Abstract

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Bid/no bid decision using fuzzy risk assessment

Bid / No-Bid decisions for large number of projects for construction companies can be cumbersome, tedious and complex task due to the uncertainty, uniqueness of each project and numerous internal and external factors. Contractors’ reputation is generated through the successful completion of projects contractors execute each year. The goal of construction companies is to keep their projects profitable while being executed in line with contractors’ ambition to be an industry leader in sustainability. The profitability of contractors depends on the success of their projects which can be achieved only with an appropriate bid/no bid decision system. This paper introduces a comprehensive two-stage bidding assessment framework for the contractors. The proposed approach helps evaluating the bid/no bid decision and removing any ambiguity that may be associated with the decision process. A competency group scored heat map model to exclude projects with an unattractive opportunity/risk profile as much as possible and as early as possible during the Selection phase and a project risk model using fuzzy logic to decide whether to bid not to bid. The proposed framework is expected to help contractors improving the bidding strategy and ensuring that an efficient bidding processes is in place, as well as relevant resources.