



PROJECT MANAGEMENT

Sixty senators conspired



The death of Julius Caesar, Vincenzo Camuccini



Sixty senators conspired

Only 23 managed to stab him



Sixty senators conspired

Only 23 managed to stab him

Only 1 wounded fatally

What we learn:

- Majority of the project team members was incompetent
- Finally only 23 were capable to do the work
- As usually: The success of the whole enterprise depends on a single team leader



Only 1 wounded f

Project Build-up



Planning & Scheduling



Project Management

07:00 P&S

Planning and Scheduling:

07:10 Goals

Effective and repeatable process which secures:

- Project orientation
towards the project goals as set by the purchaser
taking under consideration the company strategy
- Cost/benefit ratio as agreed with the purchaser

through:

- Proper project structuring
- Project planning
- Permanent reviewing and change execution



07:00 P&S

07:20 Methods **Project goal:**

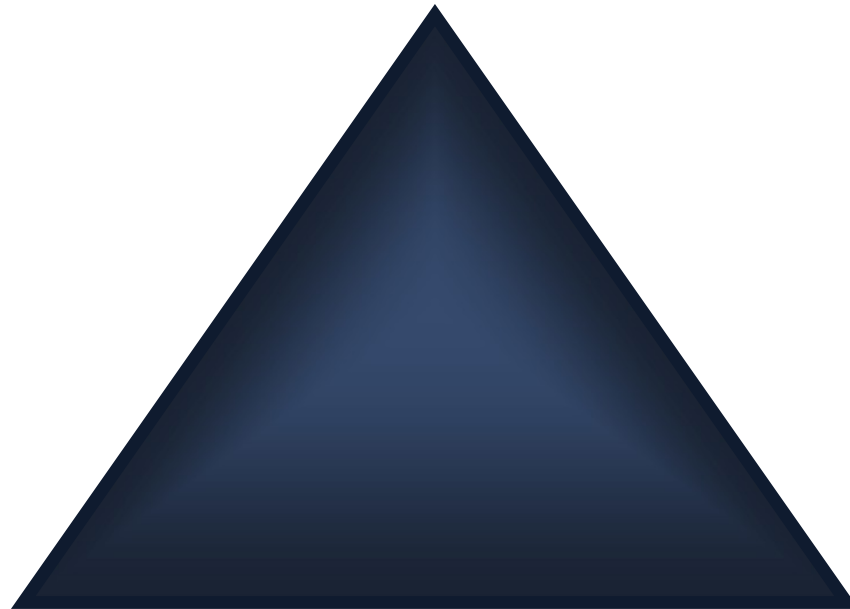
Result, which should be achieved
or defined condition of the realization
of all project related tasks



07:00 P&S

07:20 Methods Project goal dimensions:

Results



Time

Cost



07:00 P&S

07:20 Methods **SMART**

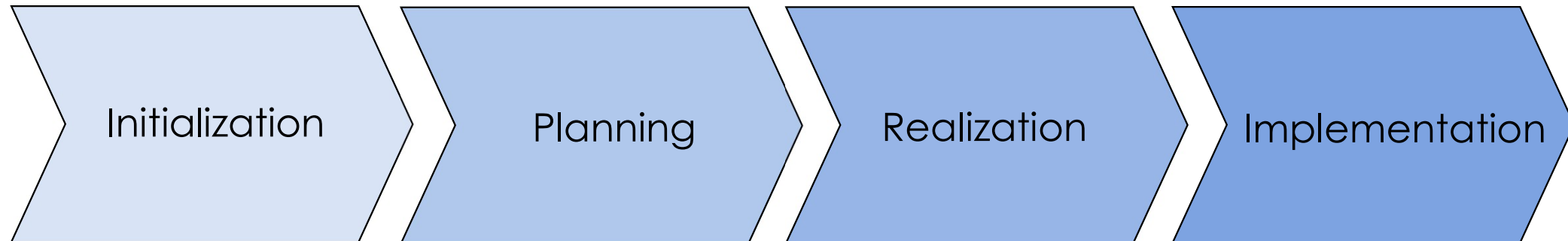
Abbreviation	Description	Example
S	Specific	With a budget of 20 Millions the city of 100'000 inhabitants shall get within 2 years complete coverage with 10 MB Data network.
M	Measurable	Network: 10 MB Data network Budget - 20 Millions Coverage: the whole city of 100'000 inhabitants Duration: 2 years
A	Attainable	Budget is secured by the city, technology is available, provider has technical capabilities to deliver, no obstacles from the inhabitants are expected.
R	Relevant	Project objectives contribute towards project goals of improved people communication within the area with a positive impact on local economy.
T	Time-Bound	Project results are to be delivered within 2 years completion time.



Project Management

07:00 P&S

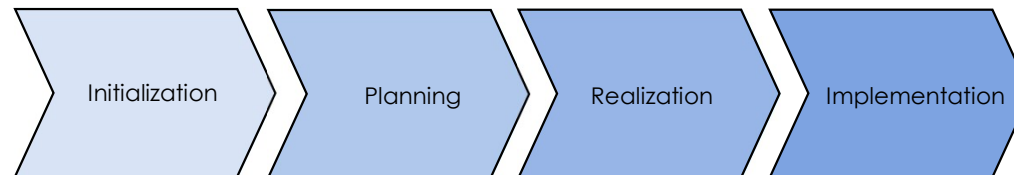
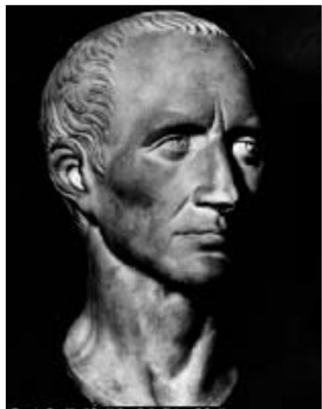
07:20 Methods **Basic Project Phases:**



07:00 P&S

07:20 Methods Basic Project Phases:

Any Idea how old is this model?



Just about 2000 years at least!

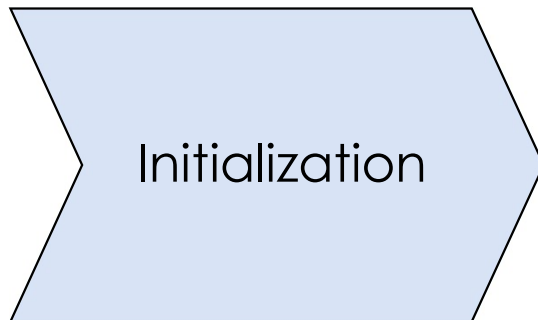
Rubicon Model of Motivation Build-up
named after Cesar Julius Gaius



07:00 P&S

07:20 Methods **Initializing Goals:**

- Answer the question: Do I want it?
- Build-up the motivation of a team



07:00 P&S

07:20 Methods **Planning Goals:**

- Answer the question: How I want it?
- Sworn the team on a common solution



*No war was won as planned,
but no war was won without plan.*

Dwight D. Eisenhower



07:00 P&S

07:20 Methods **Implementation Goals:**

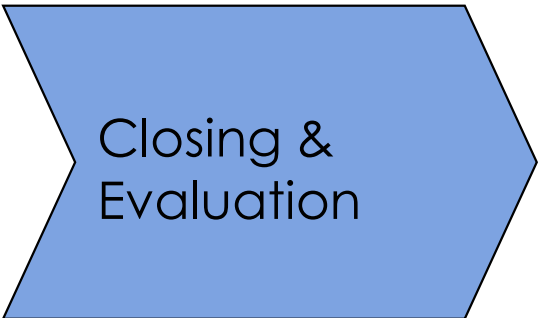
- Do it exactly as planned!
- Keep everybody motivated!



07:00 P&S

07:20 Methods **Closing Goals:**

- Make sure it works as planned!
- Convince everybody it was the best project ever!

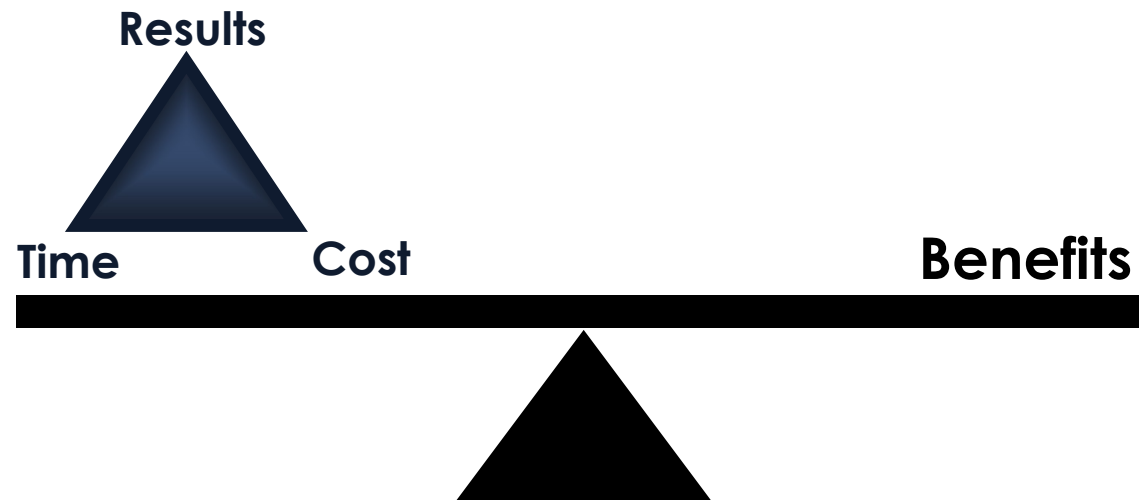


Closing &
Evaluation



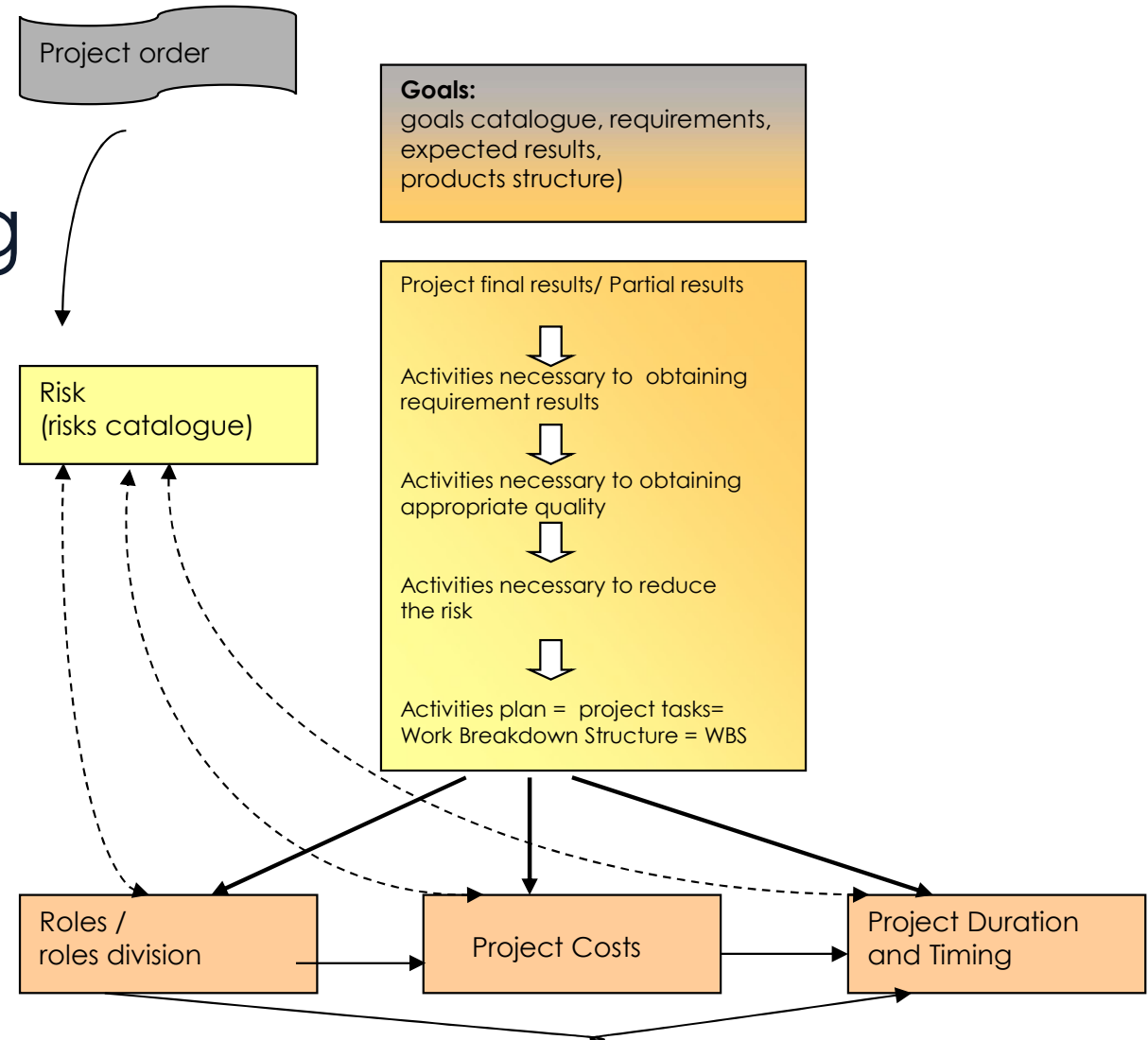
07:00 P&S

07:20 Methods **Cost/Benefit**



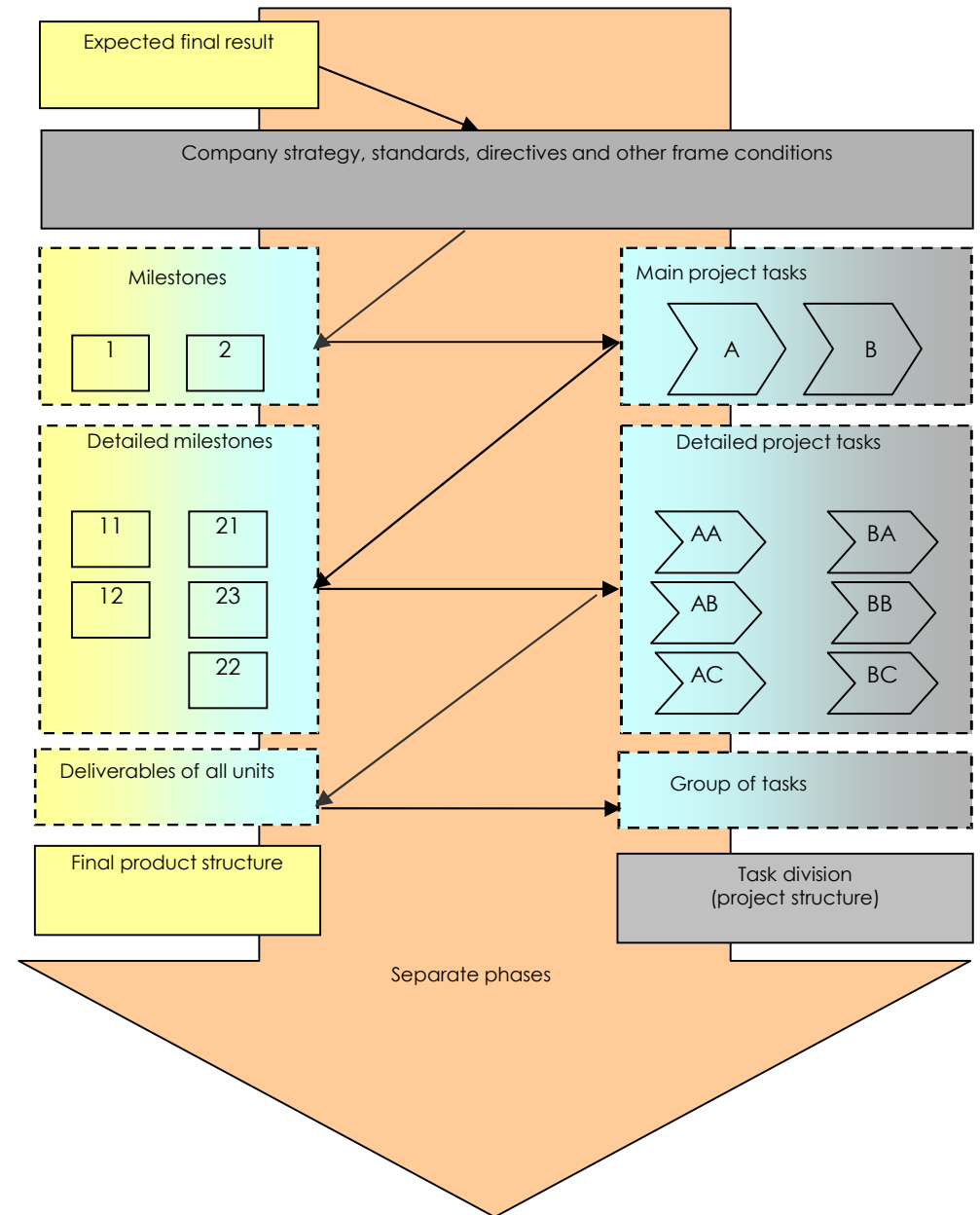
07:00 P&S

07:20 Methods Structuring Project



07:00 P&S

07:20 Methods Product & Project Structures

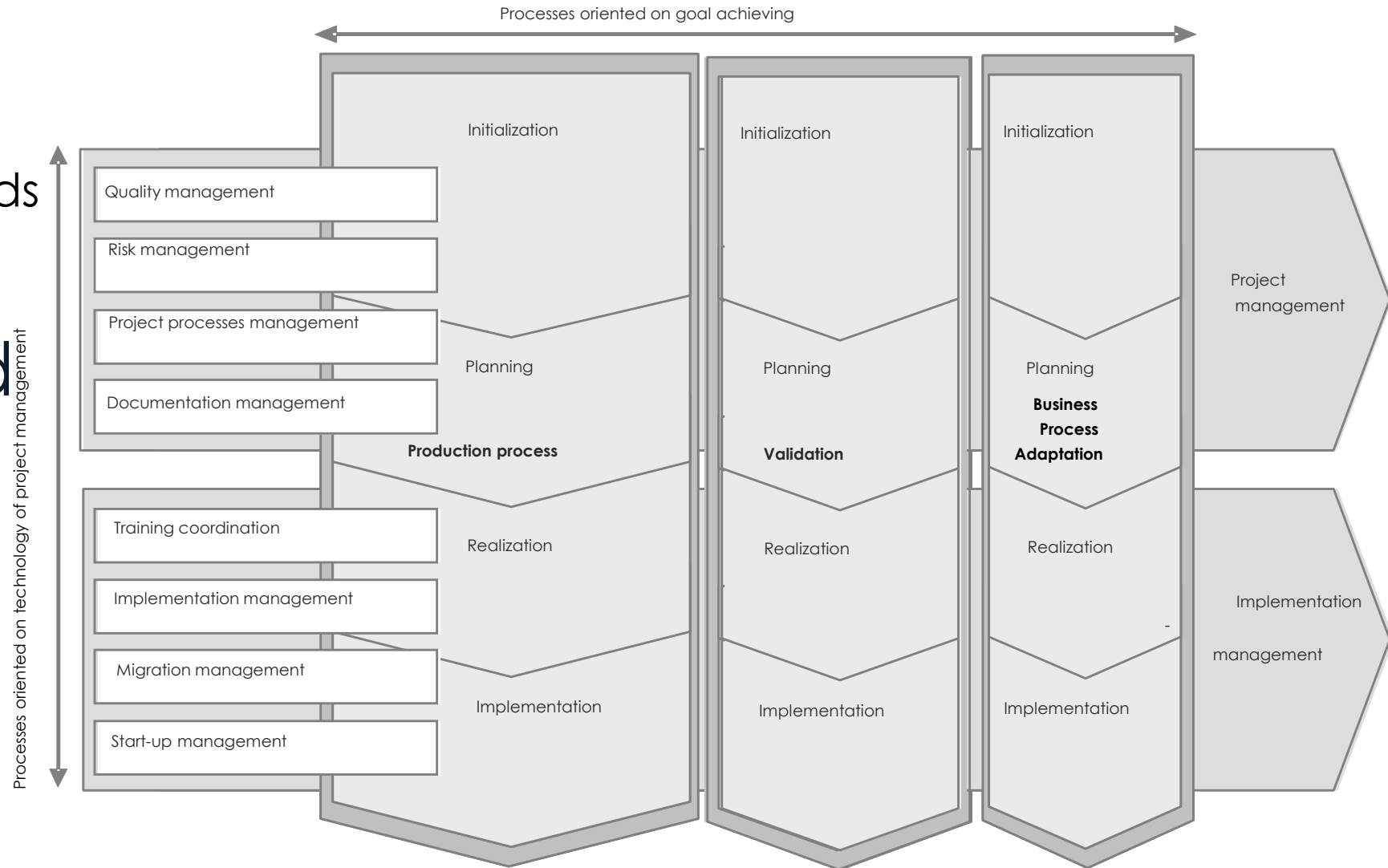


P&S: Planning & Scheduling

07:00 P&S

07:20 Methods

Integrated Model of Project Structure



Project Management

07:00 P&S

07:20 Methods **Planning**

Logical interdependence between the operations determines the planning.

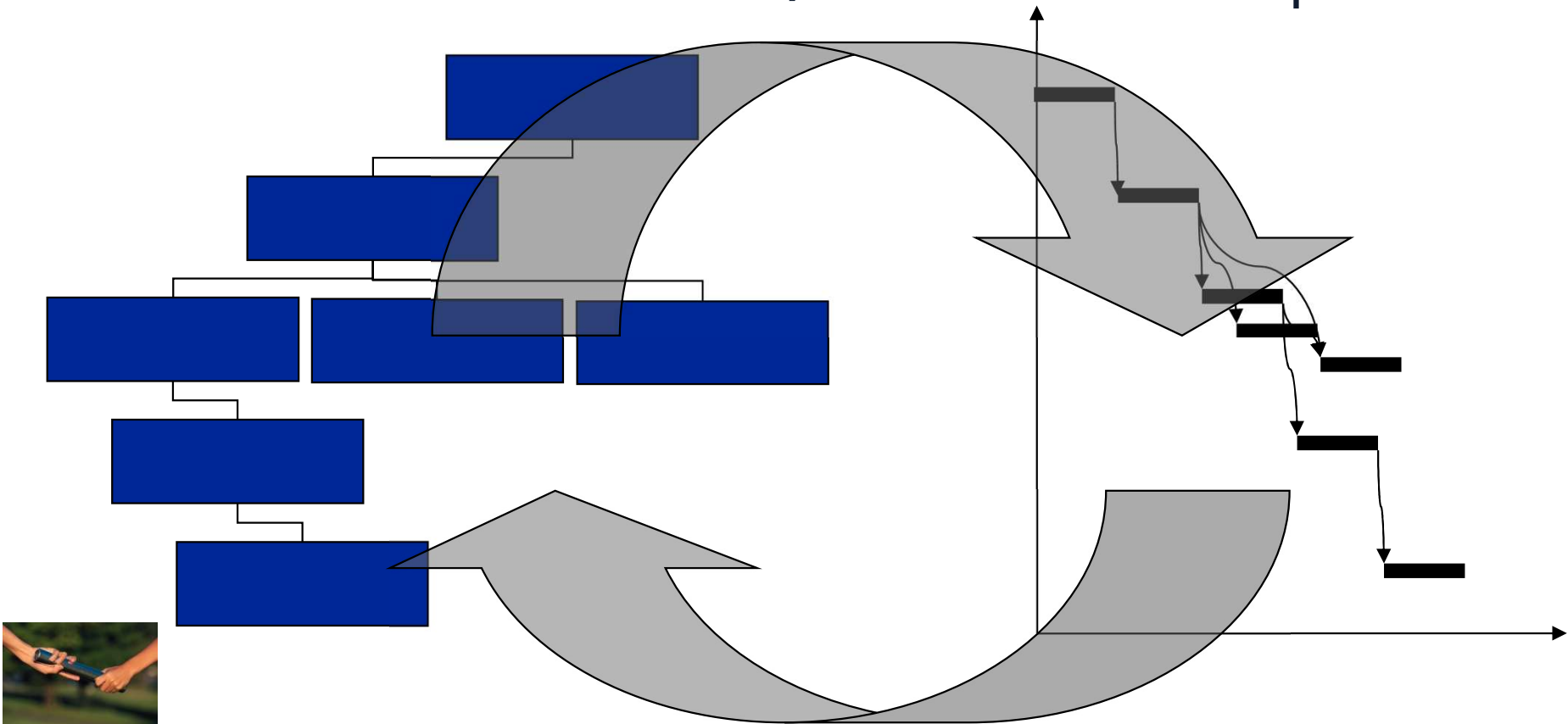
Procedure:

- Which operations are independent?
- Which results are necessary for the subsequent operations?
- Which operations are sequential?
- Can some operations be grouped?
- Can some groups of operations be separated as project?



07:00 P&S

07:20 Methods Interrelation / Schedule Optimization



07:00 P&S

07:30 Techniques **Milestone**

- significant event
- set up and ending phase related to project or part of a project, project phase or group of tasks
- it may be verified if achieved
- It has an established time schedule
- It is clear what/when and at which cost is to be done
- It marks a progress towards the project goals' achievement



07:00 P&S

07:30 Techniques **Brainstorming**

1. Select Moderator
2. Choose the criteria for ideas evaluation
 - Moderator pick-ups all contributions regarding criteria
 - Nobody judge contribution during the brainstorming
 - Structure the final list of criteria
3. Work on Ideas
 - Moderator pick-ups all contributions with ideas
 - Nobody judge contribution during the brainstorming
 - Eliminate double items, combine similar
 - Evaluate along the final list of criteria
 - Structure the final list of evaluated ideas



07:00 P&S

07:30 Techniques Beta Technique of Project Costs/Time Estimation

Cost/Time of single task = 1/6 of:

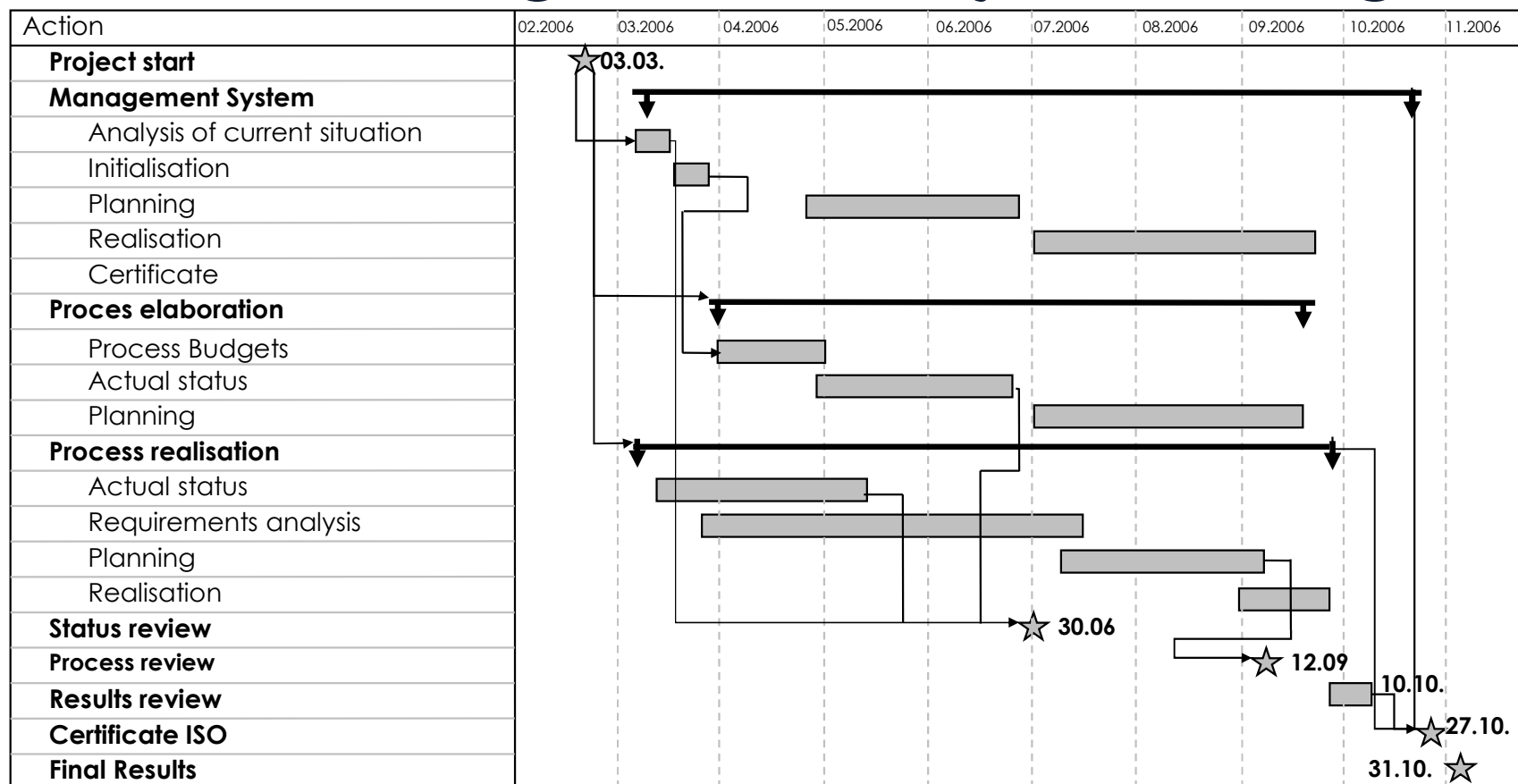
(1 x Pessimistic estimation of the task costs/time
+ **4** x Estimation of the mean task costs/time
+ 1 x Optimistic estimation of the task costs/time)

99.74% Level of probability



07:00 P&S

07:30 Techniques Gantt Diagram of Project Timing



Project Management

07:00 P&S

07:30 Techniques **Rentability Estimation by RoI**

$$\text{Return on investment} = \frac{\text{benefits from the project}}{\text{invested capital}}$$





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