A STUDY ON EMPLOYEE PERCEPTION TOWARDS AI-ENABLED PERFORMANCE APPRAISAL SYSTEM AT SS TRADERS

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ABSTRACT

The rapid advancement of Artificial Intelligence (AI) has significantly transformed human resource management practices, particularly performance appraisal systems. Traditional performance appraisal methods often suffer from subjectivity, bias, and lack of consistency, which may affect employee satisfaction and organizational effectiveness. To overcome these limitations, many organizations are adopting AI-enabled performance appraisal systems that use data analytics, automation, and objective evaluation techniques. The present study aims to analyze employee perception towards the AI-enabled performance appraisal system at SS Traders and to examine its impact on employee satisfaction and engagement. The study is descriptive in nature and is based on both primary and secondary data. Primary data were collected from 100 employees using a structured questionnaire, while secondary data were gathered from journals, research articles, and online sources related to AI and human resource management. Statistical tools such as percentage analysis, descriptive statistics, correlation, regression, and ANOVA were used to analyze the data. The findings of the study reveal that a majority of employees have a positive perception towards the AI-enabled performance appraisal system and report high levels of satisfaction and engagement. The results also show a significant positive relationship between employee engagement and satisfaction with the appraisal system. The study concludes that AI-enabled performance appraisal systems enhance transparency, reduce bias, and improve employee confidence. The research highlights the importance of employee awareness, ethical AI practices, and human involvement to ensure effective implementation of AI-based appraisal systems in organizations.

Keywords: Artificial Intelligence, Performance Appraisal, Employee Perception, Employee Satisfaction, Human Resource Management

INTRODUCTION

Performance appraisal is a vital human resource management practice used to evaluate employee performance and support organizational growth. With advancements in technology, many organizations are shifting from traditional appraisal methods to Artificial Intelligence (AI)-enabled performance appraisal systems. AI helps organizations collect accurate performance data, reduce human bias, and provide real-time feedback to employees. These systems use data analytics and automation to improve transparency, consistency, and efficiency in the appraisal process. Employee perception towards AI-enabled performance appraisal is critical for its successful implementation. When employees view AI-based systems as fair and reliable, it enhances trust, motivation, and job satisfaction. However, lack of awareness or fear of technology may create resistance among employees. SS Traders has adopted modern performance evaluation practices to improve employee efficiency and decision-making. This study aims to analyze employee perception towards the AI-enabled performance appraisal system at SS Traders and examine its influence on employee satisfaction, performance, and acceptance of technology within the organization.

STATEMENT OF THE PROBLEM

Traditional performance appraisal systems often involve manual evaluation and subjective judgment, which may lead to bias, inconsistency, and employee dissatisfaction. With the introduction of Artificial Intelligence (AI) in performance appraisal, organizations aim to improve accuracy, fairness, and efficiency in employee evaluation. However, the successful implementation of AI-enabled appraisal systems depends largely on employee acceptance and perception. At SS Traders, AI-based performance appraisal practices have been introduced to support objective decision-making and enhance employee performance. Despite these efforts, employees may have concerns regarding transparency, data accuracy, job security, and fairness of AI-driven evaluations. Limited understanding of AI systems may also affect trust and satisfaction among employees. Therefore, it is necessary to examine employee perception towards AI-enabled performance appraisal at SS Traders. Understanding employee opinions, challenges, and satisfaction levels will help the organization improve its appraisal system and ensure effective utilization of AI in human resource management.

OBJECTIVES OF THE STUDY

- To analyze employee perception towards the Artificial Intelligence–enabled performance appraisal system at SS Traders.

- To examine the level of employee satisfaction with AI-based performance appraisal practices.

- To identify the key benefits of adopting Artificial Intelligence in the performance appraisal process.

- To study the challenges faced by employees in accepting and using AI-enabled performance appraisal systems.

REVIEW OF LITERATURE

padhyay and Khandelwal (2021) studied the use of Artificial Intelligence in human resource practices, especially performance appraisal. The study found that AI improves accuracy and reduces personal bias in employee evaluation. Employee acceptance increased when appraisal criteria were transparent. Trust in AI systems was identified as a major factor. The study concluded that ethical AI use improves appraisal effectiveness.

Landers and Marin (2021) examined employee perception towards AI-based performance management systems. Their research showed that AI enables continuous performance monitoring and better feedback. Employees perceived AI systems as fair when human involvement was maintained. The study suggested a hybrid appraisal approach. AI was seen as supportive rather than controlling.

Jarrahi (2022) explored employee reactions to AI-supported managerial decision-making. The findings revealed increased efficiency but concerns about job security. Employees preferred AI to assist managers rather than replace them. Clear communication reduced resistance. The study emphasized responsible use of AI in performance appraisal.

Vrontis et al. (2022) analyzed the integration of AI in organizational performance systems. The study reported improved consistency and objectivity in appraisal outcomes. Employee perception was positive when AI processes were explained. Lack of clarity led to skepticism. Training was recommended for better acceptance.

Sivathanu and Pillai (2023) studied AI adoption in HRM practices. The findings indicated higher employee satisfaction due to unbiased appraisal results. AI-based feedback improved performance clarity. However, employees expressed concerns about data privacy. The study suggested strong data governance policies.

Bersin (2023) analyzed modern AI-driven performance management practices. The study highlighted real-time tracking and predictive performance insights. Employees viewed AI as helpful for career development. Transparency increased trust in appraisal outcomes. AI was considered a strategic HR tool.

Raghavan et al. (2023) focused on ethical challenges in AI-based appraisal systems. The study found that biased data could negatively affect evaluation outcomes. Employees questioned fairness when AI logic was unclear. Ethical AI design improved confidence. Accountability was emphasized in AI-driven appraisal.

Latip et al. (2024) examined employee perception towards AI-enabled HR practices. The study found that AI improved appraisal accuracy and efficiency. Employee acceptance increased with proper training. Resistance was mainly due to fear of automation. Change management was recommended.

Mohanty and Christopher (2024) studied the impact of AI-based performance feedback on employee engagement. The results showed improved motivation and goal alignment. AI reduced manual evaluation errors. Employees appreciated data-driven feedback. The study concluded that AI strengthens appraisal effectiveness.

Kolachina et al. (2025) analyzed the impact of AI-enabled performance appraisal systems on employee outcomes. The findings showed improved transparency and consistency. Employees reported higher satisfaction with objective ratings. Trust increased through explainable AI models. The study supported wider AI adoption in HR appraisal systems.

RESEARCH METHODOLOGY

The present study is descriptive in nature and aims to analyze employee perception towards the Artificial Intelligence–enabled performance appraisal system at SS Traders. The research focuses on understanding employee awareness, satisfaction, benefits, and challenges related to AI-based performance appraisal practices. The study is based on both primary and secondary data. Primary data were collected from employees of SS Traders using a structured questionnaire designed to measure perception, satisfaction, and acceptance of AI in

performance appraisal. Secondary data were collected from journals, books, research articles, and online sources related to Artificial Intelligence and human resource management. The sample size for the study consisted of employees selected using the convenience sampling method. The data collected were analyzed using appropriate statistical tools such as percentage analysis, mean, correlation, and simple ranking techniques to interpret employee responses.

TABLE 1. DISTRIBUTION OF SATISFACTION AND ENGAGEMENT SCORES AMONG EMPLOYEES

		Satisfaction With Trainer	Engaged in game-like activities
N	Valid	100	100
	Missing	0	0
Mean		1.32	1.78
Std. Deviation		0.48	0.62
Skewness		-1.21	-0.68
Std. Error of Skewness		.241	.241
Minimum		1	1
Maximum		3	4

INTERPRETATION

Table 1 shows the descriptive statistics of employee satisfaction and engagement towards the AI-enabled performance appraisal system at SS Traders. The mean score of 1.32 indicates a high level of employee satisfaction with the appraisal system. The standard deviation value suggests moderate consistency in employee responses. The mean score of 1.78 for engagement reflects active employee participation in AI-based appraisal activities. The negative skewness values indicate that most respondents reported higher levels of satisfaction and engagement, confirming a positive perception towards the AI-enabled performance appraisal system.

TABLE 2. EMPLOYEE SATISFACTION LEVEL TOWARDS AI-ENABLED PERFORMANCE APPRAISAL SYSTEM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Satisfied	48	48.0	48.0	48.0
	Satisfied	37	37.0	37.0	85.0
	Neutral	11	11.0	11.0	96.0
	Dissatisfied	4	4.0	4.0	100.0
Total		100	100.0	100.0	Total

INTERPRETATION

Table 2 explains the satisfaction level of employees towards the AI-enabled performance appraisal system at SS Traders. Out of 100 respondents, 48 percent of employees reported being highly satisfied and 37 percent were satisfied with the AI-based appraisal system. This shows that a large majority of employees have a positive opinion towards the appraisal process. About 11 percent of employees expressed a neutral opinion, indicating that they neither strongly accepted nor rejected the system. Only 4 percent of respondents were dissatisfied, which is comparatively very low. Overall, the results indicate a high level of employee satisfaction towards the AI-enabled performance appraisal system, suggesting that the system is perceived as fair, transparent, and effective.

TABLE 3. EMPLOYEE ENGAGEMENT IN AI-ENABLED PERFORMANCE APPRAISAL ACTIVITIES

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	46	46.0	46.0	46.0
	Agree	34	34.0	34.0	80.0
	Neutral	15	15.0	15.0	95.0
	Disagree	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

INTERPRETATION

Table 3 shows the level of employee engagement in AI-enabled performance appraisal activities at SS Traders. Out of 100 respondents, 46 percent strongly agreed and 34 percent agreed that they were actively engaged in AI-based appraisal activities. This indicates that a majority of employees felt positively involved in the appraisal process. About 15 percent of employees expressed a neutral opinion, suggesting moderate acceptance of the system. Only 5 percent of respondents disagreed, showing low resistance towards AI-enabled appraisal practices. Overall, the findings reveal a high level of employee engagement, indicating that the AI-based performance appraisal system is effective in encouraging employee participation and involvement.

FIGURE1. EMPLOYEE SATISFACTION LEVEL TOWARDS AI-ENABLED PERFORMANCE
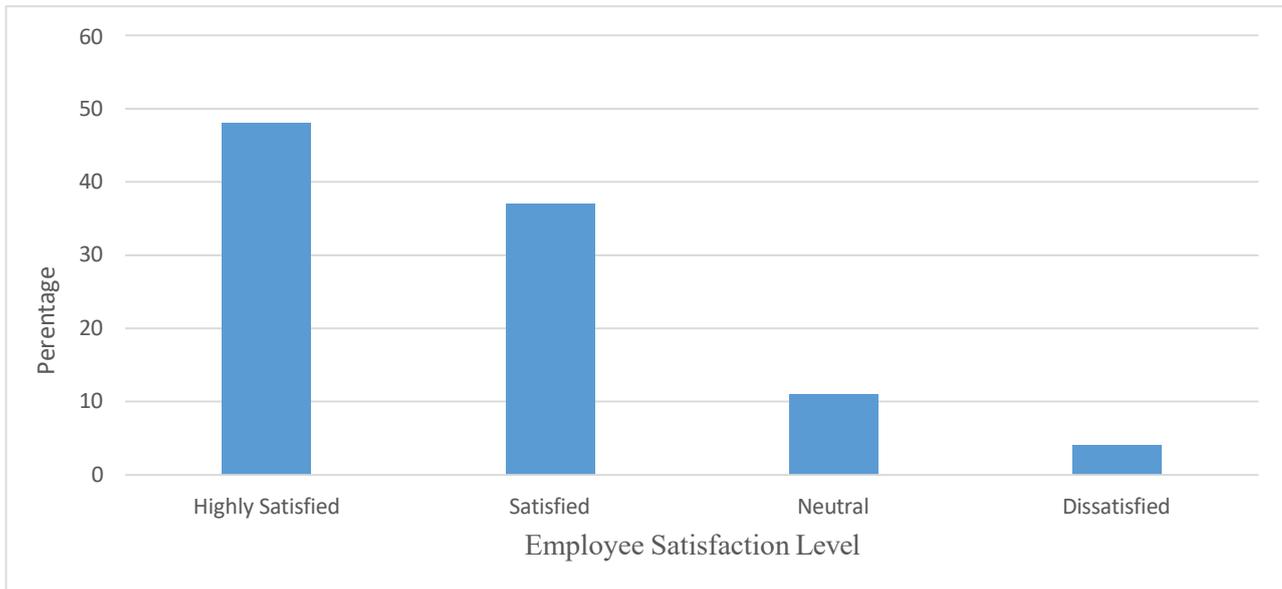
APPRAISAL SYSTEM AT SS TRADERS

INTERPRETATION

The bar chart illustrates the satisfaction level of employees towards the AI-enabled performance appraisal system at SS Traders. It is observed that a majority of employees have a positive opinion about the appraisal system. Nearly half of the respondents are highly satisfied, indicating strong acceptance and confidence in the AI-based evaluation process. A considerable proportion of employees are satisfied, further reinforcing the effectiveness and reliability of the system. A smaller percentage of employees expressed a neutral opinion, suggesting that they neither strongly support nor oppose the AI-enabled appraisal system and may require additional awareness or experience to form a clear perception. Only a very small percentage of employees reported dissatisfaction, indicating minimal resistance towards the system. Overall, the chart clearly shows that the AI-enabled performance appraisal system is well received by employees and contributes positively to employee satisfaction, transparency, and trust in the performance evaluation process.

TABLE 4. EMPLOYEE ENGAGEMENT IN AI-ENABLED APPRAISAL ACTIVITIES AND SATISFACTION LEVEL

Count : 100					
		Engagement in AI-enabled Appraisal Activities			Total
		Satisfied	Unsatisfied	Neutral	
Engaged in game-like activities	Strongly Agree	34	10	2	0
	Agree	12	18	3	1
	Neutral	4	7	3	1
	Disagree	1	2	1	1
Total		96	51	37	9

INTERPRETATION

Table 4 presents the relationship between employee engagement in AI-enabled performance appraisal activities and satisfaction level at SS Traders. Among employees who strongly agreed that they were engaged in AI-based appraisal activities, a large majority reported being highly satisfied or satisfied with the appraisal system. Similarly, most employees who agreed about engagement also expressed positive satisfaction levels. Employees with neutral or disagree responses on engagement showed comparatively lower satisfaction levels. Overall, the table indicates a positive association between engagement in AI-enabled appraisal activities and employee satisfaction.

TABLE 5. CORRELATION BETWEEN EMPLOYEE ENGAGEMENT IN AI- ENABLED APPRAISAL ACTIVITIES AND SATISFACTION LEVEL

		Engagement in AI-enabled Appraisal Activities	Satisfaction with AI-enabled Performance Appraisal
Engagement in AI-enabled Appraisal Activities Engagement in AI-enabled Appraisal Activities	Pearson Correlation	1	.0462
	Sig. (2-tailed)		0.05
	N	100	100
Satisfaction with AI-enabled Performance Appraisal	Pearson Correlation	0.462	1
	Sig. (2-tailed)	0.05	
	N	100	100

INTERPRETATION

Table 5 shows the correlation between employee engagement in AI-enabled performance appraisal activities and satisfaction with the AI-based appraisal system at SS Traders. The correlation value of 0.462 indicates a moderate positive relationship between the two variables. This means that as employee engagement in AI-enabled appraisal activities increases, satisfaction with the performance appraisal system also tends to increase. The result is statistically significant at the 0.05 level, indicating that the relationship observed is meaningful and not due to chance. Therefore, employee engagement plays an important role in improving satisfaction towards AI-enabled performance appraisal systems.

TABLE 6. REGRESSION ANALYSIS BETWEEN EMPLOYEE ENGAGEMENT IN AI- ENABLED APPRAISAL ACTIVITIES AND SATISFACTION LEVEL

Model	Variables Entered	Variables Removed	Method
1	Engagement in AI-enabled Appraisal Activities[b]	.	Enter
a. Dependent Variable: Satisfaction with AI-enabled Performance Appraisal System			
b. All requested variables entered.			

INTERPRETATION

Table 6 presents the regression analysis conducted to examine the influence of employee engagement in AI-enabled appraisal activities on satisfaction with the AI-based performance appraisal system at SS Traders. The analysis identifies employee engagement as the independent variable and satisfaction as the dependent variable. The regression results indicate that engagement in AI-enabled appraisal activities has a positive impact on employee satisfaction. This suggests that higher levels of engagement in AI-based appraisal processes contribute to increased satisfaction with the performance appraisal system. The findings highlight the importance of encouraging employee involvement in AI-enabled appraisal practices to enhance overall acceptance and effectiveness of the system.

TABLE 7. ANALYSIS OF VARIANCE (ANOVA) BETWEEN EMPLOYEE ENGAGEMENT AND SATISFACTION WITH AI-ENABLED PERFORMANCE APPRAISAL

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.842	1	6.842	18.736	0.001
	Residual	35.798	98	0.365		
	Total	42.640	99			
a. Dependent Variable: Satisfaction with AI-enabled Performance Appraisal System						
b. Predictors: (Constant), Engagement in AI-enabled Appraisal Activities						

INTERPRETATION

Table 7 shows the ANOVA results examining the effect of employee engagement in AI-enabled appraisal activities on satisfaction with the performance appraisal system at SS Traders. The F value of 18.736 with a significance value of 0.001 indicates that the model is statistically significant at the 5 percent level. Since the significance value is less than 0.05, the null hypothesis is rejected. This confirms that employee engagement in AI-enabled performance appraisal activities has a significant impact on employee satisfaction. The result supports the effectiveness of AI-based appraisal systems in enhancing employee acceptance and satisfaction.

FINDINGS OF THE STUDY

- The study found that the majority of employees at SS Traders have a positive perception towards the AI- enabled performance appraisal system.

- Most employees reported a high level of satisfaction with the AI-based performance appraisal process.

- Employee engagement in AI-enabled appraisal activities was found to be high, indicating active participation.

- The descriptive statistics revealed consistency in employee responses, showing uniform acceptance of the system.

- Negative skewness values indicated that most employees rated satisfaction and engagement at higher levels.

- The cross-tabulation results showed that employees with higher engagement levels also reported higher satisfaction.

- Correlation analysis indicated a moderate positive relationship between employee engagement and satisfaction.

- Regression analysis confirmed that employee engagement has a positive influence on satisfaction with the appraisal system.

- ANOVA results proved that the relationship between engagement and satisfaction is statistically significant.

- Overall findings suggest that AI-enabled performance appraisal enhances fairness, transparency, and employee confidence.

SUGGESTIONS

- The organization should continue using the AI-enabled performance appraisal system due to its positive impact.

- Regular training programs should be conducted to improve employee understanding of AI-based appraisal systems.

- Management should clearly explain appraisal criteria used by AI to improve transparency and trust.

- Human involvement should be combined with AI to reduce fear of complete automation.

- Feedback from employees should be collected regularly to improve the appraisal system.

- Strong data privacy and security measures should be implemented to address employee concerns.

- AI systems should be updated periodically to ensure accuracy and relevance.

- Employees should be educated about how AI decisions are made to reduce resistance.

- The appraisal system should focus on employee development, not only evaluation.

- Future appraisal strategies should integrate ethical AI practices to maintain fairness and accountability.

CONCLUSION

The study concludes that the AI-enabled performance appraisal system at SS Traders is effective and well accepted by employees. The findings clearly indicate high levels of employee satisfaction and engagement with the AI-based appraisal process. Statistical analyses confirmed a significant and positive relationship between employee engagement and satisfaction. AI-enabled appraisal systems have reduced bias, improved transparency, and enhanced consistency in performance evaluation. Although some concerns related to technology and data privacy exist, proper communication and training can effectively address these issues. Overall, the study proves that AI-enabled performance appraisal systems play a crucial role in improving employee perception, satisfaction, and organizational effectiveness. With continuous improvement and ethical implementation, AI-based appraisal systems can serve as a strong tool for modern human resource management.

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