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Navigating Construction Project Outcomes: Synergy Through the Evolution of Digital Innovation and Strategic Management

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Abstract : The ongoing high rate of construction project failures worldwide is often blamed on the difficulties of managing stakeholders. This highlights the crucial role of strategic management (SM) in achieving project success. This study investigates how integrating digital tools into the SM framework can effectively address stakeholder-related challenges. This work specifically focuses on the impact of evolving digital tools, such as Project Management Software (PMS) (e.g., Basecamp and Wrike), Building Information Modeling (BIM) (e.g., Tekla BIMsight and Autodesk Navisworks), Virtual and Augmented Reality (VR/AR) (e.g., Microsoft HoloLens), drones and remote monitoring, and social media and Web-Based platforms, in improving stakeholder engagement and project outcomes. Through existing literature with examples of failed projects, the study highlights how the evolution of digital tools will serve as facilitators within the strategic management process. These tools offer benefits such as real-time data access, enhanced visualization, and more efficient workflows to mitigate stakeholder challenges in construction projects. The findings indicate that integrating digital tools with SM principles effectively addresses stakeholder challenges, resulting in improved project outcomes and stakeholder satisfaction. The research advocates for a combined approach that embraces both strategic management and digital innovation to navigate the complex stakeholder landscape in construction projects.

Keywords : strategic management, digital tools, virtual and augmented reality, stakeholder management, building information modeling, project management software
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