

Check the Sensitivity of Cost Parameters in Construction Projects Using Deterministic Model

Mustafa Hassan Talib^{1,a*} and Sedqi Esmael Rezouqi^{1,b}

¹Civil Engineering Department, University of Baghdad, Baghdad, Iraq

Mustafa.Talib2001M@coeng.uobaghdad.edu.iq, sedki_razqi@yahoo.com

*Corresponding author

Abstract

The deterministic model was built to check the sensitivity of the impact of standard cost on the cost and demystification was carried out at the beginning (Delphi rounds and Likert scale) to determine the most important parameters, the Fuzzy Analytical Hierarchy Process (FAHP) to arrange and finally verify the parameter using FDM for the purpose of comparison with reality. In practice, the most important parameters were used and applied in 100 construction projects, calculating importance weights, and then using the deterministic model to verify the extent of their impact in preparation for predicting the mathematical model of cost parameters.

Keywords

Parametric Cost, Deterministic Model, Sensitivity Index