Web of Scholars: Multidimensional Research Journal
ISSN: 2751-7543
Volume 05 Number 03 (2026)
https://innosci.org/wos

Article

Use of Digital Platforms in the Development of Labor Relations

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Abstract: This article examines the theoretical and practical aspects of using digital platforms in the development of labor relations in the digital economy. The study analyzes the processes of digitalization of the labor market, the role of digital platforms in improving cooperation between participants in labor relations, and their impact on the efficiency of the labor market. In particular, the importance of the digital labor infrastructure introduced in Uzbekistan, including the unified national labor system "E-mehnat", electronic labor contracts, and state electronic services platforms in making labor relations more transparent and expanding formal employment is assessed. The article examines online labor exchanges, recruitment platforms, digital personnel management systems, and modern mechanisms for organizing platform labor based on the experience of developed countries. The results of the analysis showed that digital platforms accelerate information exchange for labor market participants, increase the efficiency of labor resources, and ensure openness and transparency of labor relations. At the same time, issues such as the lack of digital skills in the process of using digital platforms, problems with the legal regulation of platform labor, and risks associated with remote and informal employment were also identified. Based on the results of the study, proposals and recommendations were developed to increase the effectiveness of digital platforms in the development of labor relations. The article proposes scientific, theoretical and practical directions for the modernization of labor relations in the digital economy, based on the need to combine national reforms with international experience.

Keywords: digital economy, labor relations, legal literacy, online platform, digital legal education, cybersecurity.

Citation: I. A. Bakiyeva. Use of Digital Platforms in the Development of Labor Relations. Pioneer: Journal of Advanced Research and Scientific Progress 2026, 5(3), 497-502.

Received: 10th Apr 2026
Revised: 11th May 2026
Accepted: 24th Jun 2026
Published: 04th Jul 2026

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Introduction

The rapid development of the digital economy is introducing new approaches to the system of organizing and managing labor relations. In particular, the widespread introduction of digital platforms makes it possible to simplify the interaction between employers, employees and state bodies, ensure transparency, and increase the efficiency of the labor market. World experience shows that the effective use of digital platforms has a positive effect on the quality of labor resource management, improving the mechanisms for formalizing labor contracts, calculating working hours, organizing remote work, and protecting labor rights [1].

Modern digital platforms are creating a convenient information environment for all participants in labor relations. In particular, electronic labor exchanges, online recruitment platforms, digital personnel management systems, and government electronic services are becoming an important element of the labor market infrastructure. In international experience, digital platforms serve to reduce information asymmetry in the labor market, ensure the matching of vacancies and job seekers, and increase the openness of labor relations [2].

Uzbekistan is also implementing large-scale reforms to digitize labor relations. In particular, the unified national labor system “E-mehnat”, the electronic public services portal “my.gov.uz” and other digital platforms related to the labor market provide citizens

and employers with many services online [3]. These platforms have created opportunities for electronic registration of labor contracts, maintaining information on employee labor activities, providing information on job vacancies, and using public services in the labor sector [4]. At the same time, the level of full and effective use of the existing capabilities of digital platforms is still insufficient. In some cases, low digital skills, insufficiently formed culture of using information technologies, and problems with digital infrastructure limit the effectiveness of platforms. Therefore, it is urgent to scientifically study the role and importance of digital platforms in the development of labor relations, identify factors that increase the effectiveness of their use, and develop practical proposals [5].

Methodology

The study conducted a normative and legal analysis based on the Labor Code of the Republic of Uzbekistan and relevant legislative documents. Based on comparative analyses, the legal literacy system in Uzbekistan and developed countries was compared, and online platforms (E-mehnat, e-Estonia, Singpass, Korea e-Government) were analyzed using the Content Analysis method. Inductive and deductive approaches were used to draw theoretical conclusions from the problems and develop relevant proposals.

Literature review

The development of labor relations and their digitalization have been widely studied by scientists and researchers around the world in recent years. In particular, the impact of digital platforms on the labor market, new forms of organizing labor relations, and innovative mechanisms for managing labor resources are among the important areas of scientific research.

Frederick Taylor's work "Principles of Scientific Management" (1911) is of great importance in shaping the theoretical foundations of organizing and managing labor relations. It explores the issues of scientific organization of labor processes, standardization of work processes, and increasing labor productivity. Today, these ideas are being further improved through digital platforms, automated management systems, ERP programs, and electronic personnel management tools. At the same time, the Taylor model has been criticized for not sufficiently taking into account the interests of employees, which also indicates the importance of social protection issues in digital labor relations.

In the study of the interaction of the parties involved in labor relations, the work of John Dunlop “Industrial Relations Systems” (1958) is of particular importance. The scientist argued that for the sustainable development of labor relations, a balance must be maintained between the interests of the state, employers, and employees. In the context of the digital economy, this approach retains its relevance in the processes of regulating labor relations through electronic platforms, conducting electronic labor contracts, and developing the state's digital labor infrastructure.

In their work “What Do Unions Do?” (1984), Richard Freeman and James Madoff analyzed the role of trade unions in labor relations, arguing that they have a positive impact on the effectiveness of labor relations by not only increasing wages, but also improving working conditions and protecting the interests of employees. In the context of the development of digital platforms, these ideas are important in terms of online protection of workers’ rights, improving digital communication channels and electronic appeal mechanisms. The impact of digital transformation and market relations on the labor sphere is analyzed in David Auston’s work “The Defeat of Solidarity: Anger and Politics in Postcommunist Europe” (2005). The author emphasizes that changes in the system of labor relations as a result of economic reforms can lead to a segmentation of the labor market and a decrease in the level of social protection of certain groups of workers. These conclusions are also relevant for employment relationships established through digital platforms, and the issues of ensuring legal protection for freelancers, platform workers, and individuals engaged in remote work are especially important.

In recent years, foreign studies have paid special attention to the impact of digital platforms on the labor market. They have extensively analyzed the legal and social aspects of platform work, digital labor exchanges, online recruitment systems, and remote work. Studies show that digital platforms, while increasing the efficiency of the labor market, require new mechanisms for the legal regulation of labor relations.

The issues of digitization of labor relations, modernization of the labor market, and human resource management in the digital economy in Uzbekistan have been widely covered in the scientific works of such scientists as Academician K.Kh. Abdurakhmonov, B.Kh. Umurzakov, N.K. Zokirova, G.K. Abdurakhmonova , S.B. Goyipnazarov , B.E. Tagaev. Their research analyzed labor market development trends, the impact of the digital economy on employment, the role of artificial intelligence technologies in labor relations, and mechanisms for reducing informal employment.

The issues of developing digital public services and electronic labor infrastructure have also been studied by scientists of our country. In particular, the importance of the "E-mehnat" system, electronic labor contracts, and digital platforms for the labor market has been assessed from the point of view of increasing the transparency and efficiency of labor relations management. The analyzed scientific literature shows that although the issues of improving labor relations, digitizing the labor market, and regulating platform labor have been widely studied, the institutional mechanisms of using digital platforms in the development of labor relations, their impact on mutual relations between labor market participants, and directions for increasing the efficiency of digital platforms have not been sufficiently studied. This situation determines the need for additional scientific research on this topic .

Results and Discussion

The rapid growth of the population of the Republic of Uzbekistan means the need to ensure employment of the population in the labor market and provide practical assistance to job seekers. In turn, the large number of job seekers, the high share of those employed in the informal sector, and the lack of legal assistance in emerging labor disputes require increasing the legal literacy of the population in the field of labor relations [6].

While the share of those employed in the informal sector in our country was 51.2% (6814.3 thousand people) in 2016, we can see that this indicator has decreased significantly, reaching 42% (5412.9 thousand people) by 2024 (Figure 1).

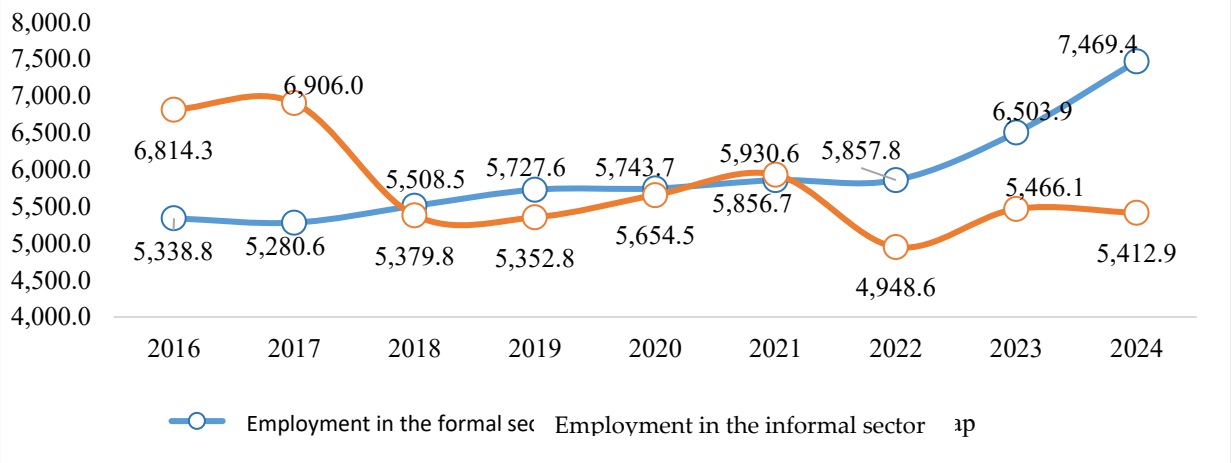

Figure 1. Distribution of the number of employed people in the Republic of Uzbekistan by formal and informal sectors, in thousand people.

During the period under review, the formal sector recorded relatively stable and slow growth in the labor force. In particular, in 2022–2024, a sharp increase was observed,

overtaking the informal sector for the first time. This is due to the increase in jobs in the formal sector, legislative reforms, measures aimed at transferring those working in the informal sector to formal employment contracts, and policies to make the labor market more transparent [7].

Improvement of labor relations in Uzbekistan is being carried out through reforms aimed at protecting vulnerable categories of citizens and simplifying labor legislation. For example, measures are being taken to introduce mandatory job reserves and change the system of unemployment benefits from November 1, 2025. Also, measures are being taken to regulate working hours and form a unified policy in the field of employment through the Ministry of Poverty Reduction and Employment, but despite this, there are a number of problems related to the regulation and development of labor relations, such as information asymmetry, a low level of legal culture (especially in rural areas, where the population has limited access to information on labor rights), low efficiency of digital platforms, and cybersecurity problems (low confidence in the security of personal data among the population).

The experience of foreign countries with developed economies in finding solutions to problems has attracted attention, and in 2024 the European Union adopted a new legal framework, the "Platform Work Directive". As a result, rules were established on the transparency of algorithmic management, human control, the right to appeal automated decisions, and the openness of working conditions in cross-border situations [8].

In Spain, the "Rider Law" achieved employee status and algorithm transparency. RDL 9/2021 (Rider Law), created in 2021, recognizes the work of delivery platforms as an employment relationship of employees and imposes an obligation on workers and their representatives to provide information on algorithm parameters. The Spanish experience reduces asymmetric information by reclassifying platforms under labor law and strengthening collective information rights [9].

In Estonia, the population has online access to all legal information through the "e-Estonia" platform. Through this system, citizens receive all information on employment contracts and labor rights in electronic form [18]. In Singapore, citizens have access to employment-related services, including advice on employment rights, through the Singpass single identification system [10]. In South Korea, the e-Government system has a dedicated online portal for employment rights protection, through which citizens can submit applications for online consideration of employment disputes [11].

Comparing the use of digital technologies in Uzbekistan to increase the legal literacy of the population in the field of labor relations with the experience of developed countries, we can see that the republic's level in this area is relatively low [12].

Since the main initiatives being carried out in Uzbekistan to increase legal literacy in the development of labor relations are limited to the publication of state portals and manuals, the assessment is at level 4. In international experience (ILO, EU Legal Literacy Projects), wide-ranging programs have been launched, which is equivalent to the maximum level of 5 points. At the same time, although there are systems in Uzbekistan such as E-mehnat and My.gov.uz in the field of using digital platforms to disseminate legal knowledge on labor relations, they have not yet been fully integrated. In international experience, the digital government systems of Estonia or Singapore are seen to be highly effective [13].

Despite the increasing use of mobile devices by the population, the use of mobile applications and chatbots in foreign countries is also low, but this practice is practically not implemented in Uzbekistan. International experiences (for example, India's Umang App or legal chatbots in European countries) are widely used.

As a result of the Covid-19 pandemic, the use of digital technologies has expanded worldwide. In particular, the opportunities for various trainings and studies have

expanded through the organization of online courses. Although online education is currently developing in Uzbekistan, it is not yet widespread. In the USA and European countries, there are open online courses on labor rights and employee-employer relations on the Coursera, edX, and FutureLearn platforms [14].

Legal advocacy is also being carried out on social networks. In particular, in South Korea, government agencies distribute animated videos and infographics on labor rights through YouTube and TikTok, while in Uzbekistan this practice is carried out only through Telegram channels, which is insufficient [15].

In foreign countries, along with the use of digital technologies, special attention is paid to ensuring cybersecurity and data security, in particular, in the European Union, the protection of personal data is fully established under the GDPR legislation. Uzbekistan has state programs on cybersecurity and data security, but in practice there are many shortcomings, which leads to problems in the use of digital technologies [16].

As a general conclusion on foreign experience and the situation in the republic, it can be noted that although certain steps have been taken in the development of labor relations of the population in Uzbekistan, there is still a big gap compared to international experience. In particular, it is necessary to strengthen work in the areas of mobile applications, chatbots, and cyber protection [17],[18].

In our opinion, it is necessary to carry out work in Uzbekistan within the framework of relevant areas related to labor relations of the population based on digital technologies (Table 1).

Table 1. Problems in the development of Labor Relations of the population in Uzbekistan and their solutions.

Direction	Existing problems	Proposed solutions
Legal literacy methods	Manuals are mostly distributed in paper format, and the use of digital resources among the population is insufficient.	Preparation of interactive electronic manuals and infographics, their dissemination through online platforms.
Digital platforms	E-work In. My.gov.uz for users who do not want to integrate into the system, the security level is lower.	Creation of a single labor rights portal, integration of all services and implementation of the “Bir darcha” (one-stop shop) principle
Mobile apps and chat bots	Special mobile applications for labor rights are practically absent	Development of mobile applications and Telegram/WhatsApp chat bots that provide legal advice.
Interactive training courses	The number of online courses is limited in content.	Coursera, edX, Udemy каби платформаларда маҳаллий контент яратиш, университетлар билан ҳамкорликда модуллар ишлаб чиқиш.
Legal propaganda on social networks	The distribution of information is mainly limited to Telegram channels.	TikTok, YouTube, Instagram are a selection of videos and infographics ready for a wide audience.
Cyber security and Information Protection	Data protection is present in legislation, but there are many disadvantages in practice.	International Security Standards (GDPR), data encryption and security protocols

The table shows that the main problems in Uzbekistan are the insufficient introduction of digital technologies and the lack of provision of legal information to the population in a convenient format. Therefore, the use of mobile applications, interactive courses and social networks is the most effective solution for increasing legal literacy [19],[20].

Conclusion

Digital technologies are the most effective means of increasing legal literacy of the population regarding labor relations. International experience shows that the provision of legal information in a public and simple language through online platforms and mobile applications significantly increases legal culture. Although a number of works have been carried out in this direction in Uzbekistan, full results have not yet been achieved. Therefore, improving national digital platforms and implementing international experience are the main ways to increase the level of legal literacy.

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