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# TRANSFORMATION OF FACTORS OF PUBLIC PRODUCTION SYSTEM IN MODERN CONDITIONS OF ECONOMIC DEVELOPMENT

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**Abstract.** The economy can be imagined as a system of specific relations existing between individual entities regarding the production, distribution, exchange and consumption of material and other goods created by nature and produced by man himself in the course of his labor activity. Therefore, the whole history of the development of the economy is inextricably linked with the development of production, which arose from the desire of a person to equip his own life and grew into a whole complex system of social production with a complex structure of productive forces and existing production relations.

**Key words.** social production system, digitization, labor, land, capital, knowledge

## Introduction

The problems of the formation of human capital in the service economy, changing priorities of society values in the system of consumption at the beginning of the XXI century. It is proved that economic growth, competitiveness of countries and development of the IT sector are completely dependent on human capital (Reznikova, Kruglov, Ganieva and Verna 2019).

The study of transformation of factors of public production system was reflected in the papers of Balcerzak A.P., Pietrzak M.B. (2016), Borsch L.M., Tsohla S.Y., Simchenko N.A. (2019), Danilina E.I., (2016, 2017), Malikova Y.I. (2016), Zvyagintseva O.P. (2018), Ryndin E.V. (2014), etc.

Globalization processes have embraced almost all spheres of human activity in the past twenty years. Their dynamic nature contributes more and more to an increased accessibility to many material and physical resources, the possession of which is no longer a substantial competitive advantage among various organizations (Danilina, Reznikova, Verna and Ganieva 2017).

## Methods

In its development, the economy has gone through several generally recognized stages: pre-industrial, industrial, post-industrial and is living a stage today, which they called as the stage of the knowledge economy, the information stage or the period of digitalization of the economy. Each stage in its development was gradually transformed into the next, due to a change in ownership of the means of production, accumulating human capabilities, forms and methods of managing it, and also thanks to the achievements of science, technology and technology. Each stage in its development was gradually transformed into the next, due to a change in forms of ownership of the means of production, accumulating human capabilities, forms and methods of managing it, and also due to the achievements in science, equipment and technology. In this regard, new components of the structure and infrastructure were created and formed, which together reflected the features of each stage and explained the patterns of functioning of the corresponding economic system. Thus, one can propose considering the development of the economy as a series of successive transformations, illustrated by the forms of the structural layout of the factors of production used at this particular stage and the objectively emerging elements of market infrastructure that explain the existing economic relations between

the entities. Understanding the role of individual factors of production and the principles of interaction between them and market infrastructure should contribute to the presentation of the expected patterns of development of the modern economy.

In the pre - industrial period of economic development, the main factor of production was the Land in the understanding of the natural wealth that a person could use, relying on his own labor (Fig. 1).

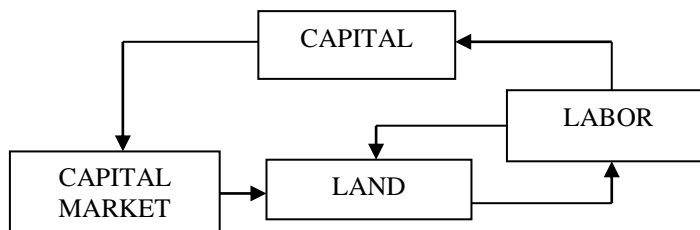


Figure 1. Factors of production in the pre-industrial period of economic development

The goods produced was also a certain capital of the producer, by virtue of which he could reproduce his products, directing the reproduction to the subsequent use of the land factor. The accumulation of this capital is carried out by using the monetary form of exchange of products in the goods market, which is a component of market infrastructure.

In the industrial period of economic development, the main factor in production is capital. Expressed in the form of liquid real estate and in the form of financial capital, this factor ensures the connection to the production process and the use of the labor and land factor necessary for capital itself as a sufficient resource of the production process (Fig. 2.).

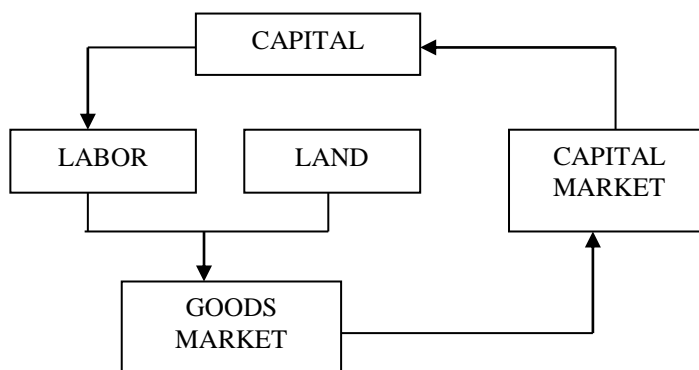


Figure 2. Factors of production in the industrial period of economic development

The commodity market ensures the circulation of goods and the accumulation of capital through the use of the added value of the products realized. Capital already accumulated in sufficient quantity itself becomes a commodity for which its own market is objectively formed - as a new component of market infrastructure. Thus, the development of the economy in the industrial period is ensured by the circulation of capital, the representation of which is expressed in the forms of real estate, finance, securities and money, with the formation and organization of the functioning of new types of markets created for each form.

In the post-industrial period of economic development, a new factor is emerging that regulates the production process - entrepreneurship. This factor becomes decisive, since it determines the most beneficial and efficient use of the remaining factors of production: land, labor and capital in order to meet the increasing needs of the population. The needs of the population show themselves in the goods market. The goods market provides the possibility of capital accumulation. At the same time, it is necessary to use a diverse workforce of different qualifications, which leads to the

formation and development of the labor market as a new market infrastructure. The reproduction of the labor force requires spending of the part of the capital, which regains with return by virtue of more productive labor (Fig. 3).

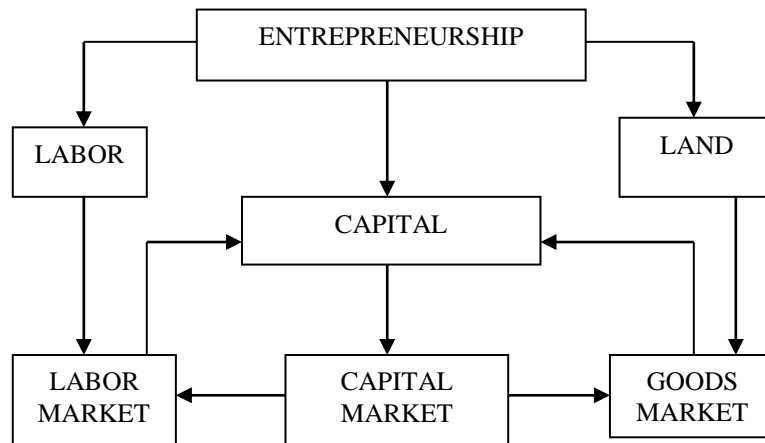


Figure 3. Factors of production in the post-industrial period of economic development

In the modern period of economic development, all researchers register the emergence of a new factor of production - knowledge. This factor becomes determining, due to the objectively existing limitations in the reserves of natural resources, human resources of the necessary qualifications and lack of capital. The need for the correct rational distribution of available resources, the need for the search for cognitive solutions expressed in the methods of obtaining new materials, the implementation of new technologies, and the optimal management of existing and created productive forces start prevail. All these innovations are impossible today without improving and optimizing all processes and implementing effective regulation of them.

At the same time, role of knowledge is not related only to production processes and related economic relations, but also to social political and cultural processes. The tool for implementing all processes mentioned above is cybernetics - as a management based on the use of sufficient, complete, accurate and promptly delivered information to the decision-maker object, while a technological basis for this tool application is digital information technologies developing nowadays. It is the digitalization of the economy (not just the production process) that allows an integrated use of traditional factors of production and markets created in previous periods (Fig. 4).

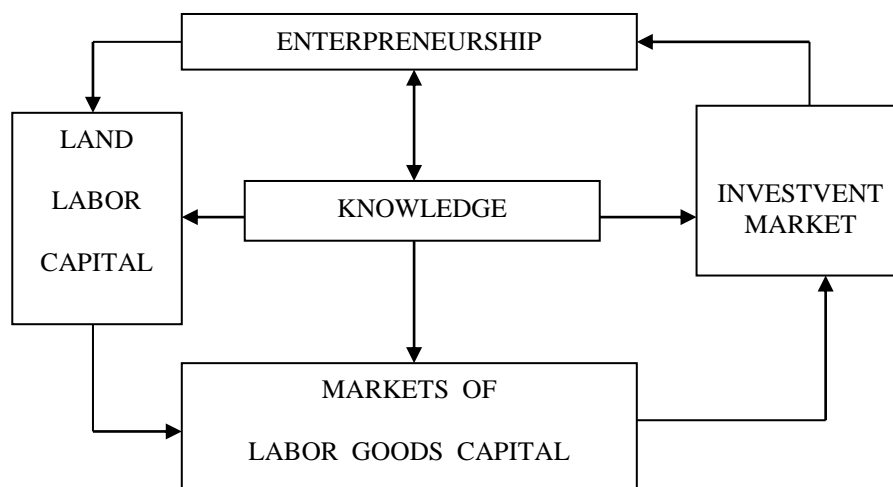


Figure 4. Integrated use of production factors at the present stage of economic development

### Results

Under conditions of economic recession in the Russian Federation (RF) and continued budget cutting of all levels, efficient utilization of budgetary funds at the level of municipalities remains one of the most significant issues (Danilina, Chebotarev, Reznikova and Gorelov 2016).

As known, factors and indicators of social-economic efficiency of using labour form a methodological foundation for developing methodics of defining demand in personnel for agrarian enterprises (Malikova, Danilina, Reznikova 2016).

The requirement directly concerns service sector enterprises: services costs must match the purchasing power of consumers in the market, especially in production (Danilina, Reznikova, Verna and Ganieva 2017; Lebedev, Reznikova, Dimitrieva and Ametova 2018).

Currently, it is knowledge, in conjunction with entrepreneurship, that determines the necessary areas in production, the development of technical and technological capabilities and in the management of all these and require the investment of the necessary funds. Therefore, in our opinion, during the digitalization of the economy, a new infrastructure component should be formed - the investment market, which will determine the effective investment of forces and means from the existing limited stock into the most priority areas of economic development.

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