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THE ROLE OF INNOVATIVE HR SYSTEMS IN SUPPORTING LEGAL EMPLOYMENT AND COMPLIANCE WITH LABOR STANDARDS IN THE EU

Summary. *The article examines the role of innovative HR systems based on artificial intelligence in ensuring legal employment and compliance with labor standards in the countries of the European Union. support for immigration policy. Attention is focused on legal compliance, risk management, requirements for transparency of algorithms and protection of workers' rights, in particular migrants. A comparative analysis of the main challenges and benefits of implementing such systems within the EU regulatory framework is provided.*

Key words: *innovative HR systems, legal employment, labor standards, artificial intelligence, GDPR, AI Act, personal data protection, anti-discrimination, labor migration.*

Innovative HR systems based on artificial intelligence play a crucial role in ensuring legal employment and compliance with labor standards in the EU. According to N. M. Chernikova, information and knowledge, the source and carrier of which is a person, are the main values in the digital economy, so in these conditions the role of human resources and human capital increases, no less than innovation. [3, c. 73]. By combining the automation of candidate data verification

with the verification of documents, work permits, and integration with state registers, such platforms provide a transparent and documented control system, reducing the risk of illegal labor and the shadow economy.

At the same time, guaranteed protection of personal data is an integral part of these systems. The GDPR, implemented in 2018, and the new EU Artificial Intelligence Act (AI Act), which came into force on August 1, 2024, strictly regulate the processing of personal and sensitive data, providing for the principle of "privacy by design," a privacy impact assessment (DPIA), and the need for human control over decisions made by automated AI modules [10].

From a practical point of view, S. Barabashyn points out that HR systems provide analytical tools for monitoring working conditions - checking employment contracts, working hours, protecting employees' rights - and form a digital footprint to track compliance in case of inspections or labor disputes [1].

In the European Union, the introduction of innovative AI-based HR systems significantly enhances the ability to ensure legal employment and compliance with labor standards. First, the GDPR and the AI Act harmonize the definition of "profiling" as the automated processing of personal data for the purpose of analyzing personal characteristics and behavior (including professional behavior), which requires impact assessment and transparency. Secondly, HR systems that perform profiling in the context of employment are classified as high-risk according to Annex III of the AI Act and therefore require data governance, DPIA, risk management, and data accuracy [15]. Thirdly, the AI Act prohibits the use of systems for emotion recognition, social sorting, or biometric categorization in HR, but allows them only under limited conditions in critical infrastructure according to security standards. In addition, the law requires transparency of the decision, explanation of the logic of artificial intelligence in HR decisions, the ability of people to get an interpretation of rejection or appointment, and establishes mandatory human control over every important automated decision [18].

Article 14 of the AI Act describes the need to design HR systems with the ability to stop, interpret, and two-step verification of decisions by experts to avoid "automation bias" and ensure the legality and fairness of processes [9].

Financial penalties for non-compliance with standards or the use of prohibited practices amount to up to 7% of global turnover or €35 million, which encourages HR departments to carefully monitor data quality, compliance with procedures, and documentation of AI use [10]. Thus, in the EU, AI-based HR systems serve not only as a tool for recruitment optimization but also as a legal compliance mechanism: they automatically check the eligibility of candidates, ensure data protection, and prevent discrimination, at least at the official level, guaranteeing the right to explanation and human control in every personnel decision.

At the same time, the European regulatory framework, especially in terms of regulating the use of AI, imposes strict requirements on employers and developers of HR technologies. The new European AI Act (EU AI Act) establishes a framework for the use of algorithms in the employment sector, focusing on personal data protection, transparency of processes, and non-discrimination [6; 20]. This makes HR systems not only efficient but also ethical, responsible, and legal.

Compliance with anti-discrimination requirements is particularly important: although algorithms can optimize selection, there is a risk of bias. According to the EU approach, AI system models should be audited for zip code-based, age, gender, or ethnic discrimination, which is supported by legal norms and HR jurisprudence.

Particular difficulties arise in the area of migrant employment, which is regulated by a complex system of European and national norms. HR technologies should ensure the protection of migrants' rights and prevent exploitation, as confirmed by numerous conclusions of the European Agency for Fundamental Rights [2]. They should also take into account the diversity of labor regulations

in member states to avoid violations [16]. There is a separate task of minimizing the risks of bias in hiring algorithms, which necessitates constant auditing and human participation in decision-making [5]. An example of an integrated approach is the German Skilled Immigration Act of 2025, which provides for the use of HR technologies to facilitate the adaptation and integration of highly skilled migrants [15].

EU legal regulation establishes gradual implementation of restrictions: prohibition of certain "dangerous" practices, according to the AI Act and relevant directives, mandatory audit of models and risk documentation [9]. For HR services, this means implementing risk management of AI systems: building registration systems, data quality assessment, human support of automated solutions, logs, and responsibility for security and explainability [2].

HR systems that use AI can automate a wide range of operations, from searching and sourcing candidates to assessing their compliance with legal requirements. In particular, within the European legal framework, such technologies allow for prompt verification of documents confirming the right to work in accordance with the EU Regulation on the Free Movement of Workers of 2011 [12]. In addition, automated monitoring of the compliance of working conditions with the European Charter of Social Rights ensures compliance with basic labor standards in different member states [7]. Equally important is the ability of these systems to promote transparency and equality in recruitment processes, reducing the risk of bias through the implementation of algorithms that are audited for non-discrimination [13].

The impact of EU regulatory initiatives on the development of innovative HR systems is crucial. The 2011 Free Movement of Workers Regulation ensures the basic rights of migrants to employment, which is the foundation for further technological solutions [12]. The European AI Law introduces the necessary standards of security and transparency in the use of algorithms in HR [19]. The EU Charter of Social Rights emphasizes the right to fair and adequate working

conditions, which is reflected in the functionality of modern HR systems [7]. The interaction of these regulations forms the legal basis for the ethical and legal application of innovations in the field of human resources management, maintaining a balance between technological progress and social justice.

In the context of analyzing the legal and practical impact of innovative HR systems on the sphere of legal employment in the European Union, special attention should be paid to the generalized data presented in Table 1.

Table 1

Comparative analysis of the main aspects of the impact of innovative HR systems on legal employment in the EU

The main aspect	Characteristics	Relevant sources	Challenges and recommendations
Automation of legality checks	Real-time verification of documents confirming the right to work	Free Movement of Workers Regulation (2011), AI in HR Management (2024) [6].	The need for accuracy, avoiding false rejections
Compliance with labor standards	Control of working conditions, wages, and working hours in accordance with labor laws	European Pillar of Social Rights (2017), Navigating European Labor Laws (2024) [18].	Ensuring adaptation to different national regulations
Combating discrimination	Using algorithms to reduce bias in candidate selection	GRASE Partners (2024), AI and employment law (2023)	Constant audit of algorithms, involvement of human control
Protection of migrants' rights	Monitoring of migrants' working conditions, protection from exploitation	FRA Opinions (2023) [17], Temporary labor migration programs (2022)	Increasing transparency, integration with human rights organizations
Compliance with the EU AI law	Regulating the use of AI in HR, ensuring transparency and protection of personal data	The regulation of AI-based migration technologies (2023) [22], The EU AI Act (2023)	Implementation of ethical standards, staff training

Support for immigration policy	Automation of adaptation processes for qualified employees	HR Tech & Immigration: Germany's Skilled Act (2025) [14].	Harmonization of immigration procedures and HR practices
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Source: compiled by the author

According to the comparative analysis presented in Table 1, the most important aspects of the impact are automation of employment legality checks, ensuring compliance with labor standards, combating discrimination, protecting migrants' rights, compliance with artificial intelligence legislation, and supporting EU immigration policy.

Automation of labor legality checks involves the use of digital mechanisms to quickly verify an employee's legal status, including checking work permits and compliance of documents with legal requirements. This reduces the burden on HR departments and ensures compliance with the Free Movement of Workers Regulation (2011), but at the same time poses the challenge of algorithmic accuracy, as erroneous refusal to hire may have legal consequences.

HR systems also help to monitor compliance with labor standards - working conditions, working hours, and salaries - in accordance with the provisions of the European Charter of Social Rights (2017) and national regulations. The main difficulty lies in the need to adapt such systems to legal pluralism within the EU, where each state has its own specifics in the field of labor law.

Another critical vector is the prevention of discrimination. HR platforms using AI can both minimize bias and reproduce it if not properly audited. Therefore, constant technical and ethical control over algorithms, including ensuring human intervention in key decisions regarding candidates, becomes necessary.

Protecting migrants' rights within digital HR platforms is also a crucial element of employers' social responsibility. It is about identifying cases of potential exploitation, restriction of access to the labor market or discriminatory selection. Data from the European Agency for Fundamental Rights (FRA)

indicates the need to integrate systems with legal protection mechanisms and to cooperate with specialized organizations.

The AI Act, which came into force in 2024, has significantly changed the approach to regulating innovations in HR [20]. AI systems used for personnel selection are classified as high-risk, which means they must meet the criteria of transparency, explainability, data protection, and manual control. For employers, this means the need to document procedures, regularly audit models, and implement security standards in HR management.

Finally, support for immigration policy through HR technologies is gaining importance. An example is the German Skilled Immigration Act of 2025, which provides for the use of innovative systems to facilitate the adaptation of foreign workers, in particular through digital support of integration procedures and alignment with national regulations.

Thus, innovative AI-powered HR systems have become a key tool for ensuring compliance with labor laws, monitoring the legality of employment, and managing employment risks within the European Union. Their integration with state registries, automation of document verification and monitoring of working conditions allow employers to comply with regulatory requirements in real time, which significantly reduces the risk of violations and legal liability.

The European regulatory framework, in particular the GDPR and the AI Act, creates a strict framework for the use of such systems. It obliges employers to audit algorithms for bias, implement DPIA, ensure transparency of decision-making, and exercise constant human control. The definition of AI solutions in HR as high-risk, the prohibition of emotional analysis, and the establishment of clear standards of explainability and the right to interpretation form a regulatory framework that prevents uncontrolled use of AI in the HR field.

Special attention is paid to protecting the rights of migrants and avoiding discrimination. Automated HR solutions are required to take into account the multiplicity of national legal systems and be audited for potential bias based on

age, gender, ethnicity, or place of residence. This helps ensure legal compliance and social responsibility when hiring staff from outside the EU.

The use of HR systems also supports the implementation of immigration policy by automating work eligibility verification, employee onboarding, and ensuring that employment conditions comply with the standards of the European Charter of Social Rights. The role of these systems is expanding from a recruiting tool to a legal compliance mechanism that serves as a digital infrastructure for compliance with labor, immigration, and ethical standards.

To summarize, the introduction of AI into HR processes in the EU is possible only if strict technical, legal, and ethical requirements are met. This requires companies not only to implement technological solutions, but also to implement control, documentation, audit, and adaptation procedures to changes in the regulatory environment.

References

1. AI Hiring Program (EU) – impactmania. URL: <https://www.impactmania.com/im/ai-hiring-eu/> (accessed June 30, 2025).
2. Curphey, M. (2025). AI in global recruitment and HR: overcoming legal problems and built-in bias. *Relocate Global*. URL: <https://www.relocatemagazine.com/ai-in-global-recruitment-and-hr-overcoming-legal-problems-and-built-in-bias-marianne-curphey-sp25> (accessed June 30, 2025).
3. Deel Team (2025). AI in HR Management: How Does It Mesh with European AI Regulations. *DEEL*. URL: <https://www.deel.com/blog/ai-in-hr-management-and-european-regulation/> (accessed June 29, 2025).
4. Barbashyn, S. (2023). Artificial intelligence: legal regulation in Ukraine and the EU. *BARBASHYN LAW FIRM*. URL: <https://barbashyn.law/statti/shtuchnyj-intelekt-pravove-regulyuvannya-v-ukrayini-ta-yes/> (accessed June 28, 2025).

5. Boyko, D. (2025). Personal data protection and AI: Draft Law No. 8153, GDPR and the EU AI Law in the context of artificial intelligence technologies. *Dnistryanskogo Center, Publications*. URL: <https://dc.org.ua/news/zahyst-personalnyh-danyh-i-shi-zakonoproekt-8153-gdpr-ta-zakon-es-pro-shi-u-konteksti-tehnologiy-shtuchnogo-intelektu> (accessed June 30, 2025).

6. Chernikova, N.M., Voronina, V.L. & Chebotarev, K.G. (2023). Innovative approaches to managing HR processes at domestic enterprises. *Transformational economy*, 3(03), 70-75. DOI: <https://doi.org/10.32782/2786-8141/2023-3-12> URL: <https://dspace.pdau.edu.ua/handle/123456789/16462> (accessed June 30, 2025).

7. Andrews, C. (2024). EU AI Act shines light on human oversight needs. *IAPP*. URL: <https://iapp.org/news/a/eu-ai-act-shines-light-on-human-oversight-needs> (accessed June 28, 2025).

8. Maschek, W.A., Delille, T., Seranne, M. et al. (2025). EU Publishes Regulation Banning Products Made with Forced Labor. *Squire Patton Boggs*. URL: <https://www.shrm.org/topics-tools/employment-law-compliance/eu-publishes-regulation-banning-products-made-with-forced-labor> (accessed June 26, 2025).

9. EU: Artificial Intelligence Act finalized; will impact HR policies. (2024). *MERCER*. URL: <https://www.mercer.com/en-us/insights/law-and-policy/eu-artificial-intelligence-act-finalized-will-impact-hr-policies/> (accessed June 30, 2025).

10. Caproni, M. (2025). Europe - the AI revolution is underway but not quite yet in HR? *SQUIRE PATTON BOGGS*. URL: <https://www.employmentlawworldview.com/europe-the-ai-revolution-is-underway-but-not-quite-yet-in-hr/> (accessed June 29, 2025).

11. European Pillar of Social Rights. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017DC0250> (accessed June 29, 2025).

12. Free Movement of Workers Regulation 2011. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=legissum:l23013a> (accessed June 30, 2025).

13. GRASE Partners pave the way for bias-free recruitment based on AI. (2024). *Directorate-General for Employment, Social Affairs and Inclusion*. URL: https://year-of-skills.europa.eu/news/unveiling-bias-grase-partners-pave-way-bias-free-recruitment-based-ai-2024-01-16_en (accessed June 30, 2025).

14. Urich, C. (2025). HR Tech & Immigration: Germany's Skilled Act 2025 Insights. *JOBBATICAL*. URL: <https://www.jobbatical.com/blog/hr-tech-skilled-immigration-act-germany-2025> (accessed June 29, 2025).

15. Lily, L. (2024). Comparing EU and US AI legislation: déjà vu to 2020. *Reuters*. URL: <https://www.reuters.com/legal/legalindustry/comparing-eu-us-ai-legislation-dj-vu-2020-2024-10-21/> (accessed June 30, 2025).

16. Navigating European Labor Laws: A Comprehensive Guide. *Europe HR Solutions*. URL: <https://europe-hr-solutions.com/resources/navigating-european-labor-laws-a-comprehensive-guide/> (accessed June 30, 2025).

17. Protecting migrant workers from exploitation. FRA Opinions. URL: <https://fra.europa.eu/en/content/protecting-migrant-workers-exploitation-fra-opinions> (accessed June 29, 2025).

18. Wsrunnywatercolors. (2024). The EU has passed its Artificial Intelligence Act which now gives European citizens the most rights, protections, and freedoms, regarding AI, of anyone in the world. *Reddit*. URL: https://www.reddit.com/r/ThielWatch/comments/1bhph71/the_eu_has_passed_its_artificial_intelligence_act/ (accessed June 28, 2025).

19. Stewart, L. S. (2024). The regulation of AI-based migration technologies under the EU AI Act. *European Law Journal*, 30(1-2), 122-135. <https://doi.org/10.1111/eulj.12516>; URL: <https://onlinelibrary.wiley.com/doi/10.1111/eulj.12516> (accessed June 29, 2025).

20. Vljakovic, M. (2024). What Should Employers Expect from the EU AI Act? CEE Legal Matters. Schoenherr. URL: <https://ceelegalmatters.com/by-practice/27785-what-should-employers-expect-from-the-eu-ai-act> (accessed June 30, 2025).