

## Exploring ai's impact on HR information management

**Sulaimon Toheeb**

*applicant of the educational program «Management»,  
University of Economics and Law «KROK», Kyiv, Ukraine,  
e-mail: SulaimonTO@krok.edu.ua*

**Volodymyr Tokar**

*professor, department of international management,  
University of Economics and Law «KROK», Kyiv, Ukraine,  
e-mail: VVTokar@krok.edu.ua,  
ORCID: 0000-0002-1879-5855*

In the dynamic world of more and more businesses, managing HR information proficiently is key to an organization achievements. With technological progressions, HR experts are adopting novel approaches that refine procedures, boost decision-making capabilities and enrich the interactions of employees. This piece delves into the considerable effect that adept management of HR information has on companies and underscores the advantages it confers upon HR divisions as well as the entities at large.

Thillaivasan and Wickramasingne argue that artificial intelligence has already surpassed human intelligence in abstract gaming and is expected to continue this trend across various aspects of human intelligence, thereby altering the role of humans in organizational value creation. The authors examine the impact of artificial intelligence on organizational performance within the context of the Fourth Industrial Revolution, focusing on its impact on management and human capital, key elements used in assessing organizational performance. These changes may require existing metrics for organisational performance to be re-evaluated. Furthermore, the adoption of AI and next-generation technologies will introduce new challenges related to privacy, data security, and ethics. The review also identifies hurdles in leadership, organizational culture, and employee reskilling, as well as broader policy implications in education, employment, and social security. Given the profound effects of these technologies on policy and society, further research is warranted. [1, p. 13] Lack of clarity on how the metrics used to measure organizational performance need to be reconsidered for future organizations. Lack of investigation into the potential advantages and drawbacks of implementing artificial intelligence, smart automation, and other next-generation technologies. Lack of concrete examples of the issues related to data protection, privacy, and morality associated with the use of AI.

HR departments encounter numerous challenges in managing information, including data overload, silos, time constraints, and subjective decision-making. The proliferation of employees and digital tools results in vast data volumes, complicating analysis and insight extraction. Information fragmentation across systems impedes comprehensive analysis. Time constraints from administrative tasks divert attention from strategic initiatives. Traditional HR practices relying on subjectivity introduce biases. AI-driven solutions offer remedies. Machine Learning automates data analysis,

revealing performance trends and skill gaps. Natural Language Processing interprets human language for feedback analysis and communication strategies. Chatbots provide real-time support, alleviating HR professionals from routine tasks. Predictive analytics forecasts employee behaviour, informing targeted interventions and retention strategies.

The benefits of artificial intelligence in information management for human resources are significant. Data is simplified with artificial intelligence automation. HR professionals can focus on more strategic initiatives and employee interactions by focusing on analysis tasks, enabling them to focus on more analysis tasks. Data-driven decision-making in recruitment, training, and talent management is enabled by valuable insights from large datasets. AI-powered devices personalize interactions, provide instant information, and automate routine tasks, enhancing the working environment. Furthermore, artificial intelligence algorithms can be designed to be objective and unbiased, reducing the influence of human biases in HR decisions.

Hmoud and Várallyai conducted a study to explore how trust and other factors influence HR professionals' attitudes and intentions towards using AI-based HR systems. The Authors proposed a framework to examine the relationships between various variables. The findings provided insights into how trust, facilitating conditions, organisational size, technological readiness, and performance expectancy affect HR professionals' intentions to use AI-based HRIS. Age and experience played a role in dampening the effects. Participants demonstrated positive expectations toward using AI-based systems, with trust playing a crucial role in shaping their intentions. Despite being in the early adoption phase, respondents displayed trust in AI technology, possibly due to rapid advancements. Age and experience did not affect trust, indicating broad engagement with AI technologies. Unlike prior studies, organizational size did not significantly influence HR professionals' intentions. Technological readiness and facilitating conditions had minimal impact, while performance expectancy strongly predicted adoption. [2, p. 13]. The study reveals some shortcomings. In its examination of the controlling factors influencing AI adoption. Age and experience were taken into account but crucial aspects like individuals' roles within the organization, their educational attainment, and organization culture were largely ignored. This oversight could have provided deeper understanding of AI adoption.

Elrehail, H., Harazneh, I., Abuhjeleh, M., Alzghoul, A., and Alnajdawi, S. examined a model and included HR planning, job analysis, employee performance evaluation, recruitment, selection, compensation, rewards, and training. Contrary to previous research, this investigation emphasised the significance of human resources tactics in gaining a competitive edge. Hypotheses concerning human resources management, job evaluation, employee performance evaluation, and selection, selection, and placement received empirical backing. Nevertheless, contrary to expectations, there was no significant linkage between employee compensation, monetary rewards, and prevailing advantages. [3, p. 14]. The study suggests reassessing educational and growth initiatives based on worker discontent and challenges existing literature by revealing no mediatory role for worker contentment in determining

competitive advantage between HR practices. The paper promotes a comprehensive approach to human resources management and emphasises the interconnectedness of human resources practices within organizations.

This review examined, in conclusion, the increasing impact of AI on human resources Information management for human resources information management. Artificial intelligence holds great promise for enhancing human resources procedures, decision-making, and employee involvement, ultimately leading to superior organizational performance. The potential for artificial intelligence to redefine human roles within HR is one of the challenges. The benefits of AI in HR are highlighted by studies by Thillaivasan and Wickramasingne and Hmoud and Várallyai. Data analysis, tasks, and bias in decision-making can be streamlined by machine learning. Human resources professionals are generally receptive to AI adoption, but trust and ethical considerations remain crucial. Future research should explore the broader implications of AI in human resources, including its impact on leadership, performance metrics, privacy, and data security. Understanding how AI is applied within HR is crucial for unlocking its potential for success.

**Key words:** artificial intelligence, data analytics , human resources, information management, technology integration.

#### **List of references:**

1. Thillaivasan, D. & Wickramasingne, C.N. (2020). *Conceptualizing the Impact of AI and Automation on Leadership, Human Capital and Organisational Performance. Journal of Business and Technology*, vol 4(1-2), p.1- 19. DOI: <http://doi.org/10.4038/jbt.v4i1-2.37>
2. Hmoud, B. I., & Várallyai, L. (2020). *Artificial Intelligence in Human Resources Information Systems: Investigating its Trust and Adoption Determinants. International Journal of Engineering and Management Sciences*, (1), 749-765. <https://doi.org/10.21791/IJEMS.2020.1.65>
3. Elrehail, H., Harazneh, I., Abuhjeeleh, M., Alzghoul, A., Alnajdawi, S. & Ibrahim, H.M.H. (2020), "Employee satisfaction, human resource management practices and competitive advantage: The case of Northern Cyprus", *European Journal of Management and Business Economics*, Vol. 29 No. 2, pp. 125- 149. <https://doi.org/10.1108/EJMBE-01-2019-0001>