

AI-DRIVEN EMPLOYEE PERCEPTION TOWARDS JOB ATTRITION IN THE IT SECTOR WITH SPECIAL REFERENCE TO CHENNAI CITY

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Abstract: This study investigates AI-driven employee perceptions towards job attrition in the IT sector with special reference to Chennai City, a major Indian technology hub where AI adoption in HR functions is rapidly accelerating. Using a quantitative research design, primary data were collected from 100 IT employees through a structured Google Forms questionnaire and analyzed using SPSS to examine the relationship between socio-economic characteristics, perceptions of AI-driven HR practices, and job attrition intentions. The findings show that, while most socio-economic variables do not significantly alter employees' views on AI in HR, family annual income and gender are associated with perceptual differences, and AI-driven HR practices exhibit a strong positive correlation with job attrition intentions, suggesting that ethical concerns, increased AI-driven workload, and fears of skill obsolescence and unfair decisions are critical AI-related factors shaping employees' inclination to leave their organizations.

Keywords: *Job Attrition, Employee Perception, Artificial Intelligence, HR Practices*

I.INTRODUCTION:

The swift and pervasive integration of Artificial Intelligence (AI) into organizational frameworks has fundamentally reshaped the global employment landscape, particularly within sectors that are heavily reliant on technology, such as Information Technology (IT). Over the past few years, AI has emerged as a pivotal element in a myriad of Human Resources (HR) functions, encompassing critical areas such as talent acquisition, employee engagement, performance assessment, and workforce analytics. While the deployment of AI significantly enhances operational efficiency and the precision of decision-making processes, it concurrently raises pressing concerns regarding job security, equity, and the evolving nature of human roles within corporate structures. These dynamics have led to a notable shift in employee perceptions regarding job stability and intentions to leave their positions, especially within the IT sector. In Chennai, recognized as one of India's foremost IT hubs, the ramifications of AI adoption on employee attitudes and career trajectories are particularly pronounced. The workforce in this vibrant city is continuously exposed to transformative changes driven by automation, necessitating that employees remain agile and adaptable in the face of new technologies and shifting job requirements. As organizations increasingly turn to AI to streamline operations and enhance productivity, employees' perceptions regarding their relevance in the workplace, opportunities for career advancement, and the fairness of organizational practices become crucial determinants of their loyalty and propensity to remain with their employers. Therefore, investigating how AI influences employee perceptions related to job attrition is essential for understanding the broader implications of technological transitions on workforce retention and morale within the IT industry. This study aims to delve into the perceptions of employees in Chennai's IT sector regarding the implementation of AI, examining the degree to which these perceptions impact their job satisfaction and sense of security. Furthermore, it will explore how these factors collectively

influence their tendencies toward attrition. The anticipated findings are expected to yield valuable insights for HR managers and policymakers, enabling them to devise strategies that harmonize technological progress with employee welfare and organizational sustainability.

STATEMENT OF THE PROBLEM

The Information Technology industry in Chennai is undergoing a swift integration of Artificial Intelligence within essential HR and operational roles, transforming job responsibilities, processes, and performance standards. This technological evolution, while improving efficiency and decision-making, has also heightened employee anxieties concerning job security, skill obsolescence, changes in workload, perceived equity in AI-driven decisions, and the overall quality of work life. If these anxieties are not properly addressed, they may lead to increased job stress, decreased engagement, and greater intentions to depart from the organization. Despite the rising implementation of AI-powered HR tools and predictive attrition models in Indian IT companies, there is a lack of empirical research specifically examining how IT employees in Chennai perceive AI and how these perceptions affect their likelihood of job attrition. Current studies mainly focus on the technical advantages of AI for retention and HR analytics, but neglect to consider employees' psychological reactions, trust in AI systems, and perceived organizational support during transitions spurred by AI. This gap poses a significant challenge for practitioners and policymakers: organizations might invest significantly in AI without grasping whether employees regard these technologies as beneficial or detrimental to their careers, thus risking unintentional increases in attrition. There is an urgent need to systematically explore AI-influenced employee perceptions addressing job security, fairness, workload, career advancement, and well-being and their collective impact on job attrition intentions among IT professionals in Chennai. Tackling this issue will assist organizations in crafting AI and HR strategies that reconcile

technological progress with employee stability and retention.

OBJECTIVES OF THE STUDY

1. To know the socio-economic profile of the employee
2. To assess IT employees' perceptions of AI-driven HR practices and their impact on the workplace.
3. To examine AI-driven HR practices' influence on employees' intentions to job attrition IT sector.
4. To identify key AI-related factors affecting job attrition among IT employees.

Hypothesis

H1: There is a significant relationship between IT employees' socio-economic profile and their perceptions of AI-driven HR practices.

H2: AI-driven HR practices have a significant influence on employees' intentions toward job attrition in the IT sector.

II.REVIEW OF LITERATURE

Author(s) & Year	Methods	Key Findings	Gaps / Future Research
Jude, S. S. A., & Vinayagam, K. (2024)	Conceptual/Review focusing on the dual role of HRM practices (talent acquisition, learning, well-being) and AI integration in IT.	Positive relationship between strategic HRM practices and successful AI integration; organizations aligning both elements show reduced attrition and higher job satisfaction.	Need for empirical validation of the proposed positive relationship and its specific magnitude across different IT contexts.
Zulfiqar, H., et al. (2025)	Quantitative (SEM); Data from 240 employees in small/medium IT firms. Focus on the moderating role of AI-powered employee engagement solutions on turnover intention.	Perceived Organizational Support (POS) significantly reduces turnover intention. AI-driven solutions amplify POS by offering real-time feedback and	Further exploration of ethical AI frameworks and their impact on employee trust and retention (mentioned as a need, not fully explored). Limited to

		personalized development, reducing workplace bullying and disengagement.	small and medium-sized IT firms.
Sankari, S., & Geetha, A. (2025).	Conceptual/Review focusing on the potential use of Generative AI (Gen AI) in addressing attrition drivers in the IT sector (with reference to Chennai).	Gen AI can provide insights and personalized employee experiences to proactively reduce attrition by addressing the core causes of turnover, leading to greater satisfaction and loyalty.	Lack of empirical data and case studies demonstrating the actual reduction in attrition rates specifically due to Gen AI implementation in the IT sector.
Panwar, S., et al., (2025)	Quantitative (PLS-SEM); Data from 435 mid to senior-level professionals in various industries in Delhi-NCR. Focus on AI-based retention strategies and financial growth, mediated by employee satisfaction.	AI-driven retention strategies and marketing forecasting have a significant positive effect on financial growth. Employee Satisfaction strongly mediates this relationship. SDG orientation moderates the influence.	Limited focus on IT sector-specific attrition factors, as the study covers multiple industries. The primary outcome is financial growth, not attrition reduction itself.
Nair, K. B., et al. (2022)	Focuses on observing employee viewpoints on attrition factors in the Chennai IT sector following the pandemic	Identified that the IT sector experienced the highest rise in attrition during the	The study predates the major wave of Generative AI adoption and does not explicitly explore the

AND ENGINEERING TRENDS

(April-June 2021).	pandemic. Highlights the need to comprehend the leading factors causing attrition to enrich retention measures.	role of AI in either driving or mitigating attrition. Focus is on traditional factors and pandemic effects.
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III. RESEARCH METHODOLOGY

The study employs a quantitative research design using a structured questionnaire to examine IT employees' perceptions of job attrition, analysed through SPSS version 20. Convenience sampling under non-probability sampling was used to collect data from 100 respondents. Primary data were gathered via Google Forms, while secondary data were sourced from journals, books, and online resources.

IV. RESULT AND DISCUSSION

The analyzed demographic data, based on a sample of 100 respondents, reveals a profile dominated by young, highly educated, and relatively inexperienced individuals: over half (53.0%) are aged 18-28, 90.0% hold a university degree (UG/PG), and 66.0% have three years or less experience at their current company, reflected in the majority holding Entry or Mid-Level jobs (60.0%). The sample is nearly equally split between Males (52.0%) and Females (48.0%), but leans towards being married (55.0%), with the highest concentration of full-time employees (77.0%) working in the Finance (25.0%) and Programming (19.0%) departments. Finally, while most respondents earn below 7 Lakhs annually (67.0%), the family income distribution is more dispersed, with 17.0% reporting family income above 15 Lakhs.

Table 1: One-way ANOVA for significant difference between socio-economic profile and their perceptions of AI-driven HR practices.

Hypothesis 1a: There is no significant relationship between IT employees' socio-economic profile and their perceptions of AI-driven HR practices.

Variables	Characteristics	Mean	SD	F value	P value
Age Group (in years)	18-28	41.72	7.357	0.523	0.719
	29-38	41.96	5.506		
	39-48	39.67	6.630		
	49-58	42.00	8.327		
	Above 58	46.00	1.414		

Educational Qualification	Up to Schooling	50.00	.	0.625	0.681
	Diploma	40.33	15.885		
	UG	41.30	7.223		
	PG	42.03	5.454		
	Professionals	38.25	7.676		
	Others	44.50	0.707		
CES	Full Time	41.66	6.411	0.227	0.877
	Part Time	40.31	10.395		
	Internship	42.33	4.500		
	Others	44.00	.		
Total years of experience	Less than one Year	41.64	7.884	0.368	0.831
	1-3 Years	41.00	6.787		
	4-6 Years	43.16	5.993		
	7-10 Years	40.58	6.067		
	M10Years	41.27	6.915		
Years of experience in the present company	L1Years	42.06	7.521	0.553	0.698
	1-3 Years	40.07	6.622		
	4-6 Years	42.05	6.591		
	7-10 Years	42.88	5.167		
	M10 Years	43.00	7.106		
Department	HR	41.24	5.585	0.511	0.767
	Finance	40.72	8.434		
	Programming	43.63	5.439		
	Sales & Marketing	42.17	7.469		
	Operation	40.56	7.615		
	Others	41.27	5.198		
Job level	Entry Level	40.28	8.968	1.571	0.188
	Mid-Level	40.19	5.759		
	Senior Level	44.00	6.091		
	Managerial	43.67	3.312		

AND ENGINEERING TRENDS

	Level				
	Executive	42.14	6.040		
Annual income [PA in Rs.]	B 4 L	41.29	7.315	0.819	0.516
	4-7 L	42.85	6.435		
	7 - 10 L	42.38	6.850		
	10-15 L	41.08	6.251		
	Above 15 L	37.86	6.492		
Family Annual income [PA in Rs.]	B 4 L	41.69	7.913	2.914	0.025
	4-7 L	39.13	7.985		
	7 - 10 L	44.48	3.513		
	10-15 L	44.00	5.701		
	Above 15 L	39.12	6.051		

Source: Primary Data

Table 1: The one-way ANOVA results indicate that there are no statistically significant differences in employees' perceptions of AI-driven HR practices across most socio-economic characteristics, including age group, educational qualification, current employment status, years of experience (overall and within the present company), department, job level, and annual income, as all corresponding p-values exceed 0.05. This suggests that employees, regardless of these demographic and professional variations, tend to share similar views about the influence of AI in HR practices. However, a significant difference was observed with respect to family annual income ($F = 2.914, p = 0.025$), indicating that employees from different family income brackets perceive AI-driven HR practices differently. Overall, the findings partially support Hypothesis 1, highlighting that while most socio-economic factors do not shape perceptions significantly, family income plays a meaningful role in differentiating employees' viewpoints toward AI integration in HR.

Table –2 t-test for significant difference between ‘Male’ and ‘Female’, and ‘Single’ and ‘Married’, with respect to their perceptions of AI-driven HR practices.

Hypothesis 1b: There is a significant relationship between IT employees' socio-economic profile and their perceptions of AI-driven HR practices.

		Mean	SD	T value	P value
Gender	Male	41.00	7.864	0.388	0.005
	Female	42.19	5.507		
Marital	Single	41.16	7.000	0.682	0.586

Status	Married	41.91	6.728		
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Source: Primary Data

Table 2: The t-test results reveal that there is a statistically significant difference between male and female employees in their perceptions of AI-driven HR practices ($t = 0.388, p = 0.005$). Female employees (Mean = 42.19, SD = 5.507) reported slightly higher positive perceptions compared to their male counterparts (Mean = 41.00, SD = 7.864), indicating that gender influences employees' views toward AI adoption in HR functions. In contrast, no significant difference was found between single and married employees ($t = 0.682, p = 0.586$), suggesting that marital status does not have a notable impact on their perceptions. Overall, the findings demonstrate that while gender plays a role in shaping attitudes toward AI-driven HR practices, marital status appears to have minimal effect.

Table 3: Karl Pearson Correlation Coefficient between the AI-driven HR practices and Job attrition intentions

Hypothesis 2: There is no relationship between the AI-driven HR practices and their significant influence on employees' intentions toward job attrition in the IT sector.

Characteristics	AI-driven HR practices	Job attrition intentions
AI-driven HR practices	1.000	0.661**
Job attrition intentions	0.661**	1.000

Source: Primary Data

Note: ** denotes significant at 1% level

Table 3: The Karl Pearson Correlation Coefficient analysis demonstrates a strong, positive, and highly statistically significant relationship ($r = 0.661, p < 0.01$) between AI-driven HR practices and employees' job attrition intentions in the IT sector. This strong positive correlation leads to the rejection of the null hypothesis, indicating that as the implementation or use of AI-driven HR practices increases, employees' intentions to leave their jobs also significantly increase. The findings suggest that the integration of AI into HR functions may be generating unintended negative consequences, such as feelings of job insecurity, lack of personal connection, or perceived algorithmic unfairness, which collectively drive the employees' desire to seek employment elsewhere.

Table 4: Descriptive statistics for key AI-related factors affecting job attrition among IT employees

AND ENGINEERING TRENDS

Statements	Mean	SD
Ethical AI concerns and retention	4.15	0.833
AI workload impact on attrition	4.07	0.795
Skill obsolescence due to AI	3.97	0.904
AI transparency and turnover risk	3.85	0.999
Perceived AI decision unfairness	3.81	1.107
AI monitoring privacy concerns	3.80	1.064
AI job automation risk	3.69	0.961
AI favouritism perception	3.69	0.982
Inadequate AI training attrition	3.34	1.047
Stress from rapid AI adoption	3.06	0.993

Source: Primary Data

Table 4 reveals that IT employees generally agree that AI-related factors influence job attrition, with mean scores ranging from 3.06 to 4.15. Among these, ethical AI concerns, and retention (Mean = 4.15, SD = 0.833), and AI workload impact on attrition (Mean = 4.07, SD = 0.795) scored the highest, suggesting that employees are most concerned about the ethical use of AI and how AI-driven workloads may affect their decision to stay within an organization. Moderate agreement levels were found for factors such as skill obsolescence due to AI (Mean = 3.97) and AI transparency and turnover risk (Mean = 3.85), reflecting apprehension about fairness and clarity in AI-driven processes. On the lower end, stress from rapid AI adoption (Mean = 3.06, SD = 0.993) and inadequate AI training attrition (Mean = 3.34, SD = 1.047) showed comparatively lower means, indicating more neutral or varied employee perceptions in these areas. Overall, the results suggest that while IT employees broadly recognize AI’s influence on attrition, ethical, workload, and skill-related concerns are perceived as the most significant drivers affecting their retention decisions.

V.CONCLUSION

The findings of this study present a nuanced view of the perceptions surrounding AI-driven human resource (HR) practices among IT employees in Chennai. Contrary to a universally favorable reception, the data indicate a troubling trend: the increasing integration of AI technologies within HR processes correlates strongly with heightened intentions among employees to consider job attrition. This suggests that while AI has the potential to streamline operations, it may simultaneously foster an environment of insecurity and dissatisfaction among workers. Interestingly, when examining the socio-economic factors that influence these perceptions, most variables, such as age, education level, departmental affiliation, and years of experience, do not yield significant differences in how AI is

viewed. However, two demographic factors stand out: family annual income and gender. These elements appear to play a crucial role in shaping employees' interpretations of AI's function within HR, indicating that an individual’s economic and social standing can significantly affect their acceptance and trust in AI technologies. The study highlights a strong positive correlation between the adoption of AI-driven HR practices and the intentions of employees to leave their jobs. This relationship is compounded by elevated mean scores reflecting ethical concerns, increased workload pressures attributed to AI, and fears surrounding skill obsolescence and the potential for biased decision-making. Such findings underscore a critical message: if not implemented with care and consideration, AI can inadvertently exacerbate feelings of job insecurity, stress, and a lack of trust among employees. For practitioners and policymakers, these insights are of paramount importance. They underscore the necessity for a thoughtful approach to the deployment of AI in HR contexts. Emphasizing transparency, ethical considerations, and an employee-centric framework is essential. This includes providing comprehensive training, establishing fairness safeguards, and fostering open communication channels to ensure that the benefits of AI, such as enhanced efficiency and improved analytics, are realized without compromising employee morale, trust, or retention in the increasingly competitive IT sector. By addressing these concerns proactively, organizations can better harness the advantages of AI while cultivating a supportive and trusting workplace environment.

VI.REFERENCES

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