

ANALYSIS OF PERFORMANCE OF ESTIMATORS IN COMPETITIVE BIDDING

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Abstract

Competitive bidding is an intriguing game for company estimators and offer an equal opportunity to submit bids to the prospective clients. The analysis of previous estimating performances of contractors is very important when submitting bids in successive stages in order to become the lowest bidder.

In this research, the estimator's performances are analyzed in three main headings; analysis of current estimating performances, variability of lowest tenders and the relationship between the estimating inaccuracies and the marginal loss.

Under the analysis of current estimating performance the variation of contractor's cost estimate to the lowest bid, variability of contractor's bid with respect to time. Variation of lowest bid and mean bid against number of bidders, statistical test of randomness and success rate sensitivity to change in *mark up policies* are discussed. *different mark up policies* for different cost estimates were determined giving indication to the contractor that what range of projects (*cost*) to be bid. In addition, the success rates for different project types were also analysed. Success rate sensitivity to change in mark up policies gives indication to the contractor that how he increases his success rate in future bidding.

The analysis of variability of lowest tenders gives some indication about the mean of the lowest bids for different range of cost estimates. The coefficient of variation gives some indication about the dispersion of lowest bids so that the contractor can determine the lowest bid for given significance level.

Determination of estimating inaccuracy gives very useful information on estimating variability and the site costing performances. The prospective contractors need to minimize their estimating inaccuracies in succeeding bidding situations. The estimating inaccuracy (obtained as $\pm 2.0-2.5\%$) was linked with the marginal loss (obtained as $\pm 2.0\%$) so that the contractors can determine the possible marginal losses in competition before submitting bids for competition.

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