



Impact of AI-Based HRM Decisions on Entry-Level Employment

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Abstract—

Provide a clear, well-structured, and informative summary of your The rapid adoption of Artificial Intelligence in Human Resource Management has significantly transformed recruitment and selection processes in India. Organizations increasingly rely on AI-driven tools such as applicant tracking systems, automated assessments, and algorithm-based decision-making for entry-level hiring. While these technologies improve efficiency and reduce recruitment costs, they also raise concerns regarding job accessibility, fairness, skill requirements, and employment opportunities for fresh graduates and first-time job seekers. Entry-level employment plays a critical role in absorbing India's young and diverse workforce. This study helps to analyse the impact of AI based HRM decision on entry level employment.

Keywords— Applicant tracking systems-Automated assessments-Algorithm-based decision making- Job accessibility- Skill requirement

I. INTRODUCTION

The recruitment and selection processes in India have dramatically changed after the adoption of artificial intelligence in Human resource management. Organizations increasingly rely on AI-driven tools such as applicant tracking systems, automated assessments, and algorithm-based decision-making for entry-level hiring. While these technologies improve efficiency and reduce recruitment costs, they also raise concerns regarding job accessibility, fairness, skill requirements, and employment opportunities for fresh graduates and first-time job seekers.

Entry-level employment plays a critical role in absorbing India's young and diverse workforce. With over 1.5 million engineering graduates produced annually and 10–12 million youth entering the workforce each year, the structural changes brought by AI in HRM directly affect a massive segment of the population.



II. LITERATURE REVIEW

- ❖ Johnson, R.D et al (2020) discussed how Hospitality and Tourism organisations can use eHRM or artificial intelligence (AI) to assist in recruiting, selecting and increasing employee retention rates and cutting down on time to replace staff.
- ❖ Chang, K. (2020) identified the potential knowledge gap in personnel management literature and provided new insights, developing a new AI in the Personnel Management model (APM).
- ❖ Kshetri, N. (2021) examined the use of HRM in the Global South for artificial intelligence, carrying out several case studies of AI instruments used in HRM to recruit, select, develop, and retain employees productively.
- ❖ Medwell (2022) discussed how workers in companies such as Amazon saw algorithms as dehumanizing, overly demanding, and unreasonable in setting performance expectations.
- ❖ Neudert, Knuutila, and Howard (2020) found that globally, 47% of business professionals believed automated decision-making to be helpful rather than harmful, albeit with regional variations.
- ❖ Budhwar et al. (2023) believe that the technology of generative AI continues to evolve and impact developments in the field of HRM, particularly with the emergence of large language models such as ChatGPT.
- ❖ Chowdhury et al. (2024) noted that a market shakeout is inevitable as the landscape of traditional AI technologies continues to evolve and be reshaped with smarter, more innovative versions of large language models.
- ❖ Bondarouk & Brewster (2016) noted that there will be divisions between traditional and generative AI technologies, each differently impacting HRM in compelling and transformative ways.

III. METHODOLOGY

This study adopts a descriptive, exploratory, and analytical approach:

- Primary Data: Structured questionnaire administered to 120 respondents including entry-level job seekers, fresh graduates, and HR practitioners across major Indian cities.
- Secondary Data: Credible industry sources including NASSCOM, India Skills Report, IIMA surveys, ICRIER/EY studies, and government reports.
- Quantitative Analysis: Survey responses tabulated, presented as frequency tables and percentage charts, and interpreted for trends.

IV. RESULTS AND DISCUSSION

- ❖ The respondent pool represents a balanced cross-section of gender demographics.
- ❖ Respondents come from varied educational backgrounds, with the majority from technical and management fields.
- ❖ Urban centres with IT/services concentration dominate the respondent pool.
- ❖ The mix of employed and job-seeking respondents provides a balanced perspective on AI-based hiring.
- ❖ A majority are aware of AI-based recruitment tools, indicating growing visibility of AI in hiring Process
- ❖ Most respondents agree that AI accelerates the recruitment cycle, reducing time-to-hire considerably.
- ❖ Opinions are mixed, with a significant portion skeptical about AI's ability to eliminate bias, reflecting concerns about algorithmic fairness.



- ❖ While many believe AI shortlisting can be objective, a notable group remains concerned about hidden biases in algorithmic decisions.
- ❖ Respondents show moderate confidence in AI's ability to evaluate skills, with concerns raised about soft skill assessment.
- ❖ A majority anticipate that AI will play an increasingly dominant role in candidate assessment in coming years
- ❖ A significant number feel that AI-based screening raises the entry barrier for fresh graduates and first-time applicants.
- ❖ There is a strong consensus that AI-based recruitment may overlook or undervalue soft skills, which are critical for workplace success.
- ❖ Views are polarized, with respondents divided on whether AI truly democratizes opportunity or perpetuates systemic biases.
- ❖ A majority are optimistic about AI's capability to enhance overall hiring quality when implemented responsibly.
- ❖ The majority still prefer human HR professionals for final hiring decisions, reflecting a trust gap with AI-only decision-making.
- ❖ While many are open to participating, a considerable segment remains hesitant due to concerns about fairness and transparency.
- ❖ Transparency in AI decision-making, an option for human review, and clear feedback are the top factors that would improve acceptance of AI recruitment.
- ❖ Resume screening and initial shortlisting are seen as the most appropriate stages for AI integration, while final interviews should remain human-led.
- ❖ Social media, word of mouth, and direct experience during job applications are the primary channels of awareness.
- ❖ Most respondents believe AI-based recruitment primarily benefits employers through cost savings and efficiency, rather than candidates.
- ❖ A majority believe AI will reduce, but not eliminate, the role of HR professionals, shifting focus toward strategic and interpersonal functions.
- ❖ Salary and growth opportunities are ranked as the most important factors, while the nature of the recruitment process has moderate influence on acceptance decisions.

Findings

- The majority (48%) of respondents fall in the 21–30 age group, confirming that this study primarily captures the perspective of young, entry-level job seekers most directly impacted by AI in HRM.
- A significant 20–25% reduction in traditional entry-level roles has been reported in the IT/ITeS sector, attributed to AI automation of routine tasks such as basic coding, testing, and data entry.
- Fresher hiring intent is declining, with freshers comprising only ~14% of new hires in recent years, down from 18.8% in prior periods.
- The majority of respondents agree that AI makes recruitment faster and reduces time-to-hire, but are divided on whether AI reduces or creates new forms of algorithmic bias.
- A strong consensus exists that AI-based recruitment systems may overlook soft skills such as communication, creativity, and adaptability, which remain critical for workplace performance.
- AI-skilled freshers command significantly higher starting salaries (7–8.5 LPA) compared to candidates without AI competency (3–4 LPA), creating a dual-speed entry-level job market.



- India leads global workplace AI adoption at 92% of workplaces using generative AI tools, significantly above the global average of 72%.
- Approximately 55% of surveyed IT firms reported a decline in entry-level employment, while mid- and senior-level roles remained stable or grew.
- There is strong demand for hybrid competencies combining domain knowledge with AI literacy, data analytics, and cloud skills, raising the baseline skill threshold for entry-level positions.
- Trust in AI for final hiring decisions remains low; respondents strongly prefer human HR professionals for the ultimate hiring decision.
- Transparency in AI decision-making, human review options, and structured feedback are the top factors that would encourage greater acceptance of AI-based recruitment.
- Resume screening and initial shortlisting are seen as the most appropriate stages for AI integration, while final interviews should remain human-led.

Recommendation

For Organisation and HR practitioners

- Adopt a hybrid AI-human model for recruitment: use AI for initial screening and shortlisting, but ensure human review for final decisions.
- Design AI recruitment systems that are explainable and transparent, providing candidates with clear feedback on shortlisting outcomes.
- Invest in upskilling existing HR teams to work alongside AI tools, repositioning HR professionals from administrative to strategic roles.
- Periodically audit AI recruitment algorithms for bias, particularly against underrepresented communities or candidates with non-linear backgrounds.

For Educational Institutions and Academic Institutions

- Redesign curricula to incorporate AI literacy, data analytics, prompt engineering, and cloud computing as foundational skills.
- Establish industry partnerships to expose students to real-world AI recruitment processes through internships, hackathons, and live projects.
- Introduce soft skills development programmes to help students articulate competencies in ways that AI screening systems can evaluate.

For Freshers and Job seekers

- Proactively upskill in AI tools, data analytics, and domain-specific technologies to remain competitive in an AI-augmented hiring environment.
- Build digital portfolios, GitHub profiles, and participate in hackathons to demonstrate proof of work beyond academic credentials.
- Optimize resumes with keywords and formats compatible with Applicant Tracking Systems (ATS).

For Government and policy makers

- Establish a national regulatory framework for AI ethics in recruitment, including mandatory disclosure and anti-discrimination safeguards.
- Launch targeted national skilling initiatives to prepare the youth workforce for AI-integrated employment environments.
- Encourage development of gig and flexible work models to absorb graduates displaced by AI automation in traditional entry-level roles.



V. CONCLUSION

This study has undertaken a comprehensive examination of the impact of Artificial Intelligence (AI)-based decisions in Human Resource Management (HRM) on entry-level employment in India. Drawing on both primary survey data from 140 respondents and secondary data from credible industry sources including NASSCOM, India Skills Report, ICRIER/EY, and IIMA, the study has mapped the multifaceted ways in which AI is reshaping the entry-level job landscape for India's young workforce.

The evidence presents a nuanced picture. AI in HRM offers genuine efficiencies—faster recruitment cycles, broader talent pool access, reduced administrative burden, and more objective screening. On the other hand, it is creating structural headwinds for entry-level candidates: a 20–25% decline in traditional entry-level roles, rising skill thresholds demanding AI literacy from day one, erosion of the 'learn-on-the-job' pathway, and growing concerns about algorithmic bias and opacity.

India's position at the forefront of global AI workplace adoption means that these dynamics will only intensify. The study finds that the impact is not uniform: AI-skilled freshers command significantly higher salaries and better opportunities, while those without AI competency face growing structural disadvantages. The entry-level job market is effectively bifurcating into a high-skill, AI-augmented tier and a shrinking traditional tier.

Ultimately, the trajectory of AI in HRM in India is neither an inevitable productivity enhancement. It is a pivotal transformation that demands proactive, multi-stakeholder responses to ensure that India's demographic dividend is leveraged rather than squandered in the AI age.

REFERENCES

- A. Bondarouk, T., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. *International Journal of Human Resource Management*, 27(21), 2652–2671.
- B. Budhwar, P., et al. (2023). Artificial intelligence – challenges and opportunities for international HRM. *International Journal of Human Resource Management*, 34(6), 1065–1097.
- C. Chang, K. (2020). Artificial intelligence in personnel management. *Personnel Review*, 49(6), 1304–1320.
- D. Chowdhury, S., et al. (2024). Generative AI, market disruption and HRM. *Human Resource Management Review*, 34(2), 100989.
- E. Dargnies, M.P., et al. (2024). Aversion to algorithmic HRM. *Journal of Business Ethics*, 189(3), 451–469.
- F. Danner, M. (2018). Algorithms: Building blocks of artificial intelligence. *AI & Society*, 33(1), 39–54.
- G. García-Lillo, F., et al. (2017). The intellectual structure of human resource management research. *International Journal of Human Resource Management*, 28(13), 1786–1815.
- H. Giermindl, L., et al. (2022). Algorithmic management in organizations. *Journal of Business Research*, 148, 280–293.
- I. Johnson, R.D., et al. (2020). eHRM and AI in hospitality recruitment. *International Journal of Hospitality Management*, 86, 102415.



- J. Kaur, P., et al. (2024). Employee green behavior in the Indian hotel industry. *International Journal of Hospitality Management*, 117, 103694.
- K. Kim, S., et al. (2021). AI and HRM: A thematic review. *International Journal of Human Resource Management*, 32(22), 4826–4865.
- L. Kshetri, N. (2021). AI in HRM in the Global South. *Human Resource Management Journal*, 31(4), 823–842.
- M. Kunduru, A.R. (2023). Robotic Process Automation in business operations. *Journal of Business Technology*, 12(1), 55–68.
- N. Malik, A., et al. (2020). SHRM in the age of AI and the sharing economy. *Human Resource Management Review*, 30(4), 100695.
- O. Medwell, J. (2022). Algorithmic management and worker experience. *Work, Employment and Society*, 36(4), 692–709.
- P. Mookerjee, A. (2021). RPA in banking and financial services. *Journal of Financial Services Marketing*, 26(2), 93–104.
- Q. Naik, R. (2024). AI adoption in Indian IT HRM practices. IIMA Working Paper.
- R. Neudert, L.M., Knuutila, A., & Howard, P.N. (2020). Global attitudes toward automated decision-making. Oxford Internet Institute Report.
- S. Pillai, R., & Sivathanu, B. (2020). Adoption of AI technology for talent acquisition. *International Journal of*