

工程異質採購分析模式之研究Development of a heterogeneity analysis model  
for construction procurment

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摘要

Heterogeneity of procurement is essential for Best Value (BV) tender selection. However, there was no theoretical model developed for analysis of the heterogeneity of tenders. It has caused difficulties for the procurement personnel of public agencies in determining the most appropriate tender selection method. The present research aims at developing a quantitative model, namely Price/Performance Analysis Model (P/PAM), for analysis of the heterogeneity of tenders of a procurement project. The P/PAM was developed based on several related fields including the utility functions, price/performance relationships, and price elasticity. The paper describes the mathematic model development of P/PAM and proposes a "Market Price Elasticity of Performance ( $E_m$ )" as an index for measuring the heterogeneity of tenders of a procurement project. Finally, two practical procurement examples, including a product procurement project and a design/build (D/B) construction project, are demonstrated with the proposed P/PAM to illustrate the applicability of the proposed model. Practical issues related to the adoption of P/PAM are also addressed.

關鍵字：tender selection, best value, performance elasticity,  
heterogeneous procurement