative class,% of the employed population	35-47	20,5	35
Share of the population covered by higher education	28-38	25,3	35
Costs for research and technological development,% of GDP	2-3	0,83	2,3
Number of patents per 1 million population	0,7-1,3	0,36	1
Number of researchers,% of the employed population	250-600	84,3	350
Place in the world ranking in terms of creative development	1-30	49	25-30

### 3. Creative core of intellectual activity

In the economic theory of the information society, the category of "intellectual activity" is called to play a key role, similar to that which was played by the category "commodity - labor" for the creation of economic science by Marx, since creative work in the form of intellectual activity is the main source of value creation and a special factor in production in the information society, as well as the final stage in the development of human evolution in economic life.

Today, potential partners and investors are focusing not on tangible assets, but on the availability and value of intangible assets. Investments in the intangible assets in Ukraine remain negligible and equal to 3.3% of deposits in tangible assets. In 2016, there was a significant decline in investment in NMA, due to the volatile political and economic situation in the country (Figure 1).

In the EU, the volume of intangible assets is 50-80% of the book value of enterprises and organizations, and in Ukraine, they do not exceed 1.5% of the cost of fixed assets, while according to expert estimates, the real value of such assets is not less than 20 billion. UAH [5].

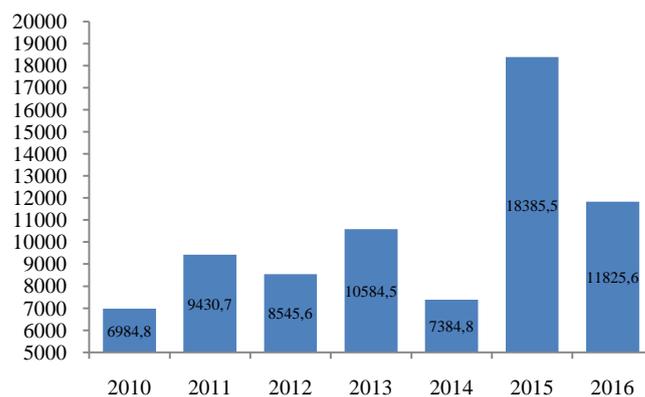
Creativity of intellectual activity of a person means the generation and production of such knowledge and skills, the use of which will not lead to negative social and socio-economic consequences in the life of the individual and society. Thus, in the knowledge economy, intelligence is focused on building knowledge and mental faculties of the agent, operating in the conditions of human morality, justice and a high level of general and economic culture.

The creative potential of the company lies in the willingness of staff to accept creative ideas and use innovative technologies, and creative process is a set of sequential steps that lead to success in its implementation, namely: understanding ideas, preparation for sale, comprehension, insight, confirm the idea by other people. Therefore, the creative sphere of activity of a modern enterprise is one of the most difficult to predict and obtain the result. To achieve the goal it is important to provide a creative atmosphere in the team to accumulate creative ideas, stimulate the development of the process of self-fulfillment of employees.

On the basis of the analysis of intellectual activity, the following components of the innovation activity of human brain function are distinguished [6]:

- *intellectual activity* - aimed at the analysis and systematization of existing knowledge, the formation of connections and the hierarchy of knowledge;
- *creative activity* - aimed at generating new ideas;
- *combinatorial activity* - aimed at the synthesis of various knowledge;

- *synergistic activity* - characterized by the speed of picking up an idea and the emergence of a chain creative reaction.



**Figure 1.** Investments in intangible assets of enterprises Ukraine, mln. UAH.

The notion of "innovative potential" is directly related to the notion of "creative potential", which in the general-philosophical aspect is interpreted as a set of possibilities of purposeful transformation activity, and at the level of individual manifestation of creativity is defined as "creative potential of the individual".

Creative potential is a dynamic personality structure, which includes a set of creative instincts that are manifested and developed in intellectual activity, as well as a complex of psychic neoplasms of the person, acquired during its age ripening. It is based on imagination, associative relationships, and the richness of intuitive processes, emotional diversity and empathic feelings that are realized in the process of creative activity. According to psychologists [7], creative potential is a psycho-energetic tension that arises between the aspirations, possibilities and the real life of a person. It is realized in a reflexive and creative effort aimed at reaching previously unattainable, on the realization of what was not accomplished to this moment, on aspirations beyond yourselves. With the help of creative effort, a person can gain in his life what was not given by nature or in the process of upbringing and education. It defines the uniqueness and life strategy of the individual.

### 4. Intellectual and creative activity of the person in innovative work

Modern problems of economic development are connected with the intellectualization of labor, giving the highest priority to the processes of producing new knowledge that can provide socio-economic progress to any society.

Innovative work as the most important component of the knowledge economy embraces a cycle from the development of a scientific and technical idea to its commercialization. The result of innovation work is a new product that materializes the ideas of the authors of innovations, that is, innovators. In the conditions of competition among enterprises, organizations, individual entrepreneurs for economic survival, innovative work is oriented towards the market. In general, the essence of innovation work can be illustrated through a model (Figure 2).

An important intellectual resource of the company is its personnel, the optimal use of which dictates the need to develop new approaches to its formation, assessment and motivation. The human resources management system should include a block of management of intellectual labor resources that will adequately reflect the professional and personal characteristics of employees engaged in creative activity [8]. The meaningful specifics of this block of corporate management are determined, above all, by the degree of intellectualization of production processes, the role of intellectual resources in the overall effect. The block should include: selection of intellectual personnel, search of talents,

estimation of their contribution to the effectiveness of the organization, methods of motivation for intellectual activity.

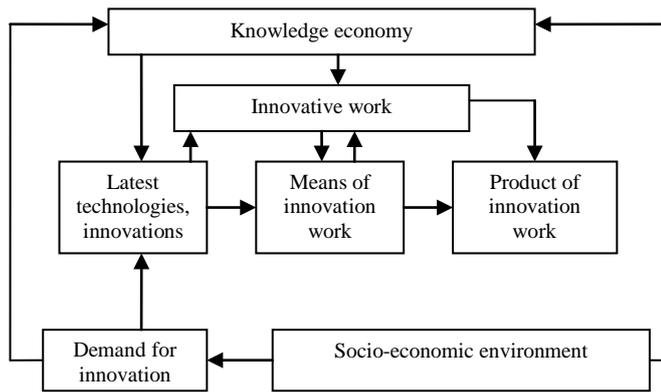


Figure 2. Model of innovation work in the system of knowledge economy

The intellectual resources of the organization are highly educated workers engaged in creative activity and are absolutely adequate to the business processes of the organization, the result of which is an intellectual product in the form of a technological or managerial decision [9]. The source of these resources for the firm is not the labor market, but investment in their preparation and development. Thus, the selection of intelligent personnel - is, firstly, the result of organizing their internal brand movement; and secondly, an important strategic direction of management of the organization as a whole. The content of intellectually-creative activity of human in the professional activities of various social groups is represented in Table 2.

Table 2 Intellectual and creative activity of social groups

Social group	На робочому місці застосовують	The share of intellectual and creative work				
		0-20%	20-40%	40-60%	60-80%	80-100%
Workers, peasants	Knowledge + Skills					
Service industry workers	Knowledge + Skills					
Creative social group, including creative core	Knowledge + Skills + Talent					
	Knowledge + Skills + Talent + Active action					

Creativity is a prerequisite for the formation of a professional, but at the same time, this personality quality must have a certain orientation associated with professional activity. Innovative potential manifests itself in mastering of new effective professional technologies, in innovative solution of production tasks. Thus, the analysis of the activity and the personal qualities of the personnel who have achieved significant professional results, just ascertains his or her innovative activity [10].

5. The development of a creative personality in the knowledge economy

Florida R. knowledge economy refers to the creative economy, which is the core of the creative class. It is based on the principle of three "T": technology, talent and tolerance [11]. He believes that only the availability of all three components can help generate innovation and stimulate economic growth. An indication

of the fact that it is creative people and, in particular, the creative core, one of the factors contributing to the competitiveness of national economies, is the positioning of the present century as an era of struggle for talents.

Characteristics that allow recognizing the economy as creative include [12]:

- the positioning of the creative person as the main engine of progress and the most valuable resource of development;
- the existence of a system of capitalization of creative and cultural potentials;
- growth of social activity;
- strategic planning of balanced development taking into account economic, environmental, social and cultural determinants;
- the formation of competitive advantages due to the unique natural, creative and cultural resources, optimal use of them;
- activation of creative industries as priority sectors of the economy;
- development of cultural products market.

The creative economy is a special sector of the knowledge economy that is associated with intellectual activity of people, because today the external environment requires new business laws, because the structure and motivation of consumers has changed. There was a need for products with high intellectual content. Therefore, entrepreneurs need to be aware of new trends in customer behavior and needs. Understanding the peculiarities of the creative economy makes it possible to turn the creative ideas of both business owners and their employees into profitable activities. These features include [13]: the high role of new technologies and inventions in various fields of human activity; high degree of uncertainty; a large amount of existing knowledge and the urgent need to generate new knowledge.

The evolution of the formation of the knowledge economy demonstrates how, over time, changes in the perception of those human qualities that are used in production processes. The main motive of the worker's activity is self-realization, the desire to acquire knowledge, the search for new possibilities of creativity. In the information society there is a transformation of the nature of labor, which traditionally was aimed at the creation of material values. Its place is occupied by intellectual activity of a person, which is based on the totality of scientific knowledge, spiritual and cultural values and is not subject to regulation, which is usually characteristic of labor in the traditional sense [14].

Today we are talking about the phenomenology of intellectual talent of a person, which includes three gradual stages with phenomena: 1) "competence", 2) "talent" and 3) "wisdom", which is the result of long-term subordination to certain laws of the process, the essence of which is the organization and enrichment of the individual mental experience [15]. The development of a creative person combines the specifics of intellectual activity and mentality, and the interdependence of experience and knowledge occurs through their dualism under the influence of the continuous action of external factors (Figure 3).

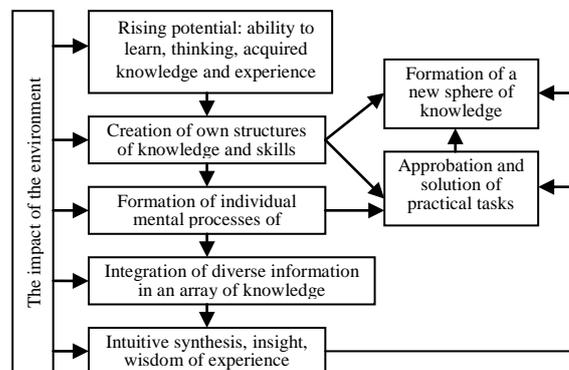


Figure 3. The scheme of individual intellectual resources development

Consequently, from a scientific point of view, in the context of innovation activity, there is a close relationship between creativity and personality innovation. Thus, creativity is a prerequisite for any creative activity that is motivated by the individual's aspirations for self-expression and self-affirmation, including as a prerequisite for innovation. Innovation, directly related to the ability of an agent at the cognitive and behavioral levels to ensure the emergence, perception, as well as the possible revision and implementation of new and original ideas, that is, the creation of innovation.

## 6. Conclusion

Activation of the concept of knowledge society manifested in solving economic problems and social management based on knowledge. It began to be considered in a fundamentally new socio-political and technological context as a factor for modernization or as a scientific model for modernizing society based on the knowledge economy and its core – creative economy.

Appropriate institutional support, systematic studies of the preconditions and trends in the development of cultural and creative potential, and on this basis, strategic programming of development, taking into account cultural and creative determinants, is needed for the formation of a creative economy.

In modern conditions, knowledge, skills, work skills, initiative and other personality characteristics of employees should become an increasingly important strategic resource compared to financial and industrial capital. It is human potential that creates an innovative potential, which, depending on the subject, is the ability of a person, enterprise, industry or population to create and apply innovation.

Innovation-intellectual potential is a key factor in the formation of a knowledge-based economy. The quality and pace of development of the whole society will depend on the activity of the process of reproduction of intelligence and knowledge. In addition, the study of literary sources and their own studies make it possible to highlight the factors that most influence the formation of the knowledge economy, that is: human potential, innovative activity and development of intellectual potential, which becomes a capital after its application. The given factors will be devoted to further scientific and practical research.

In order to achieve predictive indicators of intellectual and creative activity in Ukraine, the following tasks must be performed:

- an increase in the size of the creative social group, in particular the creative core as the main source of socio-economic development at different levels of the system hierarchy;
- stimulate the development of creative industries to accelerate economic growth;
- construction of spatial-sectoral infrastructure with the creation of creative cities and creative territories for the concentration of creative professionals.

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