

## Multi-Criteria Bid/No Bid Decision Support Framework for General Contractors: A Case of Pakistan

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**Abstract :** In the construction industry, adequate and effective decision-making can mean the difference between success and failure. Bidding is the most important element of the construction business since it is a mean by which contractors obtain work. This is probably the only option for any contractor firm to sustain in the market and achieve its objective of earning the profits by winning tenders. The capability to select most appropriate ventures not only defines the success and wellbeing of contractor firms but also their survival and sustainability in the industry. The construction practitioners are usually on their own when it comes to deciding on bidding for a project or not. Usually, experience-based solutions are offered where a lot of subjectivity is involved. This research has been opted considering the local construction industry of Pakistan in order to examine the critical success factors from contractors' perspective while making bidding decisions, listing and evaluating critical factors in order of their importance, categorization of these factors into decision support & decision oppose groups and to develop a framework to help contractors in the decision-making process. Literature review, questionnaires, and structured interviews are used for identification and quantification of factors affecting bid/no bid decision-making. Statistical methods of ranking analysis and analytical hierarchy process of multi-criteria decision-making method are used for analysis. It is found that profitability, need for work and financial health of client are the most decisive factors in bid/no bid decision-making while project size, project type, fulfilling the tender conditions imposed by the client and relationship, identity & reputation of the client are least impact factors in bid/no bid decision-making. Further, to verify the developed framework, case studies have been conducted to evaluate the bid/no bid decision-making in building procurement. This is the first of its nature study in the context of the local construction industry and recommends using a holistic decision-making framework for such business-critical deliberations.

**Keywords :** bidding, bid decision-making, construction procurement, contractor

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