

# STUDYING THE IMPACT OF TECHNOLOGICAL CHANGES ON LEGAL RELATIONS IN THE SPHERE OF LABOR, FLEXIBLE FORMS OF EMPLOYMENT AND EMPLOYEES' RIGHTS

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**Abstract:** Nowadays, the world is experiencing an era of technological transformations that are continuously changing our environment and how we work. They have a direct impact on legal relations, flexible forms of employment, and employees' rights. Addressing such challenges will not only identify some issues but also suggest possible ways to adapt labor legislation to modern realities. The results of our study indicate the need for constant updating of Ukrainian labor legislation to keep pace with technological and socio-cultural changes. Flexible forms of employment, such as remote work and part-time employment, are becoming increasingly essential elements in the contemporary labor market. The definition of their legal status and protection of employees' rights in these circumstances is an urgent task for legislators. The author studied the impact of technological changes on legal relations in labor, in particular, flexible forms of employment and employees' rights. It has been found that the development of distance work and other flexible forms requires adaptation of legislation to protect employees and ensure fair working conditions in the face of technological innovations. New forms of employment, such as the gig economy and self-employment, require careful regulation to ensure fair working conditions and social guarantees.

**Keywords:** flexible forms of employment, flexible working hours, labor relations, remote work, technological changes, the rights of employees.

## 1 Introduction

In today's world, rapid technological changes are affecting labor relations, defining new forms of employment, and rewriting the rules of the game in the labor sphere. This article focuses on the impact of technological innovations on legal relations in the labor sphere, examining flexible forms of employment and employees' rights. The article analyzes aspects such as remote work, part-time employment, temporary employment, flexible working hours, etc. It also highlights the issue of informal labor relations and their impact on modern employment.

## 2 Literature review

Shevchenko O. O., and Bochko N. Ye. (2022) analyzed the process of modernizing the development of e-government, focusing on digital transformations. The study by Lopushynskyi I. P. (2018) is focused on the role of digitalization in reforming and transforming society in Ukraine. Rudakova, S. G., Shchetinina, L. V., and Danylevich, N. S. (2013) analyzed the introduction of flexible forms of employment in Ukrainian enterprises. Ivanova, L. V., and Nikiforenko, V. H. (2013) studied the use of non-standard forms of employment in the modern labor market. Huk L. P. (2021) examines the diversity of employment forms in the context of digitalization and globalization. The paper by Huk L. P. and Bilichenko S. P. (2022) addressed the impact of flexible forms of employment and labor mobility on economic stability. Gutsu S. F. (2021) focused on the interaction between artificial intelligence and labor relations. Novikova O. F., Amosha O. I., Zaloznova Yu. S., Khandii O. O., Azmuk N. A., and Shastun A. D. (2022) devoted their research to the transformation of the social and labor sphere in the digital economy. Tao Jianhua and Tan Tieniu (2005) reviewed affective computing technologies and their role in

intelligent interaction, which is vital for developing intelligent systems.

## 3 Research methods

This study employed several methods, such as:

- literature review (to provide theoretical context);
- historical analysis (to reveal the development of issues over time);
- synthesis and comparative analysis (to combine and evaluate different approaches and studies).

The combination of such methods helps to provide a comprehensive look at the studied topic, covering its different aspects and perspectives.

## 4 Results

The intersection of global technological change, the challenges posed by the COVID-19 pandemic, and the Russian Federation's invasion of Ukraine has resulted in significant shake-ups in labor relations and legislation. The pandemic turned out to be a catalyst for the rapid introduction of technologies into workflows. It forced society to reconsider the usual labor standards and the relationships between employers and employees.

Remote work has become a new reality since the pandemic. Now, it is defining a new norm of labor. This transition is taking place at the technical implementation level and the revision level of traditional legal concepts regulating labor relations. Following such a changing reality, where technology dictates the terms, and the pandemic defines new safety standards, this article is dedicated to examining the impact of these factors on labor legislation and employees' rights.

Alongside technological change, the war in Ukraine that began in February 2022 has been a catastrophic event for millions of employees. They have been forced to adapt to the new labor market and living conditions. The challenges arising from this situation add complexity to the existing tensions in the field of labor relations. It also requires attention to the adaptation of legislation to unforeseen circumstances. In this context, the study of the impact of technological changes on legal relations in the labor sphere becomes highly relevant.

The role of technology in shaping the labor environment is becoming dominant in the modern world. This brings significant changes to the legal regulation of employment and employees' rights. In order to adequately respond to modern challenges, it is necessary to consider the impact of technological transformations on labor relations and the legal structure of labor. The widespread impact of digital technologies, automation, and remote work challenges the traditional framework of labor legislation. This requires a deep understanding of the legal implications of these changes.

In the context of studying the impact of technological changes on legal relations in the labor sphere, let us consider the role of digital technologies and their application in the labor environment. In a narrow (technical) sense, digital technologies are a set of processes, methods, and systems utilizing digital data and signals to process and transmit information. When it comes to labor, such technologies are defined by the use of binary codes (zeros and ones). These codes allow computers and other electronic devices to process information faster and more efficiently (Marcel Van de Voorde, 2017).

Nowadays, digital technologies, in a broader sense, represent integrated circuits and devices (Ross Knox Bassett, 2007), which include:

- Digital devices: computers, smartphones, tablets, digital cameras, and other electronic devices that can store, process, and transmit digital data.
- Programs and operating systems run on digital devices and provide their functionality to perform various tasks, including data processing, communication, and device management.
- Digital technologies expand communication capabilities via the Internet and other networks, enabling the exchange of data and information over long distances.
- The development and use of algorithms and software make it possible to automate data processing and task execution (Makoto Motoyoshi, 2009).

Today, digital technologies are defining new working conditions and promoting flexible forms of employment, but their use also raises new challenges for workers' rights and the regulation of labor relations.

As a result, digital technologies have a wide range of applications in the labor sphere, affecting various aspects of labor relations and flexible forms of employment. Here are some specific ways how they can be used:

1. Remote work and telecommunications. Today, digital technologies have become a necessary component of the modern labor process. The introduction of digital tools allows people to work remotely, providing new opportunities and challenges for companies and employees. Digital technologies allow people to work from anywhere, connecting them to their teams through virtual platforms and tools. Employees can perform their duties from home or other locations through remote working tools. Telecommunication technologies allow for online meetings, conferences, and briefings. They reduce the need for physical presence, save time and resources for travel, and provide convenience in team interaction. Digital collaboration platforms allow teams to work on projects in real-time. They can edit documents together, share ideas, and interact remotely, regardless of location. Colleagues in different locations can share information and communicate quickly via email, chats, and other specialized communication platforms. The development of digital technologies also requires the improvement of data protection systems. Ensuring the confidentiality of information is becoming a priority in connection with working with remote devices and exchanging sensitive information electronically (Josh and Dr. Joe, 2014). Overall, remote work requires employees to organize themselves and develop skills to work online effectively, such as time management and the ability to work in the absence of direct supervision. These aspects emphasize the importance of digital technologies in shaping new models of work and opening up opportunities for more flexible and efficient forms of employment. However, along with these benefits come challenges related to the need to address privacy, ethics, and regulation of the digital work environment.

2. Paperless management of documents in the labor sphere. The latter includes a range of effective practices aimed at optimizing the processing and storage of information. Let us take a closer look at it, focusing on the "Vchasno" and "Diia signature" aspects (Shevchenko and Bochko, 2022). Digital document management systems allow the creation of digital archives where all documents can be easily found and sorted. They facilitate quick access to information and reduce the time previously spent searching for paper documents. They also allow the automation of many routine operations, such as indexing, sorting, and storing documents. As a result, they reduce the risk of errors and increase employees' productivity (Jianhua and Tieniu, 2005). The use of electronic signatures simplifies the process of signing documents. It can be used to validate contracts, agreements, financial documents, etc. Electronic signatures are legally binding and provide a high level of security (Ripsman, 2010). Paperless management systems of documents can be integrated with other electronic platforms, such as electronic payment systems or electronic time and attendance systems. Such integration allows for the automation and coordination of various aspects of document management. For example, when entering

into a new contract, an electronic document management system can automatically notify all necessary parties, allowing them to efficiently review, sign, and approve the document online without physically exchanging hard copies.

3. Automation of business processes through paperless management of documents in the labor sector is becoming increasingly crucial for optimizing efficiency and providing more flexible working conditions (Lopushynskiy, 2018). It allows for the automation of routine tasks such as indexing, classification, and distribution of documents. This enables business processes to run without significant employee intervention, reducing the time and cost of tasks. Electronic signatures and automatic document approval systems speed up the decision-making process and ensure standardization. This is especially useful in large companies where different departments can work on the same document at the same time.

Automated systems can include the creation of electronic forms for data entry. They simplify the process of collecting information and avoiding manual errors. For example, employees can fill out electronic forms for orders, applications, or registration. Automated electronic document management systems can easily integrate with other tools and platforms, such as electronic time tracking systems, CRM systems, or other management tools for business processes. They also provide opportunities for monitoring and analyzing activities. Such tools can track the flow of documents and processing time and reveal opportunities for optimizing business processes (Brenner, 2006).

In addition, they can include notification systems to report events or remind about important deadlines. In addition, users can set up precise access rights, ensuring the security and confidentiality of information. It's also worth noting that electronic document management systems allow several employees to work on documents at the same time, making it easier to collaborate and save all changes. All of these aspects of automating business processes through e-document management contribute to increased productivity, reduced risks of errors, and improved collaboration in the modern workflow.

4. Online learning and skill development through e-document management systems are becoming an essential part of the modern approach to employee training. Electronic platforms allow companies to implement various forms of training, such as online courses, webinars, and virtual training. Various learning resources, such as e-books, videos, and articles, can be conveniently stored and accessed, facilitating the process of acquiring new knowledge and skills. Integrating assessment tools into electronic systems makes assessment and progress tracking possible. The flexibility and accessibility of online learning allow employees to learn at any time and place, which is especially important in a remote working environment. Adapting the training material to individual needs facilitates the creation of personalized development plans. Online learning also facilitates interaction and the exchange of experience among employees through forums and online discussions. The implementation of certification and achievement recognition systems helps to stimulate the active participation of employees in the learning process. With the help of electronic systems, companies can constantly update and adapt their training content to meet the requirements of the business environment and labor market. This approach to training promotes the development of employees' competencies and supports their adaptation to modern labor challenges.

5. Analytics and productivity measurement via e-document management systems are becoming a key element of effective labor management. These aspects allow companies to obtain information about workflows and determine the employees' performance. Electronic systems allow the collection and processing of data on the completed tasks, time of completion, and other crucial productivity indicators. This includes analyzing the effectiveness of certain employees, departments, and projects. Analytical tools allow companies to conduct in-depth analyses of workflows and identify opportunities for

optimization. When analytics tools are integrated into electronic systems, they simplify the process of collecting and displaying data, giving managers clear and complete information. By assessing performance through these systems, companies can determine employees' achievements, as well as identify trends and weaknesses in workflows. This becomes the basis for making decisions to improve efficiency and optimize workflows.

The application of analytical management tools also allows to forecast and plan the company's resources, determine staffing needs, and develop strategies to increase productivity in the future. In general, analytics and productivity measurement through electronic document management systems are becoming an integral part of modern workforce management. These tools help companies make sound decisions and achieve high levels of efficiency.

6. In a modern business environment, digital human resource management (HRM) systems are essential in improving HR management and optimizing operational processes. These systems, or workforce management systems, create an effective mechanism for integrating and automating various HR functions (Brunner, 2019). Electronic HRM systems allow companies to centrally manage key aspects of HR management, such as hiring, firing, performance appraisal, and career development. They simplify decision-making processes and allow for more efficient interaction with staff. HRM systems allow the digital collection and storage of a full range of information about each employee. This includes personal data, qualifications, employment history, and other relevant parameters. The system gives management a complete overview of the team structure and its potential. Moreover, HRM systems allow automation of many routine business processes, such as maintaining an employee list, handling vacations, tracking time, and other aspects of administrative work. It simplifies the work of the HR department and frees up time for strategic planning. HRM systems allow companies to implement effective training and staff development programs. As a result, companies can track employees' skills and knowledge and identify opportunities for further career progress.

At the same time, the most common labor issues caused by technological changes include the following:

1. Displacement of jobs is one of the main problems caused by technological changes in the labor sphere. As automation and the introduction of artificial intelligence become available, many types of work are becoming available for automation. This may lead to a reduction in the need for human labor resources. This process is particularly relevant in the manufacturing industry, where automated systems can now perform work that used to be done manually. Robots on assembly lines, artificial intelligence, installation, and packaging operations are often automated, which can affect thousands of workplaces (Gutsu, 2021). Service and administrative activities are also undergoing automation through software and bots, which may lead to a reduction in the number of workplaces in these sectors. However, it is essential to note that technological displacement of jobs can also create new opportunities in other areas, such as the development, maintenance, and management of new technologies. Nevertheless, retraining and training programs need to be actively implemented to ensure that employees can adapt to new conditions and remain competitive in the labor market.

2. The absence of clarity in legislation regarding remote work is a severe issue arising within the context of technological changes in the labor sphere. With the development of information technologies and the ability to perform tasks remotely, remote work has become highly relevant, especially during the COVID-19 pandemic and events related to the Russian Federation's invasion of Ukraine. The legislation often fails to keep pace with the rapid development of technologies, creating gaps in the legal regulation of remote work. In many countries, clear norms and standards regulating remote work are absent, including definitions of working hours, occupational safety issues, payment for work, and other aspects of labor relations. This

uncertainty affects both employees and employers, making it difficult to determine their rights and obligations. Undefined norms can lead to inequality, conflicts, and violations of labor legislation. Legislative bodies must actively work to establish clear norms and rules for remote work to ensure a balance between workers' needs and employers' capabilities in new labor relations conditions.

Additionally, there is a significant lack of regulation regarding the social package, medical insurance, and protection of remote workers. In many countries, such as the United States, the social benefits and medical insurance system still need to be improved for remote workers, and it results in social inequalities.

Such unequal conditions of employment contracts for remote workers, which can vary by region (as in Canada) or state, create additional complexity in the practical application and interpretation of labor legislation.

The problem of protecting the privacy of remote workers who work in virtual environments is particularly acute. The lack of a clear regulatory framework in Spain, for example, allows employers to monitor the activity of employees without due consideration for their privacy (McDonald, 2008).

Overall, the absence of clear norms and standards in legislation regarding remote work necessitates modern, flexible, and balanced approaches to regulation that consider the real challenges and interests of both workers and employers.

The organization of remote and home-based work in Ukraine is regulated by legislative acts, including:

- The Decree of the President of Ukraine dated March 13, 2020, No. 87.
- The Resolution of the Cabinet of Ministers of Ukraine dated March 11, 2020, No. 211.
- The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Aimed at Preventing the Occurrence and Spread of Coronavirus Disease (COVID-19)," dated March 17, 2020, No. 530-IX.
- The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Aimed at Ensuring Additional Social and Economic Guarantees in Connection with the Spread of Coronavirus Disease (COVID-19)," dated March 30, 2020, No. 540-IX.

The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding the Improvement of Legal Regulation of Remote, Home-Based Work, and Work with Flexible Working Hours," dated February 4, 2021, No. 1213-IX, which came into force on February 7, 2021, took a significant step in regulating these issues legally. This law regulated the specifics of remote and home-based work and introduced flexible working hours. Thus, remote employees can work from any location of their choice but are obliged to keep in touch with the employer via information and communication technologies. They have certain working hours and a period of disconnection when they can have a break from work and do not respond to employer messages.

Home-based employees work at designated locations outside the employer's premises, following the company's business hours. They also have defined working hours and a designated workspace or technical facilities. Both forms of remote work allow employees to maintain a work-life balance. As for the possibilities of performing distant work, they are determined by the employer, and the law also allows certain categories of employees to be transferred to remote work. The formalization of remote work requires the conclusion of a written labor contract. It is also possible to temporarily introduce remote work for existing employees by issuing an order (decree) in cases prescribed by law, such as an epidemic, threat of aggression, or an emergency.

After analyzing the above-mentioned Ukrainian legislation, we can outline the following comparison:

Table 1. Comparison of the terms "home-based work" and "remote work" in the context of Ukrainian legislation

Criteria	Home-based work	Remote work
Definition	Any work performed by employees at their place of residence or in other premises designated by them, as long as there is appropriate technical equipment and an area that is not related to the employer's workplace.	Any work performed outside the employer's premises or territory, in any place of the employee's choice, and involving the use of information and communication technologies.
Legal regulation	Reflected in Article 60-1 of the Labor Code of Ukraine and International Labour Organization's Home Work Convention (1996) No. 177.	Determined in Article 60-2 of the Labor Code of Ukraine and regulated by the Law of Ukraine "On Amending Certain Legislative Acts to Improve Legal Regulation of Remote Work," dated February 4, 2021.
Main conditions of performance	Work is performed if there is a private area and technical facilities in the premises chosen by the employee, which is not related to the employer's work premises.	Work is performed outside the workplace and the employer's territory while using information and communication technologies.
Labor contract	It requires a written employment contract for home-based work.	A standard form of an employment agreement on remote work is approved by the central executive body and defines the working and safety conditions.
Working hours planning	It is regulated in Article 60-2 of the Labor Code of Ukraine, where an employee is responsible for setting up working hours and working conditions within distance workplaces.	Working hours are scheduled according to the employee's own decision and are not subject to internal labor regulations unless they are specified in the employment contract.
Vacation and break time	A period of free time to rest (disconnection period) is guaranteed. During this time, an employee may interrupt communication with the employer.	It is determined in the labor contract for distance work, including the employee's right to disconnect.
Employee rights	Employees have the right to demand transfer to remote work if they have been subjected to discriminatory actions.	The right to demand that employers provide the necessary funds is ensured, and the terms and conditions for reporting and payments are defined.

3. Employee confidentiality and privacy are essential aspects in the context of technological changes in the labor sphere. As new technologies are used to monitor and manage employees, there are issues related to the preservation of personal data and privacy protection (Paleri, 2008). One issue is the increase in the scope of workflow monitoring, which may include tracking emails, internet usage, and activity on work devices. Hence, there is a question of how this information is collected and used and whether a sufficient level of privacy is ensured. Another critical issue is how Big Data is used for performance analysis. Big data can be used to assess employees' performance. However, it can be accompanied by risks of confidentiality and privacy violations. In the context of remote work and telecommunications, the growing use of virtual platforms and communication tools raises the issue of employees' data security and the possibility of stealing confidential information. Careful regulation and definition of standards for maintaining employees' confidentiality and privacy in response to technological changes are needed to ensure mutually beneficial employer-employee relationships and the security of personal data.

4. The use of artificial intelligence in the labor sphere raises numerous ethical issues that require careful attention and regulation. One of the main issues involves the question of fairness and discrimination when using artificial intelligence algorithms to recruit and evaluate employees. These algorithms may be based on historical data that reflects existing social inequalities and stereotypes. It can lead to automatic discrimination based on race, gender, or other factors, which creates a negative social impact and undermines the principles of justice. Another issue involves the use of artificial intelligence to monitor and control employees. Tracking productivity and behavior in the workplace can violate employees' privacy, creating unnecessary levels of control that can determine not only performance but also the psychological climate at the workplace. Furthermore, there is an issue of accountability and transparency behind artificial intelligence decision-making. AI algorithms can be unpredictable and difficult to understand, which creates difficulties in explaining and determining responsibility in case of mistaken or unfair decisions. Ethical standards and legal frameworks need to be actively developed to

ensure the fair and ethical employment of artificial intelligence in the labor sector.

5. Cybersecurity and cyber offenses in the labor sphere (Andini et al., 2023). For example, cyberattacks and leaks of corporate information can lead to loss of customer confidence and financial losses. The spread of malware can block computer networks and leak confidential information (Brenner & Clarke, 2004). Inadequate security, such as weak passwords, remote shared servers, un-updated software, etc., can become a severe problem (Blinderman & Din, 2017). Insider threats, such as misuse of privileges, can lead to information leakage. The seizure of Internet of Things (IoT) equipment creates new attack vectors (Williams, 1998; Williams, 2008). Cybersecurity requires a comprehensive approach, including regular audits, staff training, application of modern security tools, and continuous improvement of strategies to counter such attacks (Broadhurst et al., 2013).

6. Violation of the work-life balance is becoming an increasing problem in the context of technological changes in the labor sphere. New technologies that expand the possibilities of remote work can simultaneously lead to constant accessibility and overloaded work responsibilities. Working hours are becoming less fixed, and communication tools provide continuous means of communication with colleagues and bosses, even during off-hours. This can make employees feel like they need to be always on call and in charge, which negatively impacts their private lives. One of the challenges here is a lack of time to rest and recover energy. Thanks to technology, employees can carry out work tasks outside the office, but this can also lead to the fact that they postpone their rest and personal life responsibilities (Bondar, 2023). Additionally, it is vital to remember that work-life imbalance can lead to stress, burnout, and other health issues. Technological opportunities allow employees to do more tasks, but the lack of clear boundaries can affect their overall well-being. The solution to this issue requires establishing set working hours, encouraging the use of vacation and breaks, and developing policies to regulate the use of technology during off-hours. Fostering a work-life balance is becoming an important part of ensuring employees' well-being and efficiency.

7. Under the martial law in Ukraine, technological changes are becoming a key component of the labor sphere. However, they are accompanied by numerous challenges. Ukrainian society is facing problems that affect labor relations and employees' rights. Obviously, the war leads to a lot of destruction and economic instability, as well as massive job losses and economic decline. The shelling and destruction of infrastructure disrupt the stability of the power grid, creating difficulties in providing energy to businesses and the population.

Unstable communications and limited access to the Internet make it difficult to introduce remote work, limiting the capabilities of employees. Conflict-induced social instability leads to fears among the population, and employees may be forced to choose between safety and keeping their jobs.

Another factor worth mentioning is the healthcare system, which is overloaded under martial law. All these factors work together to create serious challenges for labor relations and workers' rights in the context of conflict and technological changes. In today's context of technological change, labor relations are determined by various forms of employment that provide more flexibility to both employees and employers. The main flexible forms of employment include remote work, part-time work, temporary employment, flexible working hours, etc.

The study of the impact of technological changes on legal relations in the labor sphere, flexible forms of employment, and employees' rights reveals significant transformations in work organization, in particular, with respect to remote work. As a flexible form of employment, remote work involves work performed outside the traditional office environment, using high technologies as well as information and communication platforms (Rudakova et al., 2013).

One of the key features of remote work is the fact that employees have the opportunity to choose their own workplace. This opens up new opportunities for working in a convenient environment. The use of information technology for remote work allows employees to effectively interact with colleagues and complete tasks while maintaining a high level of communication.

Employees' rights are gaining a new scope in the context of remote work. In particular, employees have the right to flexible working hours, setting their own work schedule and breaks. They can also demand that the employer provide them with the required equipment and reimbursement of expenses related to the work process at home.

It is also vital to ensure that employees have rest and switch-off times to maintain a balance between their professional and personal lives. Additionally, remote work should take into account the possibility of combining it with work at the employer's location by mutual agreement of the parties, which is determined by the employment contract. Due to technological changes, remote work is becoming an essential element of modernizing labor relations, introducing flexibility and adaptability into modern labor legislation.

In addition, we should pay attention to the analysis of part-time work as one of the flexible forms of labor organization. Part-time work is a strategic element that takes into account the personal needs of employees and increases their employability in the context of growing technological dynamics. This form of employment allows to adjust working hours to individual needs and to place high demands on working comfort (Ivanova & Nikiforenko, 2013).

Among the key benefits of part-time work is the ability to work for limited hours, which helps to maintain a balance between an employee's professional and personal life. It is especially relevant in the context of the active utilization of technologies that enable efficient completion of tasks within a limited time.

The rights of part-time employees are subject to special protection. The principles of fair payment for the completed work, provision of additional benefits, and social guarantees are essential elements of the legal regulation of such employment. It is essential to take into account the needs of employees for flexibility and adaptability of the working hours when providing them with part-time jobs. Technological progress allows for the creation of efficient work systems that promote mutual agreement between the employee and the employer (Huk, 2021).

In general, part-time work in the context of technological transformations is becoming an essential element of adaptive labor legislation. It contributes towards creating comfortable and effective conditions for employees under the new realities of the work environment.

It is worth noting that the Labor Code of Ukraine does not contain separate provisions for part-time work. However, Article 56, "Part-time work," provides for the possibility of an agreement between the employee and the employer to fix part-time hours or part-time weeks, both when hiring and later. In particular, the employer, if there is a relevant medical certificate, is obliged to establish a part-time working day or week at the request of a pregnant woman, a woman with children (including a child with a disability or a child in her care), or a person who takes care of a sick family member.

Temporary employment, which is also included in the category of flexible forms of employment, is defined as an agreement between an employee and an employer that involves a limited work period. This may be related to the seasonality of certain types of work, temporary projects, or covering missing employees.

One of the main features of temporary employment is the lack of permanence in employment relations, which distinguishes it from a standard full-fledged employment contract. However, such a form of employment can benefit employers who need a temporary workforce for particular periods and employees who seek flexibility and the ability to adjust their schedules to specific circumstances (Huk & Bilichenko, 2022).

From the perspective of workers' rights, involvement in temporary employment should be accompanied by clear terms of the labor contract, definition of duties, compensation, and other rights and obligations of the parties. It is also vital to ensure the absence of discrimination against employees engaged in temporary employment and to ensure their rights to equal conditions as compared to other categories of employees.

Flexible working hours represent an essential aspect of flexible employment forms that regulate the organization of employees' working time. The main idea is to allow adaptation of the working hours to employees' personal needs and specific business conditions (Bondar, 2022). A key feature of flexible working hours is the ability to work outside the standard eight-hour working day or five-day week. Employees can choose the start and end hours of their working day and may also have the option to work from home or choose another convenient location to perform their duties.

This approach to working time management contributes to higher productivity, increased employee satisfaction, and a better work-life balance. Flexible work hours can also be an effective tool for attracting and retaining qualified personnel by creating a comfortable working environment and supporting the diverse needs of the workforce. Employees' rights in the context of flexible working hours include ensuring transparent terms of the agreement regarding the schedule, as well as guarantees of no discrimination or illegal restrictions. It is essential to take into account the interests of both parties by facilitating flexible working hours and creating conditions for effective cooperation between employees and employers.

These were the main forms of workers' employment. Additional flexible forms of employment include the following models:

- Project work involves signing an employment contract to work on a specific project or task. An employee is hired to work on a particular task with stipulated terms and conditions of payment. Upon completion of the project, the employment relationship is terminated.
- Freelance. It is a form of self-employment where an employee, a freelancer, works independently, receiving orders from various clients. Freelancers set their own working hours or schedules and make their own agreements with clients.
- Seasonal work is one of the flexible forms of employment where labor relations are limited to a specific season or time of year when a certain type of work or service is most popular or needed. This form of employment is traditionally observed in those sectors that depend on natural cycles, such as agriculture (harvest time), tourism (summer and winter seasons), and retail (seasonal sales).

An essential feature of seasonal employment is that employees work only for a certain time of the year, after which they may take a break. This approach allows employers to respond effectively to fluctuations in workload and demand for their goods or services.

Seasonal workers may use this approach to obtain temporary work and additional income, especially if they have other responsibilities or interests that allow them to pause their work during the off-season. On the other hand, this form of employment can also put workers in a favorable situation by increasing their competitiveness in the labor market, as they can learn and grow in different fields during work breaks.

- Employment through civil law contracts. This form of employment involves signing civil law agreements between the employee and the employer. The employment process is based on agreements that define responsibilities, payment terms, and other aspects of cooperation.
- Self-employed persons may run their own businesses and do various types of work. Depending on which group they belong to, different taxation conditions and legal liabilities may apply.
- Gig contracts or gig economy is a form of employment where workers perform short-term, often small tasks or projects (gigs) based on contracts or payment rewards. This model allows employees to work on their own terms and set their working hours.

Gig contracts can be fulfilled through specialized online platforms where employers post tasks, and freelancers choose

the ones that match their skills and interests. This approach is common in several industries, including content writing, programming, graphic design, and other technical and creative fields.

The main advantages of gig contracts for workers include flexibility, the ability to choose tasks and control over their careers. On the other hand, this form of employment can result in income instability and lack of social guarantees, which can be a vital aspect for workers, particularly in terms of health insurance and vacations.

Gig contracts represent an essential aspect of the modern labor market, where digital technologies facilitate the growth of such employment and the development of flexible working forms. This is a widespread type and form of employment in the IT sector and other sectors that have already felt the impact of technological changes on legal relations in the labor sphere.

## 5 Discussion

It is necessary to emphasize the frequent cases of informal labor relations, especially in the realities of war and remote work. For instance, there is a growing trend of informal labor relations, which includes work performed without a formal employment contract and registration. This practice is often carried out using cryptocurrency technologies and crypto exchanges (Davis, 2010). Cryptocurrencies, such as Bitcoin, Ethereum, and others, are becoming an essential tool for making payments for work done in offshore or other segments where operations are not always formally regulated by law. In this context, employees can receive payment in cryptocurrencies, bypassing traditional banking and financial structures (Hawre, 2017). However, this approach is accompanied by certain risks and uncertainties, as it deprives workers of traditional social guarantees and protections that are usually linked to formal employment. The lack of legal status can lead to problems in case of misunderstandings or conflicts between the parties, as there is no clear legal framework. In addition, the use of cryptocurrencies may be subject to tax control and require special attention to financial and tax liability issues. Informal labor relations involving cryptocurrency payments for services require additional legal regulation and coordination between the parties to prevent any possible negative consequences (Novikova et al., 2022). Nevertheless, as an example, we should note a large part of foreign remittances: relationships.

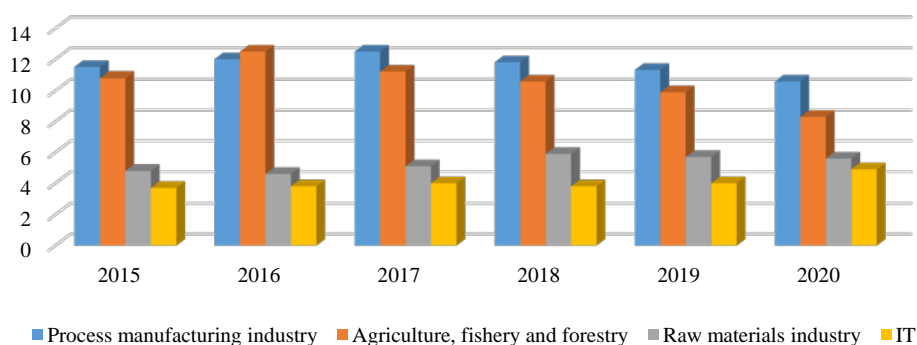


Figure 1. The share of the IT sector in the GDP of Ukraine as the main representative of remote workers.

Source: (Changes in the share of the IT industry in the total GDP of Ukraine, 2021).

In 2022, the IT industry brought \$7.34 billion in foreign exchange revenues to the Ukrainian economy. According to a press release from the IT Ukraine Association, this indicates a \$400 million increase in exports compared to 2021. As of January 1, 2023, the IT business contributed to the Ukrainian Consolidated Budget by paying taxes and fees worth UAH 32.2

billion. It reflects an increase of UAH 4.4 billion and exceeds the previous year's indicator by 16%.

## 6 Conclusions

The study on the impact of technological changes on legal relations in the labor sphere, flexible forms of employment, and

employees' rights reveals important trends and challenges arising in the modern labor environment. The development of information technologies affects the work organization, forms of employment, and legal status of employees, introducing new opportunities and risks.

Remote work, part-time work, temporary employment, and other flexible forms of employment are becoming not only a response to technological transformations but also an essential tool for providing greater flexibility for both employees and employers. However, these new models also face challenges in terms of ensuring workers' rights and regulating labor relations.

Based on the conducted research, it can be concluded that the current Ukrainian labor legislation does not meet the modern realities and challenges caused by technological changes in the labor sphere and the development of new employment forms. Based on the flexibility and diversity of modern labor relations, there is a need to reform labor legislation to adapt to modern conditions, ensuring rights and guarantees for employees within new forms of employment and supporting dynamic economic development.

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#### Primary Paper Section: A

#### Secondary Paper Section: AE, AG