



## FORMATION OF A MODEL OF THE HUMAN CAPITAL DEVELOPMENT SYSTEM

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### ABSTRACT

The article covers the formation of a model of the human capital development system. The analysis of wages at the enterprises of the Republic of Uzbekistan, which depends on the general economic situation, is carried out. The labour market is the main source of capital accumulation and well-being in the country, and therefore, an incentive for the interest of investors and all innovative development. The main parameters of the innovative activity of enterprises and organizations in the Republic of Uzbekistan are analyzed.

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### Introduction

Socio-economic development in the second half of the last century and the beginning of the current one is characterized by the increasing role of the human factor. In the economy of the modern world, human capital plays a decisive role in achieving competitive advantages and ensuring quality parameters of economic growth. Prospects for this development in the XXI century. associate with human resources as carriers of knowledge.

Human capital is an intensive productive factor in the development of the economy, society and the family, including the educated part of the labour force, knowledge, tools of intellectual and managerial work, the environment and work activity. Human capital is a necessary condition for maintaining the competitiveness of the country's economy and the state on world markets in the context of globalization, as well as the most important characteristic of the activities of legislative and executive authorities in the country.

### Results.

Modeling is one of the most reliable and frequently used methods of cognition of an object,

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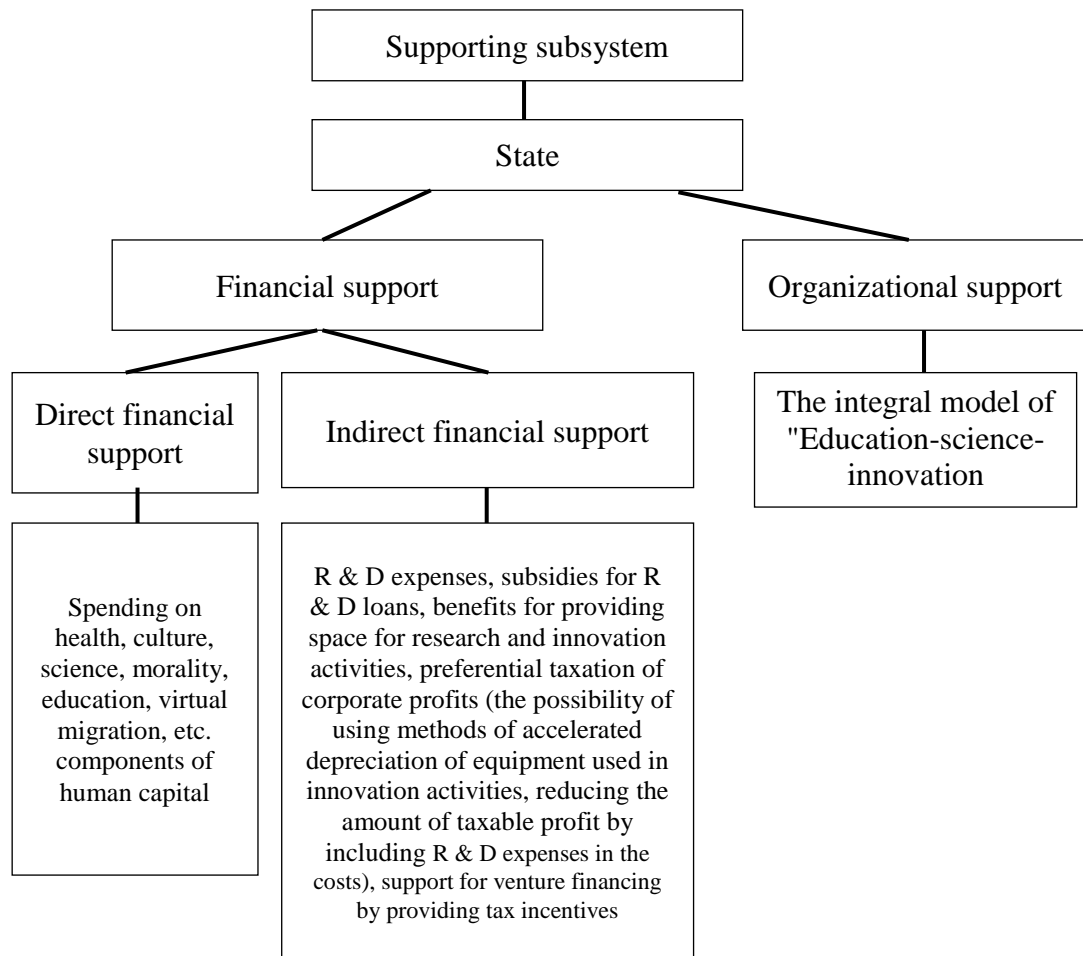
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phenomenon or process. The purpose of modeling is to collect information about the functioning of the object, the possibilities of application in practice and forecasting the directions of development with a complete reconstruction of the organizational structure, the relationships of elements and properties in general.

The basis of the model of the human capital management system of an innovative organization is the external environment (the institutional environment; the state as a supporting subsystem) and the internal environment (the providing system, the functions of which remain constant for a certain time; the accompanying subsystem based on managerial innovations; the intra-organizational management mechanism that provides managerial impact on the object of management (human capital) in the process of achieving targets).

On the other hand, education is an element of the human capital management system, participates in the social accumulation of intellectual and creative components and their use in the innovation process.

Figure 1 shows the supporting subsystem of the human capital management model. The role of state support for the necessary level of human capital for the implementation of innovative processes is to finance, provide organizational support and create conditions and incentives.



**Figure 1. Supporting subsystem of the human capital management model of an innovative organization**

Financial support of the state should be provided in the event that the business cannot obtain the necessary rate of return, and positive external effects are of great importance for the state.

Organizational support of the state on the example of the integration model "Education-science-innovative production", designed to ensure effective integration in the interests of innovative development. The creation of such an integration model contributes to the innovation activity and receptivity to innovation in domestic organizations, the development and improvement of the intellectual human capital, increase the investment attractiveness of the innovation, reduce uncertainty and risk, development of innovative infrastructure, and also contributes to addressing global socio-economic problems associated with the emergence and spread of problematic innovation.

Within the research, we proposed a mechanism for assessing the level of human capital development at the micro-level. This model is based on the needs of a person as a participant in the production process.

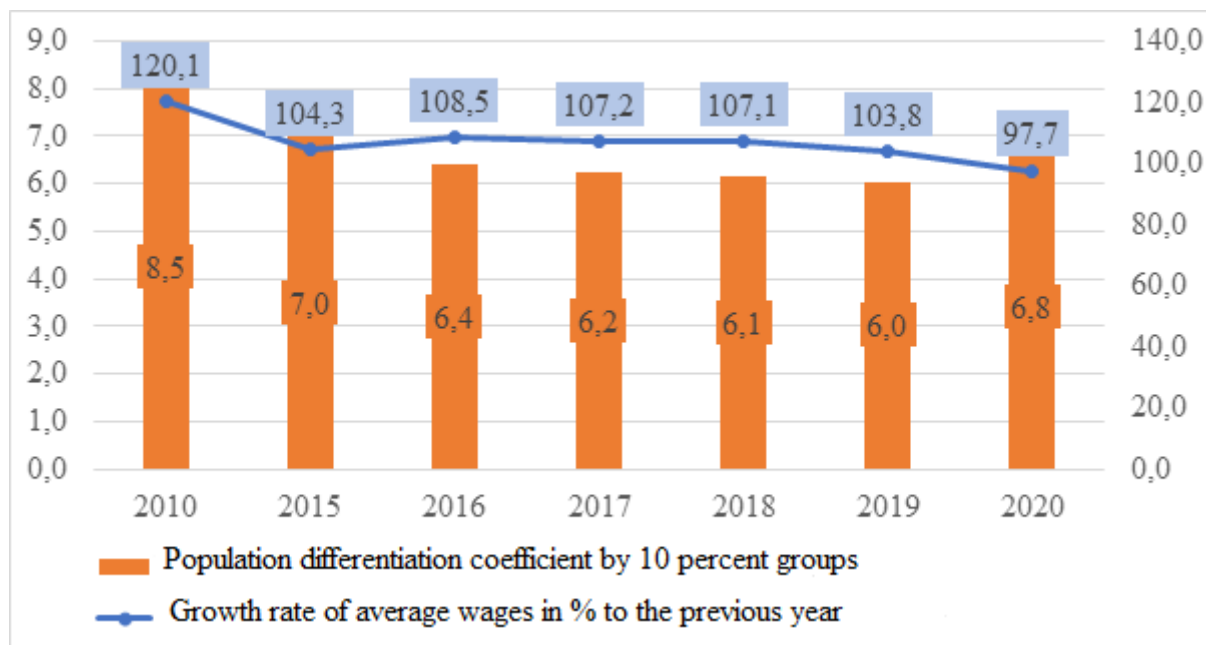
The analysis of the dynamics and current state of human capital is carried out through a set of direct indicators (quantitative representation of the labour force, the cost of human capital) and indirect indicators that indirectly affect the quality of human resources (the level of innovative activity and technological development). the infrastructure of the human capital operating environment). The analysis of the cross-correlation of indicators excludes unwanted uninformative elements and allows you to operate only statistically significant elements.

The block of indicators "Economic development" includes parameters for assessing the following aspects of human capital development.

1. The number of human resources in the economy. This block of indicators describes the quantitative composition of labour resources, their dynamics, as well as the organization's need for the appropriate personnel. The number of the economically active population is migration flows, the phenomenon of labour migration.

2. The cost of human capital. This directly includes employee salary levels and salary history. Besides, this block includes an assessment of the differentiation of the labour force by the level of wages, the value of which largely characterizes the functioning of the human environment and the socio-psychological climate.

The analysis of the wages of workers at the enterprises of the republic depends on the general economic situation. The labour market is the main source of capital accumulation and prosperity in the country, which means that it stimulates the interest of investors and all innovative development. In the period from 2010-2015. the growth of wages is reduced to 15.8%, which in the context of inflationary impacts, reaching 7.0 times. Thus, the rate of decline in real wages from 2015 to 2020 was from 104.3% to 97.7%. The population differentiation coefficient for 10 percent groups has changed insignificantly; from 7.0 times to 6.8 times. The low level of wages does not stimulate a person to be active, to work intensively, and even more to self-improvement. (Fig. 2.)



**Figure: 2. Dynamics of the wage level and its differentiation**

The excess of the wages of the most highly paid workers over the wages of the lowest-paid workers is on average 7.0 times.

In the case of building an innovative model of economic development, where the main profit will be brought by knowledge, technology and human intelligence, the growth rate of wages of enterprises in the republic will increase at a slower pace. Increase in labour productivity will become the basis for wage growth.

3. The level of innovative activity of the environment for the functioning of human capital. The development of human capital is directly related to the intensity of the organization's innovative activity, which allows employees to improve the educational level and the effectiveness of creative initiatives.

The economic activity of companies in the Republic of Uzbekistan has increased in recent years. In the last 2010-2020. enterprises and organizations of the republic bore the cost of innovation and produced innovative products. At the same time, investments in intangible assets, which should result in inventions, utility models, new technologies and software products, do not have stable dynamics. (Table 1.)

**Table 1.**

**The main parameters of innovative activities of enterprises and organizations in the Republic of Uzbekistan**

№	Indicators	2010	2015	2020
1	The number of enterprises and organizations introducing innovations:			
2	Technological	145	894	1025
3	Marketing	1	14	28
4	Organizational	3	27	32

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5	Number of implemented innovations:			
6	Technological	462	1737	2143
7	Marketing	32	36	71
8	Organizational	6	46	43
9	The volume of manufactured innovative products (goods, works and services), billion UZS	1849	8023,6	21241,2
10	Costs for innovation, billion UZS	264,4	5528,3	5821,4

The positive effects of these investments can be seen over several years and can generate significant returns with corresponding returns. Of course, investments in intangible assets can only be made by investors with a relatively high level of capital. Therefore, most organizations use commercial technology exchange with foreign countries.

4. Technological infrastructure of the environment for the functioning of human capital. An important prerequisite for innovative development is the technical level of production equipment. Not all enterprises are capable of independently developing new technologies.

It is known that the development of human capital in an innovation environment is accelerating. New equipment and technologies require appropriate qualifications of the operating personnel. Constant investments are directed to both new construction and modernization and the acquisition of fixed assets. In the republic, enterprises use 62.4% of funds for the purchase of equipment and 21.5% for the purchase of vehicles. More than 70.0% of investments in new construction are directed to the construction of buildings and structures. Modernization of machinery and equipment is carried out to a lesser extent; mainly the acquisition of new equipment is carried out. This positive trend should lead to the minimization of the amount of obsolete equipment, improving the quality of the working environment for the functioning of human capital.

The trend in the quality of the working environment in enterprises is negative. Every third employee is engaged in work in an unsafe workplace. However, only 57.7% of workers in this category receive cash or any other compensation. The dynamics of this indicator is positive, but the average growth rate is no more than one percentage point per year.

The low quality of the production environment is directly related to the general technological infrastructure and the technological level of product development. As equipment and fixed assets are upgraded, working conditions for workers will improve. The slow development of this process is now caused by the general economic situation and the lack of financial resources.

Thus, for the effective organization of motivation, contributing to the transformation of human capital in the innovation process, it is necessary:

- to establish the parameters of the natural component of the personality of each employee (natural abilities, tendencies to a certain type of activity);
- evaluate the parameters of the social component: acquired abilities (education, professional experience, advanced training, retraining, etc.),
- to assess how the vector of natural abilities coincides with the social direction of human activity (employee);
- assess the level of efficiency of using the creative energy of each specialist.

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