SPECIFIC FEATURES OF THE USE OF ARTIFICIAL INTELLIGENCE (ELECTRONIC PERSONHOOD) IN THE SPHERE OF EMPLOYMENT

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Summary

This article examines the increasing integration of modern technologies into contemporary employment relationships. It argues that artificial intelligence can be interpreted as a form of digital personhood (avatar). The concept of avatar is analyzed through three main dimensions: automation, which consists of symbols and actions that allow for full or partial imitation of the avatar's activity; enhanced identification, such as user accounts, email addresses, or profiles in corporate governance systems; and anonymity, which facilitates the representation of corporate brands. The study highlights both positive and negative consequences of digital personhood in the workplace. On the positive side, it highlights the expansion of employment opportunities, the automation of routine tasks, and increased productivity. However, the article also identifies new challenges, including changes in employment structures, the need for retraining, risks of digital inequality, cybersecurity issues, and the use of neurotechnology in the workplace.

Key words: digital technologies, account, employment relations, avatar, employee, employer, neurotechnology.

DOI https://doi.org/10.23856/7020

1. Introduction

Today, the use of digital technologies directly impacts the field of labour and leads to the transformation of employment relations. Given the growing role of artificial intelligence in everyday activities, a series of challenges are emerging in the area of labour law. This transformation necessitates legal assessment both from the perspective of current legislation and in terms of achieving an optimal legal framework that aligns with the interests of employees, employers, and the state. In this rapidly evolving environment, new legal issues are emerging, including: the impact of artificial intelligence on the sphere of labour; the admissibility of delegating HR decision-making to artificial intelligence; discrimination risks associated with AI bias or lack of objectivity; the transparency of AI use in the workplace; the limits of digital surveillance over employees' behaviour; and the protection of their privacy against unlawful employer interference. The use of digital technologies is thus transforming the traditional relationship between employer and employee.

Virtual avatars, which serve as digital representations of employees, open up new opportunities for organizing remote work, communication, and interaction within the metaverse *(Dionisio, Burns & Gilbert, 2013)*. They allow for the creation of personalized images that integrate both physical and social characteristics, fostering deeper and more effective engagement in virtual work environments *(Bailenson, 2018)*. However, these innovations raise a number of complex legal and ethical issues, such as the protection of personal data, the legal status of digital identities, and the risks of discrimination and manipulation *(Kshetri, 2021)*. Since

legislation has not yet sufficiently adapted to these developments, analyzing global practices in the use of avatars in labor relations is essential for shaping appropriate regulatory mechanisms and ensuring a balance between innovation and workers' rights *(De Stefano, 2016).*

The aim of this article is to define the role of artificial intelligence in the sphere of labour, to examine its application through the lens of digital personality (avatar), to propose an original definition of the avatar in the context of labour relations, and to analyse key issues related to the regulation of digital personalities in the field of employment. The paper also explores new approaches to legal regulation regarding the use of avatars in labour relations.

The methodological foundation of the study is based on materialist dialectics as the principal method of cognition. The research employs both general scientific methods (logical, systemic, functional, etc.) and special legal methods (formal-legal, statistical, modelling, forecasting, etc.) aimed at achieving the outlined goal and solving the stated research tasks. The logical and systemic methods were used to formulate the author's definition of the avatar in labour relations and to examine current legal literature approaches to this concept. The systemic approach provided the basis for identifying two dimensions underlying the concept and usage of avatars in labour and their relationship with employment relations. The functional approach made it possible to identify the key areas of influence that avatars, as digital personalities, have on labour relations. The comparative legal method was applied to analyse international trends and compare the approaches of foreign countries to the creation of avatars in digital space. The sociological method helped assess the factors influencing the development of avatars in the labour sphere.

2. Analysis of Current Research

The automation of production, the expansion of remote employment, and the optimisation of AI use in work processes have raised the need for deeper academic inquiry into these labour law aspects. Valuable contributions to the scientific understanding of the impact of digital technologies on labour and employment law in the context of virtual reality can be found in the works and practical studies of prominent scholars such as O.Ye. Avramova, O.A. Baranov, T.H. Katkova, M.V. Karchevskyi, K.O. Khernes, O.Ye. Radutnyi, Yu.M. Sydorchuk, A. Sulin, Ye.O. Kharitonov, O.I. Kharitonova, among others. Significant influence on the modern conceptualisation of the formation and development of digital personality has also been made by foreign researchers such as J.-F. Bélisle, S. D. Benford, M. E. Diamantis, J., Cascio, W. F., Hjorth, I., Kruschwitz, N., Kshetri, N., Garforth, D., Graham, M., M. Greenhalgh, R. J. Ingram, I. Knox, R. Lanier, Lehdonvirta, V., F. Lucivero, Montealegre, R., T. T. Ochoa, H. Prakken, J. Suler, Snowdon, C., De Stefano, V., H. Onur Bodur, J. Hirsch, B. Schafer, Wood, A. J., Fitzgerald, M.

However, many issues regarding the influence of artificial intelligence on the labour sphere and the representation of the employee through the figure of the avatar in labour relations—especially within the metaverse—remain insufficiently addressed. It is worth noting that no unified legal position regarding the definition of an avatar has yet been established in legal scholarship.This situation is quite natural, as the avatar is a new object in relation to which legal relationships are only beginning to take shape—hence the emergence of early scholarly discourse. In virtual environments, avatars are graphical representations of users online—images, icons, or illustrations that users prefer to present in place of themselves *(Benford et al., 1995; Lanier, 1996; Suler, 1999).*

A further refinement of the avatar's characteristics in this sphere is offered by O.Y. Avramova, who introduces the concept of homo virtualis—a virtual personality that

expresses identity in the digital environment and serves as a conditional participant in social relations *(Avramova, 2022)*. A notable and bold proposition comes from international researcher T.T. Ochoa, who argues that each avatar should be regarded as a joint creation of both the game provider and the user. It is also considered a contribution to a collective work (the game as a whole), which offers an optimal balance between the interests of game providers and players *(Ochoa, 2012)*. An avatar can be understood across several key dimensions: its visual appearance, which may be distinctive and highly individualised; movement dynamics; manner and sequence of actions that set it apart from others; and speech patterns and communication styles.

The concept of "electronic personhood," as proposed by the European Parliament, is intended to apply in cases where intelligent systems interact with third parties autonomously. According to an EU Parliament report, "smart" robots granted electronic personhood status should be capable of acquiring new knowledge, adapting their behaviour to changing circumstances, and exchanging data with their environment *(Stefano, 2019)*.

It is important to highlight the example of Accenture, a company that uses avatars in training processes through VR platforms that simulate real workplace scenarios to enhance employee skills *(Accenture, 2022)*. Interactive avatars help create personalized training scenarios tailored to specific professional roles and increase employee engagement in the learning process. This approach not only optimizes training costs but also promotes professional development by addressing individual needs. Retail giant Walmart also implements avatars to support remote learning and foster corporate culture across its widespread workforce. Avatars serve as tools for interaction and motivation, helping to build unity and shared values within the virtual work environment *(Walmart, 2024)*.

Thus, avatars in labor relations represent not only an innovative tool for the digital transformation of workplaces but also a source of new legal and ethical challenges. Understanding the experience of leading global companies enables the development of recommendations for the implementation of avatars that balance management efficiency with the protection of workers' rights in the digital environment.

3. Main part

A brief overview of the domains and issues associated with the use of avatars highlights the urgent need to define the concept of "avatar" and to formally establish its position within the sphere of labour. Theoretical discussions about the nature of the avatar are still ongoing. Therefore, this article proposes the following interpretation of an avatar in labour relations: a digital representation of an employee, based on a graphic image and personalised means of interacting with the virtual world, controlled by the employer in the metaverse, and serving as a reflection of the employee's professional reputation in accordance with the terms of the employment contract.

Two conceptual approaches to defining the avatar in the labour sphere may be conditionally distinguished. In a narrow sense, the employee-avatar is a virtual identity within the metaverse, including elements such as name (login or nickname), description, and appearance. Particular attention should be paid to the broad interpretation, in which the avatar is referred to as an account—the very tool through which the user interacts with the metaverse, used for information and data exchange. The account can be analysed through three key aspects: a collection of data about the user (employee) within an information system;the authentication of the employee;the provision of access to personal information and system characteristics of that employee.

The functional division between the employer and the employee lies in the exclusive right of the employer, as the rights holder, developer, or publisher of the virtual world, to the accounts. Nevertheless, the employee retains certain rights to their account, which must be clearly defined in the employment contract. The employee's interaction with the virtual world is mediated through their login to the account. Using an account is the primary way to access and utilise the metaverse, and rights to that account are governed by the employment agreement, which establishes the mutual rights and obligations of the employer and employee. Once the avatar is controlled by the employer, it becomes a representation of the employer's professional image in the metaverse. The contractual nature of the relationship regarding the use of the avatar and the employee's account explains the employer's ability to block the account if the employee violates the terms of the employment agreement or the metaverse's internal rules. Moreover, the employee's account may be reassigned or transferred to other employees during periods of absence (such as leave or temporary incapacity).

Today, high-tech companies increasingly encourage their employees to use avatars and interact within virtual environments. Virtual avatars serve as representations of individual users, allowing multiple users to simultaneously engage within a shared digital space. An avatar, as a manifestation of artificial intelligence, acts as a means of implementing the principles of a social state and depends on the effective realization of social rights and freedoms guaranteed by the constitution. At the same time, numerous issues arise, such as the handling of employees' personal data, which are directly connected to the transformation of constitutional foundations—primarily in the area of protecting human and civil rights and freedoms. Furthermore, there remains a lack of clear understanding whether a distinct citizen's right to a digital persona can emerge within the context of human rights concepts.

One of the priorities when creating avatars is data privacy protection. Employers must not collect or transmit employees' personal information without their consent. When data collection is necessary, it must be explicitly specified and the employee's consent obtained. Moreover, employers should ensure that employee avatars are not used in ways that discredit or demean the individuals they represent. Such behaviour may result in legal liability and negatively affect the company's reputation. These challenges are clearly outlined in the regulatory frameworks of the European Union, particularly in the General Data Protection Regulation (GDPR), which highlights the need to protect employees' digital identities, given that avatars may contain sensitive information *(European Parliament, 2016).* Transparency in the collection, processing, and use of avatar data is crucial, as are safeguards against discrimination or unlawful surveillance.

Among the key trends in employment relations involving avatars is the possibility for employers to offer employees the opportunity to create their own avatars.There are already real-world examples where avatars are actively used to enhance interaction between employers and employees, as well as to represent companies in the digital environment. For instance, in May 2025, Zoom CEO Eric Yuan used his own avatar—created with Zoom Clips and AI Companion technologies—to present the company's quarterly financial report. This case demonstrates that top global executives are beginning to adopt avatars as an innovative means of communication with investors and the public *(AI Frontiers, 2025).* Similarly, Klarna CEO Sebastian Siemiatkowski also utilized his AI-powered avatar to deliver the company's financial results, further confirming the growing acceptance of this technology in the business world *(AI Frontiers, 2025).*

As remote work becomes more common, digital avatars help employers and employees create a closer personal connection with each other. This allows companies to strengthen their brand image and increase customer loyalty. Typically, an employee can choose what their avatar will look like. An employee can create their avatar using creative activities, as opposed to using

software. The ability to customize every detail, from hairstyle to clothing style, from facial features to accessories, allows the employee to express themselves more freely. The employee has the opportunity to re-arrange the avatar in a way that is unique, leading to the ability to associate the avatar with a specific person, which is always unique in the digital environment. These avatars are more than just a profile picture, they become dynamic and interactive elements that reflect the employee's personality, style, and values. Compared to traditional methods, personalized avatars have the potential to create a deeper connection and increase retention. At the same time, it is much easier with avatars, which involve the representation of employees who can be modified according to the wishes of the employer. The study of such avatars is devoted to the work on the social network "Second Life" by J.-F. Bélisle and H. Onur Bodur "Avatars as Information: Consumer Perception Based on Their Avatars in Virtual Worlds" *(Bélisle J.-F., Onur Bodur H. 2010).* The authors emphasize that real companies that intend to expand into virtual worlds can use employee avatars as an indicator of personality. Digital avatars allow employees to choose the way of their own virtual representation, which contributes to greater self-expression and increases involvement in work processes *(Bélisle J.-F., Onur Bodur H., 2010).* This is especially important in remote work environments, where avatars help maintain emotional connections between team members and create a unique digital image of the company *(Benford et al., 1995; Lanier, 1996; Suler, 1999).*

It has been noted that an employee avatar is the face of the company in the digital world. Therefore, their correct formation is crucial for engagement and recognition. It should be noted that the employer should determine the target audience, the use of platforms where the employee avatar will be used, as well as the design and style of the avatar. The visual elements of the avatar greatly affect the first impression. The choice of color, facial features, clothing style and accessories should reflect not only the character of the employee avatar, but also the brand identity of the company. Thus, a more professional and simple design may be better for a corporate avatar, while brighter and more attractive colors can be used for an entertainment-oriented avatar. An employee avatar should not only be visually appealing, but also compatible with various technologies. Dynamic, high-resolution avatars can provide a more realistic and immersive experience. As trends and expectations in digital transformation change, the avatar must keep up with these changes and be constantly updated. As trends and expectations change, the employee avatar for the employer must keep up with these changes.

Employees can create their digital twins to participate in virtual meetings, training sessions, and social events, enhancing the sense of presence and fostering deeper team interaction *(Microsoft, 2023).* This refers to Microsoft, a company actively utilizing avatars in its corporate metaverse, Mesh. The continuous improvement of the digital employee-avatar ensures they remain engaging and effective as one of the most vital representatives of the company in the digital labor sphere.

Offering the ability to control and enhance one's image when customizing an avatar in the workplace in the metaverse can help overcome employee challenges in reducing stress caused by the pressure of self-presentation. With advanced technology, employee avatars have become more than just static images, but also animated and interactive. This allows employee avatars to feel more realistic and connected to the digital world.While the use of avatars offers many benefits, there are some important points to consider. When creating and using digital personas, various factors should be considered, from ethical principles (honesty and transparency) to security measures (avoiding misleading or discriminatory behavior). Otherwise, serious problems can arise for both individual employee avatars and the company. Especially if avatars

are used for misleading purposes, there can be negative consequences from the perspective of legal liability and the company's reputation.

It is important to emphasize that an employee's avatar is endowed with the freedom of visual representation and may be created in any manner the employee chooses, without reference to gender, race, or other attributes. Moreover, the choice of a specific type of avatar should not be discriminatory. It is worth noting that the ILO Convention No. 111 "Discrimination (Employment and Occupation)" includes in the definition of discrimination any distinction, exclusion, or preference made on the basis of race, color, sex, religion, political opinion, national extraction, or social origin *(ILO, 1958)*. At the same time, this situation creates a risk that the employee might become the subject of humiliating comments in the form of insults or jokes. We are convinced that the implementation of such an arrangement is possible only with the involvement of the employer. It is important to provide employees with recommendations in the form of characteristics that an employee's avatar may possess, and to take care in developing requirements regarding the avatar's appearance that would not become the basis for claims of discrimination or harassment. Employers and employees design and create their work environment with the aim of optimization, not confrontation with digital technologies. The main position of the strategy is to avoid restrictions that may cause claims of religious discrimination, such as bans on religious symbols, or age discrimination, such as requiring avatars to appear younger than their real-life counterparts. Generally, it is advisable to avoid behaviors and appearances that could negatively affect the company's image.

It should be emphasized that the avatar of the employee is endowed with the freedom of visual representation and in any way he chooses without gender, race or other attributes. And that this choice of a specific type of avatar is not discriminatory. It is worth noting that the ILO Convention "On Discrimination in Employment and Occupation" No. 111 includes in the concept of discrimination any distinction, exclusion or preference made on the basis of race, color, sex, religion, political opinion, national origin or social origin *(ILO, 1958)*. At the same time, this is where the employee risks becoming the subject of derogatory comments in the form of insults or jokes. We are convinced that this approach can only be implemented with the help of the employer. It is important to consider recommendations to the employee in the form of characteristics that an employee's avatar may possess, and to take care of developing requirements for the avatar's appearance, which could not become the basis for a claim of discrimination and harassment. The employer and employees create and design their work to optimize, not oppose, digital technologies. The main position of the strategy is to avoid restrictions that may give rise to claims of religious discrimination, in particular, bans on religious symbols or age discrimination, to require that avatars reflect a younger image than their real counterparts. In general, to avoid behavior and appearance that may negatively affect the company's image.

However, it is worth noting that avatar harassment as a form of discrimination can occur while working in a digital environment. The issue of prohibiting violence and harassment in the workplace is set out in the ILO Convention "On the Elimination of Violence and Harassment in the Workplace" *(ILO, 2019)*. Finding ways in the workplace to quickly resolve these issues is the responsibility of the employer, in particular, to accept and conduct consultations with employees in the context of digital transformation, which lie in the plane of clarifying the specific characteristics and differences between them.

Another problem arises when an employee creates their own avatar based on pre-programmed digital figures that are then modeled on the employee's physical form; this can be regarded as "intellectual work." Consequently, the employee may later assert intellectual property rights. Thus, there is a new "work" that can be considered a creation expressed in a certain

form and original in the sense that it bears the personal imprint of the author. It is difficult to assert that a work-related avatar would constitute the employee's intellectual property. It should be noted that when an employee creates a work during the performance of their employment contract that is used by the employer, copyright protection applies solely for the purpose of creating and using products and services. Moreover, if it is a personal work-related avatar created by the employee, the employer should obtain the employee's consent before using the avatar. To foster cooperation, it is advisable to clearly stipulate this in the employment contract, despite the fact that the employee may not be able to claim intellectual property rights to the work avatar. It becomes evident that the uniqueness of each avatar—created through creative activity and manifested in a digital objective form—can be afforded legal protection depending on the nature of the developer's work. Today, technological changes prompt employers to establish clear rules and guidelines regarding the use of avatars in the workplace, covering appropriate behavior and any restrictions on avatar usage. It should be noted that employers may require employees to use professional avatars that do not disclose personal information and clarify who has the right to use employees' avatars, for example, for internal purposes or when providing services.

An avatar linked to an employee becomes a form of personal data. The main directions that should be considered include: processing of registries; adaptation of privacy policies; the necessity of a legal basis for processing; avatars must not process more data than necessary for a specific purpose; ensuring security and rights of access; correction, deletion, and restriction of processing. Accordingly, questions may arise as to whether an employee has the right to take their avatar with them or delete it after termination of the employment contract.

When considering avatars as providers of digital services, issues may arise regarding the consequences related to the application of legal remedies for non-provision, as well as remedies for failure to provide diligent services. Generally, a user of the metaverse may seek legal remedies from the seller's avatar. However, there are cases when services provided by an avatar violate the rights of third parties in a series of transactions, which may involve acts or omissions by persons in preceding steps of that chain, leading to non-provision or inadequacy of the digital service. In such cases, the seller avatar has the right to claim compensation and to apply legal remedies against the person responsible for the chain of operations. An employee avatar that uses authorized technology which does not create an increased risk of harm to others must fulfill duties regarding proper selection, operation, monitoring, and maintenance of the technology used; otherwise, they must bear responsibility for breaches of the corresponding duties. The employer is obligated to ensure that the avatar has the right to legal remedies in cases of non-compliance, up to termination of the employment contract with the employee represented by that avatar for improper provision of digital services. It should also be noted that the employee avatar cannot transfer their duties under job descriptions and employment contracts to other employee avatars. This aspect may be part of the dynamics of a particular digital world, and the parties involved in the employment contract are generally free to negotiate these conditions.

The further development of artificial intelligence has led to the active application of neurotechnologies in the labor sphere. At the same time, the issue arises of experimental testing of neurotechnology use and its subsequent implementation in work processes. Directions in labor legislation grant the employer the right to prefer employees with higher performance results. This view is supported by Allan McKay, who argues that employers try to gain an advantage over competitors by using neurotechnologies to enhance the productivity of their workplaces *(Horizon Report for The Law Society, 2022).* In this aspect, neurotechnology acts as an effective

tool for employers not only to increase labor productivity but also to predict employee behavior and commercialize the obtained data. Employers performing actions unavailable to employees without neuro-implants gain several advantages: increased memory capacity; faster reaction speed; infrared vision; the ability to sense very hot and cold objects; direct connection to computers, robotics, and other devices at the workplace; copying information and storing it on a USB drive embedded in the body, among others. Employers may also involve employees directly. By leveraging neurotechnology achievements to enhance human natural capabilities, employees gain an advantage over others. Consequently, this allows for better results from employees equipped with such devices. Neurotechnologies in the labor sphere carry risks for employees, including potential dismissal or disciplinary action for refusing to participate in experiments related to the use of neurotechnologies. Participation of employees with complex neuro-implants raises a number of problems and questions about special regulation of labor relations. Furthermore, the collection and analysis of neurodata may create new opportunities for violations of privacy and data security.

Subsequent clarifications to the characteristics of avatars introduced innovative features, whereby artificial intelligence will enable impressive scales of employee monitoring. Not only will work pace, breaks, and drowsiness levels be measured *(Hirsch, 2019),* but also the suitability of a specific employee for particular tasks will be assessed *(Stefano, 2019).* Thus, artificial intelligence technologies may influence personnel optimization, while collected data may expose employees to risks of surveillance or manipulation, as questions of morality, ethics, and security remain open.

4. Conclusions

Particular importance is given to "pervasive" digital technologies — neurotechnologies, artificial intelligence technologies, robotics, quantum technologies, wireless communication technologies, virtual and augmented reality. For these reasons, the presence of artificial intelligence in the labor sphere is increasing, since virtual reality is a space where AI systems have even more possibilities than in the physical world. The development of platform labor in the metaverse will become more complex in combination with other digital technologies and their expansion in the labor sphere. The approach to the workplace is changing, becoming virtual, as well as the possible options for new quality management and full application in practical activity. A general trend is the emergence of a growing share of virtual workplaces, where consideration of the specific features of each employee includes the protection of workers' rights in digital environments. Within this framework, the fundamental principles of labor relations remain valid regardless of the platform. It is worth noting that knowledge and understanding of the listed demands on the digital identity (avatar) in labor relations raise critical questions regarding the application of labor law when using them on digital platforms within the metaverse. The legal issues related to the digital identity (avatar) in labor law include, in particular, questions concerning the definition of the legal status of avatars, the protection of personal data, regulation of digital monitoring, and prevention of discrimination in the digital space *(Wood et al., 2020);* the impact of digital identity on the labor sphere and the employee's work function; the permissibility of delegation in making personnel decisions; and encompass technological, organizational, and legal measures that ensure fairness, transparency, and security *(Fitzgerald, Kruschwitz, 2013);* the limits of digital monitoring of employee behavior and protection of their privacy from unlawful interference by the employer. The application of avatars in labor relations can significantly increase productivity, adaptability, and employee engagement,

thereby promoting the development of digital corporate culture *(Cascio, Montealegre, 2016)*. To achieve positive resolution of these issues, a thoughtful and coordinated approach is needed for the study and development of appropriate legal mechanisms to ensure fair and safe labor relations in the digital space. This rapid development of social needs and technologies will help facilitate the establishment and implementation of legal provisions to address specific problems or anticipated risks related to avatar use in the near future, thus enhancing regulatory effectiveness and the responsiveness of legal frameworks in the evolving digital landscape.

References

1. Accenture. (2022). Virtual Reality and Avatars for Employee Training. Accenture Insights. https://www.accenture.com/us-en/insights/future-workforce/virtual-reality-employee-training
2. Avramova, O. E. (2022). Homo virtualis as an object of civil legal relations. In Problems of improving private legal mechanisms of acquisition, transfer, exercise and protection of subjective civil and family rights in modern conditions in Ukraine: materials of the scientific-practical conference dedicated to the memory of Prof. Ch. N. Azimov (pp. 106–110). Yaroslav the Wise National Law University.[in Ukrainian].
3. AI Frontiers: Innovations, Breakthroughs, Challenges. (May 2025).
4. Bailenson, J. N. (2018). Experience on Demand: What Virtual Reality Is, How It Works, and What It Can Do. W. W. Norton & Company.
5. Bélisle, J.-F., Bodur, H. O. (2010). Avatars as information: Perception of consumers based on their avatars in virtual worlds. Psychology & Marketing, 27(8), 741–765. https://doi.org/[doi if available]
6. Benford, S. D., Snowdon, D., Greenhalgh, C. M., Ingram, R. J., Knox, I. (1995). VR6jVIBE: A virtual environment for cooperative information retrieval. Computer Graphics Forum, 14(3), 349–360.
7. (Benford et al., 1995; Lanier, 1996; Suler, 1999).Benford S. D., Snowdon D., Greenhalgh C. M., Ingram R. J., Knox I. VR6jVIBE: a virtual environment for cooperative information retrieval//Computer Graphics Forum. 1995. Vol. 14 № 3. P. 349–360. Lanier R. Cyberpunk Dictionary//Communication. 1996. Vol. 1 (2). Suler J. The psychology of avatars and graphical space in multimedia chat communities//The Psychology of Cyberspace. 1999.
8. Cascio, W. F., and Montealegre, R. (2016). How technology is changing work and organizations. Annu. Rev. Organ. Psychol. Organ. Behav. 3, 349–375. doi: 10.1146/annurev-orgpsych-041015-062352
9. Dionisio, J. D. N., Burns, W. G., & Gilbert, R. (2013). 3D Virtual Worlds and the Metaverse: Current Status and Future Possibilities. ACM Computing Surveys, 45(3), 34.
10. European Parliament. (2016). Regulation (EU) 2016/679 (General Data Protection Regulation). Official Journal of the European Union.
11. Employment and Society, 34(1), 56–75. https://doi.org/10.1177/0950017018785616
12. Fitzgerald, M., & Kruschwitz, N. (2013). Embracing Digital Technology: A New Strategic Imperative. MIT Sloan Management Review.
13. Hirsch, J. (2019, September 2). Worker protection laws aren't ready for artificial intelligence, automation and other new technology. Guest Column.
14. Horizon Report for The Law Society. (2022, August). Neurotechnology, law and the legal profession (p. 5).
15. International Labour Organization. (2019). Convention No. 190: Convention on the elimination of violence and harassment in the world of work.

16. International Labour Organization. (1958). Convention No. 111: Discrimination (Employment and Occupation) Convention.
17. Kshetri, N. (2021). 1 Blockchain and Work in the Fourth Industrial Revolution. Journal of Business Ethics, 162(4), 735–749. https://doi.org/10.1007/s10551-018-3952-9
18. Microsoft. (2023). Microsoft Mesh: Building the Metaverse for Work. Microsoft Official Blog.
19. Ochoa, T. T. (2012). Who owns an avatar? Copyright, creativity, and virtual worlds. Vanderbilt Journal of Entertainment and Technology Law, 14, 958–991.
20. Suler, J. (1999). The psychology of avatars and graphical space in multimedia chat communities. In The Psychology of Cyberspace.
21. De Stefano, V. (2016). The Rise of the "Just-in-Time Workforce": On-Demand Work, Crowdwork, and Labor Protection in the "Gig-Economy". Comparative Labor Law & Policy Journal, 37(3), 471–504.
22. De Stefano, V. (2019). Negotiating the algorithm: Automation, artificial intelligence and labour protection. Comparative Labor Law & Policy Journal, 41(1).
23. Walmart. (2024). Enhancing Employee Engagement through Virtual Avatars. Walmart Corporate Reports.
24. Wood, A. J., Graham, M., Lehdonvirta, V., Hjorth, I. (2020). Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy. Work, Employment and Society, 34(1), 56–75. https://doi.org/10.1177/0950017018785616