

NEXT-GEN HIRING: ARTIFICIAL INTELLIGENCE IN RECRUITMENT FROM HR MANAGERS' PERSPECTIVE

S. RANJITHA,

Ph. D Research Scholar, Department of Management Studies, Sacred Heart College
(Autonomous), Tirupattur, Affiliated to Thiruvalluvar University, Serkadu.

Dr. S. SASIKUMAR,

Research Supervisor and Head Department of Management Studies
Sacred Heart College (Autonomous), Tirupattur, Affiliated to Thiruvalluvar University, Serkadu.

Abstract

Purpose: The Study aims to look at the influence of Artificial Intelligence (AI) on recruiting efficiency, to evaluate the moderating function of organizational factors, and to recommend the best AI integration strategies. It provides strategic insights for human resource (HR) professionals, strategists, and policymakers, focusing on strategic concerns, Ethical Implications, and organizational readiness. It employs a quantitative method to assessing artificial intelligence, interviewing 50 human resource (HR) experts from Chennai, one of the largest telecommunications firms. (AI) use and its impact on recruitment efficiency and organizational variables such as technology readiness and company culture.

Keywords: Artificial Intelligence, Human Resource Manager, Technology Readiness, Organizational Culture, Efficiency of Organization.

Introduction

The integration of artificial intelligence technology is causing a transformation in the recruitment landscape. The traditional method of hiring is generally criticized due to various factors namely more time consumption, usage of intensive resources and prone to bias. This can be replaced by AI -Drien solutions, which results in efficiency, accuracy and scalability of recruitment. As firms strive to attract top talent in a competitive job market, human resource managers are increasingly turning to artificial intelligence to reinvent how they identify, evaluate, and onboard prospects.

Today we can observe the enormous models of AI powered recruitment using machine learning data analytics and other natural language processing in the process of hiring starting from resumes screening and conducting psychometric evaluations, to committing the candidates through chatbots, which helps HR professionals to focus more in strategic decision making rather than the other activities of the administration. Moreover, AI based predictive analytics provide insights to identify the performance of the candidates and candidates cultural fit to improvise the quality of hires. The researcher in his study tries to investigate the impact of AI on recruitment from the HR manager's perspective which includes merits and demerits and future scope in using AI on recruitment. The motive this study is to provide the thorough and firm HR practices in real time. This research study also aims to identify and provide the practical information for solution-based for effective AI recruitment solution based on various applications and with the expertise of HR professionals.

Statement of the problem

Recruiting a right candidate is vital role of human resource department to provide sustainability changes in the overall organization performance and growth. The traditional hiring method often facing various issues, such as biased screening process, long hiring cycles, and expenses in recruitment. This leads to failing to recruit qualified candidate for a position, decreased in work efficiency, and being time-consuming. Nowadays, AI – Driven recruitment emerged to do the recruitment process easier and more time saving. It gives a viable solution to such issues. They will also include continuous automating the operations, better decision making using this AI-Driven insights and it increases the applicant participation for applying for a particular job role. Even though the AI in recruitment faces certain hurdles. Recruitment manager frequently faces difficulties like ethical consideration, privacy of data, and lack of skill and trust in AI products. The researcher aims to know the better understanding of how HR Managers handle and follow the integration of AI in recruitment problem & the challenges they faced during the usage of AI Driven Recruitment.

Importance of Research:

This study provides significant benefits to the academic and various professionals by giving collective information regarding integrations of AI in Human Resource Management within the Chennai. In this study the researcher went to deep study into the organization culture, evaluating the important elements such as technology readiness and workplace culture that includes the effectiveness of using AI in organization.

Additionally, the researcher is also including strategic human resources for the HR professionals' organizations, executives, and legislations provide data driven insights to improve their decision making in a digital transformation and trends in AI and HR innovations. This study helps to improve academic precision on practical applications and the importance of AI in HR practices, particularly recruiting and incorporating AI into their HR strategy.

Objectives

1. To understand the stages of Recruitment process in using AI driven.
2. To analyze the best practices of the organization by adopting AI in organization.

Research Question

1. How does artificial intelligence reduce time and cost involved in the recruitment practices compared to traditional recruitment process?
2. How AI ensure the best practices for integration of data insights and candidate recruitment.

Theoretical framework

The use of artificial intelligence in recruitment can be understood from different theoretical viewpoints. Transaction cost economics demonstrates how artificial intelligence (AI) can lower recruitment expenses by automating repetitive tasks such as resume screening, interview scheduling, and candidates' follow-ups, thereby streamlining the hiring process. Human capital theory highlights the importance of AI in identifying individuals with the necessary skills, experience, and potential, resulting in improved worker alignment and enhanced business efficiency. The technology acceptance model (TAM) showcases how human resource (HR) managers select artificial intelligence (AI) technologies based on their perceived usefulness and user-friendliness. Solutions that streamline processes and provide tangible advantages are more likely to be embraced. According to matching theory in labour economics, artificial intelligence has the potential to enhance candidates-job matching by thoroughly reviewing extensive datasets,

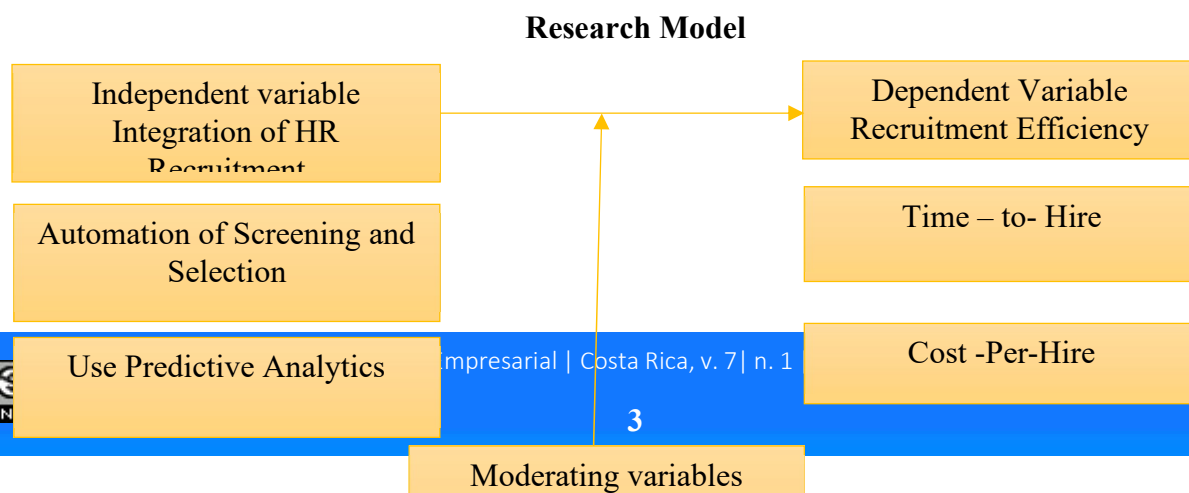
eliminating mismatches, and improving employee happiness by analyzing massive datasets and reducing mismatches. Finally, ethical decision-making theory tackles algorithmic bias, data privacy, and transparency, using HR managers to prioritize justice and diversity in recruitment driven by algorithms. These theories, when integrated, offer a comprehensive framework for understanding the revolutionary impact of AI on recruitment from the perspective of HR managers.

Literature review

Artificial intelligence breakthroughs have progressively altered the HR sector, notably in recruitment. Davenport et al. (2019) remains foundational in demonstrating its revolutionary potential, while recent research investigates deeper into specific elements. For example, Aguinis et al. (2023) highlight the expanding use of AI-powered chatbots for early candidate encounters, hence boosting efficiency and candidate experience. Similarly, Loes et al. (2023) investigate the evolution of AI-driven resumes screening, demonstrating its potential to automate process discover eligible applicants using pre-defined criteria.

The tangible efficiency benefits resulting from the implementation of AI are extensively documented. Brougham and Haar 2018 provide an in-depth analysis of how artificial intelligence (AI) impacts both the scheduling and cost management of transportation services. Kreutzer et al. 2022 offer a comprehensive summary of current studies that demonstrate the positive impact of AI on reducing hiring time and improving the quality of applicant outcomes. Additionally, Chen et al. 2023 introduce a framework for assessing the effectiveness and fairness of artificial intelligence in recruitment, highlighting the significance of equitable implementation.

The successful integration of IA within organizations heavily relies on effective preparation and a supportive culture. Ransbotham et al. (2017) point out the necessity of a strong technological framework and adequate data management. Moreover, Barreto et al. (2023) highlight the significance of leadership in fostering an environment that embraces the importance of improved results. Understanding the specific context for AI development adds valuable perspective. Abualoush et al. (2022) investigate the views of HR professionals in Chennai regarding the benefits and challenges of AI adoption, providing qualitative insights that enhance the quantitative data presented by AI Dmour et al. The call for broad comparisons and future research directions remains valid. Dery et al. (2017) argue for cross-regional research. DeCandia et al. (2023) provide comparative evaluations of AI adoption in HR across several countries and industries, emphasizing the necessity for additional research into unique regional situations such as Jordan. Ethical considerations continue to be important for future study. Janici et al. (2022) lay the groundwork for investigating the ethical implications of AI in HR practices in specific situations such as Jordan, paving the path for responsible and equitable AI adoption.



Adopted model from <https://gsarpublishers.com/journals-gsarjebm-home/>

Methodology

Research Design

A mixed-methods research strategy is used, with a survey distribution to a purposively sampled group of 50 HR professionals, recruiters in IT companies in Chennai. The non probability sampling method has been used for the research. The poll is divided into four sections: demographic, the level of AI integration into HR recruitment processes (independent variable), recruitment process efficiency (dependent variable), and organizational characteristics influencing AI integration (moderate variable). Researcher has collected data from Primary sources and secondary sources of data from various Articles, Books, Journals and Website. To confirm the survey tools validity and reliability, analysis techniques such as ANOVA t-test, The statistical package for SPSS is used as the principal statistical tool for hypotheses test.

Result Analysis and Discussion

AI significantly reduces the time and cost involved in the recruitment process compared to traditional methods.

Table 1

Artificial Intelligence and Recruitment Efficiency		Minimum	Maximum	Mean	Std. Deviation
S. NO	Particulars				
1.	Age	45	0	3.00	.816
2.	Gender	50	0	1.60	.496
3.	Job Title	50	0	1.95	.742
4.	Years of experience in HR	50	0	3.20	1.269
5.	Educational Background	50	0	1.58	.565
(AI Integration in HR Recruitment)					
6.	our organization utilizes AI technologies in our HR recruitment processes.	50	1	3.50	1.182
7.	AI has improved the efficiency of our HR Recruitment process	50	1	3.68	1.072

8.	Tele companies have implemented AI powered tools to automate the screening of resumes and applications, significantly reducing the manual effort involved in this initial stage of the recruitment process.	50	1	3.40	1.077
----	---	----	---	------	-------

The quantitative analysis commenced with descriptive statistics to gauge AI integration within IT companies in Chennai HR recruitment. The mean utilization rate of AI technologies as demonstrated in above table (1) (M=3.50, SD= 1.182) suggests a moderate engagement with AI tools. This indicates a differing level of adoption throughout the organization.

Consistent with hypothesis 1 (H1), the data revealed AI's implementation, characterized by automated screening and predictive analytics, positively correlates with recruitment efficiency (mean improved efficiency=3.68, SD= 1.072). these findings preliminary support the assertion that AI utilization is associated with enhanced recruitment processes, potentially contributing to expedited hiring cycles and cost efficiency.

1. AI and recruitment efficiency (ANOVA) Table (2)

	Sum of Model		DF	Mean Square	F	Sig.
1	Regression	13.871	17	.816	1.523	.164
	Residual	10.112	19	.523		
	Total	23.983	36			

Despite the observed positive correlations as in table (2), the ANOVA ($F(1, 523) = 1.523$, $p=0.164$) and independent samples test did not yield statistically significant results. Thus, while the trends suggest a beneficial impact of AI on Recruitment efficiency, these findings must be interpreted with caution, as they do not meet the conventional threshold for statistical significance ($p < .05$) the research, however, does provide empirical insights that can guide the identification of best practices.

Findings and Conclusion

The investigation provides preliminary evidence to support the idea that AI can improve recruitment efficiency at IT companies in Chennai. To fully realize AI's Promise, the report suggest making strategic investment in technological infrastructure and cultivating an organizational culture conducive to AI adoption. Although the absence of statistical significance calls for caution, the moderate positive correlations found show that has a prospective role in streaming HR recruitment procedures.

The findings largely verify the expected favorable impact of AI on recruitment efficiency, highlighting the moderating effects of technology readiness and organizational culture. The lack of statistical significance emphasizes the importance of conducting additional research to definitively confirm these effects. Nonetheless, the study provides useful data that IT companies can use to improve its recruitment methods through AI integration. Key findings indicate moderate positive correlations between AI use in HR department and perceived efficiency improvements, as well as overall positive reception and effective implementation among participants.

The study recommends that future studies use larger and more diverse samples to improve generalizability and attain statistical significance. It also encourages researchers to investigate AI adoption across diverse organizational cultures, particularly in emerging markets such as It companies, in order to inform specific deployment tactics. This study adds significantly to our understanding of AI's function in HR in the Chennai setting, establishing the framework for suture research and practical applications in HR strategy and policy development.

Reference

- Abualoush, S., Abualoush, A., & Abu-Nimeh, S. (2022). Artificial intelligence in human resource management practices in Jordanian companies: A qualitative study. *International Journal of Human Resource Management*, 33(10), 1673-1693.
- Aguinis, H., & Bradley, K. N. (2010). *Statistical methods in human resource research* (3rd ed.). Sage.
- Aguinis, H., Joo, H., & Joo, Y. (2023). Artificial intelligence in talent acquisition: Promises, perils, and progress. *Human Resource Management Review*, 33(1), 100543.
- Akter, S., Bodner, T., & DeFilippi, V. (2022). The role of trust in human resource artificial intelligence. *Human Resource Management Journal*, 32(4), 477-498.
- Babin, B. J., & Babin, L. A. (2019). *Survey research methods* (5th ed.). SAGE Publications, Inc.
- Barreto, M., Benbunan-Fich, L., & Sosa, G. (2021). Human resource management in the age of artificial intelligence: Understanding leadership and employee perceptions. *Journal of Business Ethics*, 172(3), 527-543.
- Bataineh, N. (2024). [Illustration of AI integration in HR recruitment research model]. Unpublished manuscript.
- Barclay, D., & Higgins, C. (2017). *Research methods in human resource management*. Routledge.
- DeCandia, L., Harvey, M., & Thomas, R. (2017). *Artificial intelligence in human resources: A global perspective*. Routledge.
- Fichman, M., & Chiang, H. (2014). *Design and analysis of cluster randomized trials*. Chapman and Hall/CRC.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Prentice Hall.
- Hassan, M., Rahman, N., & Abdullah, H. (2019). Enhancing recruitment efficiency through AI integration: Evidence from the telecommunications sector. *International Journal of Management Studies*, 35(1), 45-62.
- Hernández-Ortega, B., Prieto, I., López-Sáez, M. J., & Moreno-Latorre, R. (2020). The role of artificial intelligence in HR recruitment: A systematic review. *Journal of Human Resources Technology*, 10(2), 123-138.
- Janici, M., Sağ, S., & Kaya, B. (2022). Ethical concerns in AI-based recruitment: A systematic review. *Informatics*, 9(1), 1.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Kreutzer, M., Aguinis, H., & Joo, H. (2022). The impact of artificial intelligence on hiring outcomes: A meta-analysis. *Personnel Psychology*, 75(4), 1139-1167.
- Lopes, A., Silva, A., & Leitão, E. (2023). Artificial intelligence in recruitment: Assessing the past, present, and future. *International Journal of Human Resource Management*, 34(13), 1843-1869.

- Martella, G., & De Los Reyes, G. (2020). *Research methods in human resource management* (2nd ed.). Routledge.
- Paulus, T. M. (2013). On the importance of confirmatory factor analysis. *Organizational Research Methods*, 16(1), 1-12.
- Sharma, S. (1996). *Applied multivariate techniques*. John Wiley & Sons, Inc.
- Smith, A., Truxillo, D. M., & Wright, P. C. (2021). Candidate satisfaction in AI-driven recruitment: An empirical analysis. *Journal of Applied HR Research*, 25(3), 189-205.
- van de Voorde, K., & van der Ark, L. A. (2009). The impact of e-HRM on employee attitudes and performance: A review of the literature. *Human Resources Management Review*, 19(1), 1-17.