

THE ROLE OF TECHNICAL PROJECT MANAGEMENT IN MODERN IT INFRASTRUCTURE TRANSFORMATION

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ABSTRACT

In today's dynamic technological landscape, the role of technical project management (TPM) has become critical in driving successful IT infrastructure transformations. As organizations shift towards cloud computing, automation, and scalable solutions, project managers with technical expertise are essential for seamless integration of advanced systems. TPM bridges the gap between technical teams and business objectives, ensuring that projects align with strategic goals while being delivered on time, within budget, and with optimal quality. This study explores how technical project management enables the transition to modern IT infrastructure by managing complexities, minimizing risks, and fostering collaboration across diverse teams. TPM methodologies, such as Agile, DevOps, and Waterfall, empower managers to adapt to rapid technological changes, monitor progress, and optimize workflows. Additionally, TPM helps organizations implement emerging technologies, such as cloud-based platforms and virtual networks, which demand precise planning and execution.

The research highlights the importance of key competencies, including stakeholder communication, risk management, and technical knowledge, in transforming IT infrastructure efficiently. Technical project managers not only ensure the integration of legacy systems with new architectures but also drive innovation by promoting the adoption of advanced technologies. Furthermore, their role in facilitating cross-functional collaboration and aligning IT solutions with business objectives ensures sustained organizational growth.

In conclusion, technical project management is indispensable in IT infrastructure transformation, as it bridges technology and business requirements, fostering agility and innovation. Organizations that invest in robust technical project management practices can effectively navigate the complexities of modern IT environments and achieve sustainable digital transformation.

KEYWORDS: Technical Project Management, IT Infrastructure Transformation, Cloud Computing, Agile Methodologies, Devops, Risk Management, Stakeholder Communication, Legacy System Integration, Digital Transformation, Innovation, Cross-Functional Collaboration

Article History Received: 19 Oct 2022 | Revised: 24 Oct 2022 | Accepted: 28 Oct 2022