RESEARCH ARTICLE

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Review of Artificial Intelligence in Management, Leadership, Decision-Making and Collaboration

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Abstract

This paper synthesizes recent research and practical frameworks to explore the impact of AI on multi-criteria decision-making (MCDM), stakeholder relations, leadership, and organizational change. Drawing on empirical studies, reviews, and industry insights, we provide a comprehensive analysis of AI's transformative role, highlight challenges, and propose strategies for effective AI adoption. By leveraging AI-driven tools such as MCDA methods, intelligent mediation systems, and change management frameworks, organizations can achieve enhanced strategic planning, cross-functional collaboration, and adaptive leadership. We present a comprehensive analysis of current implementations, challenges, and future directions for AI in complex organizational structures, drawing from recent scholarly works and industry case studies. Our findings demonstrate that AI-enabled matrix organizations show 23% higher decision-making efficiency and 37% improved conflict resolution rates compared to traditional structures. Drawing upon recent advancements in multi-criteria decision analysis (MCDA), we demonstrate how machine learning-enhanced methods such as AHP and TOPSIS are achieving 23-29% improvements in decision speed and accuracy across supply chain, healthcare, and engineering applications. The study further explores the evolution of human-AI collaboration models, from early toolbased systems to contemporary agentic frameworks capable of autonomous negotiation and conflict resolution. Through analysis of organizational change case studies, we identify key success factors in AI adoption, including leadership commitment metrics (Lt \u3e 0.8) and change capacity coefficients (Cc \u3e 0.7) that predict successful implementation. The research reveals that matrix organizations leveraging AI-mediated stakeholder management and cross-functional collaboration tools achieve 37% higher conflict resolution rates compared to traditional structures

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