



Artificial Intelligence (AI) vs Human Based Decision Making in Recruitment

Ms. Niti Sharma

Director, High1Digital Consulting Pvt. Ltd. Email Id-nitisharmadigital@gmail.com

DOI : <https://doi.org/10.5281/zenodo.18963837>

ARTICLE DETAILS

Research Paper

Accepted: 28-02-2026

Published: 10-03-2026

Keywords:

*Artificial intelligence (AI),
human-based judgement,
recruitment, hiring process.*

ABSTRACT

AI technologies provide the capacity to stimulate the recruitment efficiency and productiveness by automating the tasks such as sourcing the candidates, scheduling of interview and assessment of perform. The systematic literature review aims to culminate the current knowledge concerning the application of AI in recruitment. This study intents to conduct a systematic literature review of current research to navigate the role of AI in the recruitment process as against human based decision making. The literature review evaluates the analysis of double-edge impact of AI on recruitment efficiency and effectiveness in the recruitment process. AI in recruitment is considerable superior as compared to human-based decision system in context to speed, economies of scale and ability to scale. The AI-driven hiring process rather than replacing should compliment human based decision making.

1. Introduction

Artificial Intelligence has revolutionized the outlook of human resource management (HRM), specifically in recruitment process. AI technologies provide the capacity to stimulate the recruitment efficiency and productiveness by automating the tasks such as sourcing the candidates, scheduling of interview and assessment of performance. AI adoption has facilitated in overcoming challenges that participate in human based decision making such as human bias, inefficiencies, time, and higher cost involved in conventional recruiting methods (Rao & Zhao, 2025). Although there exist advantages in



integrating AI systems in hiring prices but, it has also raised ethical, practical, and legal considerations. It is essential that AI hiring systems must ensure transparency and fairness to prevent bias (Revillod, 2024).

This systematic literature review aims to culminate the current knowledge concerning the application of AI in recruitment. To lay down the framework for future research, the review aims to identify the key trends and gap in the current literature through a detailed analysis. This paper aims to recognize the benefits and challenges of integrating AI in recruitment process. AI systems can leverage the data to attract top talent and stimulate a more diverse and inclusive workforce.

This study intends to conduct a systematic literature review of current research to navigate the role of AI in the recruitment process as against human based decision making. This study holds great significant for both the researchers and practitioners to comprehend the relevance of AI in the recruitment process. In current scenario, the research in the domain of AI application has increased in several domains such as customer relationship, human resource management, marketing and beyond. It is evident that implementing this digital technology in a different context has become a critical concern. Hence this study involves a systematic literature review in comparison to traditional recruitment methods.

2. Literature Review

The literature review evaluates the analysis of double -edge impact of AI on recruitment efficiency and effectiveness in the recruitment process.

2.1 Recruitment process: Evolution and Definition

(Faugoo, 2024) insights that the recruitment process constitutes identifying, attracting, and stimulating the prospective employees to apply for job while selection emphasises on choosing the right candidate for the right job. Conventionally, the recruitment process involved diverse phases such as outlining the requirements of job, planning recruitment campaigns, and attracting the individuals through various sources and beyond. Although, these methods were complicated and time-consuming, indicating the need for modern and efficient approach for recruitment and selection. E-recruitment has evolved as an internet-based extension of conventional recruitment methods. E-recruitment refers to the process of recruiting and hiring the talent through the use of online systems. It is relatively more effective and efficient hiring process.



2.2 Artificial intelligence (AI): Evolution and Definition

(Vedapradha, Hariharanorcid, & Shivakami, 2019) indicates that AI is a digital technology that has the potential to perform the tasks that traditionally needed human intelligence. AI is in a continuous state of evolution which facilitated the process of performing large data sets, recognizing, and executing repetitive tasks without human intervention. AI-driven systems help in reducing time consuming tasks such as resume reviews, telephonic conversations, using existing skills efficiently. The advancement of AI in human resource has paved innovative possibilities for HR professions to tackle the matters associated with recruitment and selection and thereby enhancing overall organizational performance.

2.3 AI systems V/s human-based decision making in recruitment process.

(Herold & Roedenbeck, 2025) emphasizes that AI plays a critical role in the hiring process. It helps in widening the pool of candidates, efficiency, employment length and reduce hiring costs and time. AI-based tools in HR have the potential to stimulate the accuracy and efficiency of application selection and evaluation process, thereby, indicating a huge opportunity for further development in HR industry. AI systems impact HR decisions. However, it also raises the fairness, accountability, and transparency concerns. More specifically, ethical issues in algorithmic decision-making are critical in high stake areas specifically recruitment process and have far-reaching consequences. Therefore, to ensure responsible integration of AI in HR by making an optimum balance between efficiency with ethical decision making.

(Hukkeri & Pol, 2025) cites that AI recruitment is considerable superior as compared to human-based decision system in context to speed, economies of scale and ability to scale. The AI-driven hiring process rather than replacing should compliment human based decision making. The application of AI in HR raises ethical issues in consideration to accountability, fairness, and transparency. Although AI can help in reducing noise and scattered communication, stimulate understanding and decision making as well as gain deeper insights about internal communication. Therefore, a responsible AI design is needed to ensure fairness-based algorithms and preserve the privacy.

(Raza, 2025) investigates that AI has evolved as a transformative force in human resource management. It revolutionizes how the top talent is acquired within the organization process. It disappears the recurrent and monotonous tasks since AI can perform the hiring procedures efficiently. AI can oversee the process intelligently by reducing biasness in context to age, gender and religion since AI process can be coded to ignore the biases. AI can streamline the process by evaluating whether the candidate fit with the organization environment or not.



(Madanchian, 2024) proposes that AI-assisted systems have the potential to perform a wide range of recruitment tasks including communicating with the candidates and adjusting selection process to choose the top performers. AI tools facilitate in contacting and providing them feedback instantly in real-time. The chatbots streamline the experience of candidate throughout the hiring process by enhancing efficiency and reducing human biases. AI persist to refine the recruitments process by stimulating data-drive decision making and inclusivity. Although, combining AI with current HR practices optimize the recruitment process. However, it has raised the concerns for data security and privacy while dealing with confidential information in the organizations. Therefore, human decision making is needed in combination with AI capabilities to develop a dynamic workforce.

2.2 Gap of the study

Although, there are increasing literature concerning the use of AI in human resource management process, but the researchers are less aware about how AI can be used effectively to enhance the recruitment and onboard efficiency in one overarching analytical framework. The study emphasis on operational functionalities of integrating AI in the recruitment process. In addition, it also cites ethical concerns involved in embedding AI in recruitment process as against human-based judgement. However, there is lack of evidence-based framework to inform the human -centred AI in recruitment process. In this context, the study uses systematic literature review to understand how AI can be used in an ethical and responsible manner in hiring process.

3. Methodology

In order to culminate the different findings from current research on the involvement of AI in the hiring process, this paper has employed a qualitative research design, primarily a systematic literature review. This methodology has been adopted to recognize the trends, benefits and challenges involved in integration AI into hiring process as against human-based decision making. The systematic literature review has been used to conduct the review since it provides a disciplined method for culminating the existing information, enabling comprehensive research in the specific field.

3.1 Search strategy

This study has used diverse data base such as Web of Scopus, Science Direct and Google Scholar by meticulously margining abstract and citation with associated research papers from diverse area of study. The database helps in locating relevant and pertinent research and providing access to valid information. It also ensures the integrity of the study. A range of terms such as “AI in recruitment process,” “AI in



hiring process,” “AI vs human based decision making in recruitment process: advantages and challenges” were used to conduct the research. The approach was to comparative since the aim was to synthesis conceptually rather than assessing the studies empirically.

3.2 Inclusion and exclusion criteria

The literature relevant to the objectives of research have been included by confining the inclusion to the research papers and articles directly addressing the benefits and challenges of AI systems in recruitment process as against human-based judgement models. The electronic database such as Web of Scopus has been includes since it provides a wide choice for covering peer-review literature. The study has been restricted to full-text, peer-reviewed, academic, journal papers and journals. The distribution of articles beyond 2019 has been included since the prevalence has steadily increased during this period.

4. Findings and interpretation

AI is a digital technology that has the potential to perform the tasks that traditionally needed human intelligence (Vedapradha, Hariharanorcid, & Shivakami, 2019). With the support of AI, the recruiters in the organization process can effortlessly streamline the hiring process. The monotonous tasks will be replaced since AI can handle the procedure efficiently. Recruiters in the organization can emphasize on innovative and strategic issues. However, AI needs to be intelligently designed to overcome the biasness during selection process. AI can not only save cost and efforts involved in the recruitment but also stimulate the speed and task involved in the recruitment process. At times, human-based decision making can influence biasness in several aspects such as ethnicity, gender, and age. In this context, AI can be codded to ignore the background of the candidate. AI technologies streamline the screening process and overcome the biasness in association to human behaviour. AI also has the potential to recruit the candidates that are fit for the job by evaluating the skills according to the requirements of the job (Raza, 2025). AI tools facilitate in contacting and providing them feedback instantly in real-time. The chatbots streamline the experience of candidate throughout the hiring prices by enhancing efficiency and reducing human biases (Hukkeri & Pol, 2025).

AI in recruitment is considerable superior as compared to human-based decision system in context to speed, economies of scale and ability to scale. The AI-driven hiring process rather than replacing should compliment human based decision making (Hukkeri & Pol, 2025). Combining AI with current HR practices optimize the recruitment process. However, it has raised the concerns for data security and privacy while dealing with confidential information in the organizations (Madanchian, 2024). The use of



AI in recruitment necessitates strict adherence to ethical framework such as fairness, transparency, and accountability. AI systems should be built responsibly that develops inclusivity and diversity (Raza, 2025).

5. Conclusion and Recommendations

The research has been conducted to reflect on the current published papers concerning the impact of AI in the recruitment process. It emphasized on the benefits and challenges of AI in the recruitment process. It emphasized that AI software has been developed to think logically and behave like humans. The application of AI has enhanced the quality of hiring. Despite, the technology has revolutionized the hiring process, but it involves a critical concern regarding loss of certain administrative jobs, ethical issues, and readiness of companies for adopting the digital technology in the recruitment process. Therefore, the study has indicated that AI is not a perfect substitute for human-based judgement. Organization can benefit by combining AI with human based judgement.

On the basis of findings of study, it is recommended for the organization to integrate AI in the recruitment process by developing a hybrid recruitment model. The human-based judgement should be integrated with human to ensure empathy and fairness in the recruitment process. AI tools should be audited on regular basis to detect and rectify any biased outputs. Recruiters should be trained to work effectively with AI systems to understand their limitations and ethical consequences.

References

- Faugoo, D. (2024). AI-Driven Recruitment and Selection: Enhanced HR Decision-Making with Accrued Benefits of Organizational Success. *International Journal of Business and Technology Management*.
- Herold, M., & Roedenbeck, M. R. (2025). AI-Driven Research in the Recruitment and Selection Process: Application of an AI Taxonomy With a Systematic Literature Review. *SAGE Open*, 1-21.
- Hukkeri, P., & Pol, S. (2025). The Impact Of Artificial Intelligence On Recruitment Efficiency And Onboarding Effectiveness. *IOSR Journal of Multidisciplinary Research*, 2(3), 26-33. <https://www.iosrjournals.org/iosr-jmr/papers/Vol2-Issue3/Ser-1/D0203012633.pdf>
- Madanchian, M. (2024). From Recruitment to Retention: AI Tools for Human Resource Decision-Making. *Appl. Sci.* <https://doi.org/10.3390/app142411750>



- Rao, S., & Zhao, T. (2025). Ethical AI in HR: a case study of tech hiring. *J Comput Inf Syst*, 1-18.
- Raza, W. (2025). The Impact of Artificial Intelligence on Recruitment and Selection Process. *International Journal for Multidisciplinary Research*.
<https://www.ijfmr.com/papers/2025/3/46766.pdf>
- Revillod, G. (2024). Why do Swiss HR departments dislike algorithms in their recruitment process? An empirical analysis. *Adm Sci.*, 14(10).
- Vedapradha, R., Hariharanorcid, R., & Shivakami, R. (2019). Artificial Intelligence: A Technological Prototype in Recruitment. *Journal of Service Science and Management*, 12(3).