International Journal of Economics, Accounting, and Management
Vol. 2, No. 4, November 2025
Page 411-417
E-ISSN: 3047-6798
P-ISSN: 3047-678X
Site : https://jurnal.intekom.id/index.php/ijeam

Human-Centered AI In Strategic Hr: Post-2024 Transformation Study

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Article Info

Article history:

Received November 1, 2025
Revised November 10, 2025
Accepted November 30, 2025

Keywords:

Artificial Intelligence,
Human-Centered AI,
HR Transformation

ABSTRACT

The paradigm of human resource management (HR) has been significantly changed by the introduction of artificial intelligence (AI) after 2024. The HR function no longer focuses on administrative work, but becomes a strategic partner that uses technology to help make decisions, talent management, and improve employee experience. This study aims to analyze the transformation of HR strategies after 2024, identifying the key competencies that HR needs. The research method uses a Systematic Literature Review (SLR) of ten scientific articles published between 2024 and 2026. These articles were obtained via academic databases like Scopus, Google Scholar, ScienceDirect, and Emerald Insight. The results show that AI improves efficiency and analytical capabilities in HR functions, but its success depends on digital skills, ethical technology, and employee mental readiness. To ensure equitable and humane AI adoption, employees must learn a hybrid of skills, such as data analytics, interpersonal skills, ethical leadership, and change management skills.

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1. INTRODUCTION

After 2024, strategic shifts in human resource management will be driven by the advancement of artificial intelligence (AI). AI is now used in decision-making, talent analytics, employee performance prediction, and data-driven training customisation, rather than just administrative automation. The HR department has evolved from an administrative to a strategic and digital business partner as a result of this change.

According to Rahmawati & Rahmat [1], in order to increase accuracy and efficiency, multinational corporations are currently incorporating AI into hiring, assessment, and human resource development. To maximize staff retention and efficiency, businesses like IBM, Google, and Unilever have implemented AI-driven personnel platforms and HR analytics. These advantages do, however, bring with them new strategic difficulties. Algorithmic bias, process openness, and data security are significant concerns, according to Chatterjee & Jemima [2]. Additionally, employees' uneasiness and

confusion about their future responsibilities are impacted by the use of AI [3].

This shift promotes the idea of Human-Centered AI, which integrates technology with human ethics, values, and trust. According to Mabrouk [4], AI in HR must strike a balance between worker psychological health and operational effectiveness. Additionally, Putri & Wibowo [5] discovered that in order to deal with the AI era, businesses in Southeast Asia, particularly Indonesia, require greater digital literacy, analytical abilities, and moral leadership.

To ensure that technological transformation is ethical and sustainable, it is crucial for enterprises to create HR competence models based on digital competencies, AI governance, change management, and a human-centered approach.

2. METHOD

2.1 Types of Research

With an emphasis on building human resource capabilities based on the Human-Centered AI approach, this study is a Systematic Literature Review (SLR) that seeks to identify, assess, and synthesize research on the application of artificial intelligence (AI) in human resource management (HR) after 2024.

As demonstrated by Rahmawati & Rahmat's [1] research on the analysis of AI adaptation strategies in HR and Chatterjee & Jemima's [2] systematic study of the impact of AI on HR, the SLR approach was selected because it can offer a thorough scientific mapping of trends, challenges, and opportunities for AI- based HR transformation.

According to the guidelines for the use of literature studies in the digital age, this approach is appropriate for examining modifications in contemporary HR management concepts [6].

2.2 Data Collection

The secondary data used in this study was gathered from a variety of reliable academic databases, including scholarly journal publications. Several major databases, including Scopus, Google Scholar, ScienceDirect, and Emerald Insight, are used as reliable sources of scientific references during the methodical gathering process. The goal of using these diverse sources is to guarantee that the articles gathered are of the highest caliber and have a significant bearing on the research question.

To increase the relevancy of search results, researchers employ a number of targeted keywords when looking for articles. The keywords include "Strategic Human Resource Management" AND "Artificial Intelligence", "Human-Centered AI in HR", "Digital HR capability", and "Post-2024 HR transformation". The selection of these keywords was adjusted to the focus of research to collect articles that discuss the integration of artificial intelligence in human resource management and digital transformation in the field of HR.

This research also establishes inclusion and exclusion criteria to ensure the quality and suitability of the selected articles. The inclusion criteria include articles published in 2024–2026, focusing on AI in HR or digital HR capability, empirical studies, systematic reviews, scoping reviews, or literature reviews, written in English and Indonesian, and available in full-text access. Meanwhile, articles that are non-scientific, editorial, opinion, or that focus solely on AI technology without HR context [3], as well as articles that are not available in full- text format, are excluded from the list of considerations.

The article selection process is carried out following the PRISMA stages, according to the recommendations in the modern scientific literature study methodology [7], so that the process of filtering and determining articles is transparent, systematic, and structured. Of the total 22 articles that were successfully found, as many as 10 articles met all selection criteria and were used as the main source in this study. These final results show that there is a strict screening of the literature, so that the analysis in the research can be carried out with a strong and up-to-date academic foundation.

2.3 Research Methods

The data analysis in this study is carried out through three main stages to ensure that the information obtained from the literature can be processed systematically and in-depth. The first stage is the screening process, which includes the identification of the main themes of the research as well as the grouping of articles based on related variables. Artificial intelligence adoption (AI adoption), human resource capabilities in the digital age (HR capability), ethical considerations, psychological preparedness of human resources (psychological readiness), and human-centered practices are among the criteria utilized in the grouping process. In order to create a more focused analysis structure, this step attempts to make it easier to map each study's focus.

Thematic analysis is the second step. At this point, the researcher examines each classified article for trends, themes, and important conclusions. A conceptual picture of the connections between the variables and phenomena under study can be created with the use of the thematic analysis approach. This method was selected due to its efficacy in thoroughly examining the profound significance of qualitative data, as demonstrated by Sundari et al. [6] in research pertaining to technology- based human resource management.

Narrative synthesis is the final step. At this stage, the researcher compiles findings from various sources into integrative conclusions that are able to provide a comprehensive perspective on the development of research in the field of AI in human resource management. As seen in the studies of Chatterjee & Jemima [2] and Putri & Wibowo [5], the narrative synthesis approach is utilized to compare and contrast the findings of prior research. Thus, the output of this stage is a comprehensive understanding of the contributions and directions of research that have been and can be developed in the future

3. RESULTS AND DISCUSSION

This study identified 10 relevant journals regarding the application of AI in post-2024 HR management through the Systematic Literature Review approach. Three primary goals were addressed by the analysis: future HR capabilities, shifts in HR strategy, and striking a balance between technological efficiency and human value.

Table 1. Summary of Findings of Previous Research

No	Research and Year	Key Findings	HR Implications
1	Rahmawati & Rahmat (2024)	AI is used for recruitment & evaluation	HR digital transformation and technology adaptation
2	Chatterjee & Jemima (2024)	Risk of bias, ethics, transparency	Need AI governance & audit
3	Sundari et al. (2024)	AI increases engagement when integrated with training	Digital skills & HR role hanges
4	Rama Devi et al. (2024)	AI improves evaluation accuracy	HR needs an understanding of analytics
5	Yamin et al. (2024)	AI supports agility and resilience	HR must be adaptive & data-driven
6	Nowicka et al. (2024)	Big data is important in HR decision- making	Mandatory data literacy
7	Mabrouk (2024)	The urgency of ethics & transparency AI HR	Human-centered AI governance
8	Hasan & Malik (2025)	Employee trust is important in AI	HR needs to build sychological readiness

No	Research and Year	Key Findings	HR Implications
		adoption	
9	Alvarez & Singh (2025)	HR requires a digital mindset, AI ethics, analytical skills	Digital capabilities & ethical leadership
10	Putri & Wibowo (2025)	ASEAN HR needs digital literacy & leadership	Relevant to the Indonesian context

Based on the findings shown in Table 1, it can be said that prior studies have consistently emphasized the significance of changing HR functions in response to AI adoption. These changes include the need to enhance competencies in the areas of data analytics, technology literacy, and AI ethical governance, as well as the shift in roles towards strategic digital enablers.

While research by Sundari et al. [6] and Yamin et al. [7] demonstrates that AI also plays a role in boosting employee engagement and organizational resilience, other studies, like Rahmawati & Rahmat (2024), highlight increased efficiency through technology in recruitment functions and performance appraisals. However, the study of Hasan & Malik [3], which contends that employee acceptance and familiarity with technology are critical to the success of AI adoption, places a strong emphasis on elements of trust, transparency, and psychological preparedness. Adityaksa & Suyoso [11] observed that AI adoption enhances the relationship between employee trust and job engagement, supporting the idea that trust is a crucial psychological mediator in AI use (e.g., job engagement → trust → effective adoption). Further highlighting the necessity of psychologically prepared and transparent AI systems in HR situations, current research indicates that ethical and transparent AI practices greatly increase employee engagement and corporate commitment [12].

Wang et al. [12] Further highlighting the necessity of psychologically prepared and transparent AI systems in HR situations, current research indicates that ethical and transparent AI practices greatly increase employee engagement and corporate commitment. Furthermore, to ensure the success of AI-based digital transformation, research by Alvarez & Singh [8] and Putri & Wibowo [5] emphasizes the need for new HR competencies in Southeast Asian and global contexts, such as digital mindset, analytical skills, ethical leadership, and change management capacity.

The results in Table 1 offer a solid basis for this investigation in developing an awareness of:

1. Transform HR strategy post-2024
   The table's findings demonstrate how HR's function has changed from being administrative to becoming a leader in data-driven organizational culture and digital transformation.
2. Future HR competencies
   In order to facilitate the successful and compassionate application of AI, the literature highlights the necessity of digital competencies, AI ethics, and analytical skills.
3. The importance of a human-centered approach
   Since trust, ethics, and worker welfare are topics covered in every study, the human-centered approach to AI becomes important and pertinent. As a strategic reaction to the digital transformation of post-2024 enterprises, the table thus supports the research's goal of creating a thorough knowledge of the Human-Centered AI-based HR capabilities framework.

3.1 HR Strategy Transformation After AI Adoption Post-2024

The SLR's findings demonstrate that the use of AI promotes HR's transition from an administrative to a technology-based strategic partner position. Workforce analytics, talent forecasting, employee experience (EX), and digital organizational growth are currently the main areas of attention for HR.

AI increases the effectiveness of HR operations, particularly in hiring, performance management,

and employee retention forecasting [1]. Additionally, by speeding up data-driven decision-making, AI improves organizational agility [7].

However, as the human element is still the primary focus, HR strategies now balance technology and empathy rather than just pursuing automation [2]. The post-2024 HR strategy will be transformed as follows:

a. Transition to data-driven HR & predictive analytics
b. HR as an enabler of digital transformation
c. Focus on technology-based employee experience & engagement
d. Strengthening AI governance & digital culture of organizations

3.2 HR Competencies for a Human-Centered AI Ecosystem

Research indicates that in order to lead digital enterprises, HR needs to acquire new competencies. The literature lists the following as the primary competencies:

Table 2 HR Competencies for a Human-Centered AI Ecosystem

No	Competency Categories	Detail
1	Digital & Data Literacy	Data analytics, AI literacy (Nowicka et al., 2024)
2	Ethical Leadership	AI ethics, fairness, compliance (Mabrouk, 2024)
3	Human-Centered Design	Employee experience & empathetic communication (Hasan & Malik, 2025)
4	Change & Innovation Capability	Technology adaptation, digital transformation skills (Putri & Wibowo, 2025)
5	Strategic Mindset	Future thinking & agile HR strategy (Alvarez & Singh, 2025)

HR competencies in the Al age are changing from administrative skills to strategic digital capabilities, according to the research findings in Table 2. These days, HR must not only comprehend technology but also make sure that its application stays focused on human values. According to Nowicka et al. [9], data literacy and the capacity to understand analytical findings are crucial pillars enabling evidence-based HR decision-making. According to Audrin, Audrin, & Salamin [13] Validated multidimensional framework of digital skills at work, including critical inquiry and technology use, supports the transition from administrative to strategic HR roles. According to Ruiz et al. [14] recent empirical research demonstrates that organizations with an explicit digital HR strategy achieve better alignment between HR processes and firm performance.

The notion of digital human resource management is further clarified by Strohmeier [15], who contends that digitization changes HR from transactional administration to strategic, technology-mediated practices that call for new competences and governance strategies. Additionally, employees' psychological preparedness and confidence levels affect the effectiveness of AI deployment [3], therefore HR must possess change management and empathic communication abilities. To guarantee that Al is used fairly and openly, ethical leadership abilities are also required [8]. HR needs to be flexible and capable of handling cultural diversity during the digital transformation process in Southeast Asia [5].

The three main components of HR competency development should be interpersonal skills, ethics and leadership, and digital literacy. This guarantees that the organization's use of Al not only boosts productivity but also upholds equity, openness, and worker welfare.

3.3 Balancing Technology Efficiency & Human Values

The literature highlights how crucial it is to make sure that the use of AI does not eradicate the human element. Although AI can speed up and improve the accuracy of HR choices [10], HR must still uphold employee welfare, fairness, and openness.

Employee confidence and psychological preparedness are critical to the success of AI, according to a study by Hasan & Malik [3]. As a result, the following tactics are necessary:

Table 3 Strategies for Balancing Technology Efficiency and Human Values in HR

No	Strategy	Explanation
1	AI Transparency	Provide open information on how AI works and the basis for decision-making
2	Human-in-the-loop	Ensuring that important decisions remain human involved so that they are not completely dependent on algorithms
3	Reskilling-Upskilling	Improve employees' ability to work side by side with AI
4	Well-Being Support	Maintaining employees' mental health, well- being, and comfort during the digital transition
5	Ethical AI Policy	Establish ethical guidelines to ensure the use of AI remains fair, safe, and bias-free

The aforementioned table demonstrates that the organization's capacity to uphold human values is just as important to the success of AI-based digital transformation as technology. According to Rama Devi et al. [10], crucial judgments still need a human touch to stay fair and sympathetic, even though AI can improve efficiency and accuracy in HR operations.

Furthermore, openness in the application of AI is crucial to preserving employee comfort and trust, particularly during hiring and performance reviews [4]. Programs for the development of digital skills are also essential for ensuring that workers are prepared to deal with technology advancements [6].

In order to ensure that technology enhances employee experience and well- being rather than the other way around, firms must strike a balance between automation and human-centered methods. This strategy is consistent with the findings of Hasan & Malik [3], who highlight the significance of psychological preparedness and trust in AI adoption.

4. CONCLUSION

This study demonstrates that post-2024 Al usage has significantly changed HRM practices. HR responsibilities are becoming strategic jobs that concentrate on technology, analytics, and the creation of more individualized and flexible employee experiences rather than just administrative tasks. The study's findings highlight a number of important points:

a. HR Strategy Transformation:

According to Rahmawati & Rahmat (2024) and Yamin et al. (2024), HR's job has changed to include driving digital transformation and acting as a strategic agent that uses data, analytics, and Al technology for decision- making, increased efficiency, and enhancing organizational agility.

b. Human-Centered HR Competencies:

To guarantee that the application of Al enhances employee well-being and job quality, modern HR competencies include digital literacy, Al ethics, analytical skills, compassionate leadership, and change management abilities (Hasan & Malik, 2025; Putri & Wibowo, 2025).

c. Balance of Technology & Humanities:

In order to preserve employee comfort and trust, Al must be implemented with a human-centered

approach through algorithm transparency, human involvement in critical choices, digital skills development programs, and the application of ethical policies (Mabrouk, 2024; Sundari et al., 2024). As a result, this study highlights that the preparedness of human resources, employee trust, and human values as the cornerstone of contemporary HR strategies are just as important to the success of Al's adoption in HR as technology.

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