Using Weighted Schedule Performance to Improve Project Duration Forecasting Accuracy

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ABSTRACT

Earned value management synchronous integration of the concept of cost and duration. Implementation of the project to measure the performance and monitoring. At the same time, managers can simultaneously resolve the cost and time management difficulties. Lipke(2003) import time point proposed the concept of earned schedule(ES). Performance indicators can reflect the real situation of project. Enhance the forecasting ability of the project completion time, but earned value management most focus on the cost field of project. Show insufficient for research of project duration forecasting.

Vandevoorde and Vanhoucke(2005) use project performance indicators as a measurement based. Integration of the nine different project duration forecasting methods. In this study, different from the concept to the use of the cumulative time performance indicators show, but individual period that. And use the average concept. Re-calculate the project schedule performance indicators. During the individual period values do inspection of fluctuation percentage, and executed smooth amendment action on the excess fluctuation scope of period. Construction a forecasting duration method of integration average and smooth amendment concept. And Lipke(2009) proposed weighted average composite rank method, through project cases analysis to examine that earned schedule(ES) ability to forecasting. To provide project managers of the new thinking of selected forecasting methods and calculation of performance indicators.

Keywords: earned value management　earned schedule　schedule performance index　project duration forecasting

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