

Applying the AHP to support the best-value contractor selection - lessons
learned from two case studies in Taiwan

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Abstract

Lately the Best-Value (BV) method for contractor selection has been receiving considerable attention in the public sector in many countries. However, the operations used in performing the BV method often differ due to the various government procurement requirements. Consequently, some of the methods popular in the academic community are not easily incorporated in the BV method in some countries. To enhance the procurement process, this study aims to gain experience by applying the well-known analytical hierarchy process (AHP) to weight the decision criteria for selecting BV contractors of two construction projects in Taiwan. Through these two case studies, this work confirms that the AHP provides a significant benefit for considering the individual preferences of all decision-makers when weighting the criteria. However, this study finds two major potential obstacles, the legal requirements associated with using the AHP and the time it takes to implement the AHP. To overcome these obstacles, this work suggests guidelines to meet the legal requirements for implementing the AHP in the BV contractor selection, and proposes several strategies to shorten the AHP implementation time. The lessons learned here are relevant to those countries in which BV method must be performed in a transparent and strictly regulated environment.

Keyword : best-value tendering method, analytical hierarchy process, multiple criteria evaluations, contractor selection,