

SPM: SOFTWARE PROJECT MANAGEMENT
SPM: UNIT-4 04/17

20 APRIL 2022 / IT-3rd year, VIth semester
FALL SEMESTER, YEAR (VIth, 3rd)
FALL SESSION (2021-22)
(SPM)
MS. SHWETA TIWARI
Published: April 20, 2022

SPM: SOFTWARE PROJECT MANAGEMENT

TOPIC On : Difference between Cost Variance and Schedule Variance

—

By SHWETA TIWARI

Under On: SOFTWARE PROJECT MANAGEMENT

TOPIC On : Difference between Cost Variance and Schedule Variance

Prerequisite – [Cost Variance \(CV\) and Schedule Variance \(SV\)](#)

Cost Variance (CV):

Cost variance is basically related with the budget of the project. Cost variance is the difference of the actual cost and the expected cost. Cost Variance is calculated by taking the difference of the Earned Value and the Actual Cost.

Schedule Variance (SV):

Schedule variance basically related with the scheduled time for the project. Schedule variance is the measurement of deviation of consumed time from the scheduled time. Scheduled Variance is calculated by taking difference between Earned Value and Planned Value.

Example:

The budget of a project is at 1, 00, 000 dollar. It has to be completed in 9 months but after one month it is found that only 10 percent of the project is completed and the cost at the end of one month is 10, 000 dollar. The planned completion should have been 15 percent.

Then the Cost Variance (CV) and Schedule Variance (SV) will be:

Actual Cost,

$$= 1,00,000 \text{ dollar}$$

Planned Value,

$$= 15\% * 1,00,000$$

$$= 15,000 \text{ dollar}$$

Earned Value,

$$= 10\% * \text{Rs. } 1,00,000$$

$$= 10,000 \text{ dollar}$$

Cost Variance (CV),

$$= \text{Earned Value} - \text{Actual Cost}$$

$$= 10,000 - 1,00,000$$

$$= -90,000$$

Schedule Variance (SV),

$$= \text{Earned Value} - \text{Planned Value}$$

$$= 10,000 - 15,000$$

$$= -5,000$$

Conclusion: Cost Variance (CV) is negative which means the project is over budget and Schedule Variance (SV) is negative that means the project is behind the schedule.

Difference between Cost Variance and Schedule Variance:

Cost Variance	Schedule Variance
Cost variance focuses on the budget of the project.	Schedule variance focuses on the time consumption in the project.
Cost variance shows deviation of spent cost and the expected cost.	Schedule variance shows the deviation in time consumed and the estimated time.
Cost variance is the difference of earned value and actual cost.	Schedule variance is the difference of earned value and planned value.
$CV = EV - AC$	$SV = EV - PV$
If cost variance is negative then the project is over budget.	If schedule variance is negative then the project is behind schedule.
If the cost variance is positive then the project is under budget.	If the schedule variance is positive then the project is ahead of schedule.

If the cost variance is zero then the project is on budget.

If the schedule variance is zero then the project is on schedule.