



Revista CEA
ISSN: 2390-0725
ISSN: 2422-3182
revistacea@itm.edu.co
Instituto Tecnológico Metropolitano
Colombia

Opportunities (but also Challenges) in Applying Artificial Intelligence to Human Resource Management within Companies

 **Baena Luna, Pedro**

Opportunities (but also Challenges) in Applying Artificial Intelligence to Human Resource Management within Companies

Revista CEA, vol. 9, núm. 20, e2777, 2023

Instituto Tecnológico Metropolitano

Disponible en: <https://www.redalyc.org/articulo.oa?id=638174850010>

DOI: <https://doi.org/10.22430/24223182.2777>



Esta obra está bajo una Licencia Creative Commons Atribución-NoComercial-CompartirIgual 4.0 Internacional.

Editorial

Opportunities (but also Challenges) in Applying Artificial Intelligence to Human Resource Management within Companies

Pedro Baena Luna
University of Seville, España
pbaenaluna@us.es

 <https://orcid.org/0000-0002-8509-0222>

Revista CEA, vol. 9, núm. 20, e2777,
2023

Instituto Tecnológico Metropolitano

DOI: [https://doi.org/
10.22430/24223182.2777](https://doi.org/10.22430/24223182.2777)

Editorial:

Allusions to the reality of Artificial Intelligence (AI) are constantly made across different areas of society and business management. We are immersed in the so-called Fourth Industrial Revolution or Industry 4.0 (Kong et al., 2021), and one of its undeniable effects is the emergence of new challenges in business management, brought about by the combined use of information and communication technologies (already ingrained in our society) and AI. This, undoubtedly, opens up new possibilities for organizations (Bolander, 2019).

In the field of Human Resource Management (HRM), as in the other departments or functional areas of companies, there has been an increase in the adoption of AI-based tools. This surge can be attributed to their ability to generate value, benefiting not only employees but also extending advantages to customers and consumers (Chowdhury et al., 2023). However, despite the increasing presence of AI in HRM, it remains true that although many HR managers recognize the potentialities these tools offer, they also acknowledge that their use often lacks a clear objective or fails to align with the organization's strategy (Vrontis et al., 2022).

One of the key objectives of HRM is to create a differentiating factor among organizations to achieve a clear competitive advantage over competitors (Elrehail et al., 2020). Therefore, the introduction of such new potentialities in HRM (based on the use of AI-based tools) should favor the achievement of this objective (Palos-Sánchez et al., 2022).

AI offers potential benefits to companies, specifically in the realm of HRM, which can be extended to multiple fields of action. These benefits include improved decision-making processes as a result of better information management, the automation of learning processes to reduce errors in irrelevant and low-value (but necessary) tasks, and the elimination of repetitive tasks (Ore & Sposato, 2022; Pillai & Sivathanu, 2020). Nonetheless, the application of AI to HRM also poses several challenges that, if not addressed, may hinder its implementation and lead to undesirable effects for organizations.

Regarding challenges, it is essential that organizations, especially their managers, do not look elsewhere and avoid being carried away by the wave of modernity and the current prevalence of using AI (for almost everything) in every functional area, specifically HRM. Notably, efforts are already underway to correctly address these challenges and thus ensure the continuity and sustainability of companies. One key challenge to be highlighted is the potential perception of workers (including job applicants) of a certain dehumanization in personnel management (Fritts & Cabrera, 2021). Additionally, the increasing reliance on machines and technology for people management may lead to episodes of technostress among individuals (Kumar et al., 2023).

Another critical challenge is concerned with the ethical and moral considerations of workers. They often feel that a significant part (if not all) of their professional growth lies solely within the control of algorithms designed for a specific purpose (Budhwar et al., 2022). Moreover, concerns are raised regarding their privacy when using specific tools directly linked to AI technologies in their daily tasks (Sharma et al., 2021).

Today, we are witnessing a paradigm shift in business management, in which the role of organizational leaders is presumed to be fundamental in addressing the challenges posed by the ever-increasing application of AI to all areas of an organization.

REFERENCES

- Bolander, T. (2019). What do we loose when machines take the decisions? *Journal of Management and Governance*, 23(4), 849–867. <https://doi.org/10.1007/s10997-019-09493-x>
- Budhwar, P., Malik, A., De Silva, M. T. T., & Thevisuthan, P. (2022). Artificial intelligence—challenges and opportunities for international HRM: a review and research agenda. *International Journal of Human Resource Management*, 33(6), 1065–1097. <https://doi.org/10.1080/09585192.2022.2035161>
- Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human Resource Management Review*, 33(1), 100899. <https://doi.org/10.1016/j.hrmr.2022.100899>
- 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*, 29(2), 125–149. <https://doi.org/10.1108/EJMBE-01-2019-0001>
- Fritts, M., & Cabrera, F. (2021). AI recruitment algorithms and the dehumanization problem. *Ethics and Information Technology*, 23(4), 791–801. <https://doi.org/10.1007/s10676-021-09615-w>
- Kong, H., Yuan, Y., Baruch, Y., Bu, N., Jiang, X., & Wang, K. (2021). Influences of artificial intelligence (AI) awareness on career competency and job burnout. *International Journal of Contemporary Hospitality Management*, 33(2), 717–734. <https://doi.org/10.1108/IJCHM-07-2020-0789>
- Kumar, A., Krishnamoorthy, B., & Bhattacharyya, S. S. (2023). Machine learning and artificial intelligence-induced technostress in organizations: a study on automation-augmentation paradox with socio-technical systems as coping mechanisms. *International Journal of Organizational Analysis*. <https://doi.org/10.1108/IJOA-01-2023-3581>
- Ore, O., & Sposato, M. (2022). Opportunities and risks of artificial intelligence in recruitment and selection. *International Journal of Organizational Analysis*, 30(6), 1771–1782. <https://doi.org/10.1108/IJOA-07-2020-2291>
- Palos-Sánchez, P. R., Baena-Luna, P., Badicu, A., & Infante-Moro, J. C. (2022). Artificial Intelligence and Human Resources Management: a Bibliometric Analysis. *Applied Artificial Intelligence*, 36(1), e2145631. <https://doi.org/10.1080/08839514.2022.2145631>
- Pillai, R., & Sivathanu, B. (2020). Adoption of artificial intelligence (AI) for talent acquisition in IT/ITeS organizations. *Benchmarking: An*

International Journal, 27(9), 2599–2629. <https://doi.org/10.1108/BIJ-04-2020-0186>

- Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2021). Implementing challenges of artificial intelligence: Evidence from public manufacturing sector of an emerging economy. *Government Information Quarterly*, 39(4), 101624. <https://doi.org/10.1016/j.giq.2021.101624>
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *International Journal of Human Resource Management*, 33(6), 1237–1266. <https://doi.org/10.1080/09585192.2020.1871398>