Balancing Artificial Intelligence and Emotional Intelligence in Modern Personnel Management

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Abstract:

Purpose: This paper examines the role of emotional intelligence in personnel management in the context of the growing use of artificial intelligence in contemporary organizations. The study aims to analyze how AI-supported management systems influence leadership practices and employee relations. It also assesses whether emotional intelligence remains a key managerial competence in AI-driven work environments.

Design/methodology/approach: The study adopts a conceptual research approach based on a critical review of literature related to emotional intelligence, leadership, and artificial intelligence in human resource management. The analysis integrates perspectives from organizational behavior and management studies. The objective is to explore the complementary roles of AI technologies and emotionally intelligent leadership in personnel management.

Findings: The findings indicate that despite the increasing role of AI in HR processes and decision-making systems, emotional intelligence remains essential for effective leadership. AI technologies enhance analytical capabilities and operational efficiency but cannot replicate empathy, trust-building, and interpersonal understanding. The results suggest that the most

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effective management approach combines AI-based tools with emotionally intelligent leadership practices.

Research limitations/implications: *The study is conceptual and based primarily on literature analysis rather than empirical data. Future research could include empirical studies examining how AI-supported management systems influence leadership effectiveness and employee engagement. Comparative studies across industries may provide deeper insights into the interaction between technological systems and human competencies.*

Practical recommendations: *Organizations implementing AI in HR management should recognize the continuing importance of emotional intelligence in leadership. Managers should develop both digital competencies and interpersonal skills to balance technological efficiency with human-centered leadership. Leadership development programs should therefore integrate training in emotional intelligence and digital management competencies.*

Keywords: *Artificial Intelligence, emotional intelligence, human resource management, leadership, organizational behavior.*

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1. Introduction

Contemporary organizations operate in an increasingly complex and dynamic environment shaped by globalization, technological advancement, and intensifying market competition (Rakowska, 2007; Robbins and Judge, 2017). Under such conditions, effective personnel management has become one of the key determinants of organizational success. Traditional management approaches based primarily on technical competencies and formal authority are increasingly complemented by perspectives emphasizing interpersonal and emotional competencies (Drucker, 1976; Armstrong, 2007).

In recent decades, emotional intelligence has emerged as an important concept in leadership and organizational research. Emotional competencies are associated with improved leadership effectiveness, communication quality, and employee engagement (Goleman, 1995; Barsade and Gibson, 2007).

Research indicates that managers with higher levels of emotional intelligence are more capable of building trust, resolving conflicts, and fostering supportive organizational climates (Northouse, 2016).

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At the same time, organizations are experiencing profound technological transformation driven by digitalization and the rapid development of artificial intelligence. AI-based technologies are increasingly implemented in organizational decision-making processes, including human resource management systems (Robbins and Judge, 2017).

AI tools support recruitment processes, workforce analytics, talent management, and performance evaluation by enabling organizations to analyze large volumes of data and generate predictive insights.

Recent research suggests that organizations are increasingly relying on data-driven decision-making models supported by AI technologies (Górka *et al.,* 2025). These developments have significantly reshaped managerial practices and raised important questions about the future role of human competencies in leadership and organizational management.

Despite the growing importance of AI, the relational and emotional aspects of leadership remain strongly dependent on human capabilities. Artificial intelligence can process data, identify patterns, and automate tasks, but it cannot fully replicate human empathy, moral judgment, or contextual emotional understanding.

Existing research on artificial intelligence in management primarily focuses on technological efficiency, data-driven decision-making, and automation of HR processes. However, comparatively less attention has been paid to the relationship between AI and emotional intelligence in personnel management, particularly regarding their complementary roles in leadership and employee relations.

This article contributes to the literature in three ways:

- It integrates research on emotional intelligence and artificial intelligence within the context of contemporary personnel management.
- It highlights the complementary roles of AI and emotional intelligence in modern leadership.
- It proposes a conceptual framework explaining how emotionally intelligent leadership remains essential in AI-supported management environments.

The remainder of the article is structured as follows. The next section discusses the theoretical foundations of emotional intelligence and its role in management. The third section analyzes the increasing role of artificial intelligence in human resource management.

The fourth section explores the relationship between emotional intelligence and AI in modern leadership. The final section presents the conclusions and implications for future research.

2. Emotional Intelligence: Definitions, Models, and Importance in Management

The concept of emotional intelligence was first systematically introduced by Salovey and Mayer (1990), who defined it as the ability to perceive, understand, regulate, and use emotions in thinking and action. This definition highlights the cognitive processing of emotional information and its role in adaptive behavior.

Later research expanded this concept and linked emotional intelligence with leadership effectiveness, organizational communication, and interpersonal relationships (Goleman, 1995; Mayer *et al.,* 2004). Emotional intelligence has since become a key topic in organizational behavior and leadership studies due to its influence on employee well-being and managerial effectiveness (Barsade and Gibson, 2007; Norena-Chavez and Thalassinos, 2022a; 2022b).

Emotional intelligence is generally understood as a multidimensional construct consisting of several core competencies, including self-awareness, emotional regulation, empathy, and social skills. These competencies enable individuals to manage their own emotions while recognizing and responding effectively to the emotions of others (Northouse, 2016).

From an organizational perspective, emotional intelligence plays an important role in shaping leadership styles, communication patterns, and organizational culture. Leaders with high emotional intelligence are more effective in building trust-based relationships and managing complex interpersonal dynamics within teams (Stoner *et al.,* 2011)

The literature distinguishes two dominant theoretical approaches to emotional intelligence: the ability model and the mixed model.

- The ability model conceptualizes emotional intelligence as a set of cognitive abilities related to emotional information processing. According to this model, emotional intelligence consists of four core abilities: perceiving emotions, using emotions to facilitate thinking, understanding emotions, and managing emotions (Mayer *et al.,* 2004).
- The mixed model, popularized by Goleman (1995), integrates emotional competencies with personality traits and motivational aspects. This model includes competencies such as self-awareness, emotional self-regulation, empathy, motivation, and relationship management.

Due to its practical orientation, the mixed model is widely used in leadership development programs and managerial training initiatives. Scholars have also emphasized that emotional intelligence integrates both cognitive and emotional aspects of human functioning, highlighting its relevance for decision-making processes and leadership effectiveness (Koźmiński and Piotrkowski, 2007).

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Emotional intelligence has significant implications for managerial effectiveness and organizational performance. Leaders with strong emotional competencies are better able to motivate employees, manage conflicts, and foster positive workplace relationships (Armstrong, 2007).

Research suggests that emotional intelligence contributes to improved team performance and communication quality within organizations. Managers who demonstrate emotional awareness and empathy create more supportive work environments that promote employee engagement and productivity (Barsade and Gibson, 2007).

Internal communication is also a critical factor influencing organizational effectiveness. Effective communication practices strengthen trust, collaboration, and knowledge sharing within organizations (Baran *et al.,* 2025). Employee motivation represents another area where emotional intelligence plays an important role. Contemporary management research emphasizes that both financial and non-financial motivational factors influence employee engagement and organizational performance (Kasperczuk *et al.,* 2025a).

Moreover, work–life balance has become an increasingly important factor affecting employee well-being and organizational effectiveness. Maintaining a balance between professional and personal life contributes to higher levels of employee satisfaction and productivity (Kasperczuk *et al.,* 2025b).

3. Artificial Intelligence in Human Resource Management

Artificial intelligence has become an increasingly important tool in contemporary human resource management. Organizations are increasingly implementing AI-based systems to improve the efficiency of HR processes and support data-driven decision-making (Robbins and Judge, 2017). The development of AI technologies has significantly changed how organizations recruit, evaluate, and develop employees.

One of the most common applications of AI in HR management is recruitment and selection. AI tools are capable of analyzing large numbers of job applications, identifying key competencies, and matching candidates with job requirements.

Automated recruitment systems can significantly reduce the time required for candidate screening and improve the accuracy of candidate selection. Additionally, chatbots and virtual assistants are increasingly used in the early stages of recruitment to answer candidate questions and conduct preliminary interviews.

Artificial intelligence also plays an important role in employee performance evaluation. AI systems can analyze large datasets containing employee productivity indicators, project outcomes, and behavioral patterns.

Based on this information, AI algorithms can generate personalized performance reports and provide managers with insights that support more informed decision-making.

Another important application of artificial intelligence concerns employee development and training. AI-based learning platforms enable organizations to create personalized training paths tailored to individual employee needs. Such systems analyze employee competencies, identify knowledge gaps, and recommend appropriate training programs. As a result, organizations can more effectively develop employee skills and improve workforce capabilities.

Artificial intelligence is also widely used in workforce analytics. HR analytics tools allow organizations to analyze large datasets related to employee engagement, job satisfaction, and turnover risk. Predictive analytics can help managers identify employees who may be at risk of burnout or resignation, allowing organizations to implement preventive strategies.

Recent studies emphasize that digital transformation and the adoption of remote and hybrid work models have further accelerated the use of AI in organizational management (Ćwiąkała *et al.,* 2025). The increasing reliance on digital communication platforms and data-driven management tools has fundamentally changed the way organizations manage distributed teams.

Despite these advantages, the implementation of AI in human resource management also presents significant challenges. One of the most important concerns is related to ethical issues, such as algorithmic bias, data privacy, and transparency of decision-making processes. AI systems rely heavily on historical data, which may contain hidden biases that can unintentionally reinforce discrimination in recruitment or evaluation processes.

Another challenge concerns the complexity of human behavior in organizations. Human interactions involve emotional, social, and contextual factors that are difficult to quantify and incorporate into algorithmic decision-making models. As a result, while AI can provide valuable analytical insights, it cannot fully replace human judgment in personnel management.

4.   The Role of Emotional Intelligence in the Era of AI Tools

The growing integration of artificial intelligence into organizational management has generated significant debate about the future role of human competencies in leadership.

While AI technologies offer substantial advantages in terms of data analysis and operational efficiency, they cannot fully replicate the emotional and relational capabilities that characterize human leadership.

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Emotional intelligence plays a critical role in leadership because it enables managers to understand the emotional needs of employees and respond appropriately to complex interpersonal situations. Leaders with high levels of emotional intelligence are better equipped to create psychologically safe work environments, which foster employee engagement, creativity, and collaboration.

In the context of AI-supported management, emotional intelligence becomes even more important. As organizations increasingly rely on automated decision systems and digital communication technologies, maintaining strong interpersonal relationships within teams becomes more challenging. Employees may perceive AI-based management practices as impersonal or overly bureaucratic, which may negatively affect trust and organizational commitment.

Emotionally intelligent leaders can mitigate these risks by maintaining open communication with employees and demonstrating empathy and understanding. By combining analytical insights provided by AI with interpersonal leadership skills, managers can create a more balanced and human-centered management approach.

Another important aspect of emotional intelligence concerns trust-building within organizations. Trust is a fundamental element of effective supervisor–subordinate relationships. Employees are more likely to trust leaders who demonstrate authenticity, transparency, and empathy. While AI systems can provide data and analytical support, they cannot replace the relational processes through which trust is developed between managers and employees.

Conflict management represents another area where emotional intelligence remains indispensable. Organizational conflicts often arise from misunderstandings, perceived injustices, or emotional tensions between employees. Resolving such conflicts requires empathy, negotiation skills, and the ability to understand multiple perspectives. AI systems may assist by providing information or identifying patterns in organizational communication, but they cannot effectively mediate interpersonal conflicts without human intervention.

At the same time, artificial intelligence can complement emotionally intelligent leadership by providing managers with valuable insights into employee behavior and organizational dynamics. For example, AI systems can analyze communication patterns in digital collaboration platforms and identify early signs of employee disengagement or stress. Such information can help managers respond proactively to emerging challenges.

Moreover, by automating routine administrative tasks, AI technologies allow managers to devote more time to interpersonal interactions and leadership activities. This shift may ultimately strengthen the role of emotional intelligence in management by enabling leaders to focus on coaching, mentoring, and supporting employees.

From this perspective, the relationship between artificial intelligence and emotional intelligence should not be viewed as competitive but rather as complementary. Artificial intelligence enhances analytical capabilities and supports efficient decision-making processes, while emotional intelligence enables leaders to interpret complex social dynamics and maintain strong interpersonal relationships within organizations.

Organizations that successfully integrate AI technologies with emotionally intelligent leadership practices are likely to achieve higher levels of employee engagement, organizational trust, and long-term performance.

5. Conclusion

The rapid development of artificial intelligence is transforming organizational management practices and reshaping human resource management systems. AI-based technologies enable organizations to analyze large volumes of data, automate administrative processes, and improve the efficiency of managerial decision-making. As a result, AI has become an increasingly important component of contemporary organizational management.

Despite these technological advancements, the findings of this study suggest that emotional intelligence remains a fundamental competence for effective leadership and personnel management. While artificial intelligence can support analytical decision-making and optimize operational processes, it cannot fully replicate the emotional and relational capabilities that characterize human leadership.

Competencies such as empathy, self-awareness, emotional regulation, and interpersonal communication continue to play a crucial role in building trust, resolving conflicts, and maintaining positive workplace relationships.

The analysis presented in this article highlights the complementary relationship between artificial intelligence and emotional intelligence in modern organizations. Artificial intelligence enhances managerial capabilities by providing data-driven insights and automating routine tasks, while emotional intelligence enables leaders to interpret complex interpersonal dynamics and respond appropriately to employees' emotional and psychological needs.

Organizations that successfully integrate technological capabilities with emotionally intelligent leadership practices are likely to achieve higher levels of employee engagement, organizational trust, and long-term performance.

From a theoretical perspective, this article contributes to the literature by integrating research on artificial intelligence and emotional intelligence within the context of contemporary personnel management. The study emphasizes that technological development does not reduce the importance of human competencies in leadership

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but may instead increase their significance. In AI-supported organizational environments, emotional intelligence becomes an essential factor that enables managers to balance technological efficiency with human-centered leadership.

The findings of this article also have practical implications for managers and organizational leaders. Organizations implementing AI-based management systems should recognize that technological tools cannot replace interpersonal leadership competencies.

Managers should therefore focus not only on developing digital and analytical skills but also on strengthening emotional intelligence competencies such as empathy, communication, and conflict management. Leadership development programs should incorporate training that combines technological literacy with emotional and social competencies.

This study has several limitations. First, the article adopts a conceptual approach based on literature analysis rather than empirical research. As a result, the proposed conclusions should be interpreted as theoretical insights that require further empirical validation. Second, the analysis focuses primarily on general management and HR contexts, which may limit the applicability of the findings to specific industries or organizational environments.

Future research should further explore the interaction between artificial intelligence and human competencies in organizational management. In particular, empirical studies could examine how emotionally intelligent leadership influences employee trust, engagement, and performance in organizations implementing AI-based management systems. Additionally, future research could investigate how AI technologies influence leadership styles, organizational culture, and employee well-being in digitally transformed workplaces.

Understanding the dynamic relationship between artificial intelligence and emotional intelligence will remain a critical challenge for both researchers and practitioners in the coming years. Organizations that successfully combine advanced technological systems with emotionally intelligent leadership practices will be better positioned to address the complex social, ethical, and managerial challenges of the digital era.

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