

IT Project Management

Final Lesson

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The Project Management

We will speak about:

- **WHAT** is the Project Management
- **HOW** it can help us
- **WHY** we should use it

What is a Project (1)

The Guru of the Project Management, Russel. D. Archibald, defines a project as:

*“the **systemic** management of a complex, single and **fixed-term company** aimed at achieving a **clear and predefined** objective through a **continuous process** of differentiated planning and control and interdependent **cost-time-quality** constraints”*

And the Project Management Institute, in a more simple way:

*“Project Management is the application of **knowledge, skills, tools and techniques** to project activities to meet project **requirements**”*

Why Project Management (1)

To Manage a Project is a **cost**.

The question is: why have I (the Company) to pay that cost ?

Because:

The PM activities are required to achieve the project target, with the minimum of resources, the minor possible costs, on time, with the highest quality AND with the Customer's satisfaction

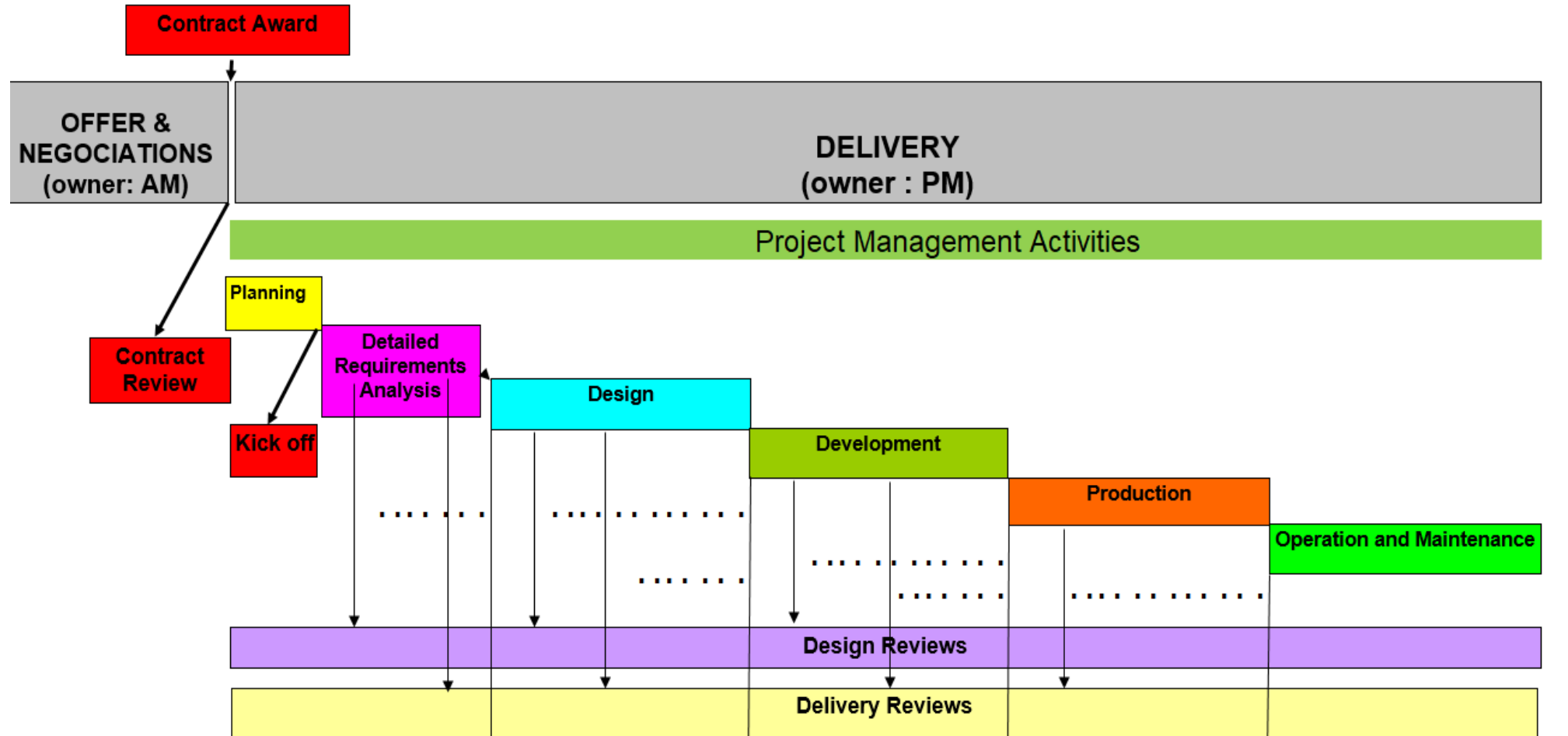
Why Project Management (2)

And BECAUSE it answers the big, existential questions of a Project Manager:

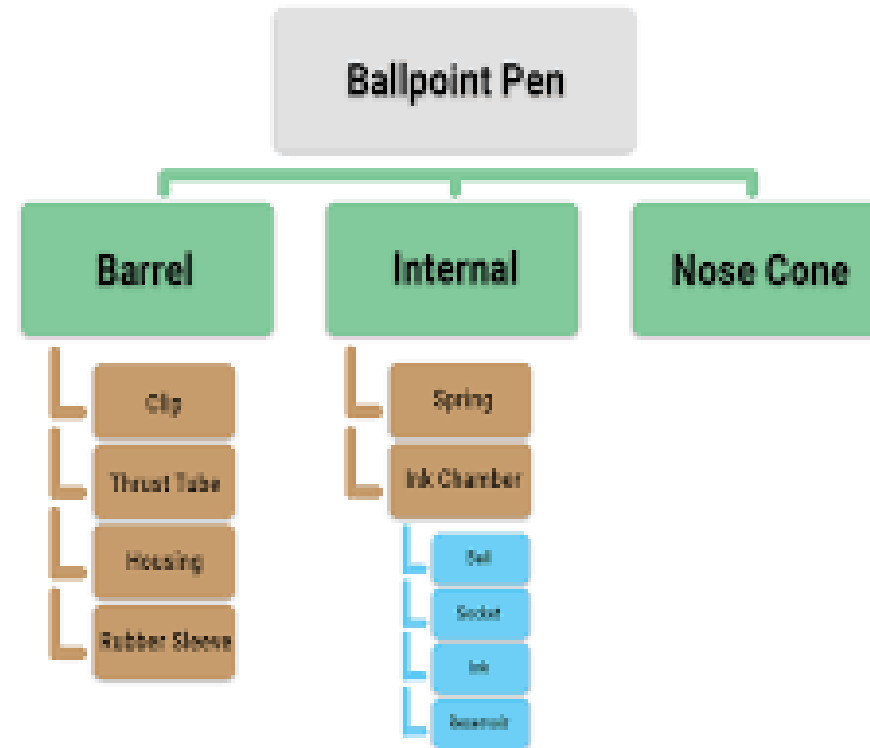
- WHAT
- WHEN
- WITH WHOM and WITH WHAT
- HOW MUCH I will pay
- HOW MUCH I will earn

Is it enough ?

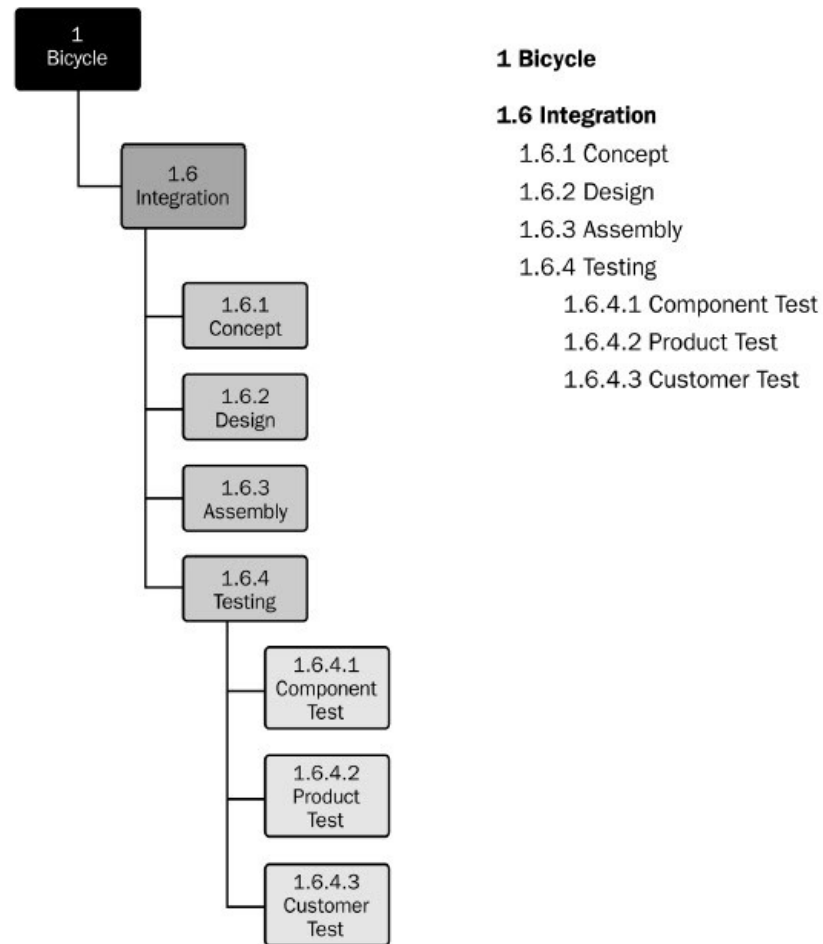
The Project Life Cycle



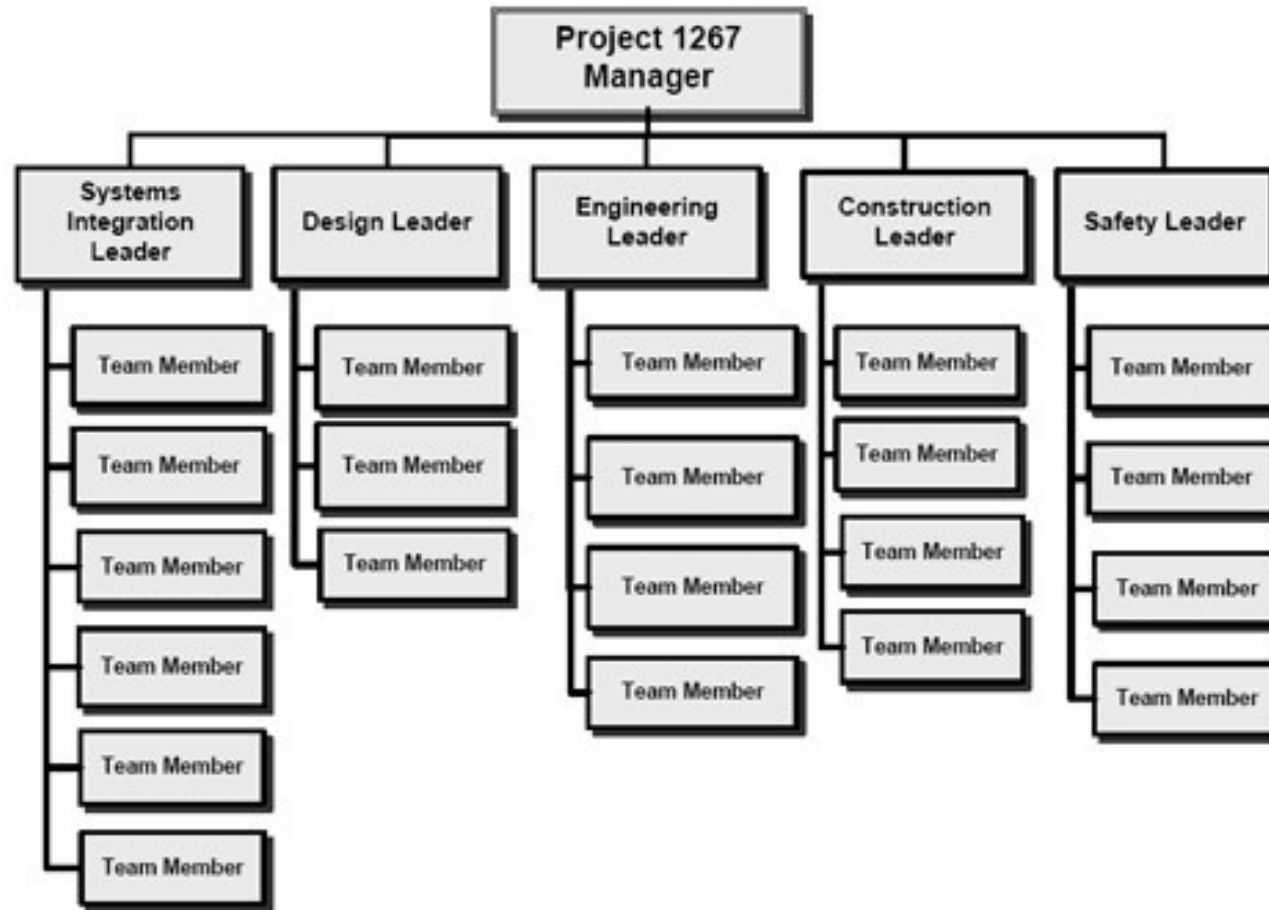
PBS: a (very simple) example



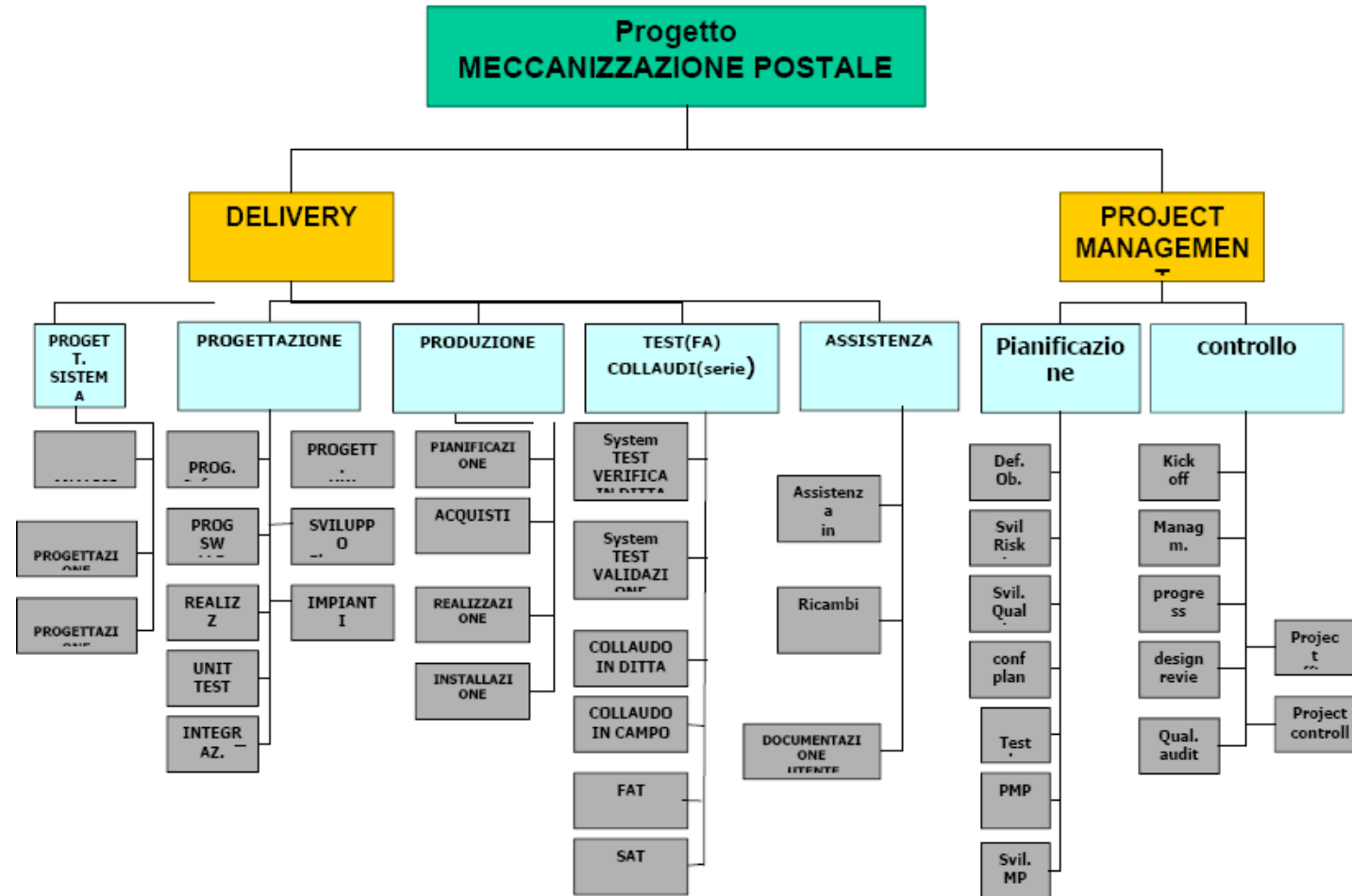
ABS: an example



OBS: an example



A real life WBS Example: Postal Mechanization



The Costs

Generally, the project costs should be estimate during the Proposal cycle

BUT

The Project Manager is now the Owner and the Responsible of the whole Project

THEN

The costs **MUST** be renegotiated with the internal and the external suppliers before their assignement to the right WP (for future control)

The time

Each activity included in a WP requires a certain time to be achieved.

The determination of the *HOW LONG it takes* is vital in the general design of the Project: most, if not all, of the project activities are dependent from each other, and the time schedule is one of the most important elements.

The time elongation of each activity **MUST** be discussed with its Responsible: it is a basic part of each WP, and an important element for the control of the project progress.

Something more

Before starting the Project detailed planning, two other elements **MUST** be considered:

The **RISKS** (Risk Analysis): remember Murphys ?!

The **EVA** (Economic Value Added): the project earns or loses money ? What can I do to generate wealth ?

Risk Analysis/1

We prefer to think about WHAT we have to do to accomplish the Project target, and to minimize what should NOT happen to make more difficult the target achievement.

ERROR

We MUST think about the RISKS that we can (will ?) face during the development of our Project, and put in place everything we can do to minimize, if not eliminate, the adverse situations.

EVA: Economic Value Added

A Company invests money to run a project: is it profitable ?

*The Economic value added (EVA) is a measure of a project's **financial performance** based on the residual **wealth** calculated by deducting its cost of capital from its operating profit, adjusted for taxes on a cash basis. EVA can also be referred to as **economic profit**, as it attempts to capture the true economic profit of a company.*

Essentially, it is used to measure the value a project generates from funds invested into it. If a project's EVA is negative, it means the project is not generating value from the funds invested into the business. Conversely, a positive EVA shows a project is producing value from the funds invested in it.

Scheduling

There are many tools used to visualize the time schedule of a project. Two are the most diffused:

- **GANTT Chart**, introduced by Mr. Henry Gantt in 1917, named sometimes as BAR Chart
- **PERT** (Program Evaluation and Review Technique), introduced by Lockheed in 1958

Communication

One of the main tasks for a Program Manager is:

Communicate

With:

- The stakeholders of the project: The Shareholders (for very large and important projects), the Company's Top Management, the Company's middle Management involved in the project
- The Project Team
- The Responsibles of the activities required to achieve the project scope

Project Management Plan (PMP)

The **Program Management Plan** (PMP) is an **essential, official document** that details all the policies, procedures, processes, and other organizational rules that the program will follow to achieve the program's outcomes.

The PMP includes both program planning and execution activities and thus acts as a guide for the program. Also, as the PMP has the potential to include a lot of information, the PMP development takes time as the plan is progressively elaborated

As detailing all such information isn't usually possible in one document, the PMP lists all such documents that are required to help the program manage, execute, and control the program to achieve its objectives.

The Kick off Meeting

The **Kick Off Meeting** is the **formal start** of a project.
It is a ***crucial moment*** in the Project lifecycle

The Attendants should be:

- The project **Stakeholder**: the Company management, usually
- The Responsible of the Teams involved
- The main Resources: who will develop the Project
- The Project Management staff

Manage a Project

Once planned, a Project **MUST be managed** in term of:

- **Activities progress**
- **Costs Analysis**
- **Risks Management**

As a plan is designed to not be abided, we should:

- **Reprogram**

And, as we work in an organization:

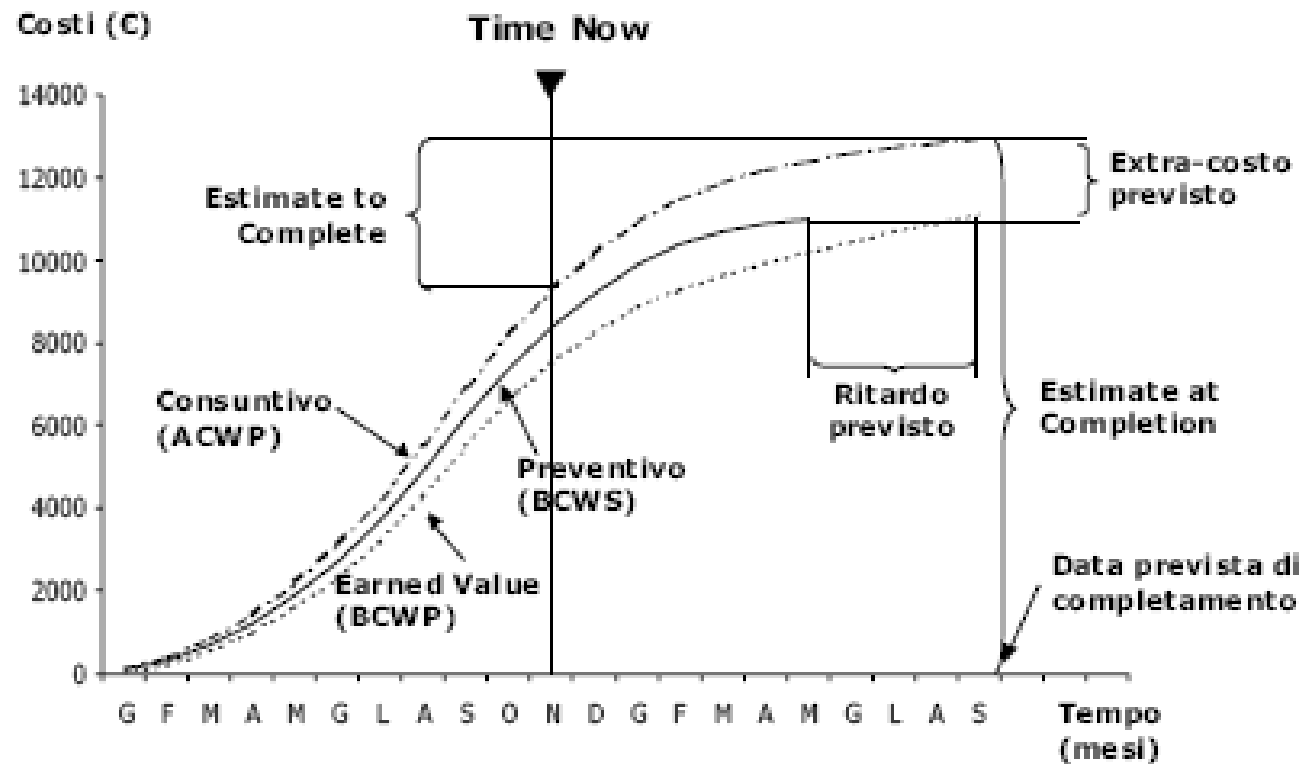
- **Report**

The EVM methodology

The Earned Value Methodology is a technique whose target is to quantify the **costs** and the **efficiency** of the production processes.

The methodology was introduced more than 100 years ago and used for the first time in project management in 1960 by the US DoD to verify the status of their projects in term of costs and schedule.

EVM with the S Curve



Reporting

A **project status report** is a critical part of an effective project communications and management **strategy** to update your project team, sponsors or stakeholders.

The target of reporting is to pass *the right information to the right people*, about the project status, the required actions, the involved responsibilities.

It's a ***vital communication tool***, and it can provide a documented *history* of the project, which makes planning for next projects easier.

Remember: **the Report is an official and formal document**

The history of a real project: the ELTA Project



Home work

A part of the exam will be the discussion of a project.

1. Invent a project: it will be related to the production of «something»
2. Draw a schedule (in excel) with the tasks and the milestones
3. Calculate the costs for each task and the total project budget
4. Determine a possible cost for the Customer, and calculate the margin
5. Prepare a concise PMP for the project: use the ToC presented in Lesson 5
6. Prepare a concise Kick off Meeting of the project: use the Guide Lines presented in Lesson 5
7. Prepare a concise Report for a choosen, intermediate date of the project schedule: use the ToC presented in Lesson 7