

A STUDY ON EMPLOYEE PERCEPTION OF AI IN THE WORKPLACE: ADOPTION, RESISTANCE AND TRUST

** Dr. Rinky Rajwani*

B.K.Birla College (Empowered Autonomous), Kalyan.

Abstract:

The rapid integration of Artificial Intelligence (AI) in workplaces is transforming how organizations operate, enhancing efficiency, and automating decision-making processes. While AI promises significant benefits, its successful adoption depends largely on employees' perceptions, attitudes, and behaviors. This study aims to explore employee perceptions of AI in the workplace, focusing on the factors that influence adoption, resistance, and trust. Using a quantitative research method approach, the research collects quantitative data through surveys from the employees. The study identifies the levels of awareness, willingness to adopt AI, reasons for resistance, and the degree of trust in AI systems. Findings from this research are expected to provide organizations with actionable insights to enhance AI acceptance, reduce resistance, and foster a trusting environment, ultimately enabling smoother AI integration and maximizing its organizational benefits.

Keywords: *Artificial Intelligence (AI), Employee Perceptions, AI Adoption, Employee Resistance, Trust in AI, Workplace AI, Technology Acceptance, ethics*

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

Introduction:

Artificial Intelligence (AI) has emerged as a transformative force in modern workplaces, offering capabilities that range from automating repetitive tasks to enhancing complex decision-making. Organizations across industries are increasingly implementing AI systems to improve operational efficiency, productivity and gain competitive advantages. However, the success of these implementations is not solely dependent on technology; it is equally contingent upon how employees perceive and interact with AI. (Dr. Richa, April 2024)

Employee perceptions, awareness, resistance and trust of AI systems play a critical role in shaping the adoption. While some employees may embrace AI as a valuable tool that simplifies work processes, others may resist due to fears of job displacement, lack of understanding, or mistrust in machine-driven decisions. Such attitudes can significantly affect the

overall effectiveness of AI deployment, potentially hindering productivity gains and innovation. (Priyanga, October 2025).

Despite the growing prevalence of AI in organizations, existing research predominantly focuses on technical efficiency, organizational performance, or managerial perspectives, often overlooking the human dimension of AI adoption. Understanding employees' concerns and attitudes by the managers or leaders is essential for creating strategies that encourage their acceptance and reduce resistance. Employees should be encouraged to share challenges faced when working with AI, allowing organizations to improve collaboration strategies and promote proactive engagement, benefiting both employees and the organization. (Qingqi Meng, May 2025)

This study, therefore, seeks to investigate employee perceptions of AI in the workplace, with a specific focus on the interplay between adoption, resistance,

and trust. By examining these factors, the research aims to provide actionable insights for organizations to design AI systems and implementation strategies that are both technologically effective and socially acceptable, ultimately facilitating a smoother transition to AI-enhanced work environments.

1. Research Problem:

Artificial Intelligence (AI) is rapidly transforming workplaces across industries, automating tasks, optimizing processes, and reshaping roles. While organizations invest heavily in AI implementation, the success of these initiatives largely depends on how employees perceive and interact with AI systems.

Despite AI's potential, employees may exhibit resistance, skepticism, or lack of trust, which can hinder adoption and reduce the expected benefits. Existing literature often focuses on technical efficiency or organizational outcomes, with limited insight into employees' subjective perceptions, attitudes, and behavioral responses toward AI in day-to-day work.

2. Research Objectives:

1. To identify factors that encourage adoption of AI tools at work.
2. To explore reasons for resistance to AI implementation.
3. To examine the level of awareness and understanding of AI among employees.
4. To assess the level of trust employees have in AI systems for decision-making and task automation.
5. To provide recommendations for organizations to improve AI acceptance and reduce resistance.

Review of Literature:

1. Employee Attitudes and Technology Adoption Models

Research on AI adoption in the workplace frequently builds on established technology

adoption theories like the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). These frameworks identify perceived usefulness, perceived ease of use, and behavioral intentions as core determinants of user acceptance. A recent empirical extension of UTAUT specifically tailored for AI shows that organizational role and emotional responses (e.g., anxiety, expectancy) shape adoption patterns among employees, suggesting that psychological factors warrant inclusion in AI-specific acceptance models. This study found that emotional responses, self-efficacy, and role context significantly influence AI usage intentions, highlighting the ways employees engage with AI beyond purely rational metrics. (KDV Prasad, October 2025). The successful integration of AI into the workplace requires not only technological readiness but also a deep understanding of employee perceptions and concerns. By actively managing these perceptions, organizations can ensure that AI adoption leads to enhanced productivity, job satisfaction, and organizational success, while minimizing negative outcomes such as resistance, job insecurity, and ethical dilemmas. Organizations must remain adaptable and responsive to employee concerns, ensuring that AI is integrated in a way that benefits both employees and the organization as a whole. (Dr. Renu, April 2025)

2. Trust as a Mediator of Adoption

Trust in AI systems emerges consistently as a crucial predictor of adoption. Empirical evidence from organizational research indicates that employee trust—both emotional and cognitive—significantly affects AI uptake and performance outcomes. In effect, trust mediates the relationship between perceived AI competence and adoption behavior, meaning that even when employees

recognize AI's capabilities, they may fear from using it unless they also trust the system's reliability and fairness. This linkage has been demonstrated in studies of diverse organizational samples, where higher trust levels correlate with greater adoption rates and better workplace outcomes. (Thevisuthan, July 2025)

Employee trust is crucial for AI adoption in the workplace. Trust is fostered through transparency, fairness, communication, and training. Employees who understand AI and see it as supportive are more likely to embrace it, while lack of trust hinders adoption, even for advanced systems. Organizations should prioritize explainable AI, open communication, training, collaboration, and tools that enhance—not replace—employee roles. When trust is nurtured, AI becomes a productive partner; when neglected, resistance and misuse rise. Building trust is essential for sustainable AI-driven transformation. (dike, April 2025)

3. Well-Being, Stress, and Wider Employee Impacts

Beyond adoption and trust, AI's integration into work environments has complex implications for employee well-being. Recent journal research shows that while AI adoption does not directly affect well-being, it has indirect effects through task optimization and workplace safety improving specific job facets that contribute to psychological health. Conversely, other studies examine negative emotional impacts, finding that awareness of automation risks predicts increased job stress and reduced affective well-being, mediated by stress responses. This work emphasizes that perceptions of AI are not only about functional acceptance but also deeply tied to employees' psychological states and health outcomes. (Alena valtonen, october 2025)

AI is transforming work, presenting both opportunities and challenges. While fear of job loss and resistance are natural, strategic interventions—like open communication, upskilling, and fostering human-AI collaboration—can turn these concerns into growth opportunities. Companies that frame AI as a supportive partner, provide resources, and prioritize employee well-being enable workers to adapt, thrive, and find meaning in AI-enhanced roles. Human-centric approaches not only reduce stress but also boost creativity, productivity, and job satisfaction. Future research should explore AI's long-term effects on mental health and develop sector-specific strategies for workforce adaptability. (M.S.L. Narasimha, Dec 2024)

4. Trust, Ethics, and Organizational Influence

The organizational context especially ethical culture, leadership, and communication—shapes employee perceptions of AI. Research demonstrates that ethical clarity, transparent policies, and supportive climate help reduce anxiety, increase trust, and mitigate job insecurity linked to AI deployment. This study shows that organizational attitudes toward AI are shaped by social and contextual factors rather than technology alone. Employees' perceptions of AI emerge from the interaction between organizational culture, innovation practices, and individual experiences. Ethical clarity, supportive work climates, and participatory innovation encourage trust and openness toward AI. In contrast, ethical misalignment and negative past experiences increase anxiety and resistance. The findings offer a comprehensive view of when AI is perceived as useful, trustworthy, or threatening. Transparent organizational procedures play a key role in shaping positive attitudes. Participatory innovation initiatives further strengthen employee acceptance of AI. Additionally, individual user experiences

highlight the importance of user experience and service design in promoting positive AI interactions. Together, these factors complement technical effectiveness and support responsible AI adoption. (Silvia Marocco, November 2025)

This study provides strong empirical evidence on the critical role of AI-driven strategies in shaping modern workplace dynamics. It confirms that workforce upskilling focused on AI significantly improves job sustainability within AI-enabled industries by maintaining employee relevance and job security. The findings also show that transparent handling of AI-related ethical issues strengthens employee trust. Employees' perceived usefulness of AI upskilling programs mediates the relationship between training efforts and job sustainability, meaning belief in their practical value enhances outcomes. Additionally, a transparent and inclusive communication culture moderates this relationship, reinforcing trust. Overall, the study emphasizes the combined importance of technology, ethics, employee perception, and organizational culture which contributes to a safer, more secure work

environment that supports employee wellbeing. (Mohamed AL Salmani, Feb 2025)

Research Methodology :

- **Research Type:** The study follows a quantitative research approach and is specifically descriptive and analytical in nature.
- **Sampling Method:** The sampling method used is non-probability convenience sampling, as data is collected from a readily available group of 60 employees through a survey questionnaire.
- **Data Collection:** A structured questionnaire with Likert-scale items will measure adoption, resistance, and trust.
- **Data Analysis:** Data will be analyzed using descriptive statistics, correlation, and Anova.

Hypothesis:

1. H1: Higher awareness of AI leads to greater adoption among employees.
2. H2: Perceived usefulness, ease of use, and support increase AI adoption.
3. H3: Job insecurity, lack of understanding, or fear of AI leads to resistance.

Data Analysis :

1. Descriptive statistics of Hypothesis 1



Source: Primary Data

Interpretations:

Overall, respondents show a positive perception of AI tools in the workplace, particularly in terms of time savings, ease of use, and support for daily tasks, all of which received high mean scores. However, comparatively lower ratings for organizational training and communication about AI changes suggest a need for improved institutional support to help employees better adapt to and fully leverage AI technologies.

2. Correlation for Hypothesis 1

H1 - Higher awareness of AI leads to greater adoption among employees.

		A	B	C	D	E	F	G	H	I
A	I am aware of the AI tools available in my workplace.	1								
B	I understand how AI can support my daily tasks.	0.51357	1							
C	I actively seek information about AI technologies at work.	0.322678	0.571184	1						
D	My organization provides sufficient training on AI tools.	0.315947	0.389316	0.378361	1					
E	I feel informed about AI-related changes in my work processes.	0.31096	0.222936	0.501292	0.486614	1				
F	AI improves the quality of my work outcomes.	0.52117	0.412583	0.478083	0.174606	0.543904	1			
G	AI saves me time when performing tasks.	0.475197	0.503364	0.320629	0.117274	0.248518	0.703036	1		
H	Support from colleagues and managers encourages AI adoption.	0.212293	0.248512	0.268898	0.294705	0.321695	0.461687	0.544338	1	
I	I find AI systems easy to use and understand.	0.268551	0.432732	0.594676	0.267652	0.287375	0.422829	0.383389	0.192688	1

Source: Primary Data

Interpretation:

The data reveals that awareness of AI tools and understanding their support for daily tasks are positively correlated, suggesting that employees who are more aware of AI are better able to comprehend its benefits. Actively seeking information and receiving sufficient training on AI are linked to feeling more informed and experiencing improvements in work outcomes. AI's ability to save time is strongly correlated with better work quality, highlighting its practical benefits. While support from colleagues and managers weakly correlates with finding AI easy to use, it still plays a role in encouraging AI adoption. Overall, the data underscores the importance of awareness, training, and support in optimizing AI usage and its effectiveness in the workplace.

3. Anova for Hypothesis 1

H1 – Higher awareness of AI leads to greater adoption among employees.

Anova: Single Factor				
SUMMARY				
Groups	Count	Sum	Average	Variance
I am aware of the AI tools available in my workplace.	60	235	3.916667	0.992938
I understand how AI can support my daily tasks.	60	245	4.083333	0.653955
I actively seek information about AI technologies at work.	60	233	3.883333	0.74887
My organization provides sufficient training on AI tools.	60	204	3.4	1.159322
I feel informed about AI-related changes in my work processes.	60	220	3.666667	1.00565
AI improves the quality of my work outcomes.	60	238	3.966667	0.948023

AI saves me time when performing tasks.	60	246	4.1	1.040678		
Support from colleagues and managers encourages me to use AI.	60	220	3.666667	1.141243		
I find AI systems easy to use and understand.	60	240	4	0.677966		
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	25.69259	8	3.211574	3.453865	0.000683	1.955829
Within Groups	493.75	531	0.929849			
Total	519.4426	539				

Source: Primary Data

Interpretation:

The one-way ANOVA results show a statistically significant difference among the AI awareness and adoption-related factors ($F = 3.45$, $p = 0.000683 < 0.05$). Since the calculated F-value is greater than the critical F-value (1.96), the null hypothesis is rejected. This indicates that employees' awareness and understanding of AI tools significantly influence their adoption and use of AI in the workplace. Therefore, Hypothesis 1 is supported, confirming that higher awareness of AI leads to greater adoption among employees.

4. Anova for Hypothesis 2

H2 – Perceived usefulness, ease of use, and support increase AI adoption.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
AI makes my work tasks easier.	60	248	4.133333	0.829379		
I am concerned that AI could replace my job.	60	173	2.883333	1.698023		
I feel anxious when required to use AI tools.	60	166	2.766667	1.131073		
I resist using AI because I do not fully understand it.	60	156	2.6	1.328814		
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	88.54583	3	29.51528	23.67241	1.98E-13	2.642851
Within Groups	294.25	236	1.246822			
Total	382.7958	239				

Source: Primary Data

Interpretation:

The one-way ANOVA results indicate a statistically significant difference among the factors influencing AI adoption ($F = 23.67$, $p < 0.001$). Since the calculated F-value is much higher than the critical F-value (2.64), the null hypothesis

is rejected. This confirms that perceived usefulness, ease of use, and related attitudes significantly influence employees' adoption of AI. Therefore, Hypothesis 2 is supported, showing that positive perceptions encourage AI adoption, while anxiety, fear, and lack of understanding act as barriers.

5. Anova for Hypothesis 3

H3 – Job insecurity, lack of understanding, or fear of AI leads to resistance

Anova: Single Factor						
SUMMARY						
Groups		Count	Sum	Average	Variance	
I worry about the ethical implications of AI decisions.		60	199	3.316667	1.338701	
I prefer traditional methods over AI-assisted processes.		60	166	2.766667	1.503955	
I trust AI to make accurate decisions in my work.		60	196	3.266667	1.148023	
I am confident in the reliability of AI systems.		60	199	3.316667	1.067514	
Transparency about AI processes increases my trust in it.		60	216	3.6	0.922034	
I feel comfortable sharing work responsibilities with AI systems.		60	208	3.466667	0.964972	
ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	24.18889	5	4.837778	4.179387	0.001056	2.239486
Within Groups	409.7667	354	1.157533			
Total	433.9556	359				

Source: Primary Data

The one-way ANOVA results show a statistically significant difference among resistance-related factors toward AI ($F = 4.18$, $p = 0.001 < 0.05$). Since the calculated F-value exceeds the critical F-value (2.24), the null hypothesis is rejected. This indicates that job insecurity, lack of understanding, trust, and fear-related concerns significantly influence employee resistance to AI. Therefore, Hypothesis 3 is supported, confirming that negative perceptions and uncertainties about AI contribute to resistance, while transparency and confidence reduce it.

Conclusion:

The study demonstrates that employees' adoption of AI in the workplace is strongly influenced by awareness, perceived usefulness, ease of use, and organizational support. Descriptive statistics and ANOVA results show that employees who are well-informed about AI tools, understand their benefits, and receive adequate training are more likely to adopt and effectively use AI,

confirming that awareness drives adoption. Positive perceptions, such as AI saving time, improving work quality, and simplifying tasks, further enhance adoption, while anxiety, fear of job replacement, and lack of understanding act as barriers. Additionally, resistance is influenced by concerns about job security, ethical implications, and trust in AI systems, whereas transparency and confidence in AI reduce reluctance.

Overall, the findings highlight the critical role of awareness, training, supportive management, and clear communication in promoting AI adoption, helping employees leverage AI effectively while minimizing resistance and enhancing workplace productivity.

References:

1. Alena valtonen, m. s. (october 2025). *AI and employee wellbeing in the workplace: An empirical study. Journal of Business Research.*
2. dike, C. (April 2025). *Employee Trust in Artificial Intelligence and Its Impact on Technology Adoption in the Workplace.*
3. Dr. Renu, D. (April 2025). *A study of employee's perception of artificial intelligence in today's era. Journal Publication of International Research for Engineering and Management (JOIREM).*
4. Dr. Richa, N. K. (April 2024). *The Impact of Artificial Intelligence in the Workplace and its Effect on the Digital Wellbeing of Employees. Journal for Studies in Management and Planning.*
5. KDV Prasad, S. S. (October 2025). *Factors Affecting the Adoption of Generative AI Tools Among Information Technology Employees: A UTAUT3, TTF, and SOR Perspective. Journal of Computational and Cognitive Engineering.*
6. M.S.L. Narasimha, P. L. (Dec 2024). *Empowering Employees In The Age Of Ai: From Resistance To Resilience". International Journal of Creative Research Thoughts (IJCRT).*
7. Mohamed AL Salmani, B. S. (Feb 2025). *AI in the Workplace: Exploring the Impact of Upskilling, Ethical Practices, and Transparency on Employment Sustainability and Trust. Journal of Information Systems Engineering and Management.*
8. Priyanghaa, D. M. (October 2025). *AI Adoption in HR: Resistance, Readiness, and the Role of Change Management. Journal of Marketing and Social Research.*
9. Qingqi Meng, T.-J. W. (May 2025). *Effects of Employee–Artificial Intelligence (AI) Collaboration on Counterproductive Work Behaviors (CWBs): Leader Emotional Support as a Moderator. Behavioral Sciences.*
10. Silvia Marocco, D. B. (November 2025). *"Attitudes Toward Artificial Intelligence in Organizational Contexts". AI.*
11. Thevisuthan, P. (July 2025). *The impact of artificial intelligence literacy on employee engagement and trust in organizational AI integration: A systematic review. International Journal of Science and Research Archive, 658-662.*

Cite This Article:

Dr. Rajwani R. (2026). *A study on Employee Perception of AI in the Workplace: Adoption, Resistance, and Trust.* In **Aarhat Multidisciplinary International Education Research Journal: Vol. XV (Number I, pp. 159–166)**

Doi: <https://doi.org/10.5281/zenodo.18642034>