

ABSTRACT

Lack of monitoring and controlling activities during the implementation of engineering-manufacturing projects at PT Padina Baraya Jaya is a factor that influences the risk of delay and over cost. To overcome this, the Earned Value Management (EVM) method is used. EVM is used to analyze project performance and predict the cost and end time of project implementation. In this study, the resulting project performance value in the 7th week is in poor status, with the CPI and SPI values of the project respectively 0.99 and 0.98. Both of these values identify the performance of project implementation is not as planned. Then from the results of the calculation of the costs needed to complete the project (EAC) amounting to Rp 123,945,928, the EAC value indicates that the costs needed to complete the project based on the current CPI increased from the planned budget of Rp 122,177,399, while the estimated duration there are additional projects for one day so that the total project completion needed will be 60 calendar days. Based on the results of the project's performance, the dashboard is designed in the form of an information system using the EVM method. With the proposed information system design provided, the monitoring and controlling process can be carried out appropriately, reducing the risk of inaccuracy, and being able to display project performance information in real-time so that corrective actions can be taken quickly to minimize obstacles that occur.

Keywords: Monitoring and Controlling, Earned Value Management, CPI, SPI, EAC, Performance Analysis, Information System, Dashboard.