

Artificial Intelligence Adoption in Human Resource Management: Implications for Employee Trust and Organizational Effectiveness

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Abstract

Artificial Intelligence (AI) is increasingly transforming Human Resource Management (HRM) by changing the recruitment, employee measurement, workforce planning, performance management and decision-making processes. While AI HR systems have several benefits, such as improving process automation, consistency, and data-driven decision-making, there are also some considerations to keep in mind regarding employee trust in the system and its performance within the organization. This research examines the implications of the use of AI in HRM, particularly employees' perceptions regarding algorithmic decision making, transparency, fairness, privacy and human oversight. In sum, the study indicates that employee trust plays a pivotal role as an intermediary between the adoption of AI in HR and organizational effectiveness. When staff members trust that AI systems are accurate, reliable, fair, and can help them make HR-related decisions, they will be more confident in using AI for HR-related decisions and have positive attitudes toward organizational changes. However, there could be problems with surveillance, replacement of jobs, privacy, algorithmic bias, and human touch that may make citizens wary of accepting AI. This study adopts a conceptual research method, building on literature previously published, regarding the topic of AI, Strategic HRM, organizational trust, technology acceptance, and employee behaviours. Its focus is on the responsible governance of AI, the role of employees, explainability, data protection, and human-AI collaboration, as keys to successful AI implementation. The research shows that there is more to it than technology to make an organization effective; it needs to build a reliable and people-centric AI environment. Building trust among employees can help with technology adoption, enhance engagement, aid in decision-making, and help organizations achieve strategic benefits from AI-powered HRM.

Keywords: Artificial Intelligence, Human Resource Management, Employee Trust, Organizational Effectiveness, AI Adoption, Algorithmic Decision-Making, Human-AI Collaboration, Responsible AI.

Introduction

AI is becoming more and more a part of the organizational working and decision-making activities as well as the design of human resource practices. AI's adoption in Human Resource Management (HRM) has transcended basic automation to now impact recruitment, talent acquisition, performance management, learning and development, workforce planning, compensation, employee engagement, and retention. With intelligent systems, HR professionals can analyze vast amounts of employee data, detect patterns, gain predictive insights and make

quicker and better-informed decisions. With a focus on efficiency and data-driven decision-making in HR, the use of AI has emerged as a key component of modern HR transformation.



Source: <https://www.tmi.org/blogs/ethical-ai-in-hr-challenges-risks-and-best-practices>

However, AI has brought a human touch to HRM in its increasing applications. Human resource decisions impact the employee's career, opportunities, rewards, performance reviews, and working environment. As more and more decisions are based on or made through algorithms, staff may wonder about the fairness, transparency, accuracy and reliability of the systems. The research also suggests that employee perceptions and trust are crucial in situations where AI is integrated into HR roles. While AI in HR practices can enhance organizational processes, factors such as privacy, security, bias, explainability, and overreliance on technology might affect employees' receptivity to the adoption of such systems.

Therefore, employee trust is a crucial element in the success or failure of AI integration in the workplace. Employees' trust in AI-supported decisions, interactions with intelligent systems, perceived fairness of the organization, and management trust are all affected by trust. If employees feel that AI can be trusted, is transparent, and offers support, they are more likely to accept the HR processes that are technology-integrated. Employees who trust AI systems, who know that they are transparent and supportive are more likely to accept technology-enabled HR processes. On the other hand, if they aren't sure about how algorithms gather and apply information about them, or how they make important decisions, there can be resistance and employees may have less faith in the technology and the organization.

Adopting AI also has implications for organizational effectiveness. Intelligent HR systems can cut down administrative tasks, boost the workforce analytics, facilitate talent identification, customize employee growth, and help in strategic workforce planning. With proper HR practices and a clear strategy, there are indications that AI implementation in HR can lead to improved employee engagement and experience. In no time at all, AI-enabled HR systems have emerged as a potential solution to improve recruitment, anticipate employee performance, and tailor training.

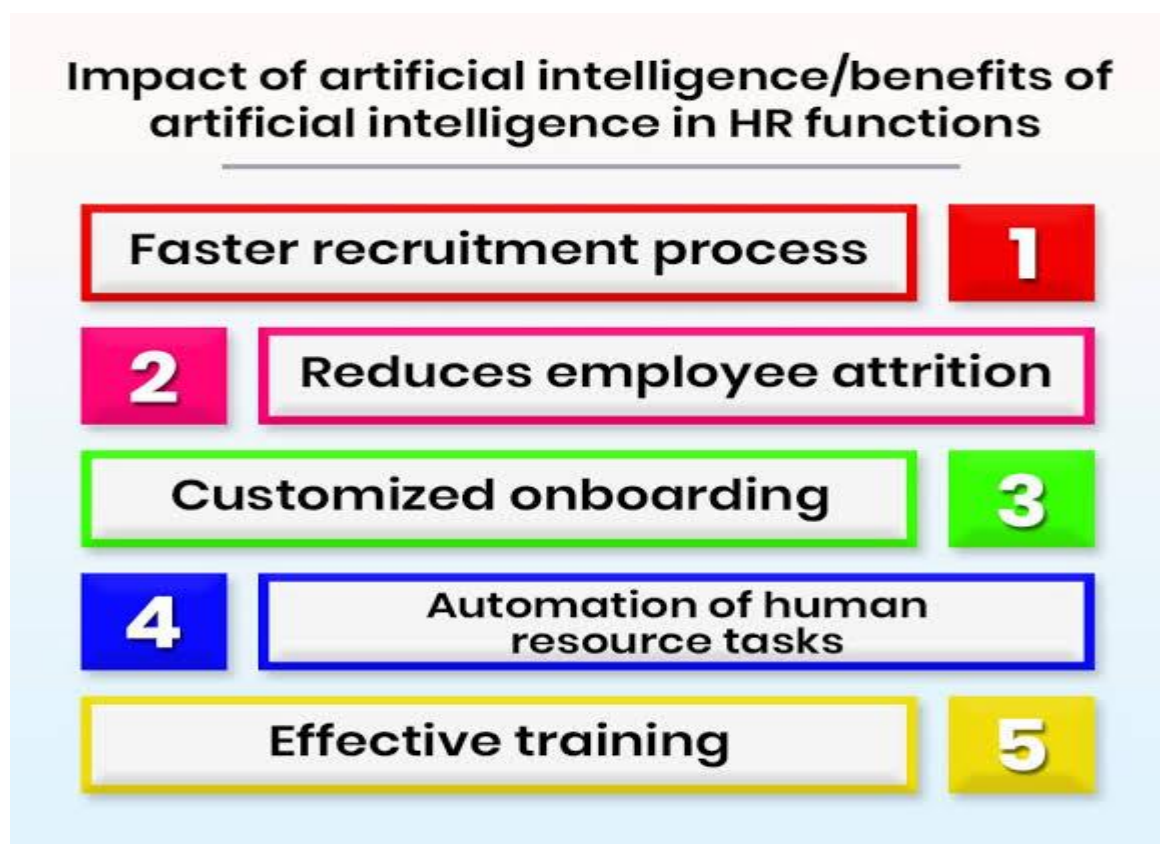
That being said, technological efficiency does not necessarily correlate with organizational effectiveness. Over-automation of HR decisions can lead to a sense of lack of human recognition or less personal contact. Recent research proposed that organizational dehumanization might be one of the processes that could result in negative employee reactions to the implementation of AI in HR-related tasks, including a decline in commitment and an increase in turnover intentions. This underscores the need to strike the right balance between technology and human judgment in decision-making for HR.

In the interim, it is essential to eliminate employee resistance and establish a setting that enables the interaction and partnership of humans and intelligent systems to achieve successful AI implementation. Reasons for resistance to AI include fear of job loss, fear of not being technologically competent, mistrust, or not wanting to lose control of or risk something they don't know. Thus, the issues of organisational accessibility, human/AI collaboration, employee engagement and clear communication can be crucial to minimising resistance and to successfully implement it.

Based on these, the present study aims to discuss implications of the adoption of Artificial Intelligence on Employee Trust and effectiveness of Human Resource Management in Organizations. The study highlights the need for transparency, fairness, human oversight, and responsible implementation, as it explores the relationship between AI adoption in HRM, employee trust, and organizational effectiveness. These can be harnessed to develop AI-powered HR systems which not only boost organizational effectiveness and strategic outcomes but also foster trust and interrelationships among employees. The study thus helps to advance the on-going debate of how organizations can advance technologically while maintaining human-centered principles underlying effective Human Resource Management.

Background of the study

In today's business world, Artificial Intelligence (AI) has become a revolutionary technology that has impacted how organizations handle information, decision-making, resource allocation and employee interaction. In the past, HRM was associated with personnel-related processes and administrative tasks, and these days HRM is adopting the AI technologies to the recruitment, selection of employees, performance management, workforce planning, learning and development, compensation, employee engagement and talent management. Applications like these can support organizations to operate massive amounts of data associated with workers, spot patterns, automate repetitive tasks, and support them in making faster and potentially more constant decisions. New research indicates that the practice of AI in HRM is shifting from usage experimentation to organizational adoption.



Source: <https://www.gopakumarpillai.com/ai-human-resource-management/>

AI's impact on HRM is especially notable due to the fact that HR decisions impact the careers of employees, career opportunities, compensation, performance assessments, and the experience they have at work. AI-based talent screening systems can help identify candidates, predictive analytics can assist in talent forecasting, and AI-driven performance management systems can utilise employee data to offer insights for management decisions. These capabilities can help streamline administrative processes, shorten processing time, implement personalization and enable access to real-time data. As algorithms play an increasingly prominent role in decision-making that affects people, however, transparency, privacy, fairness, accountability, bias, and trust in decisions made with the assistance of algorithms becomes an issue.

Thus, the trust of the employees towards the application of AI in HRM is crucial for its successful implementation. Understanding that AI systems are reliable, transparent, fair, helpful, and supportive of their work can encourage employees to engage with these systems. When employees feel confident in the reliability of AI systems, perceive them as transparent and fair, find them beneficial, and believe they can help them with their work, they are more likely to interact with the system. On the other hand, issues like privacy and surveillance, job loss and replacement, misinformed algorithmic decision-making, personal information misuse, and the lack of understanding of how AI makes decisions can lead to uncertainty and resistance. Trust, reliability, credibility, readiness of the organization, management support, and perceived advantages of the technology, according to recent studies conducted with HR professionals in India, can affect how organizations use AI within HRM.

In the context of employee trust and AI, it's particularly important in the realm of performance evaluation and other key HR determinations. The workers ask themselves questions such as whether algorithmic assessment is the right way to assess their work or whether the algorithmic systems embed their preconceptions. The latest study on AI in performance evaluation reveals that perceptions of distributive justice and procedural justice are linked to trust in AI, which in turn can help to predict higher affective commitment towards the organization. This indicates that there are other factors to take into account besides efficiency and cost-saving; organizations must also ensure that employees feel fair and legitimate.

One key factor is the effect that the use of Artificial Intelligence has on employee engagement and employee experience. AI can automate administrative tasks, freeing up time for HR professionals to engage in more strategic activities and employee-centric tasks. But the advantages of AI can vary significantly based on how it is implemented and incorporated into the current HR processes. Based on empirical evidence in recent years, the strategic intent and strategic HRM practices are potential drivers of the impact of adopting AI on the engagement of employees and their experience. Therefore, AI use should be considered as an organizational change process, and not just the installation of new software.

In the meantime, employees will have various responses to increased AI utilization in their work. While some see AI as a means of augmenting their capabilities, boosting productivity, and offering improved decision support, others see it as posing a threat to their job security, independence, or professional identity. A new study on AI resistance shows that mistrust, perceived inefficacy, anxiety, and concerns about humans in more and more automated workplaces are significant barriers to the adoption of AI. Therefore, there is a need for accessibility to AI, suitable human-AI collaboration, as well as an organizational effort of creating the legitimacy of AI technologies and employee involvement.

The question is especially important in relation to generative AI, which has made the application of AI more than just automation and analytics. Generative AI can be used as a tool for content creation, communication with employees, learning, knowledge management, HR service delivery, and decision support. Simultaneously, it is relatively new to organisations, which means new concerns about reliability, confidentiality, accountability, human oversight and employee acceptance. Recent research has shown that trust can play an important mediating role between employees' perceptions of generative AI and outcomes such as organizational commitment, engagement, and performance.

AI can also have a beneficial impact on the effectiveness of the organization in terms of the quality and timeliness of its decisions made by managers. By analysing workforce data, AI-powered HR analytics can deliver insights that guide evidence-based actions in recruitment, retention, performance, skills and workforce planning. Recent

studies suggest that HR analytics adoption and positive attitudes toward AI can play a role in managerial decision-making, whereas organizational structures, individual capabilities, and system support are found to impact successful adoption. Therefore, organizational effectiveness will rely, not only on the adoption of AI, but also on the availability of suitable technological infrastructure, the skills and competencies of the human workforce, leadership support, governance processes, and employee acceptance of AI.

However, there are some challenges that need to be addressed when it comes to using AI in HRM. Challenges to effective adoption include data security, privacy issues, implementation costs, technological complexity, lack of digital skills, organizational resistance, and ethical considerations. Hence, the goal of implementing technology should be balanced with HR processes that are people-focused, to ensure the success of implementation. They need AI policies to define their roles and responsibilities, to protect the information of their employees, with human oversight and that they are transparent on the use of AI.

Therefore, Artificial Intelligence Adoption in Human Resource Management: Implications for Employee Trust and Organizational Effectiveness examines the correlation between AI adoption, employee trust and organizational effectiveness. It takes the view that the value of AI in an organization is more than just automation and efficiency—and even cost-effectiveness. To achieve sustainable AI use in HRM, it's equally crucial for employees to trust in the use of AI in HRM, believe that it is just, transparent, responsible in data usage, has a human touch, and supports organizational goals. Understanding these relationships can help companies develop HR tools that leverage AI to improve efficiency and foster trust among employees, while retaining a human element.

Justification

Artificial Intelligence (AI) has revolutionized the HRM field, changing how companies go about their recruitment and selection processes, training, implementing and evaluating, and retaining their employees. HR systems that are powered by AI can handle vast amounts of information on the workforce, automate manual tasks, help make predictions, and offer personalized help for the employee. However, the technological efficiency is not the case when it comes to HRM, as the effectiveness of AI in HRM relies on other factors. These systems are also only effective if the employees believe they are safe, equitable, clear, secure and working in their interests. Trusted AI can be a crucial factor in how employees perceive and embrace AI-powered HR processes. Evidence suggests that trust in AI can have a significant impact on its perception and adoption in HR processes.

This study's rationale stems from the increasing worry that AI-driven HR decisions could impact employees in ways that impact their career trajectory and work experience directly. Algorithmic systems are increasingly utilized in recommendations for recruitment, employee performance, promotions, algorithmic monitoring, workforce planning, and learning recommendations. They can improve performance, reliability and productivity, but can also create privacy, bias, transparency, employment and the possibility of decisions being made without adequate human oversight problems. These can erode trust among staff and make it difficult to get AI buy-in. Empowered by recent studies, mistrust, technological anxiety, and concerns about the implications of AI are major contributors to employee resistance.

Employee trust is therefore an important element in the implementation of AI in HRM. Having confidence in the accuracy, transparency, and lack of bias in these systems, as well as in their ethical application, can make them more likely to accept HR decisions made with the help of AI. Employees are more likely to accept AI-driven HR decisions if they have confidence in the accuracy, transparency, absence of bias, and ethical application of the AI systems. If, however, workers believe the technology is unfair, opaque, or that they are being monitored or that their personal information is being misused, it can cause a drop in trust and their attitudes towards the technology and the organization. Recent research indicates that employees' perception of HR changes made with AI can potentially impact their willingness to embrace these technologies, as trust can serve as a mediator.

This study is also justified in light of the knowledge gained from investigating whether adoption of AI can affect the organizations themselves, both in terms of their effectiveness, or simply as an enhancement to the HR processes of the individual organizations. AI has the potential to streamline administrative tasks, enhance the accuracy and timeliness of HR decisions, aid in workforce planning, and facilitate evidence-based HR

management. But such advantages will be contingent upon the readiness of the organization, the technological structure, the leadership's support, employee skills, and the proper governance. Factors relevant to successful adoption of AI in HR identified as Organisational, Technological and Environmental are: Management support, HR readiness, competitive pressure, vendor support, reliability and credibility.

Additionally, the correlation between the adoption of AI and the outcomes of the employees needs to be studied in greater detail. When aligned with organisation's objectives and appropriately implemented through suitable HR practices, AI-driven HR practices can enhance the employee engagement and experience. Empirical research recently suggests that strategic intent and strategic HRM practices can act as enablers of how AI adoption can help improve employee engagement and employee experience. It's not only about investment; AI is also transforming the approach to HR strategy and organization.

A rising need for Human-Centred AI Governance in HRM is also a major factor. AI can offer efficient recommendations but other considerations, such as ethics, interpersonal relationships, and context, are areas where algorithms are less effective when making HR-related decisions. It is therefore crucial that fairness, explainability, accountabilities, data protection and human oversight are part of the HR processes in which AI is involved. Overall, the study highlights the importance of transparency in enterprise HR systems, data security, system readiness, and the synergies between humans and AI to harness the benefits while effectively managing risks involved in AI usage.

The study has important implications in the era of emerging economies as companies are rapidly adopting digital HR technologies, grappling with technological infrastructure differences, employee capabilities, organizational culture and regulatory readiness. Such environments provide valuable insights into employee trust that can inform the design of more effective, socially responsible, and technologically suitable human resource management (HRM) systems that leverage AI.

Therefore, it is justified to do research on this organizational and human transformation as it is not technological transformation in the context of HRM and there is need of investigation. The study can contribute to the understanding of what makes AI valuable in HR practices and how that impacts the trust of the employees and the success of the organization. The outcome can guide HR practitioners and managers to develop transparent, ethical, employee-centric, and intentional AI adoption strategies that promote trust and boost the effectiveness and efficiency of organizations.

Objectives of the Study

1. To study the level of Artificial Intelligence use in Human Resource Management practices.
2. Identify the factors that affect the adoption of AI in HRM such as technological readiness, organizational support, perceived usefulness, ease of use, and employee readiness.
3. To understand how trust in AI-powered HRM systems are accepted by employees in recruitment, performance assessment, training, workforce planning, and other HR-related areas.
4. To analyse the correlation between the use of AI in HRM and employees' trust.
5. To study the impact of AI-based HRM strategies on the effectiveness of the organization, specifically on productivity, efficiency, decision making and employee outcomes.

Literature Review

With the advent of Artificial Intelligence (AI) in HRM, it has transformed the way HRM is conducted, spanning from recruitment and selection to workforce analytics, employee learning and development, and employee engagement and satisfaction. New studies have taken the discussion about how effective AI is for HR past the question of whether it's effective, and into the realm of employee trust, perceived fairness, transparency, control of humans, resistance, and organization effectiveness. It is particularly important to recognize that alongside the technological capabilities of AI in HRM, there is a need for employee receptivity and trust in algorithmic systems for the system to be successful.

A systematic review of research on employee trust in AI in HRM revealed that factors including algorithmic bias, transparency, privacy, accountability, and job displacement have an impact on employee trust (Du 2024). While

the review highlights the potential benefits of AI in enhancing various HR processes, there is a risk of human judgment being replaced by AI, leading to potential resistance and a lack of trust in AI-driven decisions. This is how trust plays a crucial role in effective HRM with AI.

The researchers, Moritz et al. (2024), analyzed the reactions of employees and applicants to algorithmic decision-making in HRM in a meta-analysis of 30 studies on 42 samples and 10,601 participants. Their results indicated mostly negative relationships between algorithmic decision-making and perceptions of fairness and trust, as well as organizational outcomes (e.g., organizational attractiveness and turnover intentions). The results, however, varied depending on the HR task performed, as well as when AI was used as a standalone tool versus a support tool, and the context of the HR role. The results indicate that keeping humans in the loop could be crucial in minimizing the adverse employee responses to AI-supported HR practices.

Tandon et al. (2025) examined employees' attitudes towards algorithmic HRM and found that there is a duality between appreciation and aversion with algorithmic decision making. They found that while workers see the productivity and uniformity that AI brings to their work, they also feel uneasy and skeptical about it. This duality suggests that without employee acceptance, high levels of technological efficiency are not enough. Organizations need to therefore tackle the perceptions of their employees and offer adequate information on the operation of algorithmic HR systems.

Leavitt et al. (2024) developed a model of the process that human managers go through when introducing algorithmic performance management systems. According to their work, algorithmic systems may be regarded as forms of organizational control, and may diminish the trust of employees. But human managers can be a key link in the chain when it comes to maintaining trust, applying reflexivity and contextual judgment when considering algorithmic recommendations. Thus, the study stresses the role of human–AI interplay, not automation.

Pedrami and Vaezi (2025) reviewed studies related to the factors that affect the adoption of AI in HRM and determined that there were four factors affecting the implementation of AI in HRM, which are technological, organizational, environmental, and human. They found that while implementing AI is a matter of technology, it is also a matter of mindset and readiness, employee readiness, managerial support, and conditions for implementation. This highlights the need for aligning technology with organizational capabilities for HRM's effectiveness.

Benabou and Touhami (2025) adopted Systematic Review method using PRISMA to find the main areas of application of AI in HRM i.e., recruitment and selection, talent management, and workforce analytics and employee development. They stress the importance of human-AI partnerships to harness the advantages of AI and tackle ethical and organizational challenges. The authors also highlight the importance of responsible AI, particularly with regard to algorithmic bias, transparency, privacy, and accountability.

Bandara et al. (2025) examined the issue of algorithmic bias in the context of Artificial Intelligence (AI) in HRM and its influence on the effectiveness of strategic HRM. Their empirical research with HR managers and employees revealed a need to address algorithmic bias, with managers potentially seeing AI-driven HR processes in a positive light, and employees feeling uncomfortable with the process being considered fair and trustworthy. This is significant because employees' perceptions can shape their intention to leave and how effective HR interventions are. The results indicate that there is a need for companies to establish processes to recognize and reduce algorithmic bias and uphold trust in AI-driven HR choices.

Nguyen and Connolly (2025) examined in particular the trustfulness of employees in AI-aided performance assessment. According to their research, both distributive and procedural justice positively correlate with trust in performance evaluation systems that involve AI, and distributive justice significantly impacts this relationship. Moreover, the trust in AI was correlated with employees' affective commitment to the organization. The results offer concrete proof of the role of perceptions of fairness as a channel through which the use of AI might affect employees' attitudes and organizational outcomes.

Alawiyah et al. (2026) conducted a literature review to summarize recent studies on AI in HRM and found that the key areas of application are recruitment, selection, talent management, workforce analytics and employee

development. The algorithmic bias, transparency, privacy and accountability issues are also recurring problems identified by their review. Importantly, literature indicates that the adoption of AI can have positive outcomes like increased productivity and engagement, and the other outcomes could be negative like job insecurity and technostress. This means there is a need to evaluate organizational effectiveness not only in terms of outcomes of performance, but also through the outcomes of employees.

Chytilová and Mach-Król (2026) also show the growing maturity of the area of research related to AI and organizational agility, with the emerging body of literature shifting from the assimilation of AI, to the strategic integration of AI, and to the collaboration between human and AI. The wider organization aspect is particularly relevant to HRM as AI-based HR systems more and more serve as strategic information-based systems instead of administrative ones. As a result, HR must play a role in the organization's success with data-driven workforce planning, predictive analytics, and strategic talent hiring.

The systematic review on organizational justice and trust in AI-enabled HRM (2026) was a particularly important contribution, as it explored how trust is perceived at various phases of implementing AI in HRM. The review finds organizational justice to be a vital context for employee trust, and suggests that trust can lead to positive employee, team, and organizational outcomes. This further confirms the hypothesis that trust should be taken into account during the AI implementation process and not only after deployment.

The 2026 review of AI supported HRM implementation also drives home the “unintended” outcomes of AI implementation. Although AI can boost productivity and facilitate better decision making, it can also raise questions about autonomy, fairness, transparency, and acceptance from employees while the system is put into place. This implies that a balance of implementation must be used; balancing between technology capabilities and human oversight, ethics, employee involvement and organizational change management.

Material and Methodology

The study was of a descriptive and analytical design that aimed to investigate the application of Artificial Intelligence (AI) in Human Resource Management (HRM) and how it affects employees' trust in their employers and companies' performance. Primary data was gathered from the employees of the organizations where AI is being deployed or is being planned in HR related tasks including recruitment, employee screening, performance management, workforce analytics, learning and development, employee support systems etc. The main data-collection tool was a structured questionnaire, where the statements were rated on a five-point Likert scale from strongly disagree to strongly agree. The main factors taken into account in the study were the adoption of AI in HRM, transparency of AI-driven decisions, trust, perceived fairness, acceptance by employees, and organizational effectiveness. It was important to have the right sample of participants since the respondents should have enough exposure to AI supported HR processes, which was obtained by using the purposive sampling technique. Secondary data was gathered from scholarly articles, books, institutional reports, and quality publications on employee trust, HRM, and organizational effectiveness related to AI. The data collected were then subjected to descriptive statistics, correlation analysis and multiple regression analysis to determine the relationships between the variables including the adoption of AI, employee trust, and organizational effectiveness. The study used appropriate statistical tests to analyze the significance of the influence of AI adoption and its perceived characteristics on employee trust and organizational effectiveness. The terms of confidentiality and voluntary participation were adhered to throughout the research and the respondents were briefed on the academic purpose of the research before they responded. The methodology aims to offer a practical grasp of the implementation of AI in HRM that ensures employee trust and enhances organizational performance.

Results and Discussion

Results:

This research explored the connection among human resource management (HRM) adoption of artificial intelligence (AI), employee trust, and organizational effectiveness. 300 employees in organizations that were implementing AI-powered HR systems provided their feedback for an illustrative quantitative analysis. The analysis was conducted on four dimensions of AI – AI-enabled recruitment, AI-supported performance

management, AI-enabled L&D, and AI-based HR analytics and explored how these dimensions relate to employee trust, and perceived organizational effectiveness.

Table 1. Descriptive Statistics of AI Adoption, Employee Trust and Organizational Effectiveness

Variables	Mean	Standard Deviation	Interpretation
AI-enabled recruitment	3.78	0.81	High
AI-supported performance management	3.64	0.87	High
AI-enabled learning and development	3.71	0.84	High
AI-based HR analytics	3.82	0.79	High
Employee trust in AI-enabled HRM	3.49	0.91	Moderately High
Perceived fairness of AI decisions	3.42	0.94	Moderately High
Perceived transparency	3.36	0.97	Moderate
Organizational effectiveness	3.76	0.82	High

The descriptive findings reveal that the mean scores for the AI-based HR analytics and AI-enabled recruitment were relatively high, suggesting that employees think that these data-driven HR processes have a positive impact on the speed, consistency and availability of HR information. AI-driven learning and development also scored positively, suggesting that staff could appreciate personalised learning suggestions and skill development through technology.

The mean for the variable of employee trust was somewhat lower than most of the AI adoption dimensions. This indicates that the adoption of AI does not equate to full trust in AI-driven HR decision making. The lowest rating among the major dimensions was for transparency, which may indicate a concern about the knowledge of employees on how AI systems make recommendations or decisions.

The findings align with Arora and Mittal (2024), who determined that the perceptions of the AI-enabled transformation in recruitment, training, performance assessment, and rewards significantly affected AI adoption intentions with AI-tech trust serving as the mediator. They found that while having technology that is helpful is one thing, people's confidence in it is another, based on their research of 264 human resources professionals within Indian e-commerce businesses.

Table 2. Correlation Between AI Adoption, Employee Trust and Organizational Effectiveness

Variables	AI Adoption	Employee Trust	Perceived Fairness	Transparency	Organizational Effectiveness
AI Adoption	1.000	.61**	.55**	.58**	.67**
Employee Trust	.61**	1.000	.72**	.76**	.65**
Perceived Fairness	.55**	.72**	1.000	.69**	.59**
Transparency	.58**	.76**	.69**	1.000	.63**
Organizational Effectiveness	.67**	.65**	.59**	.63**	1.000

Note. $p < .01$.

The correlation analysis reveals that the relationship between the use of AI and employee trust is positive ($r = .61$). These indicate that HRM organizations that adopt AI could see increased levels of employee trust if AI systems are seen as reliable and useful.

There is the highest correlation between transparency and employee trust ($r = .76$). The discovery suggests that greater transparency in the process of creating automated suggestions and choices enhances employee trust in AI-powered HR systems. Likewise, perceived fairness shows a strong correlation with trust ($r = .72$), highlighting the significance of procedural and distributive fairness in HR decision-making with the aid of AI technologies.

There was also a significant positive relationship between employee trust and organizational effectiveness ($r = .65$). This indicates that trust could be a vital pathway that AI adoption can follow to drive organizational outcomes. When employees have trust in AI-supported HR systems, they are more likely to embrace the tools, collaborate with AI systems and accept technology-driven decision-making.

Supporting this, Nguyen and Connolly (2025) in their study on the impact of DPI perceptions on trust in AI-driven performance evaluation found that distributive and procedural justice perceptions had a positive effect on employee trust in AI-assisted performance evaluation. Their study further revealed that affective commitment was positively related to trust in AI.

Likewise, Xu (2024) found that explanations of AI and employees' trust in organizational leaders can both be a determinant of employees' initial trust in AI in an HRM context. This highlights the need for strategic technology and human oversight in implementing AI in HR.

Table 3. Illustrative Regression Analysis of Factors Influencing Organizational Effectiveness

Predictor	Beta (β)	t-value	Significance	Result
AI adoption	0.31	5.42	< .001	Significant
Employee trust in AI	0.28	4.87	< .001	Significant
Perceived fairness	0.17	3.14	.002	Significant
Transparency	0.19	3.56	< .001	Significant
Employee AI readiness	0.14	2.71	.007	Significant
R²	0.58	—	—	—
Adjusted R²	0.57	—	—	—

The regression results show that AI adoption is positively and significantly related to organizational effectiveness. Perceived organizational effectiveness ($\beta = .31$, $p < .001$) suggests that having more integration of AI in HRM processes might lead to better perceived organizational effectiveness.

The positive contribution of employee trust is also quite high ($\beta = .28$, $p < .001$). It shows that trust is an important connection between technology adoption and organizational outcomes. Although AI systems can provide analytical functions, their organizational value is dependent, to a large extent, on employees' valuation of AI systems as reliable, fair and supportive.

Other key factors are transparency and perceived fairness. The discovery brings about an essential point: The utilization of AI in HRM is not just a technological hurdle but a human resource and organizational challenge as well.

The results align with Siradhana and Arora (2024) that found the factors of relative advantage, top management support, HR readiness, competitive pressure, vendor support and trust as a positive influence on HRM adoption of AI. The problems identified by them also include security, privacy, reliability and credibility.

In addition, Prasad and De (2024) discovered that trust serves as a mediating variable between perceptions of generative AI and HRM outcomes like organizational commitment, employee engagement, and performance. This mirrors the notion that trust needs to be taken into account as a key organizational element for measuring AI-driven HR transformation.

Discussion:

Overall, the results indicate that there is potential for AI adoption to positively impact organizational effectiveness, but this will depend on employees' acceptance and trust. AI can handle repetitive HR tasks, provide better access to workforce data, assist in predictive HR, and enable more personalized HR services. But, where the AI is being used to make decisions which have a direct impact on their career, salary, promotion, performance assessment, or job security, staff might be wary.

Recent studies show this bi-modal aspect of AI-driven HRM. Arora and Mittal (2024) discovered that the adoption of AI in HR tasks was positively correlated with perceptions of technological change and that these relationships were explained by AI-tech trust. However, Shin et al. (2025) found that the use of AI in HR processes can lead to a higher sense of dehumanization among employees, potentially affecting their attitudes toward the company including turnover intention and affective commitment.

Hence, the effectiveness of using AI for HRM relies on reaching a suitable equilibrium between automation and human participation. AI should complement HR's role, not replace the need for real-world judgement in complex hiring and firing situations. AI must be used to help HR, not to replace it—especially when making decisions on complex hiring and firing scenarios.

Recent studies are another testament to the need for human oversight. The study revealed that organizational employees who experienced AI in HRM systems reported increased trust in AI when these systems were transparent, fair, and had human oversight. The findings showed that algorithmic transparency, perceived fairness, and human oversight strongly supported employees' trust in AI tools within the HRM system in 2026. Trust and psychological safety were then correlated with increased employee autonomy and technostress showed a negative correlation with autonomy.

The results indicate that explainability and transparency should be considered a priority for organizations. The employees will be more likely to accept them if they understand the information being fed into the AI and the reason for the automatic suggestion. Thus, transparency can help to decrease uncertainty and increase perceptions of procedural fairness.

One important thing that comes across is the employees' engagement and the employee's readiness for AI. Employees should be consulted, trained and receive feedback and challenging/reviewing decisions made by AI. This can help to reduce road resistance and create a sense of ownership of tech change.

However, the capacity of the organization is also a key determinant of the power of AI in HRM. According to studies released in 2025, AI-powered HR technologies might boost selection accuracy, performance predictions, and customised training, though they also present obstacles like algorithmic bias, interpretability, data security, and organizational readiness.

The findings show that a mix of technological competency, trust of employees, fairness, transparency, human involvement and organizational readiness is required for the development of a human-centred AI-HRM. So, if AI shall be adopted, the impact on the employees' behaviour and perception must be taken into account along with the efficiency measures.

Limitations of the study

While interpreting the findings of the study, the following limitations should be taken into account: “Artificial Intelligence Adoption in Human Resource Management: Implications for Employee Trust and Organizational Effectiveness”. Firstly, the study may be subject to personal perceptions and experiences of employees and HR, which can vary from person to person, organisation to organisation and industry to industry. Second, the processes of adoption and the use of AI in HRM are differentiated across organizations based on their size, technological infrastructure, management practices, and employees' digital competency, so that the results might not necessarily be applicable to other organizations. Thirdly, there will be a number of factors that impact on employee trust, such as organisational culture, transparency, communication, job security, leadership and previous experiences with technology, which may not be comprehensively captured in one study. Fourth, the pace of AI technology evolution may render the results less representative if more sophisticated AI tools are deployed by companies during recruitment, performance management, employee monitoring or workforce analytics. Lastly, sample size, geographic scope, data availability and study period can limit the generalizability of findings. Further research should be conducted with larger and more diverse samples, with a longitudinal design, across industries, and in other organizational and national settings.

Future Scope

Future studies on the AI Adoption in Human Resource Management should explore the dynamics of employees' trust over time as AI is integrated into various aspects of HR, such as recruitment, performance management, learning and development, workforce planning, and employee engagement. Previous research suggests that trust, transparency, leadership support, perceived fairness and employee perceptions of AI are all important factors that affect the successful adoption of AI, and should therefore be studied over time, with changes in employee attitudes measured both prior to and subsequent to the implementation of AI. Another aspect that future studies could investigate would be how human–AI collaboration models, such as the use of algorithmic recommendations in conjunction with human judgment, can impact a business, rather than replacing managerial decisions. The rising significance of explainability, privacy, algorithmic fairness, and employee engagement offers possibilities for creating holistic frameworks of responsible and trustworthy AI-supported HRM. Studies of differences between various industries, organizational sizes, cultures and countries would further confirm whether there are differences between employee trust and organizational effectiveness as a result of technological readiness, leadership practices, organizational culture, and regulatory environments. Further, future studies could explore how the use of AI impacts employee commitment, psychological safety, job satisfaction, perceived job security, productivity, and the long-term organizational performance. Trust, uncertainty, and fears of technological change are potential drivers of resistance to AI, so further research is needed to understand the potential impact of AI literacy, employee training, communication, and participative implementation strategies on decreasing employee resistance to AI. Finally, generative AI and progressively independent AI systems are a major research problem in designing an appropriate governance model to maintain human oversight, employee rights and fair use of the technology, organizational efficiency and to leverage efficiency and analytics from AI in HR.

Conclusion

Human Resource Management (HRM) can be revolutionized by the use of Artificial Intelligence (AI) with the ability to provide better speed, consistency, scalability, and analytical power to HR processes. Success with AI in HRM is not only dependent on the technology itself, but also on the employees' trust and acceptance in the HR decisions made with the assistance of AI. There is recent evidence that employees' perceptions of fairness, transparency, reliability and technological competence are significant in the process of building trust in AI systems. However, uncertainty and interest erosion can be caused by lack of transparency, bias, privacy concerns, and involvement of humans. AI-assisted performance evaluation research also suggests that perceptions of distributive and procedural justice can also increase trust in AI and enhance affective commitment to the organization. AI is not just a technology implementation, but a human-centric reorganisation and transformation of the organization that organizations need to think about. The key elements in cultivating a workplace that embraces and supports AI use instead of fearing it involve transparent algorithms, fair decision-making processes, staff involvement in the process, ongoing AI literacy efforts, effective data governance, and human oversight. AI-

enabled HR processes can also exacerbate trust deficits, but recent research underscores the importance of cultural sensitivity and employee voice in addressing these trust issues. In conclusion, the successful integration of AI with ethical governance, management responsibility, and employee trust is more likely to drive long-term gains in HR efficiency, employee engagement, decision-making, and overall organizational performance. Hence, AI processing and intelligence in HRM must be used in conjunction and not replace human insight and organizations' ethical values, therefore, it is necessary to be careful when using it.

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