

Factors Influencing Site Overhead Cost of Construction Projects in Egypt: A Comparative Analysis

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Abstract : Estimating costs is a crucial step in construction management and should be completed at the beginning of every project to establish the project's budget. The precision of the cost estimate plays a significant role in the success of construction projects as it allows project managers to effectively manage the project's costs. Site overhead costs constitute a significant portion of construction project budgets, necessitating accurate prediction and management. These costs are influenced by a multitude of factors, requiring a thorough examination and analysis to understand their relative importance and impact. Thus, the main aim of this research is to enhance the contractor's ability to predict and manage site overheads by identifying and analyzing the main factors influencing the site overheads costs in the Egyptian construction industry. Through a comprehensive literature review, key factors were first identified and subsequently validated using a thorough comparative analysis of data from 55 real-life construction projects. Through this comparative analysis, the relationship between each factor and site overheads percentage as well as each site overheads subcategory and each project construction phase was identified and examined. Furthermore, correlation analysis was done to check for multicollinearity and identify factors with the highest impact. The findings of this research offer valuable insights into the key drivers of site overhead costs in the Egyptian construction industry. By understanding these factors, construction professionals can make informed decisions regarding the estimation and management of site overhead costs.

Keywords : comparative analysis, cost estimation, construction management, site overheads

Conference Title : ICCECM 2025 : International Conference on Construction Engineering and Construction Management

Conference Location : New York, United States

Conference Dates : July 12-13, 2025