

REVIEW PAPER ON COMPARISON OF COST ESTIMATION OF RCC BUILDING

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Abstract - Cost is probably the first to be considered when it comes to construction projects. Accurate estimation of quantities and costs incurred in a construction project is a crucial factor in its achievement. In this study report we have done literature survey and we have found that the most of the peoples has been done work on the cost estimation of building but no one done research on the cost minimization of the rcc building. We have tried to do research on the different models used for the cost estimation.

Key Words: RCC, Building, Estimation, Cost, Construction Cost.

1. INTRODUCTION

Estimation is the process of finding an Estimate or approximation, which is a value that is usable for some purpose even if important data may be incomplete, uncertain or unstable. Estimation of total building work and the current cost of individual give the brief idea about making project economical. Cost is probably the first to be considered when it comes to construction projects. Accurate estimation of quantities and costs incurred in a construction industry and individuality of every project undertaking several factors may affect the overall project cost. Because of the complexity of the construction industry and individuality of every project undertaking, several factors may affect the overall project cost. Lots of quantity and cost estimation models have been developed. Linear regression is a very useful statistical device for analyzing and predicting the input of a potential new item to the overall approximation. Several other methods have been applied for the cost estimation, such as, principle component study, case based reasoning and ANN.

2. LITERATURE SURVEY

Sae-Hyun Ji, Joseph Ahn, Hyun-Soo Lee and Kyeongjin has done the suggested cost model outperforms a typical CBR cost model and identified the modified parameter-making process, which integrates many influential factors into a

small number of significant parameters and has a positive impact on the performance of the cost model. Also estimates the cost using quantity-based modified parameters multiplied by their price, so the cost model can actively respond to the iterative requirements of recalculation of the cost.

An The Hoai Le, Niluka Domingn have worked for the building maintenance as it is considered as a main activity in the construction industry, as it is essential whether the building are large or small, simple or complex. They have used EU standard 2009.

Punam Bhimrao kotak has developed system of cost estimation and cost control for the building during design and development. Research's to calculate the preconstruction cost of residential building by elemental method and the calculation of quantity for construction of building by using Microsoft Excel with the help of AutoCAD drawing.

Appu John, Aswathy Warriar have worked on building construction in which the work and quantity of items calculated by simple mensuration method and also using two methods long wall short wall and centre line method and estimation of building having wall with similar cross section. Cláudio Ricardo Bettini, Orlando Celso Longo, Luciane Ferreira Alcoforado, Alana Caroline Gamba Maia have worked on different methods used for the estimation of the construction cost and as a last observation it could be said that neural networks seem to have a great potential to improve this work, turning the estimation process at the same time quicker, more reliable and even more precise.

Senem Bilir and G. Emre Gurucanli made an effort to estimate OHS (cost of occupational health and safety) cost before construction starts. This study tries to provide an approach. Especially for prime contractors to estimate OHS cost construction can prefer safety plans and organisation and required budget to safety measure not only for cost control but also have human life is protected.

Abdelrahman Osman Elfaki, Saleh Alatawi and Eyad Abushandi have found that there is crucial necessity for a cost estimation method that covers all estimation factors from both types and real need for a standard validation method which can be used to determine the accuracy level of a cost estimation proposal.

Neven Martinec, Nevena Hrnjak Ajukovic, Stjepan Bezak has done study based on the previous experience constructed buildings. Comparing on bills and quantities for the respective buildings, they discovered the differences in the number, description, type and execution technology of buildings.

3. CONCLUSION

From the literatures we have studied in this paper, we got that the most of the peoples did research by calculating cost estimation using different methods. We have concluded that the cost required for the different building work can be reduced and it can be completed in less cost. Use of certain practices can help in reduction of waste. Lower the waste lower the cost. The major reason behind cost increase is the building material waste which generates during mixing, transportation and placing. Proper practices and time management can save labour time and material which are the two major cost consuming elements. Use of machines instead of labours and casting multiples building members at same time can help in cost reduction.

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