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## The Impact of Time, Cost, Quality Parameters on Value Engineering Application in Project Management Practices, Referencing to Post-contract Stage

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The three basic objectives of a project are time, quality, and budget. Poor construction quality, delays in the completion of projects, and cost overruns continue to afflict Sri Lanka's construction industry. Poor management and cooperation both before and after the contract have a significant impact on these issues. Value engineering is one method that is used in many countries to lessen project management issues. The main objective of the research is to measure the impact of time, cost and quality on value engineering approaches in project management in the post-contract stage. The research study was enhanced by the exceptional representation of industry professionals, comprising 92.3% of the reply rate. The industry specialists made a variety of suggestions based on their experience with value engineering during the post-contract stage of a project. Methods of statistical analysis were used to review the collected data. The findings indicated that using the VE approach, the quality factor had an overall influence of 37.5%, the cost component had an impact of 3.9%, and the time factor had an impact of 39% on the range of effective project management techniques. The factors of time, cost, and quality in high-rise building projects at the post-contract stage were the primary focus of this study. Further research could be done to explore how the value engineering concept affects the project management methods applied in infrastructure projects in Sri Lanka.

Keywords: project management, time, cost, quality, value engineering