

Artificial Intelligence, Employee Experience and Retention: A Study on IT Professionals in Chennai

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Abstract:

The Indian IT industry is undergoing a transformative shift with the integration of Artificial Intelligence (AI), which is significantly improving operational efficiency, productivity, and decision-making processes. There are many technological benefits to these changes, but they also have organizational implications and impact employees' experiences and perceptions of job security. The study aims to explore the effect of working with AI integration on employee experience and retention for IT employees in Chennai. The main data collection was carried out with 95 staff from IT service, product companies and Global Capability Centres (GCCs) working in software development, software testing, infrastructure and project management. The analysis of the data collected used the statistical methods, descriptive statistics, correlation, regression and ANOVA. The findings indicate that AI can have a positive impact on the employee experience if employees are adequately trained and managed. But, the top driver of turnover intention is the feeling of becoming job insecure due to AI, especially for employees who are less tenured with the organization. The study suggests that improving employee retention and organisational performance through reskilling, communication and AI from the employees' point of view.

Keywords: Artificial Intelligence, Employee Experience, Employee Retention, Job Insecurity, IT Industry, Chennai.

1. Introduction

1.1 Context: Chennai's IT and ITES Landscape

The city of Chennai has emerged as one of the leading technology hubs in the country with several of the biggest multinational companies and the IT service providers, software development companies and Global Capability Centres having their offices in the city. As of late, AI is progressively becoming an integral part of software development, testing, client service, and project management, as digital transformation continues to develop. Presently, AI technology is on the upswing to automating repetitive tasks, enhancing productivity and support in the provision of business choices.

1.2 The Growing Role of Artificial Intelligence in Knowledge Work

The role of IT personnel has been revolutionized by AI. AI has made a significant impact on the way IT professionals work. Efficient tools like coding assistants, automated testing tools, predictive analytics, and generative AI have cut down on manual work and increased efficiency. These technologies, however, also force staff to constantly adapt and acquire new skills and raise issues about job roles and career security.

1.3 Problem Statement

While AI can boost the productivity of the organisation, it is still a threat to the security of many employees. Technology is constantly changing and there is uncertainty regarding the career path, particularly for younger employees. This may lead to employees' lower satisfaction and higher employees turnover intention. Hence, “comprehending the connection between AI incorporation, worker experience, and retention has emerged as vital for enterprises in extremely cut-throat IT sectors.

1.4 Research Objectives

The study aims to:

- Assess IT professionals' use of AI.
- Discuss the issues of job insecurity related to AI.
- Discuss the influence of AI on employee experiences and turnover.
- Discuss and propose ways to increase employee retention in organisations using AI.

2. Theoretical Framework and Contextual Basis

2.1 Theoretical Foundation: Job Demands–Resources (JD-R) Model

Job Demands – Resources (JD-R) Model is a model that specifies the influence of job demands and organisational resources on job performance, satisfaction and turnover. AI in the workplace can be a challenge and a resource in an AI-driven work environment.

Increased demand for staff to become more proficient in learning new technologies, work processes and expectations are fueled by AI. These changes can be stressful and worrying regarding a lack of job. In the meantime, AI has proven itself as an efficient tool for organisations to help deal with repetitive tasks, make more informed decisions and reduce workload and improve employee productivity.

JD-R model suggests that employee experience is a consequence of the interplay between these demands and appropriate organisational support. On-going training in AI, leadership and clear communication can create a positive attitude towards AI amongst employees and help retain them.

2.2 Operationalisation of Core Variables

The study focuses on four key variables:

- **AI Integration:** How much AI is integrated into employees work.
- **AI-Related Job Insecurity:** Concerns among employees regarding job security and career advancement due to AI.
- **Employee Experience:** Attitude of employees towards the working environment, attitude towards management, satisfaction of the employees.
- **Turnover Intention:** The desire of the employees to transfer to other jobs.

2.3 Contextual Relevance

The IT industry has become so much more dependent on employee experience to affect their organisation's success. With the rise of AI usage, organisations need to be mindful of the importance of fostering staff growth as they embrace the advancements of the technology. Supportive leadership, reskilling initiatives that are effective, and continuous communication assist employees in the adaptation process to AI, as well as promoting engagement, commitment and retention.

3. Research Methodology

3.1 Research Design and Approach

This study is descriptive and correlational and quantitative approach. The design enabled the researcher to examine the extent to which AI is integrated, employees experience, job insecurity, and intent to leave is experienced, and to explore the correlation between these variables. The design provided the researcher with a means to assess the extent of integration of AI, employee experience, job insecurity, and intention to leave, as well as the link between these indicators.

3.2 Study Population and Sampling Strategy

The population comprised of full-time employees who were working in the field of information technology (IT) in IT companies based in Chennai, encompassing product-oriented companies, IT service companies and Global Capability Centres (GCCs). Stratified random sampling was used because they wanted to have a representation from different functional areas.

The final sample consisted of 95 respondents distributed as follows:

Functional Area	Percentage
Software Development	40%
Quality Assurance & Testing	20%
Infrastructure & Operations	15%
Business Analysis & Project Management	25%

Only employees with at least six months of work experience were included in the study.

3.3 Data Collection Methods

Structured questionnaire with 5-point likert scale was used to collect the primary data. To obtain secondary information, journals, books, reports and published research were utilized, related to Artificial Intelligence and Human Resource Management.

3.4 Research Instruments and Measurement

The questionnaire measured four dimensions:

- AI Integration
- AI-Related Job Insecurity
- Employee Experience
- Turnover Intention

Demographic information including age, qualification, organisational tenure, and department was also collected.

3.5 Data Analysis Techniques

SPSS was used to analyze the data obtained. The characteristics of the respondents were summarised using descriptive statistics and the relationship between the variables was determined using Pearson correlation. Multiple Regression was used to identify the factors contributing to the intention of employees to quit while differences between groups based on tenure in the organisation were studied by using ANOVA.

4. Results and Analysis

4.1 Demographic Profile and Descriptive Statistics

In the study, the responses from 95 IT professionals from the IT industry of Chennai were taken into consideration. Most of the respondents were engineering qualified young professionals in the age group of 24-30 years.

The results of the descriptive statistics show that there has been widespread adoption of AI in the participating organisations. There is a high level of integration with AI and an average level of job insecurity for employees

associated with AI. The general assessment of the employees' experience was good and their desire to leave the job was moderate.

Table 1: Descriptive Statistics

Variable	Mean	SD	Interpretation
AI Integration	3.78	0.77	High
AI-Related Job Insecurity	3.35	0.88	Moderate
Employee Experience	3.52	0.74	Moderately High
Turnover Intention	3.10	0.92	Moderate

The results indicate that AI tools have become part and parcel of workers' workday. However, despite the potential for AI to create opportunities for good, concerns over future job security remain, leading to changes in the work mindset of employees.

4.2 Correlation Analysis

Pearson's correlation analysis was used to study the correlation between the major variables.

Table 2: Correlation Analysis

Variables	Correlation (r)	Interpretation
AI Integration ↔ Employee Experience	0.66	Strong Positive
AI-Related Job Insecurity ↔ Turnover Intention	0.64	Strong Positive
Reskilling Support ↔ Job Insecurity	-0.51	Moderate Negative

The data revealed that the integration of AI and employee experience has a strong positive correlation, indicating that with appropriate organizational practices, employees tend to experience positive feelings. However, the relationship between AI job insecurity and turnover intention is strong and positive; that is, the more insecure that people feel about their jobs, the more likely they are to leave their organisations. The negative relationship between reskilling support and job insecurity further reinforces the importance of lifelong learning to alleviate employee anxiety, as the stronger the association between reskilling support and job insecurity, the more important it will be to establish a lifelong learning mechanism.

4.3 Multiple Regression Analysis

Multiple regression analysis was performed to identify the factors influencing turnover intention.

Table 3: Regression Results

Predictor	Standardised β
AI-Related Job Insecurity	0.42
AI-Driven Workload Pressure	0.27
Reskilling Support	-0.24

Predictor	Standardised β
Managerial Support	-0.16

Those who had less than 3-years' experience reported the lowest level of employee experience and highest level of job insecurity. On the other hand, employees with more tenure in the organisation expressed greater trust in the adoption of AI in the workplace and expressed lower intention to quit.

4.4 Organisational Tenure and Employee Perceptions

One-Way ANOVA was conducted to examine differences among employees based on organisational tenure.

Table 4: Organisational Tenure and Employee Perceptions

Tenure	Job Insecurity	Employee Experience
0–3 Years	3.90	3.20
3–6 Years	3.40	3.50
6–10 Years	3.00	3.70
Above 10 Years	2.60	3.90

The results are clear: AI has revolutionized the efficiency and experience of the workplace in the IT industry in Chennai. But the biggest issue with AI and job security is that it is impacting employee retention. Companies with continuous reskilling programs and managerial support and communication have a higher level of successful outcomes to enhance employee experience and reduce turnover intentions.

Summary of Findings

The results are clear: AI has revolutionized the efficiency and experience of the workplace in the IT industry in Chennai. But the biggest issue with AI and job security is that it is impacting employee retention. Companies with continuous reskilling programs and managerial support and communication have a higher level of successful outcomes to enhance employee experience and reduce turnover intentions.

5. Discussion of Findings and Implications

5.1 The Role of Job Insecurity in Driving Attrition

The results show that among the IT professionals in Chennai, AI related job insecurity is the biggest factor for turnover intention. While there's recognition of the advantages of AI for efficiency and minimising repetitive tasks, there's still a lack of clarity about the future of work with AI. This ambiguity results in reduced employee loyalty and high employee turnover. Therefore, the communication and career planning should be utilized to reduce anxiety of employees and should be carried out during the entire process of implementing AI in the organization.

5.2 AI Integration and Employee Experience

The integration of AI had positive correlation with employees' experience in the workplace, meaning that experience can be improved by integrating AI with proper support from the organisations. AI was considered as an assistant that made employees more productive, less time was spent and better quality of work was achieved. But the benefits were largely affected by the amount of training, managerial assistance and new skill development materials available. Companies with AI systems in place are twice as likely to increase engagement and retention. Companies adopting AI systems and providing learning opportunities for their employees are twice as likely to

boost engagement and retention. Companies that integrate AI solutions with employee learning initiatives have twice the likelihood of increased engagement and retention.

5.3 Implications for Talent Retention among Early-Career Professionals

Those with less than 3 years' experience within the organisation were most likely to feel insecure about their job and were the least experienced regarding overall employee experience. This suggests that the need for support for early career professionals to adapt to AI-powered workplaces is higher. A well-designed induction, mentoring process, frequent training and development and a clear progression plan can enhance the employees' confidence and decrease voluntary turnover. The results further validate the Job Demands–Resources (JD-R) Model by demonstrating that AI has positive effects on employees' experiences when organizations allocate adequate resources to deal with technological change demands.

6. Conclusions, Recommendations, and References

6.1 Primary Conclusions

The study suggests that AI has started to be a part of the IT industry in Chennai and the findings were significant when it came to the employee experience of the IT industry. AI can help businesses to increase productivity, reduce repetitive work, and make better decisions. AI can help companies create productivity, reduce repetitive tasks, and aid in decision making. However, in today's AI era, people with lower tenure in the company are more worried about their job security.

The analysis showed that job insecurity in the context of AI was the most important variable in the decision to leave the organization, whereas opportunities to reskill and managerial support were the most important variables in reducing the intention of the employees to leave the organization. The outcomes also reveal that the organisations that have been successful with AI also introduce technology innovation with employee development programmes. The study also shows that the AI adoption is a major concern in employee experience, employee retention, but so is the attitude that organisations take towards technological change.

6.2 Strategic Recommendations

Based on what has been found, the following recommendations are put forward:

- Deliver ongoing AI training and reskilling initiatives for employees to keep up with new technologies.
- Clarify the future role and job opportunities around implementing AI, thus reducing uncertainty.
- Improve leadership support by providing regular feedback, mentoring and career guidance.
- Develop early career staff retention strategies, including on-boarding and career development programs.
- Adopt worker-led approaches to implementation of AI, balancing technology implementation and employee well-being and organisational engagement.

All of these will help to build the trust levels with employees, build commitment levels of the employees and will also reduce the voluntary turnover of the employees and will help in maximising the utilisation of AI.

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