



Earned Value Analysis in Project Management

Earned Value Analysis (EVA) is one of the key tools and techniques used in Project Management, to have an understanding of how the project is progressing. EVA implies gauging the progress based on earnings or money. Both, schedule and cost are calculated on the basis of EVA.

Features of EVA

- Earned Value Analysis is an objective method to measure project performance in terms of scope, time and cost.
- EVA metrics are used to measure project health and project performance.
- Earned Value Analysis is a quantitative technique for assessing progress as the software project team moves through the work tasks, allocated to the Project Schedule.
- EVA provides a common value scale for every project task.
- Total hours to complete the project are estimated and every task is given an Earned Value, based on its estimated (%) of the total.
- Earned Value is a measure of 'Progress' to assess 'Percentage of Completeness'

Need for EVA

- EVA provides different measures of progress for different types of tasks. It is the single way for measuring everything in a project.
- Provides an 'Early Warning' signal for prompt corrective action. The types of signals can be the following:
 - a) **Bad news does not age well** – Holding on to the bad news does not help. The project manager needs to take an immediate action.
 - b) **Still time to recover** – In case, the project is not going as per schedule and may get delayed, the situation is needed to be taken care of by finding out the reasons that are causing delay and taking the required corrective action.
 - c) **Timely request for additional funds** – While there is time to recover, the need for additional resources or funds can be escalated with an early warning.
 - It allows 'rolling up' the progress of many tasks into an overall project status.
 - It provides with a uniform unit of measure (dollars or work-hours) for the progress.

Key Elements of EVA

- **Planned Value (PV)** – The approved cost baseline for the work package. It was earlier known as Budgeted Cost of Work Scheduled (BCWS).
- **Earned Value (EV)** – The budgeted value of the completed work packages. It used to be known as Budgeted Cost of Work Performance at a specified point (BCWP).
- **Actual Cost (AC)** – The actual cost incurred during the execution of work packages up to a specified point in time. It was previously called Actual Cost of Work Performed (ACWP).