International Journal of Research in Commerce and Management Studies

ISSN 2582-2292

Vol. 8, No. 01 Jan-Feb; 2026 Page. No. 797-803

To cite this article: ANAND.I and Dr. C. K. MUTHUKUMARAN (2026). ADOPTION OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE PRACTICES OF INFORMATION TECHNOLOGY COMPANIES IN CHENNAI, International Journal of Research in Commerce and Management Studies (IJRCMS) 8 (1): 797-803 Article No. 633

ADOPTION OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE PRACTICES OF INFORMATION TECHNOLOGY COMPANIES IN CHENNAI

ANAND.I[1] and Dr. C. K. MUTHUKUMARAN[2]

[1]RESEARCH SCHOLAR,
ALAGAPPA INSTITUTE OF MANAGEMENT, ALAGAPPA UNIVERSITY,
Karaikudi-Tamil Nadu

[2]PROFESSOR,
ALAGAPPA INSTITUTE OF MANAGEMENT, ALAGAPPA UNIVERSITY,
Karaikudi-Tamil Nadu

DOI: https://doi.org/10.38193/IJRCMS.2026.8162

ABSTRACT

Artificial Intelligence (AI) has emerged as a transformative force in Human Resource Management (HRM), particularly in the Information Technology (IT) sector where human capital is a key competitive advantage. Chennai, being one of India's major IT hubs, has witnessed increased adoption of AI-based HR practices to improve efficiency, accuracy, and strategic decision-making. This study examines the adoption of Artificial Intelligence in HR practices of IT companies in Chennai, focusing on recruitment and selection, performance management, training and development, employee engagement, and HR analytics. Primary data were collected from HR professionals and employees using a structured questionnaire. The study analyses employee perceptions, organizational readiness, and challenges associated with AI adoption. The findings reveal that AI significantly enhances HR efficiency and effectiveness, while data privacy, ethical concerns, and resistance to change remain major challenges.

KEYWORDS: Artificial Intelligence, Human Resource Practices, AI Adoption, IT Companies, HR Analytics, Chennai

1. INTRODUCTION

Artificial Intelligence refers to the capability of machines to imitate human intelligence through learning, reasoning, and problem-solving. In recent years, AI has become an integral part of Human Resource Management by automating routine tasks and supporting strategic HR decisions. AI-powered tools such as applicant tracking systems, chatbots, and predictive analytics are widely used to improve HR efficiency. The IT industry faces challenges such as talent scarcity, high attrition, and continuous skill upgrades. Chennai hosts a large number of IT companies that increasingly rely on AI-enabled HR systems to address these challenges. However, AI adoption also raises concerns regarding

ethics, data privacy, and employee acceptance. Hence, this study focuses on understanding AI adoption in HR practices of IT companies in Chennai.

2. REVIEW OF LITERATURE

Existing studies highlight that AI-based recruitment systems reduce hiring time and improve candidate matching accuracy. Research also suggests that AI-driven performance management systems enhance transparency and reduce appraisal bias. AI-enabled learning platforms personalize training programs by identifying skill gaps. However, ethical concerns, algorithmic bias, and fear of job displacement remain significant challenges. Limited empirical studies focus on Chennai-based IT companies, creating a research gap.

3. RESEARCH GAP

Despite extensive global research on AI in HRM, limited studies focus on the adoption of AI in HR practices of IT companies in Chennai. Employee perception and ethical challenges in the regional context remain underexplored. This study attempts to bridge this gap.

4. OBJECTIVES OF THE STUDY

To examine the extent of AI adoption in HR practices of IT companies in Chennai.
To analyse the impact of AI on recruitment, performance management, and training.
To assess employee perception towards AI-based HR practices.
To identify challenges in implementing AI in HR functions.

5. RESEARCH METHODOLOGY

The study adopts a descriptive research design. Primary data were collected through a structured questionnaire using a five-point Likert scale. A total of 120 respondents, including HR professionals and employees from IT companies in Chennai, were selected using convenience sampling. Secondary data were collected from journals, books, and industry reports. Statistical tools such as percentage analysis, mean score analysis, ranking, and regression were used.

Hypothesis of the Study

H0: There is no significant relationship between AI adoption and HR effectiveness.
H1: There is a significant relationship between AI adoption and HR effectiveness.

International Journal of Research in Commerce and Management Studies

ISSN 2582-2292

Vol. 8, No. 01 Jan-Feb; 2026 Page. No. 797-803

6. Data Analysis and Interpretation

Table 1: Demographic Profile of the Respondents

Particulars	Category	Respondents	Percentage (%)
Gender	Male	68	56.7
	Female	52	43.3
Age	Below 25 years	24	20
	25–35 years	58	48.3
	36–45 years	30	25
	Above 45 years	8	6.7
Designation	HR Professionals	40	33.3
	Employees	80	66.7

Table 2: AI Adoption Across HR Functions

HR Functions	High (%)	Moderate (%)	Low (%)
Recruitment & Selection	62	28	10
Performance Management	54	34	12
Training & Development	48	38	14
Employee Engagement	42	40	18
HR Analytics	58	30	12

Interpretation

Recruitment and Selection records the highest level of AI adoption among all HR functions. This indicates that organizations rely more heavily on AI-powered tools in talent acquisition processes such as resume screening, candidate shortlisting, and interview scheduling compared to other HR areas.

International Journal of Research in Commerce and Management Studies

ISSN 2582-2292

Vol. 8, No. 01 Jan-Feb; 2026 Page. No. 797-803

Table 3: Respondents' Opinion on AI in HR

Statements	Mean Score	Opinion
AI improves recruitment efficiency	4.28	Strongly Agree
AI reduces bias in HR decisions	3.96	Agree
AI enhances career development	4.05	Agree
AI threatens job security	2.48	Disagree
AI improves HR effectiveness	4.21	Strongly Agree

The mean scores indicate that respondents strongly believe AI improves recruitment efficiency and overall HR effectiveness, while they disagree that AI threatens job security

Table 4: Impact of AI on HR Functions

HR Function	Mean Score	Rank
Recruitment & Selection	4.32	I
Performance Management	4.18	II
Training & Development	4.06	III
Employee Engagement	3.92	IV

Recruitment and selection ranks first in terms of AI impact, followed by performance management and training, showing that AI influence is strongest in talent acquisition activities.

International Journal of Research in Commerce and Management Studies

ISSN 2582-2292

Vol. 8, No. 01 Jan-Feb; 2026 Page. No. 797-803

Table 5: Challenges in Implementing AI in HR

Challenges	Mean Score	Level
Data privacy & security	4.24	High
Ethical & bias concerns	4.10	High
Resistance to change	3.88	Moderate
Lack of technical expertise	4.02	High

Data privacy, ethical concerns, and lack of technical expertise are perceived as major barriers in AI implementation in HR

Table 6: Regression Analysis – AI Adoption and HR Effectiveness

Variables	Beta	t-value	Result
AI-based Recruitment	0.412	4.86	Significant
AI-based Performance Management	0.368	4.21	Significant
AI-based Training Systems	0.295	3.74	Significant

The regression results show that AI-based recruitment, performance management, and training systems significantly influence HR effectiveness.

7. FINDINGS

- AI adoption is highest in recruitment and selection.
- AI-based performance management improves transparency.
- Employees perceive AI as a supportive and efficiency-enhancing tool in HR functions.
- Data privacy and ethical concerns are major challenges.

- Technical skill gaps limit AI effectiveness.

8. SUGGESTIONS

- Provide AI training to HR professionals.
- Implement transparent and ethical AI systems.
- Retain human judgment in critical HR decisions.
- Strengthen data security policies.

9. CONCLUSION

The study concludes that Artificial Intelligence significantly transforms HR practices of IT companies in Chennai. AI enhances efficiency, accuracy, and decision-making in HR functions. However, ethical concerns, employee resistance, and data security issues must be addressed for sustainable AI adoption. Thus, AI adoption in HR is not a replacement for human resources but a strategic support system for improving organizational performance.

10. Scope for Future Research

Future studies may compare AI adoption across IT hubs, conduct longitudinal studies, and examine AI's role in employee well-being and organizational culture.

11. REFERENCES

1. Dwivedi, Y. K., et al. (2023). Artificial intelligence in human resource management: A systematic review. International Journal of Information Management, 68, 102572.
2. Kaur, P., & Singh, R. (2023). AI-driven recruitment and selection practices. Journal of Human Resource Management, 11(2), 45–58.
3. Reddy, S., & Kumar, V. (2022). HR analytics and performance management. Asian Journal of Management Research, 13(1), 112–124.
4. Sharma, N. (2024). Employee engagement through AI-based HR systems. International Journal of HR Studies, 9(1), 78–92.
5. Upadhyay, A. K., & Khandelwal, K. (2021). Artificial intelligence in recruitment. Strategic HR Review, 20(4), 145–151.
6. Bhatia, A., & Sharma, S. (2022). Ethical challenges of AI in HRM. Journal of Business Ethics, 178(4), 945–960.
7. Marler, J. H., & Boudreau, J. W. (2017). HR analytics review. International Journal of Human Resource Management, 28(1), 3–26.
8. Vrontis, D., et al. (2022). AI and HRM research agenda. Human Resource Management Review, 32(2), 100876.
9. Jatobá, M. J., et al. (2019). AI evolution in HR. Management Research Review, 42(1), 62–84.
10. MeitY. (2023). Artificial intelligence adoption in Indian IT sector. Government of India.

11. M, Arunmozhi, Strategies and Interventions for connecting industry and farming through value key chain drivers.
SSRN: https://ssrn.com/abstract=5058289 or http://dx.doi.org/10.2139/ssrn.5058289

12. M, Arunmozhi, Retail Employee Relationship between Corporate Social Responsibility, organizational culture and ethics
SSRN: https://ssrn.com/abstract=5058324 or http://dx.doi.org/10.2139/ssrn.5058324