

A Sliding Moving Average Approach for Forecasting Project Duration

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ABSTRACT

According to the book 「Critical Chain Project Management」 is describe by Dr. Leach, global projects fail at an amazing rate. Quantitative estimated show that about thirty percent of projects would be canceled before completion. All the time, money and effort that we invest in them must be wasted. Even the projects can be complete finally, the projects usually change the initial scope, or deliver late, or overrun the budget. Vandevorde and Vanhoucke(2006) sorted out three major forecasting methods for project duration. These three major forecasting methods are the planned value method, the earned duration method and the earned schedule method. For the remaining task of project, Vandevorde and Vanhoucke(2006) further extend the three methods according to three situations: 1. duration of remaining work as planned. 2. duration of remaining work follows the current SPI or SPI(t) trend. 3. duration of remaining work follows the current SCI or SCI(t) trend. The last two situations calculated performance index on average view, that might lead to ignore recent period 's performance. for the reason that, this study present the sliding moving average method to overcome this defect and try to improve the accuracy for project duration forecasting.

Keywords : sliding moving average、earned schedule、project duration

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