COST ESTIMATION WITH COST SIGNIFICANT MODEL ESPECIALLY FOR OFFICE BUILDING PROJECT

Final Project



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Final Project Bachelor Degree

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ABSTRACT

A variety of cost models are used in the world's construction industries. In Indonesia, the use of traditional bill of quantity is common. Recently they are used as effective and reliable cost models. This research explains the purpose of cost models, it explain how the principle of cost-significance can lead to a simplified method of measurement, which is both well structured and sufficiently accurate.

The derivation of a cost significant model for 7 similar building projects is presented by examples. The principle of obtaining the cost-significance method is applied by using Multiple Linear Regression Analysis, and the model has been tested by one similar project.

The statistic data has been arranged and analyzed by using SPSS program. This program can produce the formula of multiple linear regression equations, the equation can be used to make estimation of total cost for building projects. The result will be tested by different between estimated cost and actual cost divided to actual cost value. The result shows that the accuracy level reaches 5%-8%. The result provides the accuracy range of tender activity which is between 5%-15%.

Keywords:

Cost control, cost-significance, estimating practice, estimation method, multiple linear regression analysis, tender, estimator.

FOREWORD

Thanks and gratitude I prayed to the Lord Jesus Christ, above all the grace that is given, and which has led as well as provide the ability so that I can complete the final project titled "COST ESTIMATION WITH COST SIGNIFICANT MODEL ESPECIALLY FOR OFFICE BUILDING PROJECT".

This final project is structured to complement the requirements in taking a Bachelor of Engineering in the Faculty of Engineering, International Civil Engineering Program, University of Atma Jaya Yogyakarta.

The author realizes that this study may not be completed properly without the help of various parties who have helped with prayer, encouragement, support and other things for smoothen this final project, so with all humility, in this precious occasion authors wish to express gratitude to:

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The author realizes that this final report is far from perfect, there are still many shortcomings due to limited knowledge, skills and experience of the author. For perfection of this final report authors welcome any suggestions and constructive criticism from readers as well.

Final words I hope this final report can provide useful benefits to the reader as well.

Yogyakarta, 24 October 2011 Author

Andreas Setiawan Budiputra

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