

### Philosophy of EVM

What is EVM. Earned value management is a valuable technique that permits the project and program managers to effectively monitor schedule, cost, and technical project progress by the use of EVM formulas. The earned value management implementation is a highly professional function of project management. It ensures that schedule, cost, and technical features are strictly integrated. EVM has the distinctive capability to combine scope of schedule performance, cost performance, and technological operations in a sole integrated system. EVM provides an advance caution of performance issues, allowing for timely remedial measures.

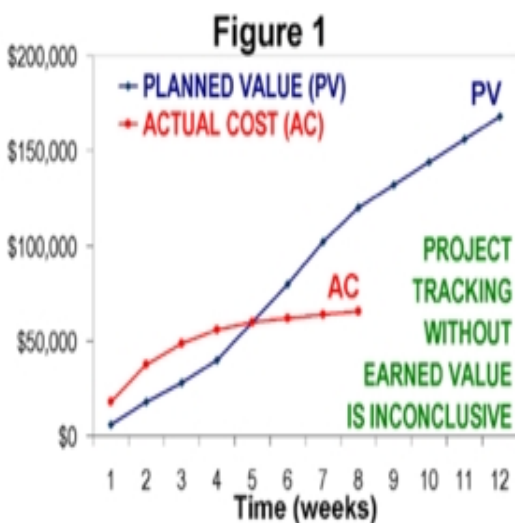
### Performance Forecast

All project activities should essentially earn some value, with the completion of project work. The earned value, attained by the completion of activities, is compared with the planned and actual costs to determine the performance of the project. The forthcoming trends of the performance can then be forecasted accurately. Physical progress is calculated in units of applicable currency, and then cost and schedule performance are evaluated in the similar units.

### EVM Formulas, How to Understand?

The following are EVM formulas. For EVM formulas description, read the article [Definition of EVM formulas](#)

$$SV = EV - PV \quad +ve \text{ good}$$



## Understanding EVM (Earned Value Management) Formulas

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$$CV = EV - AC \quad \text{+ ve good}$$

$$SPI = EV/PV \quad \text{greater than 1 is good}$$

$$CPI = EV/AC \quad \text{greater than 1 is good}$$

$$EAC = AC + BAC - EV \quad \text{budgeted, atypical, no variation in future}$$

$$EAC = BAC/CCPI \quad \text{no variation in BAC, same rate spending}$$

$$EAC = AC + (BAC - EV)/CCPI \quad \text{typical, same variation in future}$$

$$TCPI = (BAC - EV)/(BAC - AC) \quad \text{must meet BAC}$$

$$TCP I = (BAC - EV)/(EAC - AC) \quad \text{not meet BAC, CPI decreased}$$

$$VAC = BAC - EAC$$

$$ETC = EAC - AC$$

$$\% \text{ Complete} = EV/BAC$$

$$EV = \text{Total months completed} / \text{Total months project} \times \text{Total cost}$$

PV = Planned % complete x Project budget

EV = Actual % complete x Project budget

### Conclusion

Implementation of EVM in difficult and large projects include several features, indicators, and forecasts that assists to keep track of the progress with relation to the plan, and assists in timely corrective and preventive actions. However, the main function of an EVM system is its capability to measure progress by the use of EV and EV. Earned value management (EVM) measures progress objectively. Several books are available to learn more about the application of EVM formulas, and what is EVM.

Also Read:

[Definition of EVM formulas](#) .