

Employment Transformation under the Influence of Digitalization and Pandemic in Russia

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Abstract— Changes in the labor market under the influence of digitalization and the pandemic create problems for the employment of the able-bodied population of the country. Employment problems are primarily associated with changes in the requirements of organizations for the competencies of employees. The lack of competencies leads to a surprising paradox, when, on the one hand, a category of workers is formed who cannot find their place in the new digital economy, and on the other hand, the digital economy is experiencing a severe staff hunger. To overcome this contradiction, it is necessary to develop a state global comprehensive multi-level training program for transitional competencies based on the use of big data.

Keywords—Digital economy, employment, labor market, transformation, competencies, training.

I. INTRODUCTION

The digitalization of the economy is rapidly changing the world, aggravated by the Covid-19 pandemic, is changing the labor market with inexorable inevitability, employment problems are becoming more global, truly revolutionary. They are strongly reflected in all aspects of public life, determining in many respects the economic, social and cultural context of the development of the country and the world economy as a whole. At the same time, the peculiarities of the development of each country leave their characteristic imprint on these problems, requiring the development of individual ways of solving the problems that arise. That is why the study of the transformation of employment under the influence of digitalization and the pandemic at the country level is becoming extremely relevant today.

In this regard, 3 questions are considered in these theses [1]:

- how changes in the labor market affect the processes of employment in Russia
- how the requirements of organizations for the competencies of Russian employees are changing
- what are the directions of the transformation of employment in Russia under the influence of digitalization and the Covid 19 pandemic.

II. CHANGES IN THE LABOR MARKET AND THE PROCESSES OF EMPLOYMENT OF WORKERS IN RUSSIA

Let us first of all consider what changes the Russian labor market has undergone under the influence of digitalization and the pandemic over the past two years. The labor market of Russia in 2021 under the influence of these factors is characterized by the following features: instability, an increase in unemployment (3.4% over the past 2 years), obsolescence and disappearance of a number of professions, the emergence of new demanded professions and qualifications, an increase in demand for new professions, an increase in the need for specialists, primarily with digital competencies, changes in the requirements for the competencies of employees, the formation of competence models necessary for the digital economy in the transition period, changes in employment models, inconsistency of legislation with the needs of the labor market [5].

How did these characteristics affect the employment of labor resources in Russia [7]. Table 1 shows the positive and negative consequences of this influence.

Table 1. Impact of changes in the labor market on employment

Factors	Impact of changes in the labor market on employment	
	+	-
Instability	Opportunities for development, getting a new profession and increasing income	Stress, confusion, lack of confidence in the future. Threats to health and well-being
Rising unemployment	The emergence of free time, the search for opportunities for self-realization, self-development and self-education	Stress, risks of losing health. Increased time to find a job, cut wages, social stratification, yes-unshifting
Obsolescence and disappearance of a number of professions	The possibility of obtaining new professions	Reduction and change of staff, loss of work, reduction of wages, increase in difficulties in finding a job in accordance with the specialty

The emergence of new professions	Increased demand for new professions. Growth of wages for certain types of activities	Lack of compliance of existing competencies with the needs of the organization, the need for retraining
Changes in the requirements for the competence of employees	Getting additional education. Development and acquisition of new competencies demanded by the market. Income growth	Stress, risks of losing health as a result of the need for constant training, reduced income
Changing employment patterns	The possibility of remote work, freelancing, platform employment, harmonization of work and personal life	Increased social and economic insecurity. Social isolation. Precariatization of a part of the population
Inconsistency of legislation with the needs of the labor market	Opportunities to act freely in a field unregulated by law	Conflict of interest, difficulties in interacting with people and organizations

Free time, search for opportunities for self-realization, self-development and self-education	Stress, risks of losing health. Increased job search time, reduced wages, social stratification, downshifting	Ability for self-knowledge and self-regulation, proactivity
The possibility of obtaining new professions	Reduction and change of staff, loss of work, reduction of wages, increase in difficulties in finding a job in accordance with the specialty	Ability to learn. Self-education ability
Increased demand for new professions. Increase in wages for certain types of activities	Lack of compliance of existing competencies with the needs of the organization, the need for retraining	Interest in new things, innovation, digital competencies
Development and acquisition of new competencies demanded by the market	Stress, risks of losing health as a result of the need for constant training	Critical thinking, ability to analyze and set goals. Ability to manage self-development
Remote work opportunities, health in, platform employment	Increased social and economic insecurity. Precariatization of a part of the population	Self-organization, independence, self-confidence
Opportunities to operate freely in a field not regulated by legislation	Conflict of interest, difficulties in interacting with people and organizations	Ethics

Numerous studies, including the studies of the World Economic Forum (WEF) The Future of Jobs 2020, draw attention to the fact that the labor market expects a paradoxical phenomenon: an increase in unemployment against the background of an increase in new workers jobs that are difficult to provide staff with the necessary competencies "by 2025, automation and a new division of labor between people and machines will lead to a total loss of 85 million jobs in medium and large enterprises in 15 industry sectors.

At the same time, "the robot revolution will create 97 million new jobs" [3]. This paradox is a kind of test for the state for the effectiveness of managing the socio-economic development of the country. the workforce has the necessary competencies. Let us consider in detail what competencies will be required from a modern employee for successful work. arrangement in the labor market. To date, there is already an extensive literature devoted to this question. From our point of view, this list of "competencies in the transition period to the digital economy" should include, first of all, competencies that can help overcome the identified problems and ensure the entry of the majority of the working-age population into the new reality. In this regard, in table 2. we offer the following list of competencies.

Table 2. List of "transitional competencies" required in the modern world for successful employment [6,8]

Impact of changes in the labor market on employment		Competencies
+	-	
Opportunities for development, getting a new profession and increasing income	Stress, confusion, uncertainty about the future. Threats to health and well-being	Flexibility, adaptability, stress resistance

The presented "competencies of the transition period", in addition to digital ones, are specific personal and social qualities that are naturally inherent in a fairly narrow circle of people in the population. So, according to expert estimates, not more than 5% of the population has a pro-activeness, 20% are fully flexible and adaptable, and about 30% are innovatively susceptible.

III. CONCLUSION

There are several ways to solve this problem [2].

- Increasing the personal responsibility of employees for employment, the development of meta-competencies that can ensure active and responsible behavior of employees in the labor market through the introduction of employment programs in the training systems of students of educational institutions of all levels that develop their abilities to self-knowledge and self-regulation. However, this will only affect the younger generation [9,10].
- Development of corporate training. However, a study of the learning systems widespread in Russian organizations suggests that business today is not yet ready ideologically and economically to solve this problem.

- Therefore, it is necessary to change the processes of employment in such a way as to make them more manageable and expedient to provide them with support in the relevant public institutions. The system of state education and training is becoming a key public institution in the Russian Federation that is capable of solving this problem. Therefore, the formation of a model of modern employment should begin with the creation of a state large-scale all-encompassing system for teaching competencies in demand in the digital economy. The existing programs for the development of digital literacy and digital competence of the population are limited, since they include only digital training and apply to limited categories of workers. To implement such a program, it is necessary to use the capabilities of digital systems, which, based on an analysis of the level of education of various categories of the population, will create flexible multi-stage training systems with a certification system for all categories of the able-bodied population. Such educational programs should be supported by employment consultants and digital platforms offering employment based on the certificates received, which will focus on the needs of the digital economy. This approach will provide the digital economy with the necessary staff, create a sense of social security, i.e. avoid the above negative consequences of the employment crisis.

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