

## Diagramma EVM

Si tratta della curva S che si trova a pag 6 sul doc INFN-PM-QA-405 (Criteri per la redazione del Project Management Plan).

In breve e' l'integrale di allocato e speso vs tempo.

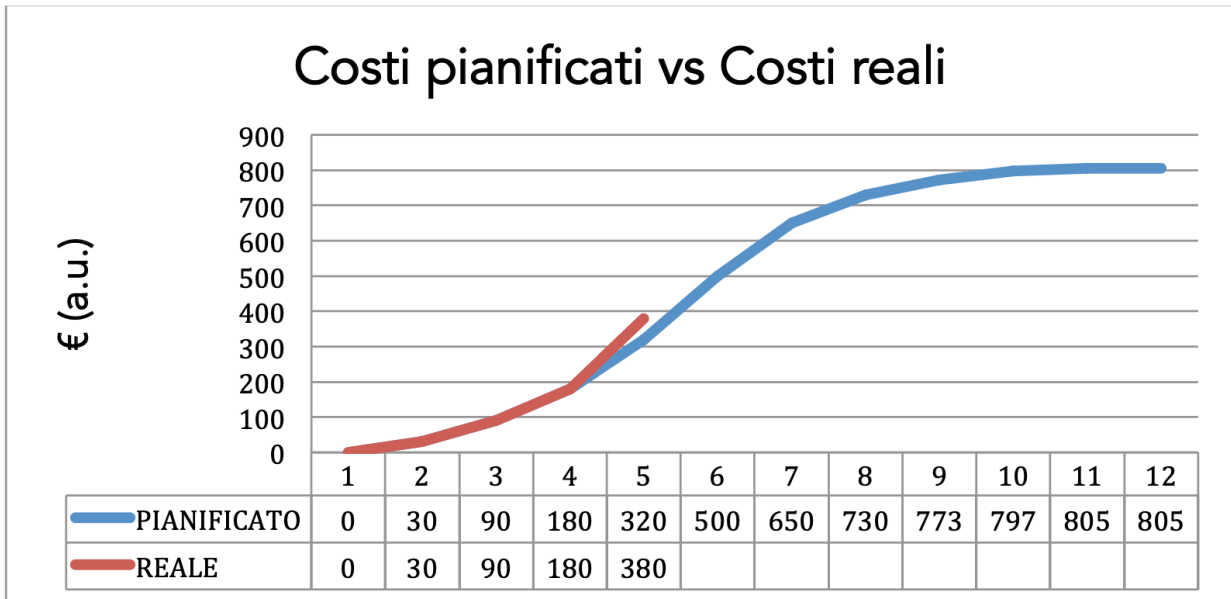


Fig.1: Esempio di curva S

Links:

[https://it.wikipedia.org/wiki/Metriche\\_di\\_progetto](https://it.wikipedia.org/wiki/Metriche_di_progetto)

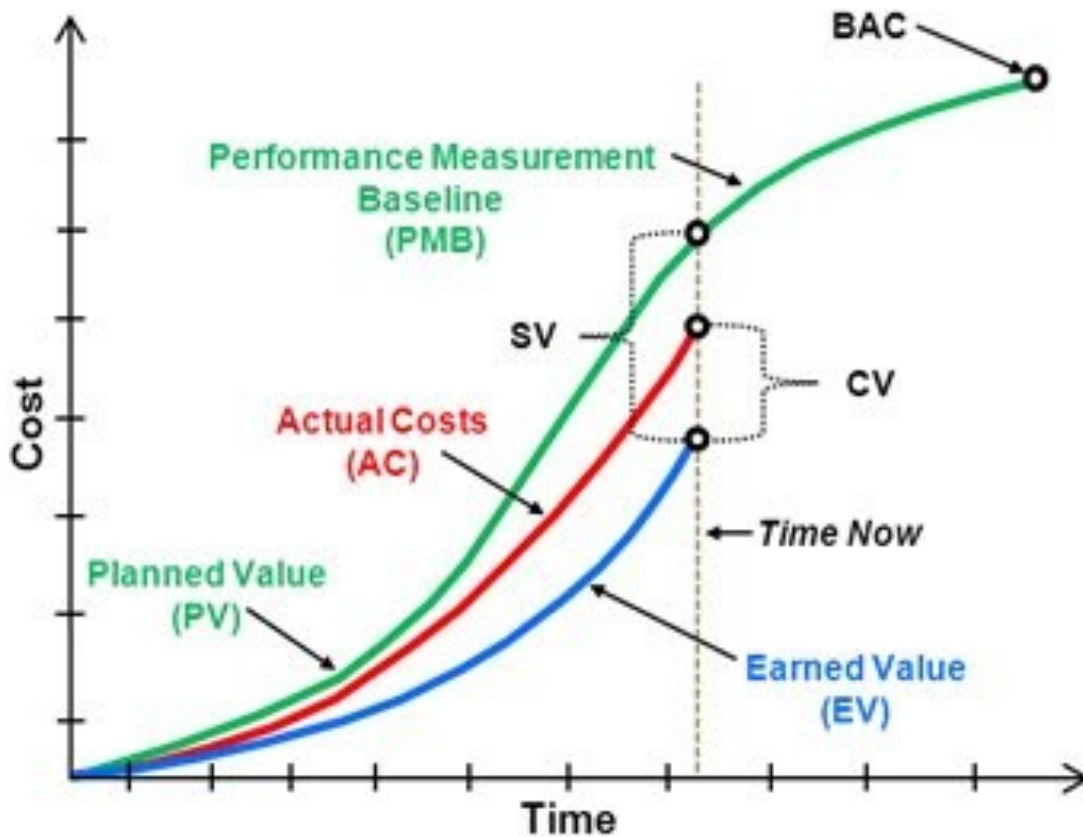
<https://twproject.com/it/blog/earned-value/>

<https://www.humanwareonline.com/project-management/center/earned-value-management/>

## Earned Value Management (EVM)

Acronyms and names:

- **Budget At Completion (BAC)** is defined as the total budgeted cost for the project.



- **Actual Cost (AC)** is defined as the sum of costs for a period incurred by specified date.
- **Earned Value (EV)** is defined as the cost of work actually completed. The calculation:  $EV = \text{Actual \% Complete} \times BAC$ .
- **Planned Value (PV)** is defined as the cost of work scheduled to be completed. The calculation:  $PV = \text{Planned \% Complete} \times BAC$ .

EVM equations can be separated into two groups: variance and performance. The variance equations describe project health in terms of profit and readiness; the performance equations refer to project performance relative to dollars and speed. Take a look.

### Calculating Project Variance

#### Cost Variance (CV)

= Earned Value (EV) – Actual Cost (AC)

CV is the profit loss equation. It's used to determine if a project is over or under budget. It tells you how much the project has earned to date and how much has been spent.

- If the resulting value is positive, the project has earned money.

- If the resulting value is negative, the project has lost money.

### **Schedule Variance (SV)**

= Earned Value (EV) – Planned Value (PV)

SV is the difference between the amounts budgeted for the work you actually did. It's used to determine if project is ahead or behind schedule.

- If the resulting value is positive, the project is ahead of schedule.
- If the resulting value is negative, the project is behind schedule.

## **Calculating Project Performance**

### **Cost Performance Index (CPI)**

= Cost Variance / Earned Value

CPI is a ratio of the budget for work performed to what was actually spent for the work. Use it to determine how the project is performing relative to cost.

- If the resulting value is greater than one, the project is earning more than what is being spent.
- If value is less than one, the project is losing money.
- A CPI of .85 means that a project is losing 15 cents for every dollar that is spent.
- A CPI of 1.85 means that a project is making .85 cents for every dollar that is spent.

### **Schedule Performance Index (SPI)**

= Earned Value / Planned Value

SPI is a ratio that compares performed work to planned work. It reflects the amount the project is ahead of or behind schedule. SPI-to-date reflects project schedule performance for the remainder of the task.

- If the resulting value is greater than one, the project is over performing and it is ahead of schedule.
- If the resulting value is less than one, the project is underperforming and it is behind schedule.
- A SPI of .85 means that the project is performing 15% slower than what is expected.
- A SPI of 1.85 means that the project is performing 85% faster than what is expected.