

THE STRATEGIC TRANSFORMATION OF HUMAN RESOURCE MANAGEMENT THROUGH GENERATIVE ARTIFICIAL INTELLIGENCE: A BIBLIOMETRIC ANALYSIS (2023–2025)

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ABSTRACT

This study examines recent research on Artificial Intelligence in Human Resource Management through a bibliometric analysis of 720 Scopus-indexed journal articles published between 2023 and 2025. Using R Studio (Bibliometrix) and VOSviewer, it maps publication trends, identifies influential contributors, and explores the field's conceptual and thematic structure. The findings show that this is a rapidly expanding and increasingly visible domain, characterised by strong publication growth, collaborative authorship, and broad international diffusion. The literature is centred on themes such as recruitment, talent acquisition, human resource analytics, machine learning, and employee-related outcomes, while recent developments indicate a shift towards more strategic and ethically informed applications.

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1. Introduction

Artificial Intelligence is increasingly recognised as a transformative technological force reshaping contemporary organisations and managerial practices. Its diffusion across business functions has significantly changed the ways firms process information, automate routines, improve decision quality, and strengthen organisational performance (Czarnitzki et al., 2023; Durrah et al., 2024; Leoni et al., 2024). At the same time, artificial intelligence is redefining managerial roles, organisational work practices, and strategic capabilities by fostering innovation, intelligent governance, and data-driven transformation across firms (Ali and Mahmood, 2025; Di Prima et al., 2024; Murire, 2024; Raina et al., 2026). Within this broader digital transformation, Human Resource Management has become one of the key domains in which artificial intelligence applications are expanding at an accelerated pace. From recruitment and talent acquisition to performance management, workforce analytics, and employee engagement, artificial intelligence-driven systems are increasingly redefining the strategic and operational foundations of Human Resource Management (Chowdhury et al., 2023; Nawaz et al., 2024; Prikshat et al., 2023; Raina et al., 2026).

The importance of this topic stems from both its practical and academic relevance. From a practical perspective, organisations are increasingly adopting artificial intelligence-based tools to improve efficiency, optimise human resource processes, and support more data-driven and predictive decisions. At the same time, the diffusion of artificial intelligence in Human Resource Management raises important managerial, ethical, and organisational questions related to transparency, bias, employee trust, and responsible governance. From an academic perspective, this growing transformation has stimulated a significant body of research exploring the implications of artificial intelligence for human resource functions, organisational capabilities, and employee

outcomes. As a result, research on artificial intelligence in Human Resource Management is progressively emerging as a distinct and rapidly evolving field of inquiry.

Previous studies have already addressed this topic from different angles. Some research has examined the adoption of artificial intelligence in specific human resource functions such as recruitment, talent acquisition, and performance evaluation, whereas other studies have focused on broader issues such as human resource analytics, digital transformation, and the organisational implications of intelligent systems. In addition, recent bibliometric and review-based studies have documented the increasing volume of publications in this field and highlighted major themes such as automation, machine learning, employee performance, decision-making, and ethical concerns (Arora et al., 2026; Hamouche et al., 2025; Nishanthi et al., 2025; Palos-Sánchez et al., 2022; Úbeda García et al., 2025). Although these contributions provide valuable insights, they often focus on specific sub-themes, restricted periods, or particular human resource domains, and they do not always offer an updated and integrated overview of the most recent intellectual structure of the field.

Accordingly, an important research gap remains. Despite the growing number of publications on artificial intelligence in Human Resource Management, there is still a need for a comprehensive and up-to-date bibliometric mapping that captures the recent evolution of the field, identifies its main publication trends, highlights the most influential sources and authors, and uncovers its conceptual and thematic structure. This need is particularly relevant in light of the rapid rise of generative artificial intelligence, the expansion of data-driven human resource practices, and the increasing scholarly attention to ethical and governance-related issues. Therefore, the present study seeks to address this gap by providing a bibliometric analysis of research on artificial intelligence in Human Resource Management indexed in Scopus during the period 2023–2025.

In light of this objective, the study is guided by the following research questions:

1. How has scientific production on artificial intelligence in Human Resource Management evolved during the period 2023–2025?
2. Which journals, authors, and countries have been the most influential and productive in this field?

3. What are the main conceptual and thematic clusters structuring the literature on artificial intelligence in Human Resource Management?
4. How has the thematic evolution of research on artificial intelligence in Human Resource Management developed over the study period?
5. What do these patterns reveal about the current state and future direction of the field?

2. Methodology

Scopus was selected as the primary data source because of its broad coverage of high-quality academic journals, standardised indexing structure, and reliable citation tracking system, which make it particularly suitable for bibliometric research. Its multidisciplinary scope allows broad retrieval of studies situated at the intersection of Artificial Intelligence (AI) and Human Resource Management (HRM). All bibliographic records were retrieved and exported from the Scopus database on 09 February 2026 to ensure methodological transparency and reproducibility.

A structured Boolean search was conducted in the TITLE-ABS-KEY fields to ensure conceptual precision. The search equation integrated two principal dimensions: (1) Artificial Intelligence-related terminology and (2) Human Resource Management-related constructs. The search was restricted to publications between 2023 and 2025 in order to capture the most recent wave of research associated with the rapid expansion of generative AI applications in organisational and HRM contexts. It was further limited to the subject areas of Business, Economics, Social Sciences, and Computer Science. Only English-language journal articles were retained to ensure analytical consistency and comparability.

The initial search yielded 1,164 records. To enhance transparency and replicability in the identification, screening, and inclusion of records, the study selection process was organised using a PRISMA-based flow framework. Following title and abstract screening to confirm conceptual alignment with the AI–HRM intersection, 444 records were

excluded. Consequently, a final dataset of 720 documents was retained for bibliometric analysis. The full screening and selection process is presented in Figure 1.

The collected data were analysed using the Bibliometrix package in R to conduct descriptive performance analysis and science mapping. In addition, VOSviewer was employed to generate network visualisations, including co-authorship, co-citation, bibliographic coupling, and keyword co-occurrence analyses, thereby enabling a comprehensive mapping of the intellectual, social, and conceptual structure of the field.

3. Results

3.1 Descriptive Bibliometric Characteristics

Table 1 shows that AI in HRM is a rapidly expanding and increasingly visible field of research. The dataset comprises 720 articles published across 402 sources between 2023 and 2025, with a remarkable annual growth rate of 70.95%, confirming the strong recent momentum of the field. The low average document age (1.66 years) further highlights its emerging character, while the average of 14.17 citations per document suggests growing scholarly attention despite the short time span.

The high number of Keywords Plus (2,224) and author keywords (2,261) reflects considerable thematic diversity, indicating that the field is developing through multiple interconnected research streams. At the same time, the authorship structure reveals a predominantly collaborative pattern, with 2,137 authors, an average of 3.29 co-authors per document, and 28.33% international co-authorship. Overall, these indicators portray AI in HRM as a recent, fast-growing, and collaborative domain with increasing academic visibility.

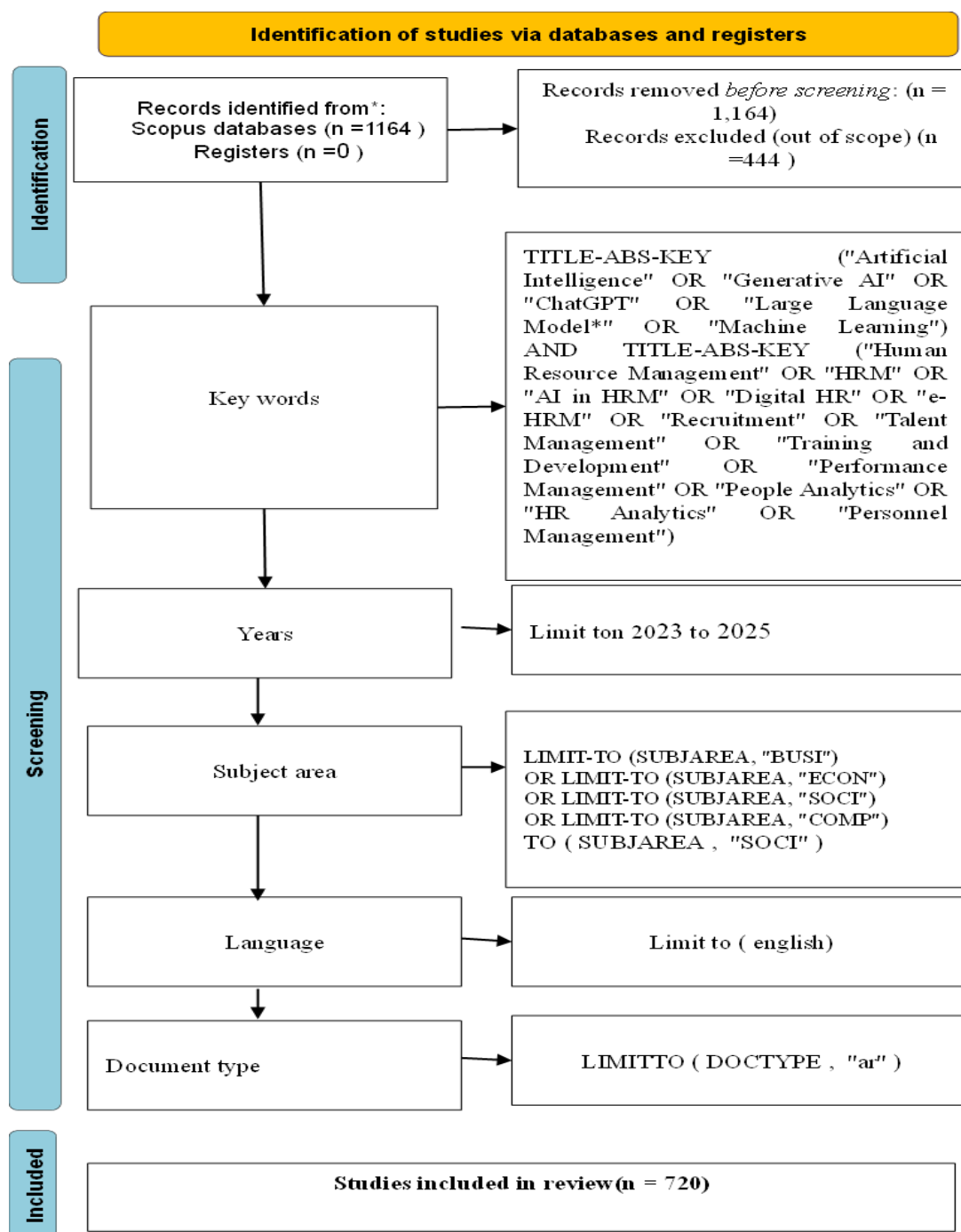


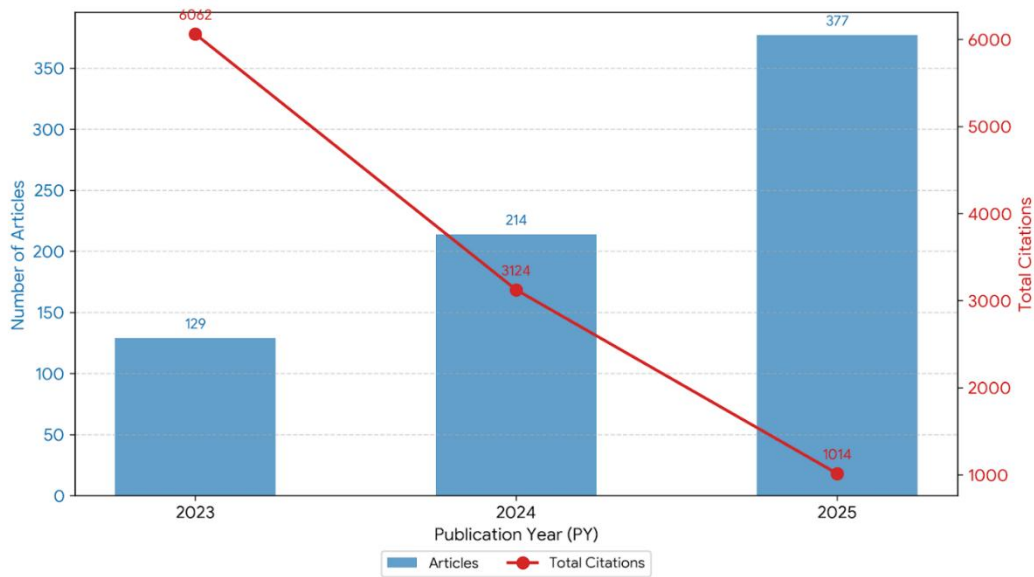
Figure 1. PRISMA-based flow diagram of the study selection process

Table 1. Descriptive Statistics of the Bibliometric Dataset (2023–2025)

Category	Variable	Result
Main Information	Timespan	2023–2025
	Sources	402
	Documents	720
	Annual Growth Rate (%)	70.95
	Average Document Age	1.66
	Average Citations per Document	14.17
Document Contents	Keywords Plus (ID)	2,224
	Author's Keywords (DE)	2,261
Authors	Total Authors	2,137
	Authors of Single-Authored Documents	92
Collaboration	Single-Authored Documents	97
	Co-Authors per Document	3.29
	International Co-Authorships (%)	28.33
Document Types	Articles	720

Source: Elaborated by author based on R Studio using biblioshiny

Figure 2. Annual publications and total citation trends in AI in HRM (2023–2025) shows a divergent trend between annual publication output and total citations during the period 2023–2025. Whereas scientific production rose sharply from 129 articles in 2023 to 377 in 2025, total citations declined from 6,062 to 1,014. This apparent decline in citations is primarily explained by the time-lag effect, as recent publications have had less time to accumulate scholarly recognition. The figure therefore confirms that AI in HRM is a rapidly growing field whose citation impact is still emerging.



Source: Author’s elaboration based on Scopus data using Excel

Figure 2. Annual publications and total citation trends in AI in HRM (2023–2025)

3.2 Core Journals and Source Impact

Table 2. Most Relevant Sources in AI in HRM (2023–2025)

Sources	Articles
Sustainability (Switzerland)	17
International Journal of Organizational Analysis	15
Personnel Review	12
Human Resource Management Review	11
International Journal of Human Resource Management	11
AI and society	10
International Journal of Advanced Computer Science And Applications	10
IEEE Access	9
IEEE Transactions on Engineering Management	8
Cogent Business and Management	7

Source: Author’s elaboration based on Scopus data using Biblioshiny.

Table 2. Most Relevant Sources in AI in HRM (2023–2025) highlights the most productive sources publishing research on Artificial Intelligence in Human Resource Management (AI in HRM) during the period 2023–2025. The results show that the field is dispersed across a diverse set of journals, with no single outlet exercising clear dominance. *Sustainability* leads with 17 publications, followed by the *International Journal of Organizational Analysis* (15) and *Personnel Review* (12).

The presence of established HRM journals such as *Human Resource Management Review* and the *International Journal of Human Resource Management* suggests that AI-related topics are becoming increasingly embedded in mainstream human resource scholarship. At the same time, the inclusion of interdisciplinary and technology-oriented outlets such as *AI & Society*, *IEEE Access*, and *IEEE Transactions on Engineering Management* confirms the cross-disciplinary nature of the field.

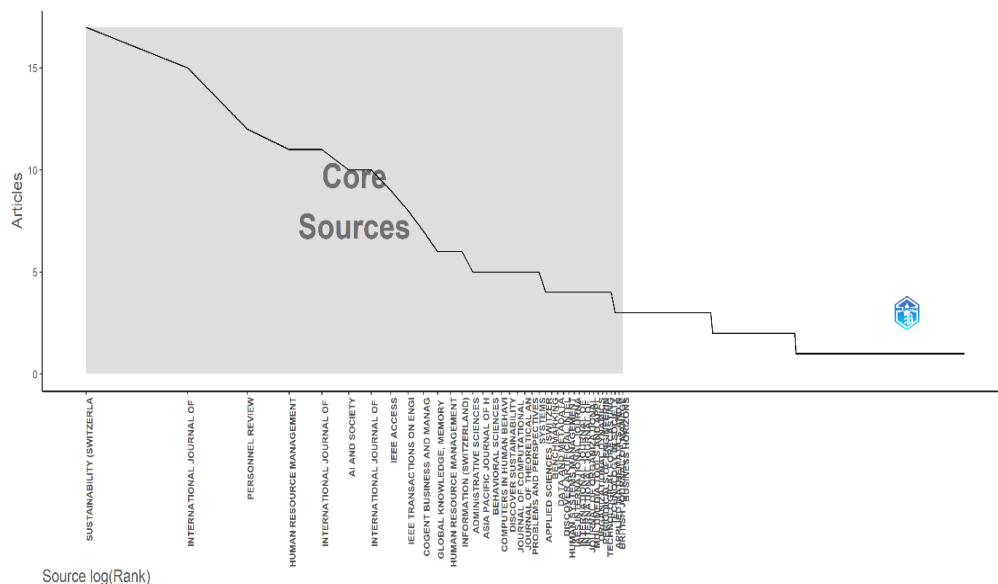


Figure 3. Core sources distribution according to Bradford's Law in AI in HRM (2023–2025)

Source: Author's elaboration based on Scopus data using Biblioshiny

Figure 3. Core sources distribution according to Bradford’s Law in AI in HRM (2023–2025) depicts the distribution of journals according to Bradford’s Law and reveals a clear core–periphery structure in the AI in HRM literature. Publications are concentrated in a limited number of highly productive sources, followed by a gradual decline in article frequency across a broader range of journals. This pattern indicates that research output is not evenly distributed, but instead clustered within a core group of outlets. Beyond this nucleus, publication activity becomes increasingly dispersed, reflecting the interdisciplinary diffusion of the field.

3.3 Author Productivity Patterns

The analysis of author productivity reveals a moderately concentrated publication structure in AI in HRM, with a limited group of scholars accounting for a disproportionate share of recent research output. ZHANG L leads with nine publications, followed by MALIK A and WANG X (eight each), and BUDHWAR P and ZHANG X (seven each), suggesting the presence of active research clusters rather than a fully fragmented authorship landscape. However, absolute publication counts should be interpreted with caution in collaborative settings. When fractional authorship is taken into account, ZHANG Q and DUTTA D emerge as comparatively stronger contributors, indicating that individual influence may differ from full-count productivity. Overall, these findings confirm that knowledge production in AI in HRM is shaped primarily by collaborative and interdisciplinary research networks rather than by isolated individual authors.

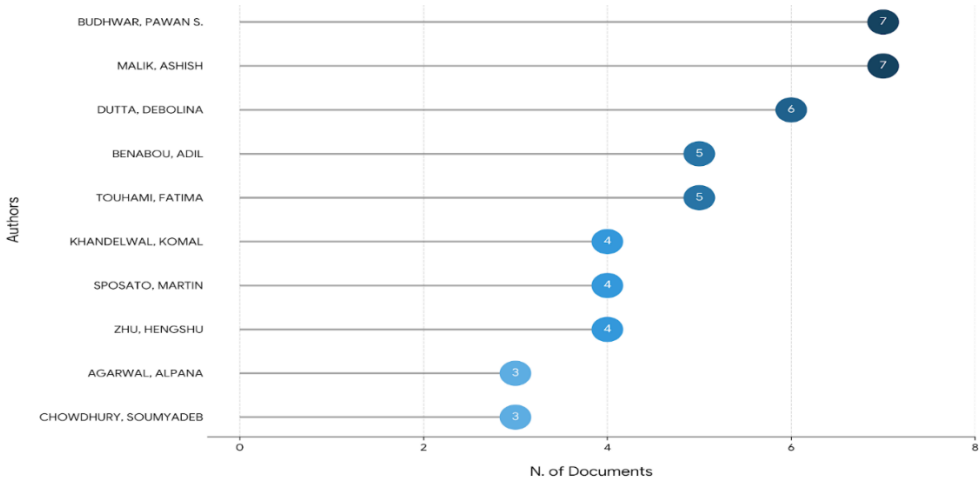


Figure 4. Most Relevant Authors

Source: Author's elaboration based on Scopus data using Biblioshiny

The citation analysis reveals a clear concentration of scientific influence within a limited number of authors. CHOWDHURY S ranks first with 834 citations from three publications, followed by BHATTACHARYA S with 752 citations from five publications. JOEL-EDGAR S and PRASANTA K DEY P each received 743 citations from only two publications, indicating a particularly high citation intensity. A similar pattern is observed for ABADIE A, RODRÍGUEZ-ESPÍNDOLA O, and TRUONG L, whose influence is largely driven by a single highly cited article. By contrast, MALIK A and BUDHWAR P combine relatively high citation impact with sustained productivity across multiple publications.

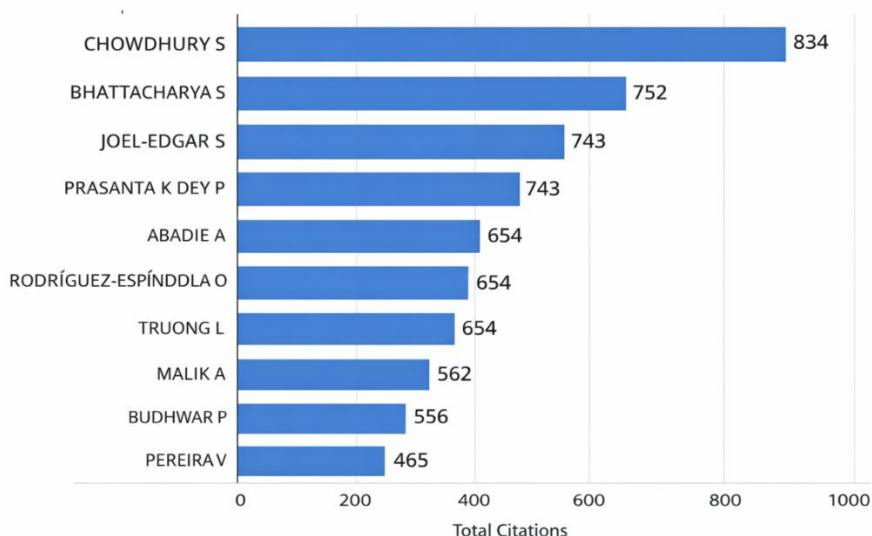


Figure 5. Most Influential Authors in AI in HRM by Total Citations (2023–2025)

Source: Author's elaboration based on Scopus data using Biblioshiny

3.4 Geographical Distribution

Figure 6 shows a marked geographical imbalance in scientific production on AI in HRM, with research output concentrated in a limited number of major academic hubs. India emerges as the leading contributor, followed by China and the United States, confirming the central role of these countries in shaping the field's recent development.

This distribution reflects differences in research capacity, digital transformation trajectories, and investment in AI-related scholarship.

Europe also displays substantial research activity, supported by strong academic infrastructure and collaborative networks, while several emerging economies, particularly in the Middle East and Asia, are becoming increasingly visible in the field. By contrast, much of Africa and parts of Latin America remain underrepresented, although the presence of countries such as Morocco suggests a gradual broadening of participation. Overall, the map indicates that AI in HRM research remains highly concentrated in technologically and institutionally advanced contexts, while also showing signs of progressive international diffusion.

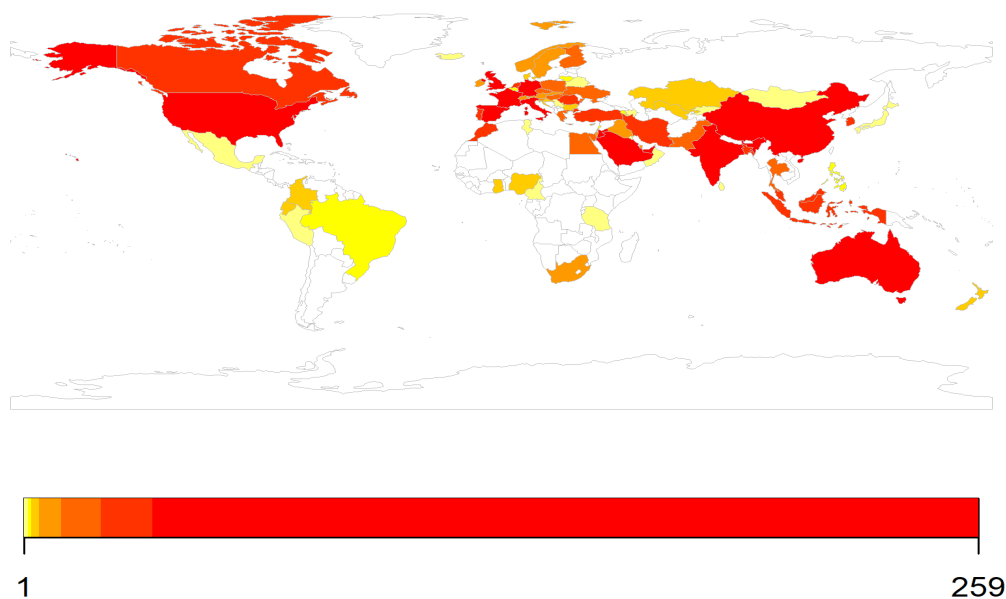


Figure 6. Global geographical distribution of scientific publications

Source: Author's elaboration based on Scopus data using Datawrapper.

3.5 Keyword Co-occurrence and Thematic Structure

Figure 7 presents the keyword co-occurrence network of research on Artificial Intelligence applications in Human Resource Management, based on Scopus data and visualised using VOSviewer. The map reveals the conceptual structure of the field, with Artificial Intelligence and Human Resource Management occupying the most central positions, confirming their dominant role in the literature. In particular, Artificial Intelligence emerges as the most influential node in terms of occurrence and link strength, reflecting the growing integration of AI technologies into HRM research and practice.

Several thematic clusters can be identified. One cluster is centred on the application of AI in core HR functions, particularly recruitment, talent acquisition, and digital transformation. A second cluster highlights data-driven HRM, linking concepts such as HR Analytics, Machine Learning, and Decision Making, which points to the increasing importance of predictive and algorithmic approaches in HR processes. Another cluster focuses on employee-related outcomes, including engagement, performance, satisfaction, and turnover, indicating that the literature is increasingly concerned with the organisational and behavioural implications of AI-enabled HR practices. Finally, the appearance of terms such as Generative AI, Natural Language Processing, and Ethical AI signals the emergence of new research directions related to advanced AI applications and their ethical implications in HRM. Overall, the network suggests that the field is evolving from a primarily functional focus towards a broader conceptualisation that integrates technological, analytical, organisational, and ethical dimensions.

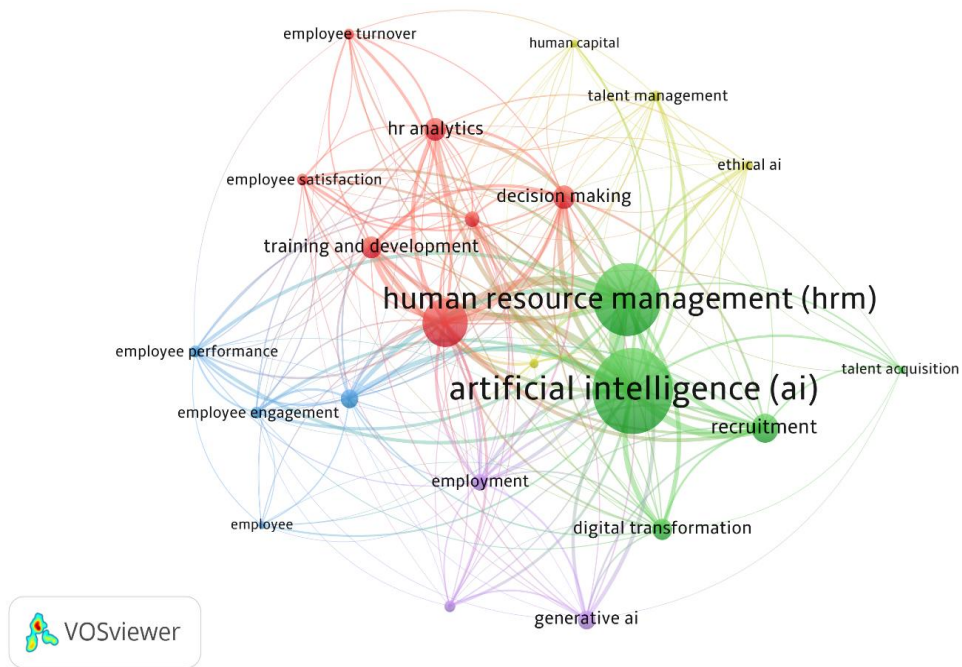


Figure 7. Keyword co-occurrence network of Artificial Intelligence applications in Human Resource Management

Source: Author’s elaboration based on Scopus data using VOSviewer

Table 3. Thematic Evolution and Emerging Research Frontiers in AI-Driven Human Resource Management (2023–2025)

Thematic Phase	Representative Keywords	Avg. Publication Period	Conceptual Focus
AI-enabled HR Functions	Artificial Intelligence; Recruitment; Talent Acquisition; Human Resource Management	2023	Early research focused on integrating AI technologies into HR functions, especially recruitment and talent acquisition, to automate hiring processes and improve efficiency.

Data-driven HR Decision Making	HR Analytics; Machine Learning; Decision Making; Performance Management	2024	Research emphasized predictive analytics and machine learning techniques to support evidence-based HR decision-making and enhance workforce performance management.
Intelligent and Ethical HR Systems	Generative AI; Natural Language Processing; Ethical AI; Digital Transformation	2025	Recent studies highlight advanced AI technologies and increasing attention to ethical governance, transparency, and responsible AI adoption in HR systems.

Source: Author’s elaboration based on Scopus data using VOSviewer

The thematic evolution analysis reveals a clear progression in AI in HRM research between 2023 and 2025. Early studies were primarily centred on the application of AI to core HR functions, especially recruitment and talent acquisition, with emphasis on automation, candidate screening, and process efficiency. This initial phase reflects the operational orientation of early AI adoption in HRM and its role in supporting the digitalisation of HR practices.

Over time, the field shifted towards more strategic and data-driven themes, including HR analytics, machine learning, and performance management, indicating a growing interest in predictive and evidence-based HR decision-making. More recent research points to the emergence of advanced and ethically informed applications, particularly generative AI, natural language processing, algorithmic transparency, and bias mitigation.

4. Discussion

The findings of the present bibliometric analysis show that research on Artificial Intelligence in Human Resource Management experienced a marked expansion during the period 2023–2025. The sharp increase in publication output and the high annual growth rate indicate that the field is rapidly gaining academic visibility and moving beyond a marginal or exploratory status. This pattern is consistent with previous bibliometric and review-based studies, which likewise report sustained growth in research on artificial intelligence in human resource management, particularly from 2020 onwards and with intensified momentum in recent years (Arora et al., 2026; Chaudhary and Khandelwal, 2024; Galán et al., 2024; Ng et al., 2025; Palos-Sánchez et al., 2022; Úbeda García et al., 2025). Previous research suggests that this expansion is closely linked to post-pandemic digital transformation, the diffusion of machine learning and generative artificial intelligence tools, and the increasing relevance of analytics-based decision-making in human resource functions (Hamouche et al., 2025; Nishanthi et al., 2025).

At the same time, the relatively low average document age confirms that research on Artificial Intelligence in Human Resource Management remains recent and still emerging. Although the average citation rate per document is already notable, citation-based indicators should be interpreted cautiously because recent publications have had limited time to accumulate scholarly recognition. This interpretation aligns with earlier studies describing the field as rapidly growing while still undergoing conceptual and methodological consolidation (Baheti et al., 2025; Palos-Sánchez et al., 2022; Úbeda García et al., 2025). In this sense, the field appears to be expanding more quickly in terms of empirical output than in terms of theoretical stabilisation.

The dispersion of publications across a broad range of journals further indicates that Artificial Intelligence in Human Resource Management is developing as an interdisciplinary domain positioned at the intersection of management, digital transformation, analytics, and applied computational research. The presence of established journals in human resource management among the leading publication

outlets suggests that topics related to artificial intelligence are increasingly being incorporated into mainstream human resource scholarship. At the same time, the visibility of interdisciplinary and technology-oriented journals confirms that the field continues to draw on adjacent areas of knowledge. This interpretation is supported by earlier bibliometric studies showing that research on artificial intelligence in human resource management is characterised by conceptual diversification and increasing convergence between management, computer science, analytics, and ethics (Arora et al., 2026; Contreras Torres et al., 2024; Hamouche et al., 2025). The Bradford distribution reinforces this view by suggesting that the field is gradually consolidating around a core of identifiable sources while still maintaining broad diffusion across peripheral outlets.

The authorship structure reveals another defining feature of the field, namely its predominantly collaborative nature. The relatively high number of co-authors per document and the presence of international collaboration suggest that research on Artificial Intelligence in Human Resource Management increasingly depends on interdisciplinary and cross-border scholarly networks. This is understandable given the multidimensional nature of the topic, which requires the integration of expertise in human resource management, organisational studies, data science, and digital systems. Moreover, the difference between full publication counts and fractional contributions indicates that productivity should not be interpreted purely in individual terms. Rather, knowledge production in this field appears to be driven by active research clusters and collaborative networks, a pattern that is consistent with the broader interdisciplinary evolution documented in prior studies (Hamouche et al., 2025; Nishanthi et al., 2025).

A comparable concentration pattern emerges in the citation structure. The results suggest that intellectual influence in Artificial Intelligence in Human Resource Management is unequally distributed, with a limited number of authors accounting for a substantial share of citations. However, this influence takes different forms. Some scholars achieve impact through sustained productivity across multiple publications, whereas others derive visibility from one or two highly cited works. This indicates that the intellectual structure of the field is shaped both by continuous scholarly engagement and by landmark contributions that quickly become central references. Such a configuration is typical of emerging research areas, where a relatively small number of

highly visible studies can strongly influence subsequent debates and research directions. This interpretation is also consistent with prior review-based studies emphasising the formative role of influential publications in structuring scholarship on artificial intelligence in human resource management (Úbeda García et al., 2025).

The geographical distribution of publications reveals a clear asymmetry in the global production of knowledge. India, China, and the United States emerge as the leading contributors, suggesting that the development of research on Artificial Intelligence in Human Resource Management is closely associated with broader national capabilities in innovation, digital infrastructure, and institutional support. This interpretation is consistent with previous studies showing that adoption of artificial intelligence is more likely to flourish in countries characterised by advanced digital ecosystems, strong innovation capacity, and supportive organisational environments (Tiago and Almeida, 2026). More specifically, existing research links China's prominence to policy support and large-scale digital transformation, while India's growing visibility reflects the strength of its information technology sector, expanding human resource data capabilities, and accelerating digitalisation across industries (Band et al., 2024; Chen et al., 2025; Goswami et al., 2023; Singh and Pandey, 2023). Comparative evidence further suggests that cultural, institutional, and economic conditions shape both the diffusion of artificial intelligence and its organisational outcomes, which helps explain the concentration of scientific production in a limited number of countries (Castaneda et al., 2026; Mo et al., 2025).

At the same time, the growing visibility of several emerging economies indicates that the field is gradually broadening beyond its principal centres. This suggests that Artificial Intelligence in Human Resource Management is increasingly recognised as a globally relevant area of inquiry, even though participation remains uneven across regions. The limited representation of many African and Latin American countries may therefore affect not only publication volume but also the thematic orientation of the field, since dominant contributions are more likely to reflect the institutional priorities and technological conditions of highly productive countries. This implies that a more geographically diversified body of literature would be important for capturing how artificial intelligence

in human resource management is shaped by different labour markets, regulatory contexts, and socio-technical environments.

The keyword co-occurrence analysis provides strong insight into the conceptual structure of the field. The centrality of Artificial Intelligence and Human Resource Management confirms that the literature is organised around the integration of technological capabilities into human resource functions. At the same time, the network reveals a differentiated thematic architecture. One major cluster centres on recruitment, talent acquisition, and digital transformation, indicating that early and highly visible applications of artificial intelligence in human resource management have focused primarily on hiring-related processes. This observation is consistent with prior bibliometric studies showing that recruitment and talent acquisition remain among the dominant themes in the literature (Nishanthi et al., 2025; Palos-Sánchez et al., 2022). A second cluster brings together machine learning, human resource analytics, and decision-making, reflecting the growing importance of predictive and data-driven approaches in human resource practice. A third cluster focuses on employee-related outcomes such as engagement, performance, satisfaction, and turnover, indicating that the literature is increasingly concerned with the broader organisational and behavioural implications of technology-enabled human resource practices (Gupta et al., 2024).

The thematic evolution analysis deepens this interpretation by showing that research on Artificial Intelligence in Human Resource Management has moved through a discernible trajectory. Early studies were primarily concerned with operational applications, especially the automation of recruitment and selection processes. This first stage reflects a functional and efficiency-oriented understanding of adoption in human resource management. Over time, the field expanded towards more strategic and analytical themes, including performance management, workforce planning, human resource analytics, and machine learning-assisted decision-making. More recent research has increasingly engaged with advanced and ethically sensitive applications, including generative artificial intelligence, natural language processing, algorithmic transparency, fairness, and responsible governance. This evolution is consistent with previous studies indicating that research on artificial intelligence in human resource management is shifting from technical and instrumental concerns towards broader strategic, ethical, and

organisational questions (Hamouche et al., 2025; Nishanthi et al., 2025; Úbeda García et al., 2025). The field therefore appears to be moving from a narrow focus on automation towards a more mature understanding of artificial intelligence as a socio-technical and governance issue within human resource management.

Overall, the discussion suggests that Artificial Intelligence in Human Resource Management is evolving into a more structured, interdisciplinary, and internationally visible research domain. Its rapid growth, collaborative authorship patterns, conceptual diversification, and widening geographical reach all point to a field in active consolidation. At the same time, the persistence of concentration patterns in journals, authors, citations, and countries indicates that the field has not yet reached full intellectual stabilisation. These findings confirm that research on artificial intelligence in human resource management is not only expanding quantitatively, but also undergoing qualitative transformation in its conceptual scope, institutional base, and research priorities.

5. Conclusion

This study set out to provide an up-to-date bibliometric mapping of research on Artificial Intelligence in Human Resource Management during the period 2023–2025. The findings show that this field is expanding rapidly and gaining increasing academic visibility, while also becoming more collaborative, interdisciplinary, and internationally diffused. The analysis further reveals that the literature is structured around core themes such as recruitment, talent acquisition, human resource analytics, machine learning, and employee-related outcomes, with more recent attention shifting towards generative artificial intelligence, ethical concerns, and responsible governance.

The study contributes to the literature by offering a recent synthesis of publication dynamics, influential contributors, geographical distribution, and conceptual evolution in research on Artificial Intelligence in Human Resource Management. In doing so, it clarifies the current state of the field and shows that it is moving from early functional applications towards a broader strategic and socio-technical research agenda.

Despite these contributions, the study has several limitations. It relies exclusively on the Scopus database, is restricted to English-language journal articles, and covers a relatively short period characterised by rapid technological change. Although these choices enhance consistency, they may also limit the inclusion of relevant studies indexed elsewhere or published in other formats and languages.

Future research could broaden the scope by incorporating other databases, such as Web of Science, extending the time horizon, and comparing regional or sectoral patterns in the adoption of artificial intelligence in human resource management. Greater attention is also needed to the theoretical, ethical, and institutional dimensions of artificial intelligence in people management, particularly in underrepresented contexts. Overall, the study confirms that research on Artificial Intelligence in Human Resource Management has become a fast-evolving and strategically important field with significant potential for further scholarly development.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References and Appendices:

- Ali, Q. and Mahmood, M.A. (2025) 'Transforming leadership: The role of artificial intelligence in modern organizational management', in *Reshaping Organizational Management and Workplace Culture With AI*. doi:10.4018/979-8-3693-8960-7.ch009.
- Arora, M., Gupta, J., Mittal, A. and Prakash, A. (2026) 'A bibliometric review of artificial intelligence technologies in human resource management: An overview of research trends', *Global Knowledge, Memory and Communication*, 75(7–8), pp. 3897–3920. doi:10.1108/GKMC-04-2024-0237.
- Baheti, S.S., Verma, D., Joshi, A.S. and Anuradha, R. (2025) 'Understanding the transitioning of artificial intelligence in human resource management: A scientometric performance analysis', in *Strengthening Human Relations in Organizations With AI*. doi:10.4018/979-8-3693-6507-6.ch008.
- Band, G., Bapat, S., Sonkul, D., Chavan, N., Nandurkar, P. and Ahmad, M.I. (2024) 'Assessing the efficacy of utilizing artificial intelligence for human resources management in the Indian IT industry', *Nanotechnology Perceptions*, 20(S5), pp. 499–506. doi:10.62441/nano-ntp.v20iS5.46.
- Castaneda, A.R., Maseeh, H.I., Surachartkumtonkun, J., Thaichon, P. et al. (2026) 'Impact of frontline employees' perceived benefits of artificial intelligence on AI adoption and job engagement: A meta-analysis', *International Journal of Hospitality Management*, 133, p. 104446. doi:10.1016/j.ijhm.2025.104446.
- Chaudhary, A. and Khandelwal, S. (2024) 'A bibliometric analysis of the role of artificial intelligence and machine learning in human resource management', *Advanced Series in Management*. doi:10.1108/S1877-63612024000034A011.
- Chen, X., Martínez-Ruiz, M.P., Bulmer, E. and Yáñez-Araque, B. (2025) 'Unpacking the black box: How AI capability enhances human resource functions in China's healthcare sector', *Information*, 16(8), p. 705. doi:10.3390/info16080705.
- Chowdhury, S., Dey, P.K., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O. and Truong, L. (2023) 'Unlocking the value of artificial intelligence in human resource management through AI capability framework', *Human Resource Management Review*, 33(1), p. 100899. doi:10.1016/j.hrmr.2022.100899.
- Contreras Torres, F., Jauregui, K. and Rank, S. (2024) 'The intellectual structure of human resource management and digitalization research: A bibliometric-mapping analysis', *Journal of Engineering and Technology Management*, 74, p. 101829. doi:10.1016/j.jengtecman.2024.101829.
- Czarnitzki, D., Fernández, G.P. and Rammer, C. (2023) 'Artificial intelligence and firm-level productivity', *Journal of Economic Behavior & Organization*, 211, pp. 188–205. doi:10.1016/j.jebo.2023.05.008.
- Di Prima, C., Bevilacqua, S., Bresciani, S. and Ferraris, A. (2024) 'The impact of artificial intelligence on organizations and managers: The skills needed for an effective leadership', in *Contributions to Management Science*, pp. 121–133. doi:10.1007/978-3-031-58704-7_10.
- Durrah, O., Tawfik, O.I. and Aldhmour, F.M. (2024) 'The use of artificial intelligence in enhancing the quality of decisions in healthcare institutions', in *Artificial Intelligence, Big Data, Blockchain and 5G for the Digital Transformation of the Healthcare Industry*, pp. 321–338. doi:10.1016/B978-0-443-21598-8.00017-8.
- Galán Hernández, J.J., Marín Díaz, G. and Galdón Salvador, J.L. (2024) 'Artificial intelligence applied to human resources management: A bibliometric analysis', in Rocha, Á., Ferrás, C., Hochstetter Diez, J. and Diéguez Rebolledo, M. (eds.) *Information Technology and Systems: ICITS 2024, Lecture Notes in Networks and Systems*, 932, pp. 269–277. Cham: Springer Nature Switzerland. doi:10.1007/978-3-031-54235-0_25.

- Goswami, M., Jain, S., Alam, T. and Khargotra, R. et al. (2023) 'Exploring the antecedents of AI adoption for effective HRM practices in the Indian pharmaceutical sector', *Frontiers in Pharmacology*, 14, p. 1215706. doi:10.3389/fphar.2023.1215706.
- Gupta, P., Lakhera, G. and Sharma, M. (2024) 'Examining the impact of artificial intelligence on employee performance in the digital era: An analysis and future research direction', *The Journal of High Technology Management Research*, 35(2), p. 100520. doi:10.1016/j.hitech.2024.100520.
- Hamouche, S., Rofa, N. and Parent-Lamarche, A. (2025) 'Systematic bibliometric review of artificial intelligence in human resource development: Insights for HRD researchers, practitioners and policymakers', *European Journal of Training and Development*, 49(1–2), pp. 43–62. doi:10.1108/EJTD-10-2023-0152.
- Karamustafa, Y.E. (2023) 'Agile human resources practices in decentralized autonomous organizations: A conceptual study', *International Journal of Humanities and Social Development Research*, 7(1), pp. 7–22. doi:10.30546/2523-4331.2023.7.1.7
- Leoni, L., Gueli, G., Ardolino, M., Bacchetti, A., Perona, M. and Gupta, S. (2024) 'AI-empowered KM processes for decision-making: Empirical evidence from worldwide organisations', *Journal of Knowledge Management*, 28(11), pp. 320–347. doi:10.1108/JKM-03-2024-0262.
- Mo, Z., Liu, M.T., Chark, R., Zeng, S. and Song, X. (2025) 'How AI adoption in human resource management practices can enhance tourism employees' organizational commitment', *Journal of Hospitality and Tourism Management*, 63, pp. 54–67. doi:10.1016/j.jhtm.2025.03.003.
- Murire, O.T. (2024) 'Artificial intelligence and its role in shaping organizational work practices and culture', *Administrative Sciences*, 14(12), p. 316. doi:10.3390/admsci14120316.
- Nawaz, N., Arunachalam, H., Pathi, B.K. and Gajenderan, V. (2024) 'The adoption of artificial intelligence in human resources management practices', *International Journal of Information Management Data Insights*, 4(1), p. 100208. doi:10.1016/j.jjime.2023.100208.
- Ng, W.C., Ravesangar, K., Toh, G.G. and Soong, Y.Q. (2025) 'Trends of artificial intelligence in human resources management using bibliometric analysis', in *Artificial Intelligence in Peace, Justice, and Strong Institutions*. doi:10.4018/979-8-3693-9395-6.ch016.
- Nishanthi, N., Hariharan, H. and P., P. (2025) 'Unveiling the future of artificial intelligence in talent acquisition: A bibliometric analysis of emerging trends and future directions', *Sustainable Futures*, 8, p. 101410. doi:10.1016/j.sftr.2025.101410.
- Palos-Sánchez, P.R., Baena-Luna, P., Bădicu, A. and Infante-Moro, J.C. (2022) 'Artificial intelligence and human resources management: A bibliometric analysis', *Applied Artificial Intelligence*, 36(1). doi:10.1080/08839514.2022.2145631.
- Prikshat, V., Malik, A. and Budhwar, P. (2023) 'AI-augmented HRM: Antecedents, assimilation and multilevel consequences', *Human Resource Management Review*, 33(1), p. 100860. doi:10.1016/j.hrmr.2021.100860.
- Raina, K., Sharma, G.D., Taheri, B., Chavriya, S. and Gupta, M. (2026) 'Artificial intelligence-driven management: Bridging innovation, knowledge creation, and sustainable business practices', *Journal of Innovation and Knowledge*, 11, p. 100860. doi:10.1016/j.jik.2025.100860.
- Singh, A. and Pandey, J. (2023) 'Artificial intelligence adoption in extended HR ecosystems: Enablers and barriers. An abductive case research', *Frontiers in Psychology*, 14, p. 1339782. doi:10.3389/fpsyg.2023.1339782.
- Tiago, F. and Almeida, A. (2026) 'Environmental, organizational, and individual determinants of AI adoption: A multilevel knowledge and analysis', *Journal of Innovation & Knowledge*, 13, p. 100934. doi:10.1016/j.jik.2025.100934.

Úbeda García, M., Marco-Lajara, B., Zaragoza-Sáez, P.C. and Poveda-Pareja, E. (2025) 'Artificial intelligence, knowledge and human resource management: A systematic literature review of theoretical tensions and strategic implications', *Journal of Innovation and Knowledge*, 10, p. 100809. doi:10.1016/j.jik.2025.100809.

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