International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

From Data to Insights: Using AI Tool to Improve Employee Involvement and Employee Tenure-Rane Madras

V. Tamizhselvan[1], Dr. S. Pougajendy[2]

[1]MBA Student, Department of Management Studies, Sri Manakula Vinayagar Engineering College (Autonomous), Puducherry
[2]Professor, Department of Management Studies, Sri Manakula Vinayagar Engineering College (Autonomous), Puducherry

Abstract
Employee involvement and retention are crucial to organizational success. This study examines how Artificial Intelligence (AI) tools can be leveraged to address challenges like attrition, skill gaps, and burnout. Focusing on Rane Madras as a case study, the research evaluates AI-driven analytics in enhancing employee satisfaction and tenure. Key findings indicate AI's potential in predictive modelling, real-time feedback, and personalized employee development strategies. These insights can transform traditional HR practices into dynamic, data-driven approaches.

Keywords: Artificial Intelligence, Employee Retention, Engagement, Predictive Analytics, Workforce Development

1. INTRODUCTION

In today's competitive landscape, organizations face challenges in retaining skilled employees and fostering engagement. Traditional strategies often fall short in addressing the complexities of modern workforce dynamics. AI emerges as a transformative tool capable of analyzing large datasets to generate actionable insights. This paper explores AI's role in enhancing employee retention at Rane Madras by identifying key factors influencing satisfaction, predicting turnover, and tailoring interventions.

Objectives of the Study:

1. To Analyze AI's impact on employee retention.
2. To Identify skill gaps to improve engagement.

2. REVIEW OF LITERATURE

A literature review by **Kumar et al (2020)** highlighted the potential of AI in predicting and preventing employee turnover.

A research by **Li et al (2019)** emphasized the need for a human-centered approach toAI implementation to ensure employee trust and acceptance.

(Sahay & Kaur, 2021) focuses on analyzing prior studies on the application of AI, machine learning, and big data to enhance performance, outlining the concept of "highly effective performance" in organizations, and exploring performance perspectives.

Among employees and managers, exploring AI's role in performance management, and examining the advantages of data-driven assessment through AI, with the aim of offering thorough insights into how these technologies can drive organizational success.

AI-Driven Employee Engagement: A Review of Literature **(Kumar & Singh, 2020)**

This review article provides a comprehensive overview of AI applications in employeeengagement. The authors discuss how AI can be used to analyze employee data, personalize experiences, and improve communication, ultimately leading to increased engagement and retention.

Leveraging AI to Enhance Employee Experience and Retention **(Davenport & Harris, 2019)**

This article highlights the potential of AI to transform the employee experience. The authors discuss how AI-powered tools can be used to automate routine tasks, provide personalized support, and improve employee well-being, ultimately leading to increased job satisfaction andtenure

AI in HR: A Systematic Review **(Kaur & Singh, 2021)**

This systematic review analyzes the existing research on AI in HR. The authors identify several key areas where AI can be applied, including recruitment, onboarding, performance management, and employee development. They assert that AI has the capacity to transform HR practices.

AI-Powered Chatbots for Employee Support: A Review **(Zhang & Li, 2023)**

This review article delves into the use of AI-powered chatbots in HR. The authors discuss howchatbots can provide instant support, answer employee questions, and improve communication,leading to increased employee satisfaction and engagement.

AI-Driven Performance Management: A Review **(Lin & Chen, 2023)**

This review article investigates the role of AI in performance management. The authors discuss how AI can be used to provide real-time feedback, automate performance reviews, and identify areas for improvement, leading to more effective performance management.

The Role of AI in Employee Development and Career Advancement **(Nguyen & Tran, 2022)**

This article explores how AI can be used to support employee development and career advancement. The authors discuss how AI can provide personalized learning recommendations, identify skill gaps, and facilitate career coaching.

AI-Powered Employee Recognition Programs: A Review **(Lee & Kim, 2021)**

This review article examines the use of AI in employee recognition programs. The authors discuss how AI can be used to identify deserving employees, personalize recognition, and measure the impact of recognition programs on employee engagement and retention.

3. RESEARCH METHODOLOGY

Research Design: This study uses a descriptive research design. Both primary and secondary data are utilized to gain a comprehensive understanding. A structured questionnaire surveyed 104 employees, supplemented by literature reviews.

Data Collection:

- **Primary Data:** It includes data gathered through structured questionnaires and surveys focusing on AI's influence on employee metrics making it highly reliable for analysis.
  Secondary Data: Academ The p-value of 0.000 is significantly less than 0.05. This indicates a strong rejection ofthe null hypothesis thus AI tools have a significant positive impact on job satisfaction and employee recognition.
- Academic journals, organizational reports, and case studies.

Sampling Method:

- Population: Employees at Rane Madras.
- Sample Size: 104 respondents.

Statistical Tools:

- Chi-Square Test
- One-Way ANOVA
- Correlation Analysis.

4. DATA ANALYSIS AND INTERPRETATION

CHI SQUARE

NULL HYPOTHESIS(H0): There is no significant impact of AI-driven personalized learning and supervisor guidance on skill acquisition and productivity.

ALTERNATIVE HYPOTHESIS(H1): There is a significant impact of AI-driven personalized learning and supervisorguidance improve skill acquisition and productivity.

	AI DRIVEN PERSONALIZED LEARNING ACQUIRE NEW SKILLS	IMPROVE PRODUCTIVITY
Chi-Square	.038[a]	149.077[b]
Df	1	3
Asymp. Sig.	.845	.000

INTERPRETATION:

The p-value of 0.000 is significantly less than 0.05. thus the null hypothesis is rejected and alternate hypothesis is accepted. This indicates that AI tools have a significant positive impact on job satisfaction and employee recognition.

ANOVA

NULL HYPOTHESIS(H0) : There is no significant impact Communication skills and continuous learning on employee growth..

ALTERNATIVE HYPOTHESIS(H1): There is a significant impact Communication skills and continuous learning on employee growth.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.487	3	.162	.264	.851
Within Groups	61.427	100	.614		
Total	61.913	103			

INTERPRETATION:

The F-statistic is 264 with a p-value of 0.851.The p-value is significantly larger than the standard significance level of 0.05. the null hypothesis is accepted and alternate hypothesis is rejected thus There is no significant evidence to suggest that communication skills and continuouslearning have a significant impact on employee growth.

CORRELATIONS

NULL HYPOTHESIS(H0) : There is no significant impact of Technology skill proficiency and work control on employee burnout.

ALTERNATIVE HYPOTHESIS(H1): There is a significant impact of Technology skill proficiency and work control on employee burnout.

		CURRENT LEVELOF PROFICIENCYIN TECHNOLOGY SKILL	LACK OF CONTROL CONTRIBUTES TO BURNOUT
CURRENT LEVEL OF PROFICIENCY IN TECHNOLOGY SKILL	Pearson Correlation	1	.113
	Sig. (2-tailed)		.254
	N	104	104
LACK OF CONTROL CONTRIBUTESTO BURNOUT	Pearson Correlation	.113	1
	Sig. (2-tailed)	.254	
	N	104	104

INTERPRETATION:

The correlation between technology skill proficiency and burnout is 0.113 with a p-value of 0.254. The correlation between work control and burnout is 0.113 with a p-value of 0.254. .the null hypothesis is accepted and alternate hypothesis is rejected. There is no significant evidence to suggest that technology skill proficiency and workcontrol have a significant impact on employee burnout.

5. FINDINGS

Chi-Square Statistic: The p-value of 0.000 is significantly less than 0.05. thus the null hypothesis is rejected and alternate hypothesis is accepted. This indicates that AI tools have a significant positive impact on job satisfaction and employee recognition.

Anova statistic: The F-statistic is 264 with a p-value of 0.851.The p-value is significantly larger than the standard significance level of 0.05. the null hypothesis is accepted and alternate hypothesis is rejected thus There is no significant evidence to suggest that communication skills and continuouslearning have a significant impact on employee growth.

Correlation: The correlation between technology skill proficiency and burnout is 0.113 with a p-value of 0.254. The correlation between work control and burnout is 0.113 with a p-value of 0.254. .the null hypothesis is accepted and alternate hypothesis is rejected. There is no significant evidence to suggest that technology skill proficiency and workcontrol have a significant impact on employee burnout.

CONCLUSION

The study underscores AI's transformative role in employee retention and engagement. By integrating predictive analytics, personalized learning, and real-time feedback, organizations can create supportive work environments that foster long-term commitment. Future research should explore broader applications across diverse industries to validate these findings.

REFERENCES

1. Oluwaseyi Kolawole Oladele., “Performance Management Analytics: Using AI to Analyze Employee Performance Data and Inform Development and Rewards Programs”, Oluwaseyi Kolawole oladele , august 2024.
2. Samreena Jeelani Gaani., Priyanka Chhibber., “A Study On Artificial Intelligence In Employee Engagement”, Kolkata Press Books, April 2022, 5, 38-41.
3. Natasha K.A. Wiebusch., “22 HR AI Tools Every HR Team Should Consider”, Marketing Content Manager At Brightmine,September 3 ,2024