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## **Problems and Prospects of Human Capital Development in Modern Russia**

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**Abstract:**

**Purpose:** *In the context of dynamically changing modern labor market there is a need to develop a model of congruence and correlation of the process of building professional competencies provided by educational standards.*

**Design/Methodology/Approach:** *The study was performed using monographic, abstract logical, sociological and statistical methods. However, this approach does not imply the formation of supra-professional competencies, which generally predetermine the success of professional tasks performed by a specialist.*

**Findings:** *The article discusses the role of human capital as a fundamental factor affecting the increase in the competitiveness of production.*

**Practical implications:** *The study focusses on the most demanded competencies for the development of digital society. The authors have grouped countries by level of human capital use.*

**Originality/Value:** *At present, the appropriate parameters for measuring professional and general cultural competencies have been adopted as a system for assessing the quality of education in general and the quality of specialist training.*

**Keywords:** *Human capital, gross domestic product, developed countries, developing countries, economic growth, digital economy.*

**JEL Classification:** *Q18, O15, O31.*

**Paper type:** *Research article.*

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## **1. Introduction**

Under current conditions, geopolitical, demographic and technical trends create a completely new reality for the labor market development. Potential employees increasingly face with uncertainty, since in the conditions of economy digitalization, completely new competencies inherent in the "knowledge economy" come to the fore. In terms of attractiveness of the labor market for potential workers, the Russian Federation lags far behind not only developed but also many developing countries, continuing to lose talented workers. This is mainly because the domestic economy continues to be resource-based and focused on the export of natural resources.

This research is the starting point of the extensive study of human capital development – one of the key elements of the national competitiveness. The authors intend to diagnose the current state of the environment (Gendler and Kuznetsov, 2014; Kuznetsov *et al.*, 2017; Kopteva and Koptev, 2018; Kopteva and Malarev, 2018; Lavrenko *et al.*, 2019) in which human development takes place. The evolution of human capital formation is reflected in the works of the following foreign economists: M. Blaug, E. Dolan, J. Kendrick, J. McCulloch, C. Menger, I. Cravis, T. Schultz, etc.

The role of human capital in the development of economic relations is disclosed in the works of S.P. Vigurskaya, A.I. Dobrynin, S.A. Dyatlov, I.V. Ilyinsky, R.I. Kapelyushnikov, Yu.A. Korchagin, O.V. Losev, V.I. Martsinkevich, L.G. Simkin, V.G. Smirnov, I.V. Sobolev, N.N. Kalinkina, L.A. Kalinina, A.V. Kozlov, V.A. Kundius, Papelo, E.V. Rudy, A.T. Stadnik, V.F. Stukach, I.G. Ushachev, I.V. Skoblyakov, S.G. Strumilina, T.L. Sudov, T.R. Khannanov, E.D. Tsyrenova, T.A. Shtertser, S.A. Shelkovnikov, M.A. Shchebratykh, A. Smith, D. Ricardo, K. Marx, M.A. Armstrong, G. Becker, Y. Ben-Porat, M. Blaug, G. Bowen, A. Brooking, J. Boone, E. Denison.

## **2. Methodology**

The fundamental principles of economic theory, the economics of agricultural organizations, scientific works on the topic under study, laws and regulations of the Russian Federation served as the theoretical and methodological basis for the study. The study also used data from the Federal State Statistics Service of the Russian Federation and its territorial office, specialized and reference literature. The authors used the following research methods: monographic, abstract-logical, sociological, economic-mathematical, and design-constructive.

## **3. Results**

In modern conditions, the use of intensive production factors in agro-education, including the active use of digital technologies, and the introduction of innovations, requires employees' professional adaptability, independent decision-making, and

self-learning. Since employers need workers with certain practical experience in addition to theoretical knowledge, practice-oriented training is of great importance in the training of future specialists. This is mainly because many graduates with higher education cannot always get the desired job due to the lack of necessary professional experience. When considering this approach, it is necessary to highlight several main areas of training. The first one implies organizing students practical training designed to provide them with the information on future professional environment. The second one implies the formation of general cultural, general professional and professional competencies. When compared to traditional education, the use of a practice-oriented approach allows increasing the efficiency of the educational process and significantly improving the quality of training future specialists (Kuznetsova *et al.*, 2018; Magsumov, 2018; Ibrahimova *et al.*, 2017; Amurskaya and Solnyshkina, 2015; Ivanova *et al.*, 2018). Practice-oriented training of future employees performs the following functions in the system of higher education:

- Developing - the development of personal potential of future employees, as well as communication and creative abilities, the ability to self-study;
- Educational - the formation of morality, contributes to the birth of the student interest in the chosen profession, dedication and focus on results;
- Training - the formation of professional competences of the student, as well as the skills and abilities in the chosen profession (Prischepa and Averyanova, 2017; Akhmetshin *et al.*, 2019a; 2019b).

According to researchers A.V. Borisov and A.A. Parashchenko: *"The professional training system is the most important profile in the market economy, which allows ensuring the most important components of competitive advantages of particular regions and the country as a whole on the world market and creates the basis for the prosperity of the Russian economy"* (Stadnik, 2015).

It must be borne in mind that the prosperity of an enterprise depends on a set of employees' competencies. This particularly applies to the top management of an enterprise presented by its executive head. This is because the head of an organization sets the necessary direction of the company's work and controls all internal processes. It should be noted that to date, management undergoes fundamental qualitative changes, aimed at increasing the role of employees' psychological component. This certainly also refers to managers, as in the conditions of tough market competition, to ensure the maximum profit they should have relevant knowledge and actively use innovation in the production process (Korableva *et al.*, 2018; Tananykhin and Saychenko, 2017; Akhmetshin *et al.*, 2018a; 2018b; Osadchy & Akhmetshin, 2015; Prokhorova *et al.*, 2016; Tananykhin and Shagiakhmetov, 2016; Podoprigora and Raupov, 2018; Podoprigora, and Saychenko, 2017; Podoprigora *et al.*, 2016; Korobov and Raupov, 2017; Aleksandrova *et al.*, 2017; Aleksandrova and Shabarov, 2016; Prischepa *et al.*, 2018a, 2018b; 2018c; Kayumova *et al.*, 2019).

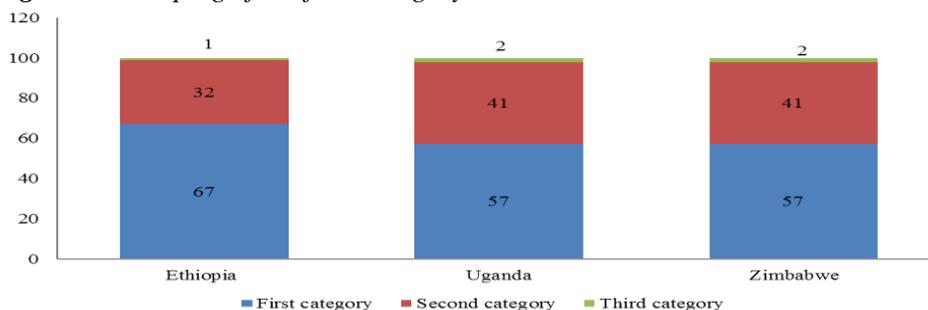
Nevertheless, recent studies indicate that apart from professional competencies, managers also value personal qualities of their employees, which cannot be taught at educational institutions. Herman Gref, the Chairman of the Executive Board of Sberbank notes that "there is a powerful global competition between countries, which had never happened before, and those who have invested in "soft skills", in the development of system-forming institutions, in everything that is connected with human capital, in the construction of investment climate, are the winners" (Kuznetsova, 2018; Nikolaeva *et al.*, 2018; Aleksandrova *et al.*, 2018; Talovina *et al.*, 2017; Aleksandrova *et al.*, 2015). Several researchers divided the employed population into three categories, depending on their qualifications.

1. The first category includes workers with initial or basic qualification. This category best copes with mechanical standard operations (drivers, guards, movers, etc).

2. The second category includes workers with an average level of qualification, these workers perform technical, routine work that does not require great mental costs (administrators, accountants, electricians, builders, etc).

3. The third category includes highly skilled workers who perform mental work. This category has key universal competencies (teachers, doctors, engineers, lawyers, managers, etc.). Below is the list of states with a preponderance of first category. It includes Uganda, Zimbabwe and Ethiopia.

**Figure 1.** Grouping of the first-category countries



The main characteristics of these countries are: the presence of young and not educated population; low human development index; the median age is 21 years old; – GDP per capita is less than \$1,707; the lack of a digital economy. The second category includes the following countries: Malaysia, Saudi Arabia, Russia, Kazakhstan, and Brazil.

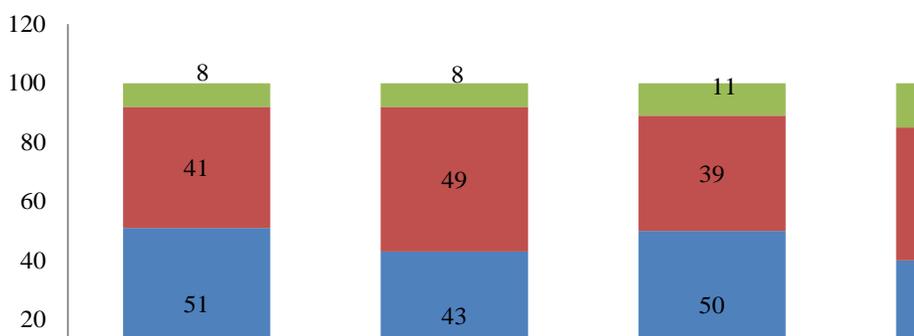
Countries of this category have the following features:

- a proportion of people above working age;
- well-educated population;
- the median age is 35 years old;
- average human development index;

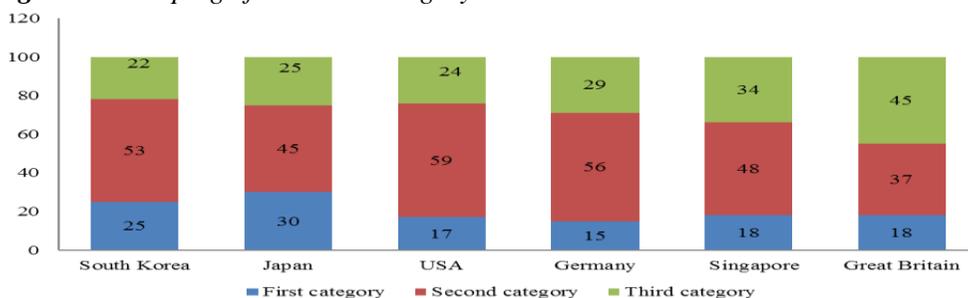
- GDP per capita is about \$29,000;
- poor development of the digital economy;
- Internet coverage not exceeding 50%.

The third category of employees include South Korea, Japan, USA, Germany, Singapore, and the UK.

**Figure 2.** Grouping of the second-category countries



**Figure 3.** Grouping of the third-category countries



Characteristic features of the third group are as follows:

- population above working age;
- highly educated population;
- the median age is 45 years old;
- high human development index;
- GDP per capita is more than \$52,000;
- developed digital economy;
- Internet coverage of more than 85%.

The rapid development of digital technologies indicates that in highly-developed countries the use of intensive production factors in agro-education (including the active use of digital technologies, the introduction of innovations) requires professional adaptability, independent decision-making and self-learning (Plotnikov *et al.*, 2018; Prischeva and Averyanova, 2017; Poltarykhin *et al.*, 2018;

Aleksandrova and Afanasova, 2019). To understand the concept of "soft skills", first, it is necessary to refer to computer terminology.

A computer as a material object is based on two English definitions: "hardware" and "software". In relation to a person, "hard skills" mean hard competencies, meaning professional knowledge related to a specific type of activity (Gabidullina *et al.*, 2018; Zhundibayeva *et al.*, 2013; Achaeva *et al.*, 2018; Achaeva *et al.*, 2016; Achayeva *et al.*, 2015; Tarman, 2017). Such knowledge is the knowledge of accounting, traffic regulations, anatomy, etc. Using "hard skills", a worker improves his/her professional skills. A person usually masters these competencies in educational institutions and in several stages. Thus, when training to become a veterinarian, it is necessary to pass intermediate certification tests and exams in order to proceed to the next course. These competencies are confirmed by a diploma. However, many managers indicate that most employees lack creativity, punctuality, responsibility, and other personal qualities.

In connection with the above, the quality of training future farmers in an educational institution should not only involve mastering professional competencies, but also the so-called "soft skills". According to the dictionary, "soft skills" are personal qualities that allow effectively and harmoniously interacting with other people. Since the microclimate at the workplace and the efficiency of economic activity depend on employee relations, this type of competencies must be treated more carefully. In modern conditions, most employers distinguish the following basic characteristics, in addition to professional ones: communication skills; creativity; fast adaptation to constantly changing conditions; educatedness, high level of culture; teamwork; professional mobility; the ability to set specific goals and achieve them; non-standard approach to solving tasks; conflict and risk management; the ability to build long-term relationships with partners; stress resistance, self-presentation and self-control; subordination (Shelkovnikov, 2016).

A survey of managers in the professional field shows, that 84% of the employee's success is achieved through soft competencies and only 16% – through professional knowledge. Today, in the production process, employees often must interact with people with different habits, traditions, and standards of behavior. In the human capital formation, special attention should be paid to the formation of soft skills among employees; however, hard skills cannot be excluded, since they ensure the employees' professional competence (Sharafutdinov *et al.*, 2017; Efimov and Kochneva, 2011; Galkin *et al.*, 2013; Koskov and Kochneva, 2012; Dmitrieva *et al.*, 2017; Mullakhmetov *et al.*, 2018; Prischepa *et al.*, 2018; Prischepa *et al.*, 2015).

The issues of professional performance and education are one of the most important in the life of each person. Not only the well-being of an individual but also the economic growth of the entire state depends on their solution (Tananykhin *et al.*, 2018; Tsvetkov *et al.*, 2018; Shagiakhmetov *et al.*, 2018; Korobov and Podoprighora, 2018; Podoprighora and Korobov, 2017; Raupov and Podoprighora, 2017; Raupov and

Korobov, 2018; Aleksandrova and Korchevenkov, 2017; Romashev and Aleksandrov, 2016). The current changes associated with the development of the "knowledge economy" lead to the formation and the use of a completely new paradigm of human capital formation.

According to M. Castells in the present conditions, the constant movement of information takes the form of a stream, staying in which for modern people gives a feeling of deep involvement (Castells, 2000). Today, a person is a bio-socio-electronic subject who can change the environment with the help of information, which has a positive effect on the economic efficiency of production activities. In the conditions of informatization of the economy, the most important competences of a person are: the ability to create new, flexibility in making management decisions, critical data processing, the ability to manage projects and teams using information and social networks. Today, the leader can be the one who can create and work with important information that can have an impact on many people. It follows that critical perception, analytical skills, a creative approach and the ability to manage information become the most important competencies of the information society.

#### **4. Conclusion**

Today in the Russian Federation considerable attention is paid to the discussion of innovation, digital economy, labor productivity, and competitiveness. However, these plans cannot be implemented without a systematic approach to human capital development, including attracting and retaining the best minds and providing conditions for the growth of progressive employers. One of the most important tasks for these organizations is to create new highly skilled workplaces inherent in a technological, diversified and creative economy, called the knowledge economy.

The study conducted by the authors shows that the leading countries that are actively transforming their educational systems focus not only on the formation of professional competencies but also on the development of cognitive skills. To sum up, it is safe to say that the next twenty years will be the era of the most sweeping changes in the educational system. Whereas the key source of these changes will not be the education system itself, but the related industries – information technologies, medicine, and finance. There will be a new global educational architecture that can significantly affect the economic efficiency of various production processes.

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