

Rethinking Leadership in the Light of AI Adoption in Organizations

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Abstract

The study aims to identify how the integration of artificial intelligence (AI) redefines leadership competencies in hybrid human-AI teams. By analyzing the perspectives of management practitioners, the research explores the evolution of the leader's role and how their personal level of AI adoption and comfort influences their competency priorities. The research employed a mixed-methods approach on a sample of 79 managers from Poland with direct experience in hybrid team management. Thematic analysis was applied to qualitative data from open-ended questions to understand the motivations behind competency choices across different levels of AI maturity. The study emphasizes qualitative insights into implementation barriers, success factors, and future-proof skills. The results reveal a paradigm shift from technical expertise toward a critical strategist and empath model. Competency priorities vary significantly with the leader's level of AI comfort and knowledge. Managers with low AI comfort focus predominantly on human-centred foundations, prioritizing emotional intelligence and building psychological safety to mitigate team anxiety during early adoption. In contrast, leaders with high AI maturity shift their focus toward strategic optimization, emphasizing critical thinking and data evaluation alongside talent development and coaching. While critical thinking remains a universal requirement to counter algorithmic hallucinations, the focus of the AI-fluent leader moves from managing the transition to verifying outputs and enhancing human-AI synergy. Qualitative data identify the balancing of human authority with opaque algorithmic recommendations as a primary barrier. Finally, the analysis highlights a frequent gap between individual proactive preparation and systematic organizational support. The findings contribute to leadership theory by demonstrating that AI adoption is a multi stage process requiring adaptive leadership styles. For organizations, this implies that leadership development programs must be tailored to the specific stage of AI maturity, shifting from operational facilitation for beginners to strategic and ethical oversight for advanced users.

Keywords: leadership competencies, artificial intelligence, human-AI collaboration, critical thinking

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