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The Impact of Triple Constraints on Standard Gauge Railway Completion

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This study investigates the impact of triple constraints; cost, time, and scope on the completion of construction projects in Tanzania, with a specific focus on the Standard Gauge Railway (SGR) project. Many large-scale infrastructure projects in the country, including the SGR have experienced delays, cost overruns, and frequent scope changes, leading to significant social, environmental, and economic consequences. By examining these key constraints, the study aims to highlight the challenges that hinder the successful completion of large-scale construction projects and provide insights into managing these limitations more effectively. the study adopts a mixed approach of descriptive analysis and partial least squares structural equation modeling (PLS-SEM) to investigate the relationships between the constraint factors that affected the SGR project completion. The findings indicate that the triple constraint factors had significant impacts on the completion of the phase I SGR project, offering valuable insights to project managers and policymakers on how to improve and utilize the available resources to minimize the impact of the constraints in future and in other large-scale projects in Tanzania. Ultimately, the study highlights the need for enhanced planning and constraint mitigation to meet the ambitious goals of the country's Vision 2025 agenda.

Keywords: Triple Constraint, Project Management, Standard Gauge Railway (SGR) project