Abstract

Earned Value Analysis (EVA) is a project management technique (Stephan and Mario, 2006). It is one of the most effective performance measurement tools for controlling and managing the development projects. EVA assists, the project manager to cognize the project status and predicts future performance. The objective of this paper is to predict the Over Target Baseline (OTB) and Estimate At Completion (EAC) of the in-progress projects, based on the earned value analysis (EVA) using Logistic Regression techniques. For this purpose, we obtained ongoing data pertaining to projects from one of the major information technology (IT) company. The progressive estimates of projects, such as, baseline cost, Planned Value, Earned Value and Actual Cost are obtained for the real time data. This approach is applicable to have better forecast of the project cost and decreasing the risk of project cost overrun, and therefore it could be beneficial for planning preventive actions.

References


Application of Logistic Regression to Predict Over Target Baseline of Software Projects

- Ricardo,V. V. , 2003, Earned Value Analysis in the Control of Projects: Success or Failure?, AACE Transactions, CSC. 21. 1.
- Suketu Nagrecha, 2002, An Introduction to Earned Value Analysis, A Report in
- Tracy, S. P., 2005, Estimate at Completion: A Regression Approach to Earned Value. MS Thesis, AFIT/GCA/ENC/05-04, Graduate School of Engineering and Management, Air Force Institute of Technology (AU), Wright Patterson AFB OH.

**Index Terms**

Computer Science  
Software Engineering

**Keywords**

Earned Duration Method  
Earned Value Analysis  
Estimate At Completion  
Over Target Baseline  
Logistic Regression