

A Comparative Analysis of Project Management Practices in Industry vs. Higher Education and AI-Driven Optimisation Frameworks

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This study underscores the significant divide between project management practices in corporate industries and higher education institutions (HEIs), focusing on areas such as methodology, risk management, stakeholder engagement, and performance metrics. While industry has embraced Agile frameworks, predictive analytics, and digital tools to drive efficiency and decision-making, HEIs often remain hindered by traditional, bureaucratic processes, limiting their ability to fully optimize resources and operational agility. The AI-driven optimization framework proposed in this research offers a path forward, drawing upon industry best practices while adapting to the unique needs of the academic environment. By incorporating predictive analytics, automated compliance tracking, adaptive workflows, and real-time dashboards, this hybrid approach enables HEIs to enhance project outcomes, reduce cycle times, and improve resource allocation. Adapting PMP methodologies from industry to the higher education sector can facilitate a much-needed transformation in academic governance. Specifically, integrating Agile practices for dynamic tasks (e.g., curriculum updates) and structured Waterfall approaches for long-term academic projects can improve efficiency, accountability, and decision-making speed. The AI-powered optimization model bridges the gap between these two sectors, aligning higher education with global trends in digital transformation. This study provides a roadmap for HEIs to move from reactive to proactive governance, leveraging AI and modern project management techniques to improve strategic decision-making and increase institutional competitiveness. The adoption of these practices will not only enhance academic governance but also position universities to better navigate the challenges of the rapidly changing educational landscape.