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## MANAGING THE DEVELOPMENT OF THE REGION THROUGH THE USE OF HUMAN CAPITAL

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### *Abstract*

In modern conditions, modernization goals require to develop new approaches to solving issues in order to ensure effective management of the region development. The main problem of region management is to use of all available resources, including human resources, more efficiently. In connection with this, the subject of the research is the region's human capital. The human capital of the region, in our opinion, is the aggregate of the able-bodied and potentially able-bodied population of the region that possess the basic, natural, and acquired stock of knowledge, skills, experience, talents (including entrepreneurial), professional competencies, which can be accumulated, retained, and reproduced for future generations and generate income ensuring the achievement of the goals of the innovative socioeconomic development of the region. The level and quality of the region's human capital development are the determining factors of the region's development potential. This article deals with the issues of assessment and management of the region's human capital. Based on the studies conducted, we developed and justified a methodology for estimating economic losses from inefficient use of the human capital and proposed a mechanism for managing region development based on the use of the region's human capital.

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**Keywords:** Economic losses, unemployment, shadow economy, human capital.



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## 1. Introduction

As practice shows, at present, the integration of such a key component as human capital in the modern system of the region's socioeconomic development management is not paid due attention, which does not allow providing a complete theoretical justification for an applied solution to the relevant problem—reasonable and balanced use of the entire set of resources of the territory for the purposes of innovative development of the region. At the same time, one of the key factors in the current situation of aggravation of issues, competition for resources, new markets, etc., which ensures the formation of a digital economy and prioritized innovative development of the region is the effective use of the region's human capital. All this dictates the need to focus on the issues of the regional human capital development. Therefore, the effective use of high-quality human capital, realization of the potential of each individual, provision and receipt of an equal volume of public services, development of demography, healthcare, education, and culture should be considered as the main priorities in the management of the socioeconomic development of the region. This, in turn, requires a qualitative reconsideration and revision of the paradigm for the region's socioeconomic development management. The new management paradigm must rely on human capital as the main driver of the digital economy development. All this predetermines the need to develop a special methodology for assessing, measuring, and managing the region's human capital. The relevance of this issue is also due to the fact that there is no appropriate mechanism for managing human capital currently.

## 2. Problem Statement

The human capital of the region, in our opinion, is the aggregate of the able-bodied and potentially able-bodied population of the region that possess the basic, natural, and acquired stock of knowledge, skills, experience, talents (including entrepreneurial), professional competencies, which can be accumulated, retained, and reproduced for future generations and generate income ensuring the achievement of the goals of the innovative socioeconomic development of the region.

Economic publications suggest many types of assessment of human capital that differ greatly in methodological approaches and indicators. In general, the performed analysis of modern methodological approaches to the human capital assessment showed that:

- different authors use different methods and there is no generally accepted and universal method, which is due to the absence of a generally recognized conceptual apparatus for the study of human capital and the existence of numerous approaches to its structuring;
- with a variety of approaches to human capital assessment, all of them lack important components, since not all structural components of human capital can be quantified;
- the authors of many publications consider this problem fragmentarily and not systematically;
- there is no economic justification for the results obtained;
- modern foreign studies focus on the microlevel and assess the efficiency of human capital and investment in it, while the research at the regional level is not comprehensive;
- modern studies underestimate the possibility of integrating methods that can significantly enhance the application of these methods to assess the region's human capital;

- the studies of Russian authors do not pay due attention to the assessment of the region's human capital (Bondarskaja, 2015; Liepe, 2012; Milost, 2014; Mukhametova, 2019; and others).

### 3. Research Questions

In this regard, the research tasks of identifying and solving the issues of ensuring organizational and economic effectiveness of the mechanism for managing the socioeconomic development of the region based on the effective use of human capital, allowing to build the system development paths with account of the majority of factors that have both positive and negative impact on the proposed management model, are of particular interest from the methodological perspective (by Constitution of the Russian Federation).

### 4. Purpose of the Study

Thus, there is an extreme need for well-elaborated methodological approaches to estimating human capital at the regional level, which in the future will enable a comprehensive estimation of the human capital of the region, ensuring its objectivity and comparability based on the most complete and reliable information.

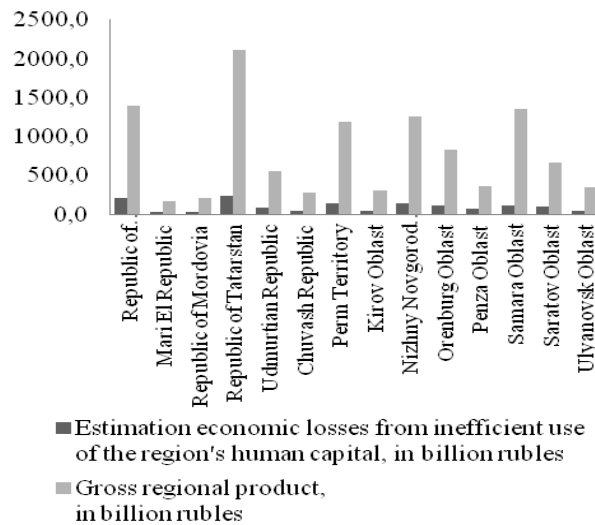
At the same time, one of the current critical priorities of the country's regional policy is to increase the contribution of human capital to the development of the digital economy of the region. Therefore, an important methodological problem is to develop a methodology for estimating economic losses from underutilizing the human potential in the regional economy. The underutilized human capital of the region is defined by us as the share of the region's population that is at working age, is legally capable, and has certain knowledge and skills, but at a given time is either economically inactive or uninvolved in the real economy (unemployed, employed in the shadow economy). Given the complexity of comprehensive assessment of the contribution of human capital to the economic and social development of the region, we estimated the economic loss caused by the underutilization of human capital in the region by formula (1), which calculates the economic losses from unemployment, on the one side, and the economic losses from employment in the shadow sector of the region, on the other.

$$E=(U*CRP \text{ per capita}+US*CRP \text{ per capita})/GRP \quad (1)$$

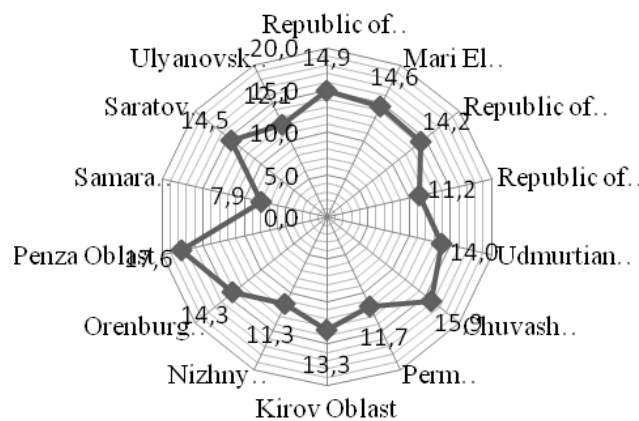
where: E - Estimation of economic losses from inefficient use of the region's human capital; GRP - Gross regional product (analogue GDP); GRP per capita - Gross regional product per capita; U - Unemployed; US -Employed in the shadow economy.

### 5. Research Methods

To verify this methodology, we estimated the region's economic losses and identified underutilized resources of the region's human capital. As a result of calculations (Table 1), we obtained the following estimates of the economic losses in the regions Volga Federal District (VFD) (see figure 1).



**Figure 01.** The results of the assessment of economic losses from underutilized human capital of the region in billion rubles



**Figure 02.** Estimation losses in GRP economic, %

Table 1 and figure 2 shows that the largest losses take place in the economy of Penza Oblast (17.6 % of the GRP), the Chuvash Republic (15.9 % of the GRP), the Mari El Republic (14.6 % of the GRP), the Republic of Bashkortostan (14.9 % of the GRP), Saratov Oblast (14.5 % of the GRP), and Orenburg Oblast (14.3 % of the GRP). At the same time, it should be noted that only about 15 % of the economic losses of the regions Volga Federal District are caused by unemployment, while the rest is caused by employment in the shadow economy.

In our opinion, such a spread of values indicates insufficiently effective management of the region's human capital. As can be seen from the analysis, all regions of the Russian Federation in the Volga Federal District have significant losses in GRP, related to the quantitative underutilization of their human capital.

**Table 01.** The results of the assessment of economic losses from underutilized human capital of the region, 2017

Regions	The results of the assessment of economic losses from underutilized human capital of the region			
	Estimation of economic losses from unemployment, million rubles	Estimation of economic losses from employment in the shadow economy of the region, million rubles	Total (E), million rubles	Estimation losses in GRP economic, %
Republic of Bashkortostan	39799.4	168687.9	208487.3	14.9
Mari El Republic	4580.3	20140.9	24721.2	14.6
Republic of Mordovia	4405.7	25948.8	30354.4	14.2
Republic of Tatarstan	38924.9	198098.6	237023.6	11.2
Udmurtian Republic	13448.1	64223,1	77671.2	14,0
Chuvash Republic	6678.4	36297.5	42975.9	15.9
Perm Territory	32605.0	106803.8	139408.8	11.7
Kirov Oblast	7651.7	33216.9	40868.6	13.3
Nizhny Novgorod Oblast	24560.6	118216.8	142777.4	11.3
Orenburg Oblast	19003.7	99014.5	118018.2	14.3
Penza Oblast	8212.2	56226.7	64438.9	17.6
Samara Oblast	23188.4	83313.2	106501.6	7.9
Saratov Oblast	14629.8	82069.1	96698.9	14.5
Ulyanovsk Oblast	7654.7	33568.2	41222.9	12.1

As the experience of developed countries shows, one of the most effective tools in this area is the organization of centralized project management. Within the framework of the research, the work on project management has been started, appropriate regulations have been adopted at the all levels of government (national and regional), project committees have been formed, etc. However, in our opinion, this work is at its initial stage and the prioritized projects so far do not fully address the key priority of the region's socioeconomic development—the effective use of human capital. Also, we believe “that in order to avoid formalizing the solution and implementation of the assigned tasks by public authorities, there is a need for an effective mechanism for coordinating the interests of all stakeholders of the region and their participation in project management” (Mukhametova, 2019, pp. 2581-2588)

In this case, the important element of the mechanism for the project management of socioeconomic development of the region is the establishment of the Project Committee for Integrated Development of Human Capital.

In addition to the defined functions, the Project Committee for Integrated Development of Human Capital of the Region will be a permanent highest-level coordinating and monitoring body under the Government that will review and solve key issues of the effective formation and use of the region's human capital, including creating conditions for its development through the consolidation of efforts and interests of regional authorities, public and scientific organizations, representatives of business, and other organizations.

We believe that in order to be effective, the executive and representative bodies of the constituent entity of the Russian Federation, local self-government bodies, territorial and subordinate bodies of the Federal Government, the Academy of Sciences, research institutes, universities, scientific and public organizations, businesses, etc. should participate in the Project Committee for Integrated Development of Human Capital of the Region. The proposals of the Project Committee for Integrated Development of Human Capital of the Region are recommendatory in nature. The structure of the Project Committee for Integrated Development of Human Capital of the Region is approved by a resolution of the Government and is formed from officials of public authorities. In order to coordinate the interests of the state, business structures, and public institutions of the region, it is suggested to that the Committee include representatives of state authorities, territorial subordinate bodies of federal executive bodies of the constituent entity of the Russian Federation, local self-government bodies, and organizations whose interests are on the territory of the region. The Project Committee acts on a free basis in accordance with the developed regulations, plans, and road maps.

## **6. Findings**

According to the Order of the Government, the priority projects in the main fields of strategic development of the region are: education, healthcare, mortgage and housing rental, housing and communal services and urban environment, international cooperation and exports, labor productivity, small business, support of individual entrepreneurial initiative, safe and high-quality roads, and ecology. We also suggest including projects such as Migration Policy, Personnel for the Digital Economy, and High-tech Workplaces as strategic projects aimed at achieving a higher efficiency of the region's human capital use.

In general, in our opinion, the establishment of a structure will enable coordinating interdepartmental interaction, as well as interaction between actors of the regional economic system, streamlining the resource flows allocated for the human capital development, and improving the system for monitoring their use, which should have a positive effect on the processes of formation and use of the region's human capital.

## **7. Conclusion**

We believe, that Project Committee for Integrated Development of Human Capital of the Region, in addition to the above, can have the main functional tasks:

- coordinate the general comprehensive assessment of the current state and development of human capital in the region, its contribution to the formation of the region's innovative potential; timely identification of bottlenecks and issues of human capital development in the region; determine

target operational, tactical, and strategic parameters and guidelines for the region management mechanism based on the contribution of the human capital of the region; identify limitations and risks of the organizational model of regional management based on the human capital development; determine the benefits and common interests of government authorities, local communities, and business elite from the human capital development; justify the need and conditions for harmonizing the interests of government authorities, local communities, and business elite in the process of efficient use of the region's human capital; develop an effective motivational mechanism aimed at encouraging representatives of the government, business, and society to develop the human capital;

- inform on a regular basis the region's government on significant issues and problems related to the formation, development, operation, and use of the region's human capital;
- distribute functions and responsibilities in the mechanism of the region's socioeconomic development management based on the effective use of the human capital;
- supervise the implementation and adjust the parameters of the region development management system functioning based on effective use of the human capital, etc. (Yangirov & Mukhametova, 2017).

Thus, the proposed organizational and economic mechanism for managing the socioeconomic development of the region is specifically focused on the effective use of high-quality human capital.

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