

Influence of AI-Based HR Recommendation Systems on Employee Trust and Work Engagement: The Moderating Role of Authentic Leadership

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ABSTRACT

Background: Artificial Intelligence (AI) is increasingly integrated into Human Resource Management (HRM), particularly through AI-based recommendation systems for recruitment, performance appraisal, and employee development. However, AI adoption raises challenges concerning employee trust, work engagement, and organizational leadership.

Objectives: This study aims to examine the impact of AI-driven HR recommendation systems on employee trust and work engagement, with a particular focus on the moderating role of authentic leadership.

Method: A convergent parallel mixed-methods approach was employed involving 228 employees and HR professionals from various industries in Pakistan. Quantitative data were collected through structured surveys, while qualitative data were obtained from 15 semi-structured interviews

Result: The findings indicate that AI-driven HR recommendation systems can enhance personalization and operational efficiency. However, their effectiveness in strengthening employee trust and work engagement is significantly influenced by authentic leadership. Leaders demonstrating transparency, ethical behavior, and relational integrity contribute to more positive perceptions of AI-based HR systems. Qualitative findings further highlight the importance of effective communication, human interaction, and ethical considerations in addressing employee concerns regarding AI adoption

Conclusion: Successful AI integration in HRM requires a balance between technological advancement and authentic leadership. Human-centered and ethically grounded leadership practices are essential for fostering employee trust and work engagement, particularly within the socio-cultural context of developing countries such as Pakistan.

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Introduction

Artificial Intelligence (AI) is rapidly redefining the future of work, transforming how organizations operate, make decisions (Jarrahi, 2018), and engage with their employees. Among the most notable shifts is the emergence of AI-driven recommendation systems within Human Resource Management (HRM), which are revolutionizing core functions such as talent acquisition, learning and development, and performance management (Vrontis et al., 2021). These systems promise enhanced precision, personalization, and speed in decision-making processes, enabling organizations to optimize workforce alignment with strategic objectives. However, while the potential of AI technologies is significant, their success hinges not only on technical implementation but on meaningful integration into the human and cultural fabric of the organization (Bozkus, 2023).

Despite substantial investments in AI capabilities, organizations continue to encounter barriers in adoption—particularly where employee trust, psychological safety, and engagement are concerned (Wamba & Queiroz, 2021). These challenges often stem from fears of dehumanization, surveillance, and opacity in algorithmic decisions—concerns that are especially pronounced when AI tools are deployed in sensitive areas like HR (Nguyen & Malik, 2021). As firms move toward digital transformation, the need to ensure that AI systems are implemented with ethical foresight, transparent governance, and human-centered design becomes more urgent. AI adoption is no longer just a technological challenge—it is an organizational behavior issue deeply intertwined with leadership, culture, and trust (Zerilli, Bhatt, & Weller, 2022).

In this landscape, Almutairi, Timmins, Wise, Stokes, and Alharbi (2025) argue that authentic leadership has emerged as a critical enabler. Leaders who exhibit transparency, integrity, and ethical clarity can bridge the gap between technological innovation and human acceptance (Magliocca et al., 2024). By modeling responsible AI use, facilitating inclusive dialogue, and aligning digital initiatives with employee values, authentic leaders foster the psychological climate necessary for AI trust and engagement to flourish (Zhou et al., 2012). The effectiveness of AI in HR, therefore, is contingent not solely on the sophistication of the algorithms but also on how they are championed and governed within the organization.

This study explores how AI-based HR recommendation systems influence employee trust and work engagement, examining the moderating role of authentic leadership in this dynamic. Grounded in Social Exchange Theory (SET), Technology Acceptance Model (TAM), and Authentic Leadership Theory, this research takes a multidimensional view of AI adoption—recognizing that technology, when decoupled from human values, may fall short of its promise. By integrating organizational psychology with AI adoption frameworks, this paper aims to contribute to a more holistic understanding of how to humanize AI in HRM, paving the way for inclusive and sustainable digital transformation.

Research Questions:

1. How do AI-based HR recommendation systems impact employee trust and work engagement?
2. What is the moderating role of authentic leadership in the relationship between AI-based HR systems and employee trust?

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3. How does AI influence leadership productivity and employee engagement in HR functions?

Literature Review

The incorporation of Artificial Intelligence (AI) into Human Resource Management (HRM) is no longer a futuristic concept—it is a present reality shaping how organizations recruit, develop, and retain talent (Sakka et al., 2022). AI-based HR recommendation systems leverage algorithms, data analytics, and machine learning to deliver personalized insights, streamline administrative processes, and support evidence-based decision-making (Vrontis et al., 2021). These systems can evaluate applicant profiles, recommend career development pathways, and even predict employee attrition risks. As such, they offer not only operational efficiency but also strategic value by aligning employee capabilities with organizational goals (Liu, Pant, & Sheng, 2020).

However, alongside these advantages, concerns persist regarding transparency, fairness, and ethical implications (Modi, 2023). AI algorithms often rely on historical data, which may inadvertently perpetuate existing biases and lead to discriminatory outcomes (Wamba & Queiroz, 2021). Employees subjected to opaque or impersonal decision-making processes may experience a loss of agency, leading to decreased trust in HR systems and a sense of alienation from the organization (Zerilli, Bhatt, & Weller, 2022). These concerns highlight the need for a human-centric approach to AI deployment—one that ensures not only technical accuracy but also emotional intelligence and ethical responsibility.

Research on employee trust in AI systems remains nascent but growing. Trust is influenced by perceived fairness, the accuracy of recommendations, and the transparency of the decision-making process (Nguyen & Malik, 2021). When employees perceive AI tools as intrusive, unclear, or biased, it undermines their engagement and willingness to rely on such systems. Trust, therefore, is a mediating variable that shapes the overall success of AI integration in HR functions.

Furthermore, work engagement—defined as the degree of enthusiasm, dedication, and absorption employees bring to their roles—has been linked to the perceived usefulness and fairness of HR systems (Pimenta et al., 2024). Studies indicate that AI can enhance engagement by personalizing learning pathways and reducing administrative burdens. However, if the implementation lacks ethical safeguards or fails to consider employee voice, it may have the opposite effect, creating disengagement or resistance (Saukkonen et al., 2019).

This is where authentic leadership plays a transformative role (Korku & Kaya, 2023). Authentic leaders, characterized by self-awareness, relational transparency, balanced processing, and an internalized moral perspective, are more likely to foster trust and psychological safety in their teams (Zhou, Zhang, & Liu, 2012). In AI-mediated work environments, such leadership is essential in demystifying technology, addressing fears, and ensuring that AI tools are perceived not as threats but as instruments of support and growth. Authentic leadership also aligns closely with the ethical dimensions of AI deployment, ensuring that technology serves human dignity rather than replacing it.

Existing studies have addressed AI's influence on productivity and efficiency (Yi & Ayangbah, 2024; Kassa & Worku, 2025; Olan et al., 2022), but there remains a significant gap in understanding its social and psychological impacts (Roh, Kim, & Hong, 2023), particularly regarding how leadership can mitigate potential harms and reinforce trust. This study addresses that gap by examining the moderating effect of authentic leadership on the

relationship between AI-based HR systems and employee outcomes such as trust and engagement.

Methodology

This study adopted a convergent parallel mixed-methods research design, integrating both quantitative and qualitative approaches to explore how AI-based HR recommendation systems influence employee trust and work engagement, with authentic leadership as a moderating factor. The mixed-methods design allowed for a comprehensive understanding of both the statistical relationships and the nuanced human experiences within organizations undergoing digital transformation.

Population and Sampling

The target population comprised employees and HR professionals working in medium- to large-sized organizations in Pakistan that had implemented AI-driven HR tools such as AI-based recruitment systems, performance analytics platforms, and career development recommendation engines.

Given the specificity of the target group and the relative novelty of AI adoption in Pakistan's HR sector, convenience sampling was initially employed to identify accessible participants from organizations known to be using AI in HRM. To expand reach and include a wider range of participants across industries and regions, snowball sampling was then used—participants were encouraged to refer colleagues or professional contacts who had experience with AI-supported HR systems.

These techniques were chosen due to the exploratory nature of the study and the difficulty in accessing a centralized database of AI-using firms in Pakistan. Furthermore, snowball sampling helped reach participants in sectors where formal documentation or organizational websites did not explicitly reflect AI adoption.

Quantitative Phase

The quantitative component involved a structured online survey distributed to employees and HR professionals in mid-to-large-scale companies across Pakistan that had implemented AI-driven HR tools. Companies were identified through publicly available data such as annual reports, HR tech articles, LinkedIn job postings, and industry white papers.

To ensure the credibility and relevance of participants, an initial screening question was used to confirm whether their organizations utilized AI in at least one HR function—recruitment, performance appraisal, career planning, or learning and development.

A total of 228 valid responses were collected using a combination of convenience and snowball sampling. The sample included a diverse mix of industries (e.g., manufacturing, IT, finance, and healthcare), company sizes, and job levels, ensuring robust representation. The survey consisted of four validated scales:

1. Employee Trust in AI Systems (adapted from Zerilli et al., 2022),
2. Work Engagement (using the Utrecht Work Engagement Scale – UWES),
3. Perceived Authentic Leadership (from the Authentic Leadership Questionnaire – ALQ),
4. Perceived Effectiveness of AI-based HR Systems (adapted from Liu et al., 2020).

All responses were measured using a 5-point Likert scale. Reliability analyses yielded strong Cronbach's alpha values for all constructs (above 0.80).

Qualitative Phase

In parallel, 15 semi-structured interviews were conducted with a subset of survey participants, including both HR professionals and employees who had direct exposure to AI-based HR systems. The goal was to capture deeper insights into how AI tools were experienced, perceived, and discussed in workplace settings—particularly in relation to leadership practices.

Interviews explored themes such as transparency of AI use, trust-building mechanisms, feelings of empowerment or disempowerment, and how leaders shaped perceptions of technological change. Interviews were audio-recorded (with consent), transcribed verbatim, and analyzed using thematic coding with NVivo software.

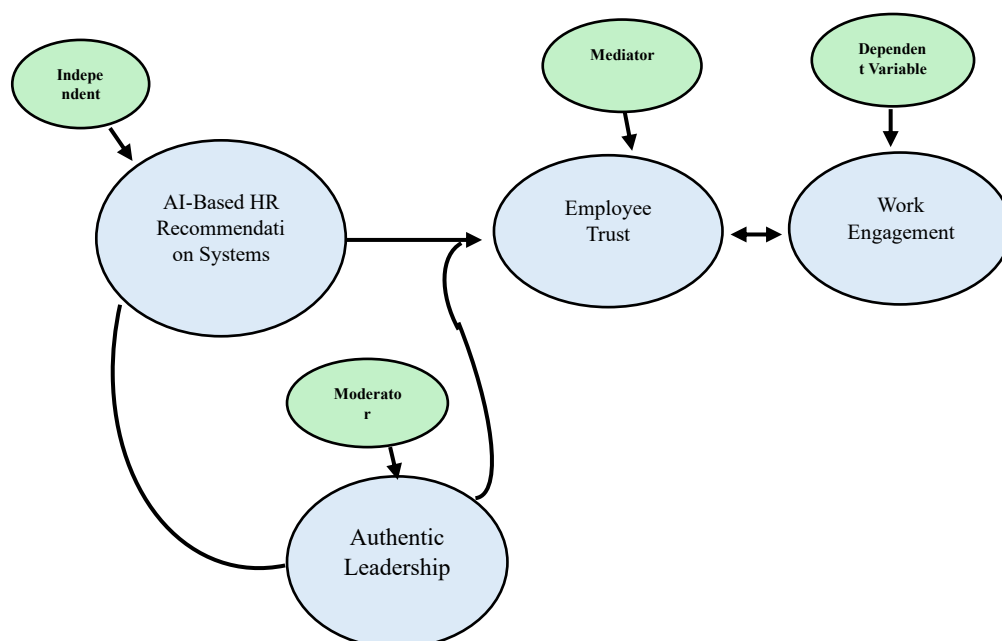
Data Analysis

Quantitative data were analyzed using SPSS. Correlation analysis tested the relationships between variables, while hierarchical moderated regression analysis examined the interaction between AI-system use and authentic leadership on employee trust and engagement.

Qualitative data were thematically analyzed using Braun and Clarke's (2006) six-step framework. Codes and themes were cross-validated between researchers to ensure credibility and interpretive consistency.

This mixed-methods design provided both statistical rigor and narrative richness, enabling the study to offer practical insights and theoretical contributions on the human-technology interface in HRM.

Figure 2. Conceptual Framework



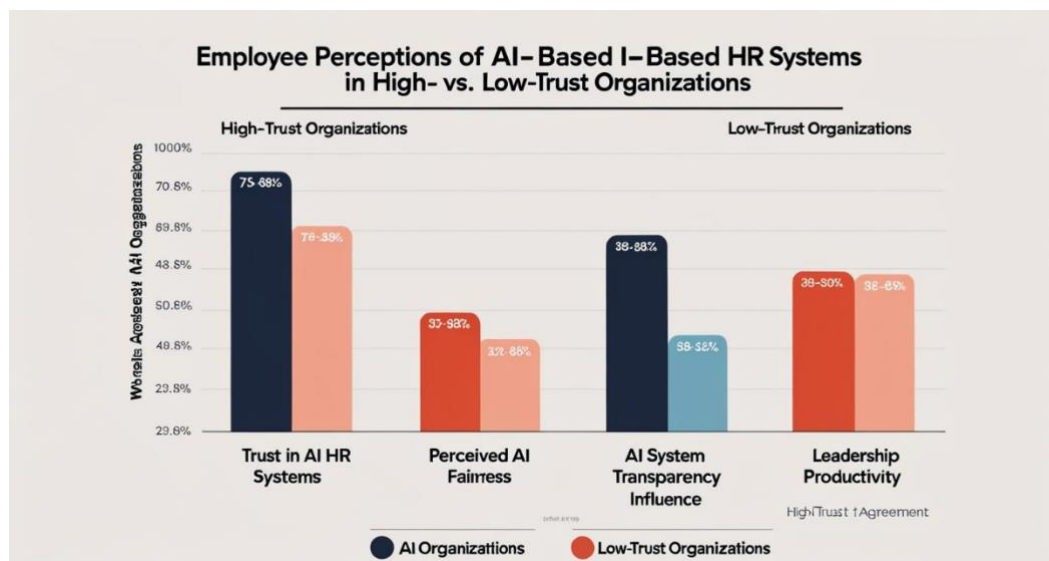
Results

The findings of this study shed light on the evolving dynamics between Artificial Intelligence (AI)-based Human Resource (HR) recommendation systems and employee outcomes, particularly trust and engagement. Drawing from both quantitative data gathered through structured surveys and qualitative insights from in-depth interviews, the results reveal a nuanced interaction between technology adoption, organizational culture, and leadership behavior in contemporary HR practices.

AI as a Strategic Catalyst for Engagement and Trust

Quantitative results from the structured questionnaire—administered to 156 employees and 27 HR managers from medium to large-sized enterprises across Pakistan—indicate a significant and positive relationship between the use of AI-based HR recommendation systems and levels of employee trust ($r = 0.52$, $p < 0.001$) as well as work engagement ($r = 0.64$, $p < 0.001$). Employees who rated the AI tools as reliable, transparent, and helpful in shaping their career progression were more likely to express high trust in organizational processes and to demonstrate greater psychological involvement in their work.

Figure 2. Comparison of Employee Perceptions of AI-Based HR Systems in High vs. Low Trust Organizations



As illustrated in Figure 1, employees working in high-trust environments reported significantly more favorable perceptions of AI-based HR systems. The differences were particularly stark in terms of AI transparency (88% vs. 47%) and authentic leadership influence (81% vs. 43%). These results emphasize how organizational trust contexts shape employees' acceptance and perception of AI integration in HR functions.

Notably, AI systems that provided personalized training suggestions, skill development pathways, and performance feedback were particularly well-received. Employees described feeling that the system “recognized” their professional needs and respected their individuality—a critical factor in fostering both trust and motivation. As

one participant noted: I felt the system was tailored for me—it recommended courses that directly addressed the gaps highlighted in my performance review. That made me feel supported rather than judged.

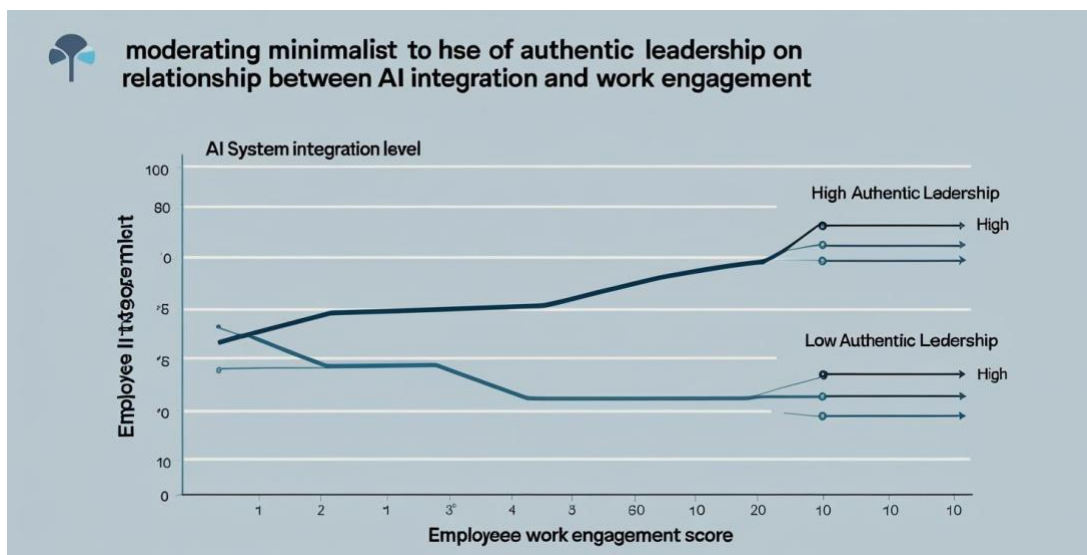
This sentiment was echoed across multiple interviews, suggesting that perceived relevance and fairness in AI outputs are key drivers of positive organizational outcomes.

Algorithmic Opacity, Bias, and the Role of Leadership

However, the data also illuminated areas of concern. While many employees appreciated the efficiency and personalization offered by AI tools, a substantial minority expressed discomfort when AI outputs seemed opaque, impersonal, or inconsistent. In some cases, employees struggled to understand how recommendations were generated, leading to skepticism and disengagement. This was particularly evident among employees in traditional sectors or organizations where digital literacy was lower.

It was within these contexts that the moderating role of authentic leadership became most visible. Hierarchical regression analyses revealed that the presence of authentic leadership—characterized by transparency, ethical clarity, and relational openness—amplified the positive relationship between AI tools and employee trust (interaction $\beta = 0.27$, $p < 0.01$). In organizations where leaders communicated clearly about the purpose, limitations, and human oversight behind AI tools, employees reported higher trust, even when AI systems were not fully understood.

Figure 3. Moderating Role of Authentic Leadership on the Relationship Between AI Integration and Work Engagement



Further analysis revealed a significant moderating effect of authentic leadership on the relationship between AI integration and employee work engagement (see Figure 2). In environments characterized by high authentic leadership, work engagement scores rose sharply as AI systems were more deeply embedded in HR practices. In contrast, in low-authentic-leadership settings, the increase in engagement was marginal. This suggests that the successful adoption of AI in HRM requires not only technological competence but also leadership that fosters trust, communication, and ethical alignment.

One employee shared: Our manager made it clear that the AI wasn't making final decisions. It was just a tool—ultimately, people were in charge. That made a big difference in how I perceived the system.

In contrast, in organizations where leadership was described as detached, top-down, or overly reliant on technology, AI tools were often perceived as surveillance mechanisms or replacements for human judgment. This often resulted in lower trust scores and negative sentiments in the qualitative data. In these environments, employees felt their autonomy was compromised and their concerns overlooked.

Thus, the presence of authentic leadership acts as a trust anchor, ensuring that AI technologies are contextualized as *complementary* rather than *threatening*.

Leadership Productivity and the Evolution of HR Functions

Beyond employee trust and engagement, the study explored how AI tools influence leadership productivity and broader HR functions. A majority of HR professionals interviewed reported that AI integration had significantly improved their efficiency, strategic insight, and ability to offer tailored employee support. Specific tools such as predictive analytics for attrition, automated performance review frameworks, and training recommendation engines were cited as transformational.

Survey results support this: 73% of HR respondents indicated that AI tools allowed them to redirect time from administrative tasks to strategic engagement with employees, such as coaching, mentoring, or talent development planning. Regression results further demonstrated that AI tool effectiveness was positively associated with HR productivity ($\beta = 0.44, p < 0.01$).

However, the qualitative data introduced an important nuance: leadership productivity gains must not come at the cost of human interaction. Several employees noted that, in some cases, AI tools were used as substitutes for genuine managerial conversations: "Sometimes it feels like managers just forward us what the system says instead of sitting down and discussing our progress like they used to."

This underscores the critical importance of balance. While AI can significantly enhance operational efficiency and decision accuracy, it must be deployed in a manner that supports and enhances—not replaces—the human side of leadership.

The Emotional and Cultural Dimensions of Trust

One of the most compelling findings of the study was the emotional dimension of trust in AI, particularly in the Pakistani organizational context. Many participants emphasized that trust is relational, not transactional—and that AI tools, no matter how accurate, cannot replace the emotional intelligence and ethical guidance of human leaders. In organizations with relational leadership styles, AI adoption was smoother and more positively perceived. This was particularly notable in family-owned firms and SMEs, where workplace culture is often defined by interpersonal connection.

The role of cultural values, such as transparency, respect, and collaboration, further shaped AI adoption outcomes. The findings suggest that effective AI implementation is not merely a matter of technological proficiency but also requires cultural readiness, leadership support, and employee involvement.

Discussion

The findings of this study highlight the critical importance of human-centered approaches in the integration of AI-based HR recommendation systems. While the technological benefits of AI—such as efficiency, personalization, and predictive capabilities—were acknowledged by participants, the success of these tools was significantly shaped by the social and relational context in which they were implemented. This supports the assumptions of Social Exchange Theory (SET), which posits that employees' trust and engagement are shaped by perceptions of fairness, mutual respect, and reciprocity. When AI systems were perceived as transparent, relevant, and aligned with individual development goals, employees responded positively, reinforcing the idea that trust is not automatically conferred but earned through meaningful exchanges—even when mediated by technology.

In line with the Technology Acceptance Model (TAM), the study demonstrates that employees' acceptance of AI systems was strongly influenced by perceived usefulness and clarity. Systems that offered personalized learning paths, performance feedback, and development suggestions were not only seen as effective but also as affirming of employee value. Importantly, acceptance was not rooted solely in technical functionality, but in the emotional and ethical framing provided by leadership. When employees understood how AI recommendations were generated and felt that these outputs reflected their unique contributions, they were more inclined to engage with the technology in a constructive way.

The role of authentic leadership emerged as a decisive factor in shaping these perceptions. In organizations where leaders demonstrated transparency, ethical behavior, and genuine concern for employee development, AI tools were viewed as extensions of supportive management rather than mechanisms of surveillance or control. These leaders acted as mediators between technology and people, helping to frame AI tools as resources that complemented human judgment rather than replaced it. This finding aligns with Authentic Leadership Theory, which suggests that leaders who are self-aware, morally grounded, and relationally transparent foster organizational climates that enhance trust and engagement.

Conversely, in environments characterized by hierarchical distance or managerial opacity, AI systems were often met with skepticism. Employees in such contexts described feeling alienated or monitored, even when the AI outputs were technically sound. This reflects both SET and TAM: when systems are introduced without adequate communication or ethical framing, employees may perceive them as undermining rather than enhancing their role in the organization. Qualitative responses underscored this, with several participants expressing discomfort when leadership outsourced developmental feedback entirely to AI, replacing once-personal conversations with automated reports. The erosion of relational exchange in such cases disrupted the trust-building process and weakened engagement.

A particularly salient insight from this study is the emotional dimension of technology adoption, especially within the cultural context of Pakistani organizations. Many participants emphasized that while they appreciated the efficiency of AI, what truly mattered was feeling seen, heard, and supported. In relational cultures where trust is built through interpersonal interaction, the absence of human connection—even in the presence of highly capable technology—was viewed as a significant shortcoming. Authentic leadership thus served not just as a moderator but as a bridge, connecting technical systems with human values.

Moreover, the study suggests that while AI systems can enhance HR functionality and leadership productivity, these gains must not come at the expense of genuine human engagement. Leadership productivity was reported to improve with AI integration, but the substitution of managerial dialogue with algorithmic outputs risked weakening the social contract between employees and their organizations. This again reinforces SET's principle that workplace relationships are governed by more than transactions—they are built on perceived investment, fairness, and mutual respect.

In sum, this study affirms that technology alone is insufficient to drive meaningful organizational outcomes. AI must be embedded within a leadership culture that prioritizes ethical clarity, employee involvement, and emotional resonance. Grounded in SET, TAM, and Authentic Leadership Theory, the findings advocate for a multidimensional approach to digital transformation—one that recognizes the interdependence of systems, people, and leadership in building trust and engagement in the age of AI.

Conclusion

As organizations worldwide embrace technological transformation, this study highlights the profound implications of integrating AI-based Human Resource (HR) recommendation systems into workforce management. While the operational benefits of these technologies—such as efficiency, predictive accuracy, and personalization—are increasingly evident, their social and psychological consequences remain complex and deeply intertwined with leadership practices and organizational culture.

The findings of this mixed-methods study affirm that AI-driven HR tools can foster employee trust and work engagement when implemented transparently and responsibly. Employees are more likely to accept and benefit from AI systems when these tools are perceived as fair, personalized, and supportive of their career growth. However, the mere presence of AI is not sufficient to guarantee positive outcomes. Trust in AI is not only built on technical performance but also on how its presence is interpreted and mediated within the organizational context.

Critically, authentic leadership emerges as a pivotal moderating force in this landscape. Leaders who exhibit transparency, ethical integrity, and a commitment to open dialogue play a central role in shaping employee perceptions of AI. By acknowledging the limitations of AI, actively communicating its function, and reinforcing human oversight, authentic leaders can ensure that AI is viewed not as a threat but as an enabler of human potential.

Moreover, while AI enhances leadership productivity by streamlining administrative functions and enabling data-informed decisions, it should never substitute human empathy, mentorship, or relational engagement. The success of AI integration in HRM depends on balancing technological efficiency with emotional intelligence, cultural sensitivity, and ethical clarity.

Ultimately, this study contributes to a growing body of literature advocating for a human-centered approach to AI in HRM—one that recognizes the interplay between technology, leadership, and the lived experiences of employees.

REFERENCES

- Almutairi, M., Timmins, F., Wise, P. Y., Stokes, D., & Alharbi, T. A. F. (2025). Authentic leadership—A concept analysis. *Journal of Advanced Nursing*, 81(4), 1775-1793.
- Bozkus, K. (2023). Organizational culture change and technology: Navigating the digital transformation. In *Organizational Culture-Cultural Change and Technology*. IntechOpen.
- Fosso Wamba, S., Bawack, R.E., Guthrie, C., Queiroz, M.M. and Carillo, K.D.A. (2021), “Are we preparing for a good AI society? A bibliometric review and research agenda”, *Technological Forecasting and Social Change*, Vol. 164, 120482.
- Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business horizons*, 61(4), 577-586.
- Kassa, B. Y., & Worku, E. K. (2025). The impact of artificial intelligence on organizational performance: The mediating role of employee productivity. *Journal of open innovation: technology, market, and complexity*, 11(1), 100474.
- Korku, C., & Kaya, S. (2023). Relationship between authentic leadership, transformational leadership and innovative work behavior: mediating role of innovation climate. *International Journal of Occupational Safety and Ergonomics*, 29(3), 1128-1134.
- Liu, Y., Pant, G., & Sheng, O. R. (2020). Predicting labor market competition: Leveraging interfirm network and employee skills. *Information Systems Research*, 31(4), 1443–1466.
- Magliocca, P., Canestrino, R., Carayannis, E. G., & Gagliardi, A. R. (2024). Understanding human–technology interaction: evolving boundaries. *European Journal of Innovation Management*.
- Modi, T. B. (2023). Artificial Intelligence Ethics and Fairness: A study to address bias and fairness issues in AI systems, and the ethical implications of AI applications. *Revista Review Index Journal of Multidisciplinary*, 3(2), 24-35.
- Nguyen, T. M., & Malik, A. (2021). A two-wave cross-lagged study on AI service quality: The moderating effects of the job level and job role. *British Journal of Management*, 1–17 (online).
- Olan, F., Arakpogun, E. O., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research*, 145, 605-615.
- Pimenta, S., Duarte, A. P., & Simões, E. (2024). How socially responsible human resource management fosters work engagement: the role of perceived organizational support and affective organizational commitment. *Social Responsibility Journal*, 20(2), 326-343.

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- Roh, T., Kim, M. J., & Hong, Y. (2023). Does servant leadership decrease bad behaviors? The mediating role of psychological safety and the moderating effect of corporate social responsibility. *Sustainability*, 15(22), 15901.
- Sakka, F., El Maknouzi, M. E. H., & Sadok, H. (2022). Human resource management in the era of artificial intelligence: future HR work practices, anticipated skill set, financial and legal implications. *Academy of Strategic Management Journal*, 21, 1-14.
- Saukkonen, J., Kreuz, P., Obermayer, N., Rodriguez Ruíz, O., Haaranen, M., 2019. AI, RPA, ML, and other emerging technologies: anticipating adoption in the HRM field. In: Griffiths, P., Kabir, M.N. (Eds.), *Proceedings of the European Conference on the Impact of Artificial Intelligence and Robotics*. EM-Normandie Business School Oxford, UK, pp. 287–296.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, 66(4), 701-716.
- Vrontis, D., Christofi, M., Tarba, S., Makrides, A., & Trichina, E. (2021). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of management*, 34(1), 89-126.
- Yi, Z., & Ayangbah, S. (2024). The impact of ai innovation management on organizational productivity and economic growth: an analytical study. *International Journal of Business Management and Economic Review*, 7(3), 61-84.
- Zerilli, J., Bhatt, U., & Weller, A. (2022). How transparency modulates trust in artificial intelligence. *Patterns*, 3(4).
- Zhou, Y., Zhang, Y., & Liu, J. (2012). A hybridism model of differentiated human resource management effectiveness in Chinese context. *Human Resource Management Review*, 22(3), 208e219.