

## TRANSFORMING PERFORMANCE MANAGEMENT: HARNESSING THE POWER OF AI

**Pushkar Dwivedi<sup>1</sup>, Prof. Ashok Kumar Mishra<sup>2</sup>**

<sup>1</sup>Research Scholar Department of Commerce Mahatma Gandhi Kashi Vidyapith Varanasi, Uttar Pradesh, India.

<sup>2</sup>Former Dean and Director Faculty of Commerce and Institute of Management Studies Mahatma Gandhi Kashi Vidyapith Varanasi, Uttar Pradesh, India.

DOI: <https://www.doi.org/10.58257/IJPREMS38684>

### ABSTRACT

The integration of Artificial Intelligence (AI) in performance management systems is transforming traditional practices, offering opportunities for enhanced efficiency and accuracy. This study investigates the factors influencing the intention to use AI in performance management, with a focus on perceived usefulness and perceived ease of use as key independent variables. A total of 450 questionnaires were distributed, yielding 418 responses, of which 399 were deemed suitable for analysis. Using a quantitative approach, this research assesses how perceptions of AI's usefulness and ease of use drive its adoption in performance evaluation and management. The findings reveal a robust positive correlation between perceived usefulness and the intention to use AI, underscoring that professionals are more inclined to adopt AI tools when they recognize tangible benefits such as improved performance accuracy, objectivity, and overall management efficiency. Moreover, perceived ease of use significantly impacts the intention to use AI, suggesting that user-friendly AI applications are essential for widespread acceptance and implementation. The study's results indicate that by leveraging AI's capabilities, organizations can streamline performance management processes, reduce biases, and enhance decision-making. The analysis highlights that both the functional benefits and the usability of AI systems are crucial for their adoption. Therefore, it is imperative for HR practitioners, technology developers, and policymakers to consider these factors when designing and implementing AI-based performance management systems. This research provides valuable insights into the adoption of AI in performance management, emphasizing the importance of creating AI tools that are not only effective but also easy to use. By addressing these aspects, organizations can ensure that the potential benefits of AI are fully realized, leading to more efficient and accurate performance management practices.

**Keywords:** Artificial Intelligence, Performance Management, Perceived Usefulness, Perceived Ease of Use, Intention to Use AI, Employee Evaluation

### 1. INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative force across various domains, fundamentally altering how businesses operate and manage their workforce. In the realm of human resource management, particularly in performance management, AI offers unprecedented opportunities for improving efficiency, accuracy, and fairness in employee evaluations. Traditional performance management systems, often characterized by periodic reviews and subjective judgments, face numerous challenges, including biases, inconsistencies, and a lack of real-time feedback. AI addresses these issues by providing data-driven insights, enabling continuous performance tracking, and offering a more objective basis for evaluations. AI-powered performance management systems can analyze vast amounts of data from various sources, such as employee work outputs, interactions, and feedback, to generate comprehensive performance profiles. These profiles help in identifying strengths, weaknesses, and development needs of employees, thereby facilitating personalized feedback and targeted training programs. By automating routine tasks and providing predictive analytics, AI not only enhances the accuracy of performance assessments but also frees up managers' time to focus on strategic decision-making and employee development (Cheng & Hackett, 2021). The adoption of AI in performance management, however, is not without its challenges. Key to its successful implementation are the perceptions of the potential users regarding its usefulness and ease of use. Perceived usefulness refers to the extent to which individuals believe that using AI will enhance their job performance, while perceived ease of use pertains to the effort required to learn and operate these systems. These perceptions significantly influence the intention to use AI technologies, as posited by the Technology Acceptance Model (TAM) (Davis, 1989).

In the context of AI in performance management, perceived usefulness can be linked to the benefits that AI brings, such as enhanced accuracy, reduced biases, and improved efficiency in performance evaluations. If HR professionals and managers believe that AI can substantially improve the performance management process, they are more likely to adopt it. Conversely, if AI systems are perceived as complex and difficult to use, resistance to adoption may arise, regardless of their potential benefits (Venkatesh & Davis, 2000). Understanding these dynamics is crucial for organizations aiming to integrate AI into their performance management practices. By examining the roles of perceived usefulness and

perceived ease of use, this study seeks to provide insights into the factors driving the adoption of AI in performance management. Such insights can guide the design and implementation of AI systems, ensuring they are both effective and user-friendly, ultimately facilitating their acceptance and utilization in the workplace.

## 2. REVIEW OF LITERATURE

Study	Objective	Methodology	Key Findings
<b>Davis (1989)</b>	To propose the Technology Acceptance Model (TAM)	Quantitative; Survey of 107 users	Perceived usefulness and ease of use significantly impact technology adoption.
<b>Venkatesh &amp; Davis (2000)</b>	To extend TAM with social influence and cognitive instrumental processes	Longitudinal field study	Social influence and cognitive instrumental processes enhance the predictive power of TAM.
<b>Venkatesh &amp; Bala (2008)</b>	To develop TAM3 and research agenda on interventions	Quantitative; Survey and field study	Identified key determinants of perceived ease of use and perceived usefulness affecting adoption.
<b>Hameed, Khan, &amp; Iqbal (2016)</b>	To explore AI's role in performance appraisals	Literature review	AI can enhance objectivity, accuracy, and efficiency in performance appraisals.
<b>Cheng &amp; Hackett (2021)</b>	To examine AI applications in HRM	Literature review and case studies	AI improves decision-making, reduces biases, and offers data-driven insights in HR practices.
<b>Nguyen et al. (2020)</b>	To investigate AI adoption in HRM	Quantitative; Survey of 300 HR professionals	Perceived usefulness and organizational support are critical for AI adoption in HRM.
<b>Kumar &amp; Srikant (2018)</b>	To study AI's impact on performance management systems	Qualitative; Interviews with HR managers	AI tools enhance accuracy and reduce biases but require significant training for effective use.
<b>Rahman et al. (2019)</b>	To assess AI's effectiveness in performance evaluations	Mixed methods; Surveys and case studies	AI enhances performance tracking and provides real-time feedback, leading to better employee outcomes.
<b>Sahu &amp; Kumar (2020)</b>	To explore AI's role in employee development and appraisal	Quantitative; Survey of 250 employees	Perceived ease of use and perceived usefulness positively influence AI adoption in appraisals.
<b>Taylor et al. (2021)</b>	To analyze barriers to AI adoption in performance management	Qualitative; Focus groups with HR experts	Resistance to change and lack of technical skills are major barriers to AI adoption in performance management.

### 2.1 Rationale and objectives of the Study

Despite the growing interest in AI applications in HR, there is limited empirical research on the specific factors driving the adoption of AI in performance management. Understanding these factors is essential for developing strategies to facilitate the integration of AI into performance management practices. This study addresses this gap by examining the roles of perceived usefulness and perceived ease of use in shaping the intention to use AI in performance management. Considering this gap following are the objectives of the study

1. To investigate the relationship between perceived usefulness and the intention to use AI in performance management.
2. To examine the impact of perceived ease of use on the intention to use AI in performance management.
3. To provide actionable insights for HR practitioners, technology developers, and policymakers to enhance the adoption of AI in performance management.

### **3. RESEARCH METHODOLOGY**

**i) Research Design:** This study employs a quantitative research design to investigate the factors influencing the intention to use Artificial Intelligence (AI) in performance management. The focus is on examining the roles of perceived usefulness and perceived ease of use as independent variables affecting the intention to use AI, which serves as the dependent variable. This approach allows for the collection and analysis of numerical data to identify relationships and test hypotheses.

**ii) Sample and Sampling Technique:** The target population for this study consists of HR professionals and managers who are involved in performance management within various organizations. A total of 450 questionnaires were distributed to this population using a purposive sampling technique, ensuring that respondents have relevant experience and knowledge about performance management systems. Out of the distributed questionnaires, 418 responses were received, with 399 deemed suitable for analysis after screening for completeness and relevance.

#### **iii) Data Collection**

Data was collected using a structured questionnaire designed to measure the variables of interest:

- **Perceived Usefulness:** The degree to which AI is perceived to enhance performance management effectiveness.
- **Perceived Ease of Use:** The level of effort required to learn and use AI tools in performance management.
- **Intention to Use AI:** The likelihood of adopting AI technologies in performance management processes.

The questionnaire included Likert-scale items, ranging from strongly disagree (1) to strongly agree (5), to capture respondents' attitudes and perceptions. The questionnaire was distributed electronically to ensure broad reach and ease of response.

#### **iv) Ethical Considerations**

The study adhered to ethical research practices by ensuring confidentiality and anonymity of respondents. Informed consent was obtained from all participants, who were informed about the purpose of the study, their right to withdraw, and the use of their responses for research purposes only. Data was stored securely and used exclusively for the analysis related to this study.

#### **v) Data Analysis**

Data analysis was performed using statistical software (e.g., SPSS or R) to evaluate the relationships between the variables. The analysis involved the following steps:

- **Descriptive Statistics:** Calculating means, standard deviations, and frequencies to summarize the data and understand the distribution of responses.
- **Reliability Analysis:** Assessing the internal consistency of the questionnaire items using Cronbach's alpha to ensure the reliability of the constructs being measured.
- **Correlation Analysis:** Examining the correlation between perceived usefulness, perceived ease of use, and intention to use AI to identify significant relationships.
- **Regression Analysis:** Conducting multiple regression analysis to determine the impact of perceived usefulness and perceived ease of use on the intention to use AI. This analysis helps in understanding the extent to which each independent variable predicts the dependent variable.

#### **1.5 Hypotheses of the Study**

Based on the research objectives, the following hypotheses were formulated and tested:

##### **Hypothesis 1:**

- H0: Perceived usefulness has no positive impact on the intention to use AI in performance management.
- Ha: Perceived usefulness has a positive impact on the intention to use AI in performance management.

##### **Hypothesis 2:**

- H0: Perceived ease of use has no positive impact on the intention to use AI in performance management.
- Ha: Perceived ease of use has a positive impact on the intention to use AI in performance management.

##### **Hypothesis 3:**

- H0: Perceived usefulness and perceived ease of use together do not have a significant effect on the intention to use AI in performance management.
- Ha: Perceived usefulness and perceived ease of use together have a significant effect on the intention to use AI in performance management.

#### 4. RESULT AND DISCUSSION

##### i) Demographic Profile of Respondents

Category	Subcategory	Frequency	Percentage
Gender	Male	285	71.4
	Female	114	28.6
<b>Total</b>		399	100
Age	18-20	79	19.8
	21-25	96	24.1
	26-30	202	50.6
	31-35	22	5.5
<b>Total</b>		399	100
Educational Background	Undergraduate	158	39.6
	Postgraduate	182	45.6
	Other	59	14.8
<b>Total</b>		399	100
Work Experience	Less than 1 year	184	46.1
	1 to 5 years	111	27.8
	Above 5 years	104	26.1
<b>Total</b>		399	100

##### ii) Validity and Reliability

Reliability Statistics	Value
Cronbach's Alpha	0.798
Number of Items	22

Cronbach's Alpha is a measure of internal consistency, indicating how well a set of items measures a single unidimensional latent construct.

The Cronbach's Alpha value of 0.798 indicates good internal consistency among the 22 items in the study, suggesting they effectively measure the same underlying concept. This level of reliability is acceptable in the social sciences, where an Alpha value above 0.7 is typically considered sufficient. While the results demonstrate good consistency, there remains some room for improvement, as an Alpha value closer to 1.0 would indicate even better internal consistency.

##### iii) Collinearity Diagnostics

In multiple regression analysis, multicollinearity refers to the high intercorrelation among independent variables. It is essential to assess and address multicollinearity to ensure the reliability and validity of the regression model. This paper uses Variance Inflation Factor (VIF) and tolerance values as diagnostic tools for detecting multicollinearity. The results of the collinearity diagnostics are presented in the following section.

##### Collinearity Diagnostics Results

The collinearity diagnostics for this study, which examines the factors influencing the intention to use AI in performance management with perceived usefulness and perceived ease of use as independent variables, are summarized below.

**Variance Inflation Factor (VIF) and Tolerance:**

Variance Inflation Factor (VIF) quantifies how much the variance of a regression coefficient is inflated due to multicollinearity with other predictors. Tolerance is the reciprocal of VIF and indicates the proportion of variance in an independent variable that is not explained by other independent variables. The VIF and tolerance values for the independent variables are as follows:

Variable	Tolerance	VIF
Perceived Usefulness	0.478	2.09
Perceived Ease of Use	0.478	2.09

A VIF value above 10 or a tolerance value below 0.1 typically indicates significant multicollinearity (Neter, Wasserman, & Kutner, 1989). In this study, both VIF values (2.09) and tolerance values (0.478) for perceived usefulness and perceived ease of use are within acceptable limits, indicating that multicollinearity is not a serious concern in our model.

**Condition Index and Variance Proportions:** The condition index and variance proportions provide additional insights into the presence of multicollinearity. A condition index above 30 suggests severe multicollinearity (Belsley, Kuh, & Welsch, 1980).

Model Dimension	Eigenvalue	Condition Index	Variance Proportions
			(Constant)
1	2.979	1	0
2	0.013	15.294	0.31
3	0.009	18.608	0.69

The condition indices for the model dimensions are 15.294 and 18.608, both of which are below the threshold of 30. The variance proportions indicate that the majority of the variance for perceived ease of use (0.96) is concentrated in the second dimension, while perceived usefulness (0.91) is concentrated in the third dimension. However, these values do not exceed critical levels, further confirming that multicollinearity is not a significant issue. Based on the collinearity diagnostics, including VIF, tolerance, condition index, and variance proportions, it can be concluded that multicollinearity is not a significant concern in this study. The independent variables, perceived usefulness, and perceived ease of use, do not exhibit problematic multicollinearity, ensuring reliable and valid results in the regression analysis of the intention to use AI in performance management.

**iv) Descriptive Statistics Results**

In multiple regression analysis, assessing the descriptive statistics of the variables is crucial for understanding the central tendencies and variability in the data. This study examines the intention to use AI in performance management, focusing on two key independent variables: perceived usefulness and perceived ease of use. The results of the descriptive statistics provide valuable insights into the general perceptions and readiness of respondents toward adopting AI in performance management. The mean, standard deviation, and sample size for each variable are as follows:

Variable	Mean	Std. Deviation	N
Intention to Use AI in Performance Management	2.9803	0.36477	399
Perceived Usefulness	3.8102	0.50669	399
Perceived Ease of Use	3.8045	0.60073	399

The mean value of 2.9803 for the intention to use AI in performance management suggests that respondents have a moderate intention to adopt AI technologies. Given the scale used (typically ranging from 1 to 5), this score is slightly below the midpoint, indicating a cautious or ambivalent attitude towards adopting AI for performance management purposes. The relatively low standard deviation of 0.36477 indicates that there is not much variability in respondents' intentions, suggesting a general consensus or uniformity in their moderate stance on AI adoption. For perceived usefulness, the mean value of 3.8102 indicates that respondents generally perceive AI as beneficial for performance management. This score, which is above the midpoint, reflects a positive perception of AI's potential to enhance efficiency, accuracy, and fairness in employee evaluations. The moderately low standard deviation of 0.50669 suggests

a moderate level of agreement among respondents regarding the usefulness of AI. Most respondents perceive AI to be beneficial, although there is some variation in the extent of this perception. Similarly, the mean value of 3.8045 for perceived ease of use indicates that respondents find AI relatively easy to use in the context of performance management. This score also reflects a favorable perception of the ease with which AI tools can be implemented and utilized. The standard deviation of 0.60073, while slightly higher than that of perceived usefulness, indicates a bit more variability in respondents' perceptions of ease of use. This suggests that while most respondents find AI easy to use, some may have reservations or face challenges in using AI technologies. These descriptive statistics provide important insights into the general attitudes and perceptions of HR professionals and managers regarding AI in performance management. The slightly below-midpoint mean score for the intention to use AI highlights a cautious approach among respondents. This suggests that while they recognize the potential benefits of AI (as indicated by the higher means for perceived usefulness and ease of use), other factors might be influencing their reluctance or hesitation to fully adopt AI in performance management. Future studies could explore these additional factors, such as organizational support, cost, or perceived risks. The higher mean scores for perceived usefulness and ease of use indicate that respondents generally have a favorable view of AI's capabilities and usability. This positive perception aligns with existing literature that suggests perceived usefulness and ease of use are critical determinants of technology adoption (Davis, 1989; Venkatesh & Davis, 2000). Organizations aiming to implement AI in performance management should leverage these positive perceptions to foster higher adoption rates. Training programs and demonstrations of AI's practical benefits could further enhance these perceptions and address any existing reservations. In short, the descriptive statistics reveal that while there is a moderate intention to use AI in performance management, respondents generally perceive AI as useful and relatively easy to use. These findings underscore the importance of addressing any underlying concerns and enhancing the positive perceptions to facilitate the successful adoption of AI technologies in performance management systems.

#### v) Hypotheses Testing

##### Hypothesis: 1

<b>H0: Perceived usefulness has no positive impact on the intention to use AI in performance management.</b>
<b>Ha: Perceived usefulness has a positive impact on the intention to use AI in performance management.</b>

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.707 <sup>a</sup>	.499	.498	.25847

a. Predictors: (Constant), PERCIEVED\_USEFULNESS

The correlation coefficient (R) of 0.707 indicates a strong positive relationship between perceived usefulness and the intention to use AI in performance management. The R Square value of 0.499 suggests that approximately 49.9% of the variance in the intention to use AI in performance management can be explained by perceived usefulness. The adjusted R Square value of 0.498 provides a slightly adjusted estimate, accounting for the number of predictors in the model, and still indicates that about 49.8% of the variability is explained by perceived usefulness. The standard error of the estimate is 0.25847, reflecting the average distance that the observed values fall from the regression line.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.435	1	26.435	395.686	.000 <sup>b</sup>
	Residual	26.523	397	.067		
	Total	52.958	398			

a. Dependent Variable: INTENTION TO USE AI IN PERFORMANCE MANAGEMENT  
b. Predictors: (Constant), PERCIEVED\_USEFULNESS

The sum of squares for regression (26.435) and residual (26.523) together account for the total sum of squares (52.958), reflecting the overall variability in the model. The F value of 395.686, with a significance level (Sig.) of 0.000, indicates that the model is statistically significant. This means that the predictor, perceived usefulness, reliably predicts the dependent variable, which is the intention to use AI in performance management.

Model	Coefficients <sup>a</sup>					
	Unstandardized Coefficients			Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.	
1	(Constant)	1.042	.098	10.606	.000	
	PERCIEVED_USEFULNESS	.509	.026	.707	19.892	.000
	SS					

a. Dependent Variable: INTENTION TO USE AI IN PERFORMANCE MANAGEMENT

The intercept (constant) is 1.042, representing the predicted value of the intention to use AI in performance management when perceived usefulness is zero. The unstandardized coefficient (B) for perceived usefulness is 0.509, indicating that for each unit increase in perceived usefulness, the intention to use AI in performance management increases by 0.509 units. The standardized coefficient (Beta) of 0.707 further confirms the strength of this relationship. Additionally, the t-value for perceived usefulness is 19.892 with a significance level (Sig.) of 0.000, demonstrating that perceived usefulness is a significant predictor of the intention to use AI in performance management. The regression analysis shows a strong positive relationship between perceived usefulness and the intention to use AI in performance management, explaining about 49.9% of the variance in the dependent variable. The model is statistically significant, and perceived usefulness is a significant predictor, as evidenced by the high t-value and p-value <0.05. These findings support the hypothesis that perceived usefulness positively influences the intention to use AI in performance management.

#### Hypothesis: 2

<b>H0: Perceived ease of use has no positive impact on the intention to use AI in performance management.</b>
<b>Ha: Perceived ease of use has a positive impact on the intention to use AI in performance management.</b>

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 <sup>a</sup>	.252	.251	.31578

a. Predictors: (Constant), Perceived Ease of Use

The correlation coefficient (R) for the model is 0.502, indicating a moderate positive relationship between perceived ease of use and the intention to use AI in performance management. The R Square value of 0.252 suggests that approximately 25.2% of the variance in the intention to use AI in performance management can be explained by perceived ease of use. The adjusted R Square value of 0.251 provides a slightly refined estimate that accounts for the number of predictors in the model, showing that about 25.1% of the variability is explained by perceived ease of use. The standard error of the estimate is 0.31578, reflecting the average distance that the observed values fall from the regression line.

#### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.370	1	13.370	134.080
	Residual	39.588	397	.100	
	Total	52.958	398		

a. Dependent Variable: INTENTION TO USE AI IN PERFORMANCE MANAGEMENT

b. Predictors: (Constant), Perceived Ease of Use

The sum of squares for regression is 13.370, and for residuals, it is 39.588, contributing to a total sum of squares of 52.958. The F value of 134.080, with a significance level (Sig.) of 0.000, indicates that the model is statistically significant. This suggests that perceived ease of use reliably predicts the intention to use AI in performance management.

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1	(Constant)	1.820	.101	17.929	.000
	Perceived Ease of Use	.305	.026	11.579	.000

a. Dependent Variable: INTENTION TO USE AI IN PERFORMANCE MANAGEMENT

The intercept (constant) is 1.820, representing the predicted value of the intention to use AI in performance management when perceived ease of use is zero. The unstandardized coefficient (B) for perceived ease of use is 0.305, indicating that for each unit increase in perceived ease of use, the intention to use AI in performance management increases by 0.305 units. The standardized coefficient (Beta) of 0.502 confirms the strength of this relationship. The t-value for perceived ease of use is 11.579 with a significance level (Sig.) of 0.000, demonstrating that perceived ease of use is a significant predictor of the intention to use AI in performance management. Given the statistical significance (p-value = 0.000), which is less than the alpha level of 0.05, we reject the null hypothesis (H0). This indicates that perceived ease of use has a positive and significant impact on the intention to use AI in performance management.

**Hypothesis: 3**

**H0: Perceived usefulness and perceived ease of use together do not have a significant effect on the intention to use AI in performance management.**

**Ha: Perceived usefulness and perceived ease of use together have a significant effect on the intention to use AI in performance management.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732 <sup>a</sup>	.535	.533	.24924

a. Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness

The model summary shows an R value of 0.732, indicating a strong positive correlation between the combined predictors (perceived ease of use and perceived usefulness) and the intention to use AI in performance management. The R Square value of 0.535 suggests that approximately 53.5% of the variance in the intention to use AI in performance management can be explained by both perceived ease of use and perceived usefulness. The adjusted R Square value of 0.533, which adjusts for the number of predictors, confirms that about 53.3% of the variability in the intention to use AI is explained by these two predictors. The standard error of the estimate is 0.24924, representing the average deviation of the observed values from the predicted values.

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
					.000 <sup>b</sup>
1	28.358	2	14.179	228.248	
	24.600	396	.062		
	52.958	398			

a. Dependent Variable: INTENTION TO USE AI IN PERFORMANCE MANAGEMENT

b. Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness

The ANOVA results indicate a sum of squares for regression of 28.358 and for residuals of 24.600, contributing to a total sum of squares of 52.958. The F value of 228.248, with a significance level (Sig.) of 0.000, shows that the model is statistically significant. This indicates that the combination of perceived ease of use and perceived usefulness significantly predicts the intention to use AI in performance management.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1	(Constant)	.824	.103	8.027	.000
	Perceived Usefulness	.435	.028	15.533	.000
	Perceived Ease of Use	.131	.024	.216	5.564
					.000

a. Dependent Variable: INTENTION TO USE AI IN PERFORMANCE MANAGEMENT

The intercept (constant) is 0.824, representing the predicted value of the intention to use AI in performance management when both perceived ease of use and perceived usefulness are zero.

- Perceived Usefulness:** The unstandardized coefficient (B) for perceived usefulness is 0.435, indicating that each unit increase in perceived usefulness is associated with an increase of 0.435 units in the intention to use AI. The standardized coefficient (Beta) of 0.604 confirms the substantial impact of perceived usefulness on the intention to use AI. The t-value of 15.533 with a significance level (Sig.) of 0.000 indicates that perceived usefulness is a highly significant predictor.
- Perceived Ease of Use:** The unstandardized coefficient (B) for perceived ease of use is 0.131, suggesting that each unit increase in perceived ease of use is associated with an increase of 0.131 units in the intention to use AI. The standardized coefficient (Beta) of 0.216 highlights the positive but smaller effect compared to perceived usefulness. The t-value of 5.564 with a significance level (Sig.) of 0.000 indicates that perceived ease of use is also a significant predictor, though less impactful than perceived usefulness.

Given the statistical significance of the F value (p-value = 0.000), which is less than the alpha level of 0.05, we reject the null hypothesis (H0). This indicates that the combined effect of perceived usefulness and perceived ease of use significantly influences the intention to use AI in performance management. The significant coefficients for both predictors further support that both perceived usefulness and perceived ease of use play important roles in shaping the intention to adopt AI in performance management systems.

## 5. FINDINGS OF THE STUDY

This study aimed to explore the factors influencing the intention to use AI in performance management, specifically focusing on perceived usefulness and perceived ease of use as predictors. The analysis provided several key findings:

### I) Descriptive Statistics:

- Intention to Use AI in Performance Management:** The mean score of 2.9803, with a standard deviation of 0.36477, indicates a moderate level of intention among respondents to adopt AI technologies for performance management. The relatively low variability suggests a consistent but cautious stance towards AI adoption.
- Perceived Usefulness:** The mean score of 3.8102 and standard deviation of 0.50669 reflect a generally positive perception of AI's benefits in performance management, with respondents acknowledging its potential to enhance efficiency and accuracy.
- Perceived Ease of Use:** The mean score of 3.8045 and standard deviation of 0.60073 suggest that respondents find AI tools relatively easy to use, though with some variability in individual experiences.

### II) Regression Analysis:

- Perceived Usefulness:** The regression analysis showed a strong positive relationship between perceived usefulness and the intention to use AI in performance management, with an R value of 0.707 and an R Square value of 0.499. This indicates that perceived usefulness explains approximately 49.9% of the variance in the intention to use AI. The unstandardized coefficient (B) of 0.509 and standardized coefficient (Beta) of 0.707 highlight its significant impact, supported by a t-value of 19.892 (p-value = 0.000). This finding underscores the importance of demonstrating the benefits of AI to encourage its adoption.
- Perceived Ease of Use:** The analysis also revealed a moderate positive relationship between perceived ease of use and the intention to use AI, with an R value of 0.502 and an R Square value of 0.252. Perceived ease of use explains approximately 25.2% of the variance in the intention to use AI. The unstandardized coefficient (B) of 0.305 and standardized coefficient (Beta) of 0.502, along with a t-value of 11.579 (p-value = 0.000), indicate that ease of use is a significant but less impactful predictor compared to perceived usefulness.

### III) Combined Model Analysis:

- When both perceived ease of use and perceived usefulness were included in the regression model, the R value increased to 0.732, and the R Square value rose to 0.535. This suggests that together, these two predictors explain approximately 53.5% of the variance in the intention to use AI in performance management. The F value of 228.248 (p-value = 0.000) confirms the model's statistical significance.
- The coefficients for both predictors were significant, with perceived usefulness having a stronger effect (unstandardized B = 0.435, standardized Beta = 0.604) compared to perceived ease of use (unstandardized B = 0.131, standardized Beta = 0.216). Both predictors contribute to the intention to use AI, with perceived usefulness having a more substantial impact.

## 6. SUGGESTIONS

- Emphasize the advantages and improvements AI can bring to performance management, such as increased efficiency, accuracy, and fairness. Clearly communicate these benefits to stakeholders to boost perceived usefulness.
- Ensure that AI tools are designed with user-friendly interfaces and provide adequate training to reduce perceived ease of use barriers. Simplify the user experience to make adoption easier and more intuitive.
- Offer demonstrations or trial periods for AI tools to allow potential users to experience the benefits and ease of use firsthand. This can help alleviate concerns and increase confidence in the technology.
- Collect feedback from users on their experiences with AI tools and use this information to make improvements. Address any usability issues or concerns that may hinder adoption.
- Provide comprehensive training and ongoing support to users to help them become comfortable with AI tools. This can enhance their perception of ease of use and overall satisfaction.
- Share case studies or success stories of organizations that have effectively implemented AI in performance management. Highlighting positive outcomes can build trust and encourage adoption.
- Continuously monitor the effectiveness of AI tools in performance management and evaluate their impact on organizational goals. Use this information to make data-driven decisions about future AI implementations.
- Engage key stakeholders in the decision-making process for AI adoption. Their input and buy-in can facilitate smoother implementation and greater acceptance of the technology.

9. By addressing these areas, organizations can effectively enhance the perceived usefulness and ease of use of AI tools, leading to higher adoption rates and successful integration into performance management processes.

## 7. CONCLUSION

This study has provided valuable insights into the factors influencing the intention to use AI in performance management, focusing specifically on perceived usefulness and perceived ease of use. The findings reveal that both these factors significantly affect the intention to adopt AI, with perceived usefulness emerging as the more impactful predictor. The analysis shows that perceived usefulness explains approximately 49.9% of the variance in the intention to use AI, highlighting its critical role in shaping adoption decisions. When AI is perceived as beneficial, users are more likely to embrace it for performance management tasks. On the other hand, perceived ease of use also plays a significant role, accounting for about 25.2% of the variance. While its impact is less pronounced compared to perceived usefulness, ensuring that AI tools are user-friendly remains essential for promoting adoption. The combined effect of perceived usefulness and ease of use explains 53.5% of the variance in the intention to use AI, underscoring the importance of addressing both factors to drive successful implementation. The high statistical significance of the predictors confirms their importance in influencing user intentions. To foster greater adoption of AI in performance management, organizations should focus on highlighting the technology's benefits while ensuring that it is easy to use. Providing adequate training, support, and demonstrating AI's effectiveness through real-world examples can enhance users' confidence and willingness to adopt the technology. In summary, understanding and addressing the key factors of perceived usefulness and ease of use are crucial for successful AI integration in performance management. By strategically addressing these areas, organizations can enhance adoption rates and leverage AI to improve performance management processes.

## 8. REFERENCES

- [1] Cheng, Y., & Hackett, R. D. (2021). Artificial intelligence in human resource management: Theory and practice. *Human Resource Management Review*, 31(2), 100732.
- [2] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- [3] Hameed, Z., Khan, I., & Iqbal, A. (2016). The use of artificial intelligence in performance appraisal: An overview. *Journal of Business Studies Quarterly*, 7(4), 94-106.
- [4] Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273-315.
- [5] Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- [6] Kumar, A., & Srikant, M. (2018). AI's impact on performance management systems. *Journal of Human Resource Management*, 9(3), 45-58.
- [7] Nguyen, T. T., Doan, H. Q., & Pham, L. M. (2020). Investigating AI adoption in human resource management
- [8] Rahman, M. M., Islam, M. N., & Karim, M. R. (2019). Assessing AI's effectiveness in performance evaluations. *Journal of Organizational Behavior*, 40(5), 650-667.
- [9] Sahu, P. K., & Kumar, R. (2020). Exploring AI's role in employee development and appraisal. *International Journal of Human Resource Studies*, 10(1), 89-104.
- [10] Taylor, B., Smith, J., & Jones, L. (2021). Analyzing barriers to AI adoption in performance management. *Journal of Management Research*, 23(3), 210-225.
- [11] Belsley, D. A., Kuh, E., & Welsch, R. E. (1980). *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. John Wiley & Sons.
- [12] Neter, J., Wasserman, W., & Kutner, M. H. (1989). *Applied Linear Regression Models*. Irwin.
- [13] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- [14] Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.