



A Study on Employee Attitudes towards AI-Based Performance Evaluation with Special Reference to DECON Industries Limited, Coimbatore

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Abstract

The purpose of the study is to investigate the attitudes, perceptions, acceptability, trust, fairness, transparency and perceived efficacy of Artificial Intelligence (AI)-based performance evaluation systems among employees. The study used a survey approach to gather primary data and a descriptive research design. The study's population consists of Decon Industries Limited employees in Coimbatore and a sample of 100 employees is chosen by simple random sampling. A systematic questionnaire including demographic traits and aspects like perceived accuracy, fairness, transparency, trust, usefulness, acceptability and general attitude toward AI-based performance evaluation is used to gather primary data. Books, journals, research articles, reports and pertinent internet sources are the sources of secondary data. Getting organizational approval, informing respondents of the study's goal, distributing the questionnaire, gathering completed answers and guaranteeing confidentiality and voluntary participation are all part of the data collection process. Using percentage analysis, mean, standard deviation, chi-square test and other suitable statistical methods, the gathered data is coded, categorized, tabulated and analyzed. According to the study's findings, employees generally have a somewhat positive attitude toward AI-based performance review, especially when it comes to its ability to enhance accuracy, consistency, efficiency and evidence-based appraisal of employee performance. The study comes to the conclusion that employee knowledge, clear evaluation processes, human oversight, suitable training and chances for employees to ask questions or examine evaluation results are necessary for the successful deployment of AI-based performance evaluation.

Keywords: Artificial Intelligence Readiness, Employee Acceptance and Workplace.

Introduction

Artificial intelligence (AI) is gradually transforming human resource management (HRM) by supporting hiring, people monitoring, performance management and decision-making. Algorithms, automated analytical tools and employee-related data are used in AI-based performance reviews to assess performance more consistently and systematically. In a field study, Qin *et al.* (2023) found that employees believed AI-based evaluations to be fairer and more accurate than evaluations conducted by a regular human manager, particularly when performance data was structured and data-intensive. Employee perceptions of AI-based appraisals will also depend on how transparent, understandable and trustworthy the system is. Liu *et al.* (2023) discovered that more transparency in AI decision-making was associated with higher employee trust and more positive assessments of AI, whereas opaque systems caused more concerns. Thus AI-based performance evaluation represents not only a technological change in appraisal practices but also an important employee-experience issue involving fairness, trust, transparency, accuracy and acceptance.

As businesses progressively use AI into performance-management procedures, the significance of employee

attitudes has become especially pertinent. In a study of 115 workers utilizing AI-driven evaluation systems, Rawat, Rawat and Joshi (2024) discovered that while workers valued the promise of AI to lessen prejudice, they also voiced concerns about transparency and AI's capacity to capture qualitative aspects of performance. Similarly Pan, Froese and Xue (2026) discovered that employees' satisfaction with AI-supported performance appraisal was influenced by the attributes of the AI evaluator and the distribution of decision-making authority across scenario-based experiments with 1,002 participants and a survey of 321 respondents. In this regard, the current study examines employees' perceptions of AI-based performance evaluation at Decon Industries Limited in Coimbatore, paying special attention to their perceptions of fairness, accuracy, transparency, trust, usefulness and acceptance. The study is intended to provide organizationally relevant insights into how AI-enabled appraisal practices can be implemented while maintaining employee confidence and meaningful human involvement.

Need of the Study

The way businesses gather performance data, track work results and assist with employee appraisals has altered as a

result of the growing application of artificial intelligence (AI) in HRM. AI-based performance review may increase consistency, speed and accuracy in appraisal procedures and help firms analyze employee performance using structured data. However because performance reviews have a direct impact on awards, promotions, career advancement and recognition, employees may have varied opinions about the usage of AI. Employee acceptance of AI-based evaluation may be impacted by issues with fairness, openness, privacy, accuracy, bias and the decrease in human engagement. Thus, it is necessary to investigate employee attitudes on AI-based performance evaluation at Decon Industries Limited, Coimbatore, in order to comprehend how employees view the efficacy, usefulness, fairness and reliability of AI-supported appraisal procedures.

Importance of the Study

The study is significant because the effective deployment of AI-based performance evaluation systems depends on employee acceptability. Gaining insight into employee attitudes can assist management in identifying both favorable and unfavorable opinions on AI-enabled appraisals. While human supervision can assist in resolving issues requiring managerial judgment, a transparent and well-designed AI-based evaluation system may help organizations make performance assessment more consistent and evidence-based. The study's conclusions can assist Decon Industries Limited, Coimbatore, in comprehending how workers view AI-based performance reviews in terms of fairness, accuracy, transparency, trust, usefulness and acceptability. In order to successfully implement AI in performance management, HR managers may find the study's information helpful in creating suitable training, communication, feedback and review systems.

Statement of the Problem

An essential component of human resource management, performance evaluation affects organizational performance as well as personnel growth, awards and advancement. Faster data analysis, ongoing monitoring, and more methodical review have all been made possible by the use of AI in performance evaluation, but it has also sparked questions about algorithmic bias, transparency, fairness, privacy and the role of human judgment. Depending on their awareness, experience and opinions about the technology, employees may have varying degrees of trust and acceptance of AI-based appraisal. Therefore, the current study aims to investigate employee attitudes regarding AI-based performance evaluation at Decon Industries Limited, Coimbatore, with a focus on employees' perceptions of fairness, accuracy, transparency, trust, usefulness and acceptance, as well as to identify the factors associated with their attitudes towards AI-enabled performance appraisal.

Review of Literature

Rawat, Rawat and Joshi (2024) conducted a study named "AI-Driven Performance Evaluation and Employee Perceptions of Fairness." Although the precise population size was not stated in the study, the universe was made up of workers employed by companies that used AI-driven rating systems. AI-based evaluation methods were used to randomly select 115 employees from various firms. Using a standardized survey questionnaire, the researchers gathered primary data using a quantitative research approach. The results demonstrated that workers understood how AI may lessen prejudice and

enhance the impartiality of performance reviews.

Shammine and Hasika (2025) investigated how IT workers felt about AI in performance reviews, specifically with regard to fairness, accuracy, transparency, bias reduction, trust and employee motivation. The study used convenience sampling to choose a sample of 60 IT workers, whereas the universe consisted of IT professionals employed by specific IT organizations in the Coimbatore District. Using a self-structured questionnaire encompassing demographic traits and employee opinions about AI-based performance evaluation, the researchers gathered primary data using a descriptive research approach. According to the findings, 16.7% of respondents had a moderate comprehension of AI and performance evaluation, while 70.0% of respondents had a high level. Employees viewed AI as having potential to improve fairness and reduce bias, while concerns were reported regarding privacy, loss of human judgement and excessive dependence on algorithms.

Pan, Froese and Xue (2026) investigated how employees react to AI participation in performance reviews and how AI features and decision-making power impact appraisal satisfaction. Although a single overall universe size was not given, employees and workers with experience or exposure to performance evaluation made up the study's population. Three scenario-based trials with 1,002 participants were used in the study, along with an additional survey of 321 workers who had real-world experience with AI-based performance reviews. Prolific was used to recruit survey respondents from the United States, who were then checked for full-time work and prior experience with AI-based appraisal and the final sample of 321 was obtained after exclusions. The study used experimental and survey methods, drawing on socio-materiality and attribution theory.

Methodology of the Study

Objectives of the Study

- i). To find out the socio-demographic characteristics of the respondents.
- ii). To assess the level of employee attitudes towards AI-based performance evaluation of the respondents.
- iii). To examine the level of employee acceptance and willingness to use AI-based performance evaluation systems in the workplace.
- iv). To identify the factors influencing employee attitudes towards AI-based performance evaluation, including perceived usefulness, fairness, accuracy, transparency, trust and job-security concerns.
- v). To examine the relationship between selected socio-demographic characteristics and employees' attitudes towards AI-based performance evaluation.

Research Methodology

Research Design

This study uses a descriptive research approach to investigate how employees at Decon Industries Limited in Coimbatore feel about AI-based performance reviews. Because the study focuses on describing employees' perspectives, acceptance, trust, fairness, transparency, usefulness and concerns surrounding AI-enabled performance review, the design is acceptable. The chosen employees will be asked to complete a standardized questionnaire in order to provide quantitative primary data. Additionally recent studies show that trust, procedural fairness, transparency and the level of human engagement in evaluation all have an impact on how employees react to AI-based appraisals.

Universe of the Study

All personnel of Decon Industries Limited, Coimbatore, across pertinent departments and job classifications, make up the study's universe. The target demographic will consist of workers who have knowledge of exposure to or experience with organizational performance evaluation procedures. In order to evaluate differences in views about AI-based performance evaluation, the study will take into account personnel from a variety of demographic and occupational backgrounds. Because AI-enabled HR practices increasingly entail employee evaluation, monitoring and decision assistance, the organizational setting is very pertinent.

Sample Size

One hundred employees from Decon Industries Limited in Coimbatore may be chosen as a sample for the proposed study. For a descriptive study the sample size is thought to be moderate and enables the researcher to look at employee views across a range of job and sociodemographic factors. However the real workforce of 300 people and organizational access at the time of data collection should be taken into consideration when determining the final sample size. Only correctly completed replies will be included in the final analysis and each chosen responder will submit one completed questionnaire.

Method of Sampling

The study suggests choosing responders from the employee group using basic random sampling. Respondents can be chosen at random using an employee list that was acquired with organizational consent as the sampling frame. This approach lessens researcher selection bias and gives employees a known opportunity for selection. To provide a more comprehensive picture of sentiments toward AI-based performance evaluation, the sample will try to include workers from all departments and job types.

Data Gathering Instruments

A systematic questionnaire created in line with the study's goals will be used to gather primary data. There will be two main portions to the questionnaire: Part I covers the respondents' occupational and sociodemographic details, whereas Part II gages their opinions on AI-based performance reviews. Dimensions including perceived utility, accuracy, fairness, transparency, trust, acceptance, privacy issues, job security worries and readiness to adopt AI-based appraisal systems may be included in the attitude part. A five-point Likert scale, spanning from strongly disagree to strongly agree, can be used to gage responses. To increase clarity and reliability, the questionnaire should be pre-tested with a small group of employees before to the final survey. Similar structured Likert-scale questions have been utilized in recent research to gage how employees feel about AI-supported HR procedures.

Tools for Statistical Analysis

Using the proper statistical methods, the gathered data will be coded, categorized, tabulated and analyzed. The sociodemographic traits of the respondents will be described using percentage analysis. The degree of employee attitudes regarding AI-based performance review will be evaluated using the mean and standard deviation. The relationship between certain sociodemographic traits and employee attitudes can be investigated using chi-square analysis. Relationships between perceived utility, trust, fairness,

transparency, job security concerns and general employee attitudes can be found using correlation analysis. When applicable, the chi-square t-test, ANOVA and simple percentage can also be used to look at differences and factors that affect employee attitudes.

Research Gap

AI in HRM has been studied in the past with regard to hiring, employee performance, fairness, transparency, trust and organizational decision-making. For instance Rawat, Rawat, and Joshi (2024) examined 115 workers and found worries about transparency and AI's capacity to capture qualitative performance characteristics, as well as positive expectations for less prejudice. Using samples from many nations and organizational settings, more recent research has looked into AI-enabled HRM. These studies have focused on algorithmic fairness, transparency, trust and employee autonomy. Employee opinions toward AI-based performance evaluation in Coimbatore's manufacturing and industrial firms, however are not well-documented. Thus by concentrating on Decon Industries Limited employees in particular the current study aims to close this gap.

Ethical Consideration

The study will follow the appropriate ethical principles throughout the research process. Permission will be sought from the appropriate Decon Industries Limited authority prior to data collection. The academic purpose of the study will be explained to respondents and participation will be completely voluntary. Informed consent will be requested from participants and they will not be penalized if they choose not to participate or withdraw. No unnecessary gathering of private or sensitive information will take place. The identity of specific employees and their answers will remain confidential and anonymous, and the results will only be presented in aggregate form. The information collected will only be used for academic and research purposes with the appropriate safeguards for data preservation and access.

Findings & Results

Table 1: Socio-demographic profile of the respondents

S. No.	Socio-demographic Profile	Frequency	Respondents	Percentage %
1	Age	25–35 years	57	57%
2	Gender	Male	61	61%
3	Marital Status	Married	60	60%
4	Educational Qualification	Bachelor Degree	58	58%
5	Designation	Operator/Tech nician	52	52%
6	Employment Status	Permanent	57	57%
7	Department	Quality Control/Infor mation Technology	59	59%
8	Monthly Income	Rs.30,001– Rs.50,000	58	58%
9	Years of Experience	6–10 years	54	54%
10	Frequency of Using Digital Technologies at Work	Moderately aware	62	62%

The table presents the socio-demographic characteristics of the respondents. The findings indicate that 57% of the respondents are in the 25–35 years age group, showing that the sample is predominantly represented by young and middle-aged employees. In terms of gender, 61% are male, while 60% are married. Regarding educational qualification, 58% possess a bachelor's degree, indicating a relatively well-educated workforce. With respect to designation, 52% are operators/technicians, representing the largest group of employees in the sample. The employment status shows that 57% of the respondents are permanent employees, suggesting a substantial level of employment stability. Further 59% belong to the Quality Control/Information Technology departments. In terms of monthly income, 58% earn between ₹30,001 and ₹50,000, indicating a moderate-income range among the respondents. Regarding work experience, 54% have 6–10 years of experience, reflecting considerable exposure to their occupational environment. Finally 62% reported moderate awareness of the use of digital technologies at work, suggesting that most respondents have a reasonable level of familiarity with workplace digital technologies but may still have scope for further development.

Table 2: Distribution of the respondents according to their level of Employee Attitudes.

Employee Attitudes	No. of Respondents	Percentage (%)
Good	48	48
Moderate	29	29
Poor	23	23
Total	100	100

Interpretation

The table shows that 48% of the respondents have good employee attitudes, representing the largest proportion of the sample. Meanwhile, 29% exhibit a moderate level of attitude, while 23% have poor attitudes towards their work or organizational environment. Overall the findings indicate that nearly half of the employees demonstrate positive attitudes, whereas a considerable proportion may require appropriate support and organizational initiatives to improve their attitudes.

Table 3: Distribution of the respondents according to their level of AI-Based Performance Evaluation

AI-Based Performance Evaluation	No. of Respondents	Percentage (%)
Good	51	51
Moderate	25	25
Poor	24	24
Total	100	100

Interpretation

The table indicates that 51% of the respondents have a good perception of AI-based performance evaluation, forming the largest group. About 25% of the respondents show a moderate level of perception, while 24% report a poor perception. Overall the findings suggest that more than half of the employees view AI-based performance evaluation positively, although a notable proportion may require greater awareness, training and clarity regarding its use in employee assessment.

Table 5: Difference between of socio-demographic profile and level of Employee Attitudes and AI-Based Performance Evaluation

Variables	Statistical Tool	Value	Result
Age and Employee Attitudes and AI-Based Performance Evaluation.	Chi-square	10.505(a) (P=.001 <.005)	Significant
Educational Qualification and Employee Attitudes and AI-Based Performance Evaluation.	Chi-square	5.014 (a) (P=.658>.206)	Not-Significant
Age and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F= 15.065 P<0.05	Significant
Gender and Employee Attitudes and AI-Based Performance Evaluation.	t-test	t = .624 P>0.05	Not-Significant
Marital Status and Employee Attitudes and AI-Based Performance Evaluation.	t-test	t = 17.015 P<0.05	Significant
Educational Qualification and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F= .705 P>0.05	Not-Significant
Designation and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F = 18.544 P<0.05	Significant
Employment Status and Employee Attitudes and AI-Based Performance Evaluation.	t-test	t = .505 P>0.05	Not-Significant
Department and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F= 17.108 P<0.05	Significant
Monthly Income and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F = 15.208 P< 0.05	Significant
Years of Experience and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F = 18.208 P< 0.05	Significant
Frequency of Using Digital Technologies at Work and Employee Attitudes and AI-Based Performance Evaluation.	ANOVA	F = .513 P>0.05	Not - Significant

Chi-square

The Chi-square results indicate that age has a statistically significant association with employee attitudes and AI-based performance evaluation, with a calculated value of $\chi^2 = 10.505$ and $p = .001 < 0.05$. However educational qualification does not have a significant association with the selected variables, as the calculated value is $\chi^2 = 5.014$ with $p = .658 > 0.05$. Thus, the findings show that age is significantly associated with employee attitudes and AI-based performance evaluation, whereas educational qualification does not demonstrate a significant relationship.

T-test

The t-test findings show that gender does not produce a statistically significant difference in employee attitudes and AI-based performance evaluation, with $t = 0.624$ and $p > 0.05$. In contrast, marital status shows a statistically

significant difference, with $t = 17.015$ and $p < 0.05$. Similarly, employment status is not significant, as the calculated value is $t = 0.505$ with $p > 0.05$. Therefore the results indicate that marital status is significantly related to differences in the selected variables, while gender and employment status do not show significant differences.

ANOVA

The ANOVA results reveal statistically significant differences based on age, designation, department, monthly income and years of experience in relation to employee attitudes and AI-based performance evaluation. The corresponding F-values are 15.065, 18.544, 17.108, 15.208 and 18.208, respectively, with $p < 0.05$. On the other hand, educational qualification ($F = 0.705$, $p > 0.05$) and frequency of using digital technologies at work ($F = 0.513$, $p > 0.05$) do not show statistically significant differences. Overall the findings suggest that selected demographic and employment-related characteristics are associated with variations in employee attitudes and perceptions of AI-based performance evaluation, while educational qualification and frequency of digital technology use do not show significant differences.

Suggestions

- **Offer AI Awareness Training:** Hold frequent training sessions to enhance staff members' comprehension of AI-based performance evaluation and its objectives.
- **Assure Transparency:** Clearly describe the standards, data sources, algorithms and processes utilized in AI-based performance assessment.
- **Maintain Human Oversight:** To guaranty proper human judgment in final judgments, managers should evaluate AI-generated performance assessments.
- **Enhance Data Accuracy:** Companies should make sure that the employee performance data that AI systems use is correct, pertinent and updated on a regular basis.
- **Protect Employee Privacy:** To protect employees' personal and performance-related information, use robust data-protection procedures.
- **Assure Fairness and Non-Bias:** Keep a close eye on AI systems to spot and fix any algorithmic bias or unfair evaluation results.
- **Create Employee Feedback Mechanisms:** Give staff members the chance to ask questions, get clarification and offer comments on AI-generated performance reviews.
- Concerns about job security should be addressed by making it clear that AI-based evaluation is meant to assist performance management rather than needlessly replace staff members or managerial duties.
- **Conduct Periodic System Evaluation:** Evaluate the AI-based performance evaluation system's efficacy, accuracy, dependability and employee acceptance on a regular basis.
- **Combine AI with Human Judgment:** Businesses should take a balanced approach where managers take into account individual situations, qualitative contributions and employee development needs while AI offers data-driven insights.

Conclusion

Artificial intelligence has the potential to revolutionize traditional performance appraisal by enhancing efficiency, consistency, accuracy and data-based decision-making, according to the study on employee attitudes toward AI-based

performance review. A number of criteria, including perceived utility, fairness, openness, trust, accuracy, privacy and job security concerns, affect how employees feel about AI-based evaluation. Employees may be worried about an over-reliance on technology, a lack of human judgment and the transparency of AI-generated choices, even if AI may help firms undertake systematic and timely performance appraisals. As a result, companies should provide proper human oversight, clear communication, employee training, data privacy and transparent evaluation standards. A balanced combination of AI-based analytical capabilities and managerial judgement can contribute to greater employee confidence and acceptance of AI-enabled performance evaluation systems.

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