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ECONOMIC DIGITALIZATION: THE IMPACT OF NEW TECHNOLOGIES ON THE LABOR MARKET

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Abstract: The paper examines the impact of digitalization on the labor market in the context of economic transformation. The main focus is on key technologies such as artificial intelligence, robotics, the Internet of Things and big data, which are creating new conditions for job creation, changing the requirements for workers' skills and promoting process automation. The challenges associated with digitalization are analyzed, including the growth of unemployment among low-skilled personnel and the increase in economic inequality. The opportunities offered by digitalization are also identified: the development of remote work, increased productivity and the emergence of new forms of employment. Particular attention is paid to the role of the state and business in ensuring sustainable development of the labor market in the era of digitalization.

Keywords: digitalization, labor market, artificial intelligence, robotics, automation, remote work, economic inequality, platform economy.

Аннотация: В статье рассматривается влияние цифровизации на рынок труда в условиях трансформации экономики. Основное внимание уделяется ключевым технологиям, таким как искусственный интеллект, роботизация, интернет вещей и большие данные, которые формируют новые условия для создания рабочих мест, изменяют требования к навыкам работников и способствуют автоматизации процессов. Анализируются вызовы, связанные с цифровизацией, включая рост безработицы среди низкоквалифицированных кадров и усиление экономического неравенства. Также выявлены возможности,

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которые открывает цифровизация: развитие удаленной работы, увеличение производительности и появление новых форм занятости. Особое внимание уделяется роли государства и бизнеса в обеспечении устойчивого развития рынка труда в эпоху цифровизации.

Ключевые слова: цифровизация, рынок труда, искусственный интеллект, роботизация, автоматизация, удаленная работа, экономическая неравенство, платформенная экономика.

Introduction. Digitalization is the process of introducing digital technologies into various spheres of life, production, business and government activity. This process includes the use of information technology (IT), the Internet, software and data to transform traditional methods of work, interaction and service delivery. The goal of digitalization is to improve the efficiency, accessibility, speed and quality of processes, as well as to create new opportunities for innovation and development.

Literature review. Digitalization of the economy has become one of the most significant phenomena of the 21st century. The introduction of new technologies - from artificial intelligence and automation to blockchain technologies and the Internet of Things - significantly changes not only the structure of the economy, but also the labor market. The impact of new technologies is manifested in the transformation of professions, changes in the nature of employment, as well as in the need for new skills and approaches to learning.

One of the first and most obvious effects of digitalization is a change in the structure of employment. Some professions are disappearing, while others are being transformed under the influence of technology. This is especially true in areas where routine and repetitive tasks were previously performed. Automation and the introduction of robots into production processes, as well as the use of artificial intelligence for data processing, are affecting such professions as accountants, cashiers, call center operators, and assembly line workers. Along with the disappearance of old professions, new ones are emerging. In recent years, there has been an increase in demand for specialists in the field of data analytics, software development,

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cybersecurity, as well as specialists in artificial intelligence and machine learning. These professions require highly qualified specialists with deep knowledge of technology and analytics.

Main part. One of the main drivers of digitalization is automation. Systems based on artificial intelligence are capable of performing tasks that previously required human participation. This covers a wide range of industries - from finance and logistics to medicine and law. For example, in the banking sector, systems are already actively used that analyze customer behavior, prevent fraud, and even advise users.

However, automation and artificial intelligence bring not only opportunities, but also risks. On the one hand, this increases labor productivity and reduces costs for companies. On the other hand, technology can lead to a significant reduction in jobs in certain areas, especially among low-skilled workers. It is important to note that many specialists who can be replaced by machines do not have sufficient skills to adapt to new working conditions.

The digitalization of the economy has contributed to the spread of remote work. Modern communication technologies and cloud services allow you to work from anywhere in the world, which is especially important in the field of information technology, marketing, finance and other sectors related to intellectual work. The COVID-19 pandemic has only accelerated this process, as many companies have switched to remote work, and many of them have decided to continue this practice after the quarantine ends.

Remote work offers workers flexibility in organizing their working hours, reduces transportation costs and contributes to a more equal distribution of jobs between regions. At the same time, it also creates challenges in terms of quality control of labor, social isolation of workers and compliance with their rights. The transition to flexible forms of employment can also lead to an increase in the number of contract workers and freelancers, which affects the stability of labor relations.

The digitalization of the economy requires workers to constantly update their knowledge and skills. If previously professional training could remain unchanged for

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many years, today the situation has changed. Workers need to constantly master new technologies to remain competitive in the labor market.

Many professions require mastering basic knowledge in the field of programming, working with big data, information analysis and cybersecurity. This knowledge is becoming important not only for those working in the field of information technology, but also for specialists in such traditional fields as finance, medicine and engineering.

In addition, the ability to adapt to change is becoming important. This means that workers must develop critical thinking skills, flexibility, and the ability to continuously learn. Education and professional retraining are becoming key tools for increasing competitiveness and adapting to new market demands.

Digitalization can contribute to increasing social inequality. Technologies create new opportunities for highly qualified specialists, but can also contribute to an increase in the number of people whose professions are becoming obsolete due to automation. People who do not have sufficient education and skills to work with new technologies risk losing their jobs, which can increase social tensions.

In addition, digitalization may widen the gap between countries, regions, and social groups. For example, developing countries and regions with a low level of digitalization may face the problem of insufficient access to new technologies, which limits opportunities for employment and doing business.

Digitalization has a significant impact on labor productivity. Modern digital tools such as cloud computing, big data, artificial intelligence, and the Internet of Things allow companies to increase their efficiency and reduce costs. This, in turn, contributes to economic growth.

However, increasing labor productivity may lead to a reduction in the number of jobs in some industries, which will require a revision of social protection models. It is important for enterprises and the state to address issues of social adaptation of workers who have lost their jobs due to automation and help them master new professions.

Conclusions. Digitalization of the economy has a significant impact on the labor market, creating new professions, changing the requirements for employee

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qualifications, and opening up new opportunities for flexibility and remote work. However, it is also accompanied by significant challenges, such as the threat of job losses for low-skilled workers, increasing inequality and the need for continuous training.

To successfully adapt to changes associated with digitalization, it is necessary to develop the education and retraining system, support flexible forms of employment and create conditions for social protection of workers. It is important that technological progress does not lead to social injustice, but, on the contrary, becomes a tool for improving the quality of life and improving working conditions.

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