



INVESTMENTS IN EDUCATION DEVELOPMENT

Selected chapters of Project Management

According to SHINE Consulting

“PMF”

L3-4

Groups of Project Processes

... and the Project Life Cycle

Process groups

- Initiation
- Planning
- Execution
- Monitoring & Control
- Closing



STRATEGY

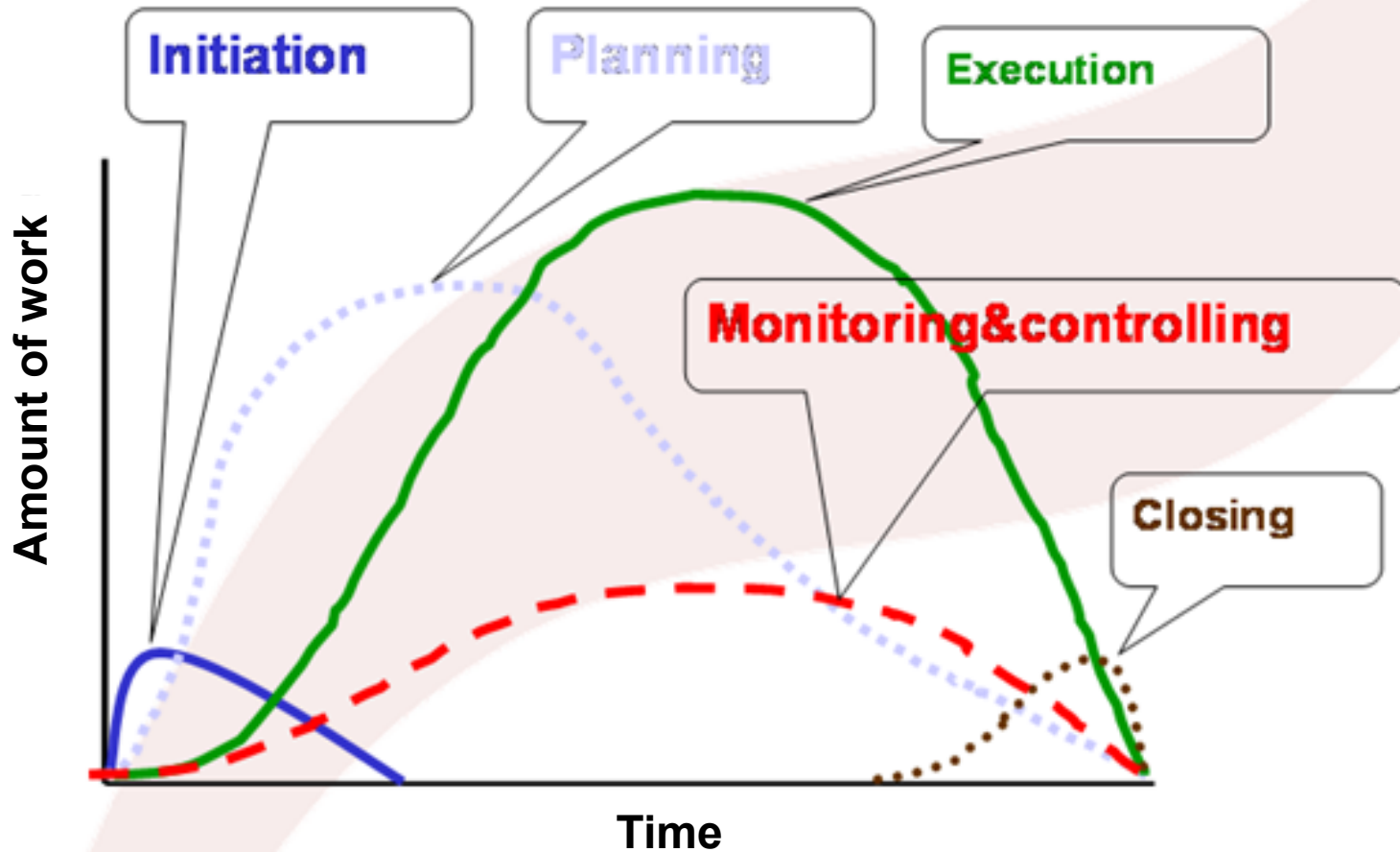


IMPROVEMEN

T

Project processes groups **Project life cycle definition**

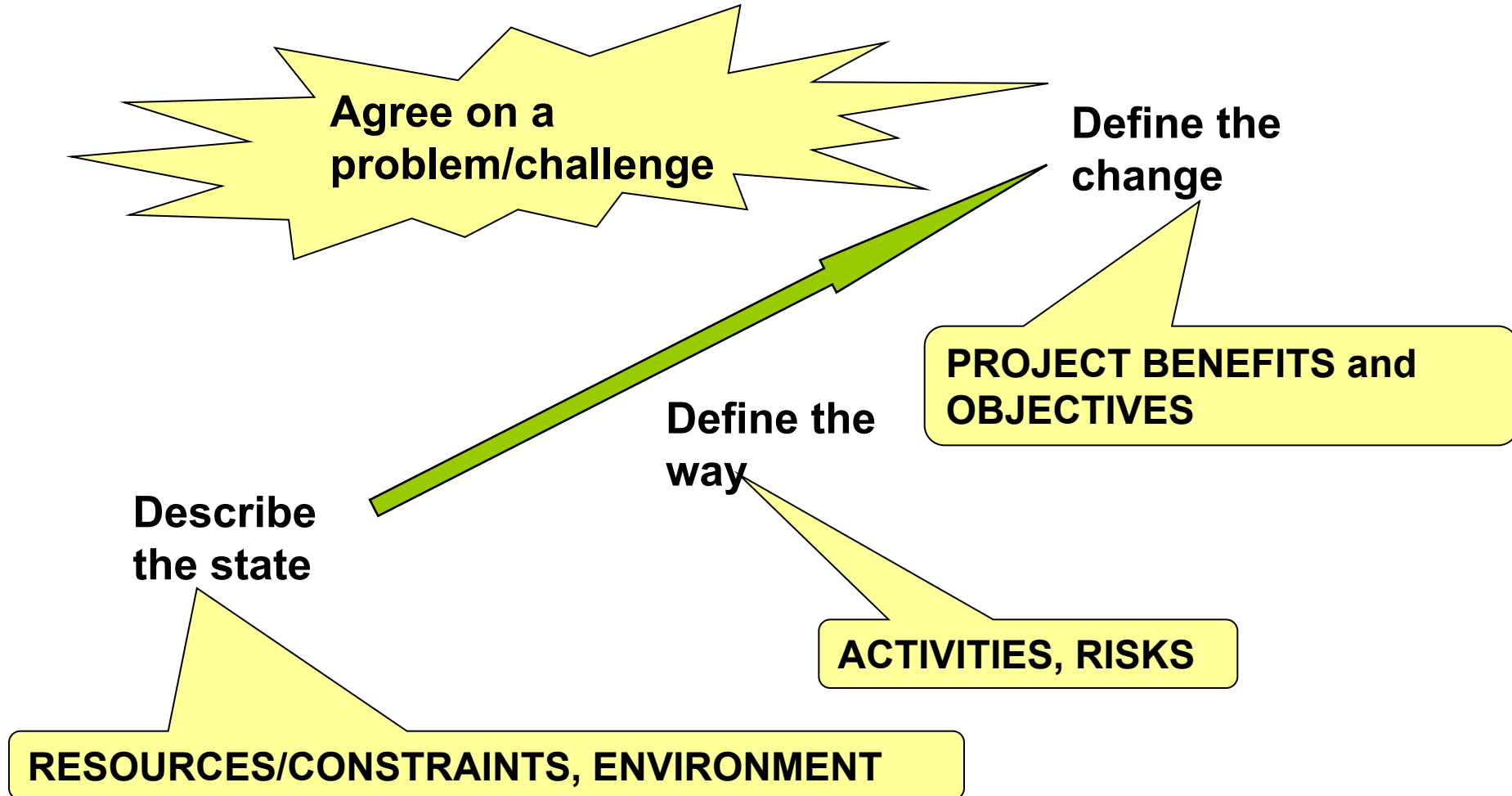
And their mutual relationship

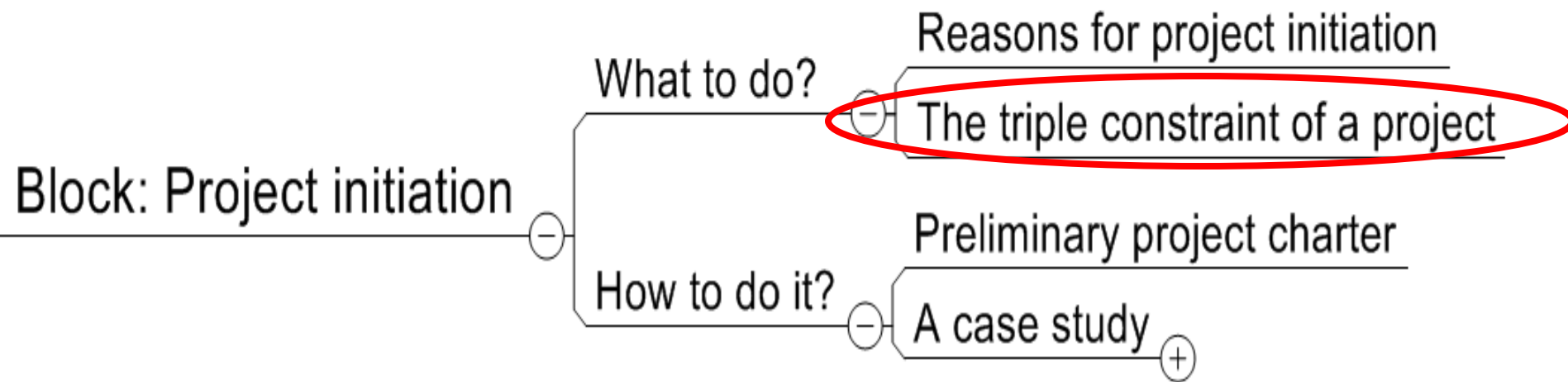


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INITIATION

Change implementation – what to agree on?

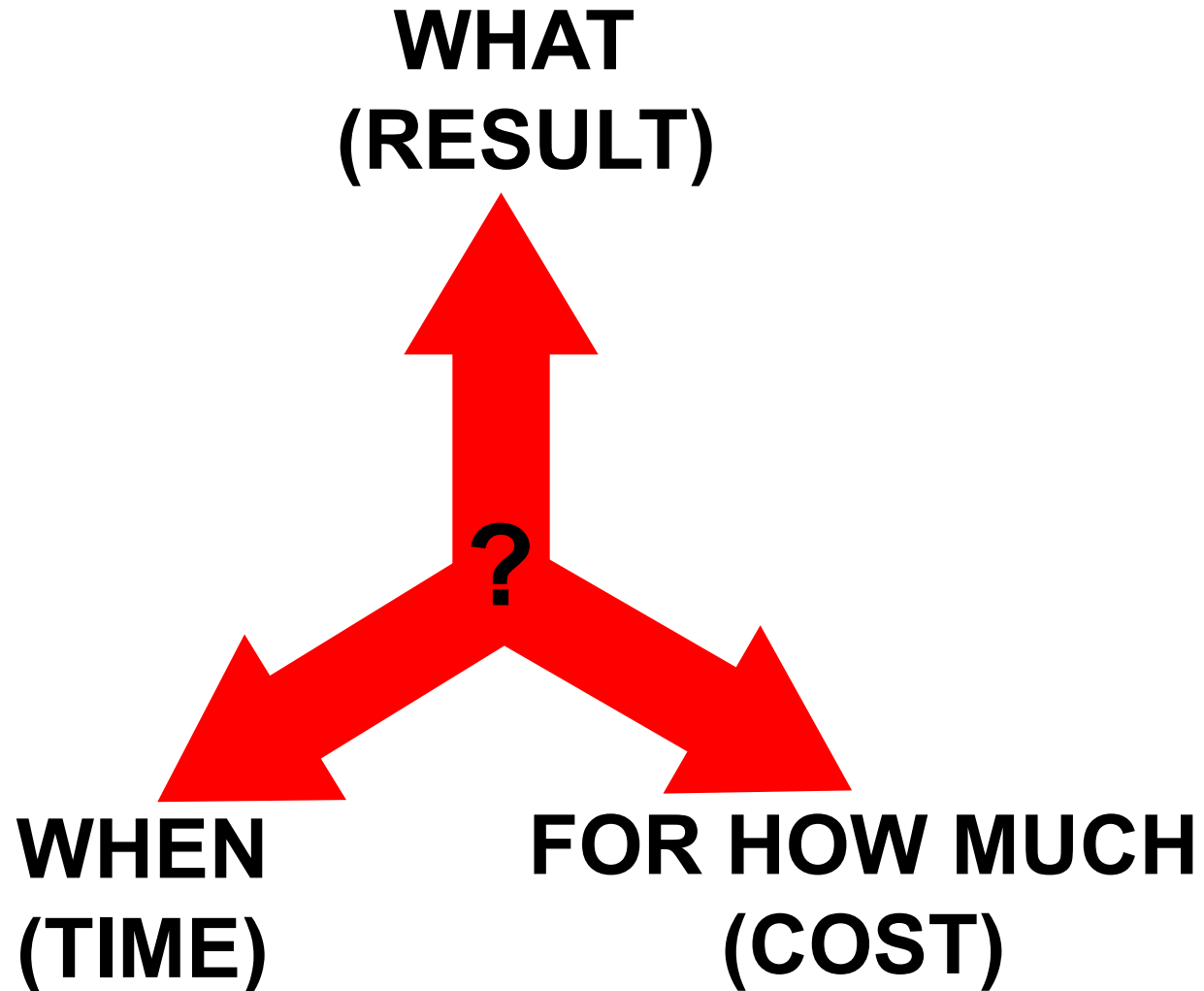


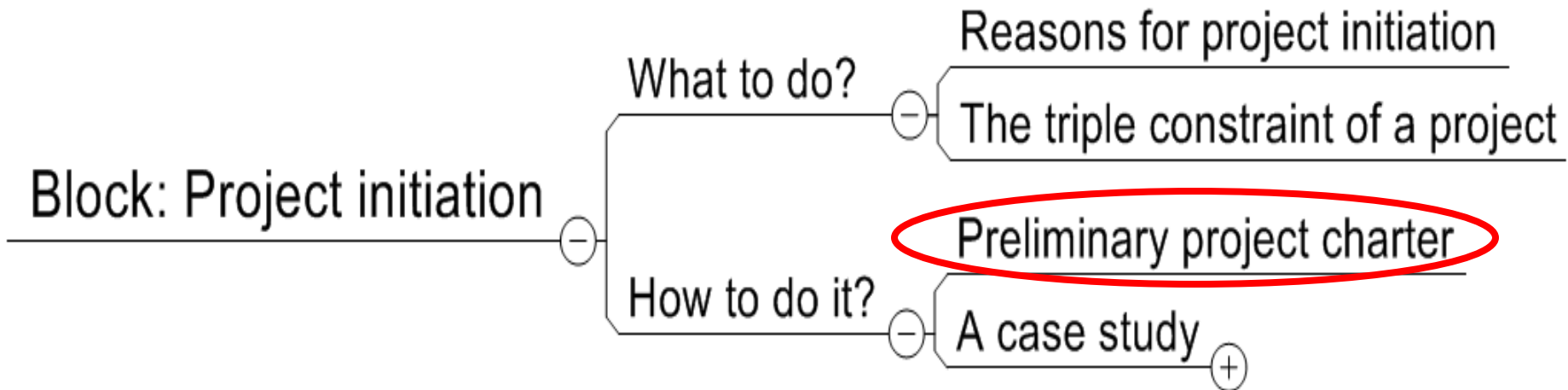


No wind is favorable for those with no goal.

Seneca

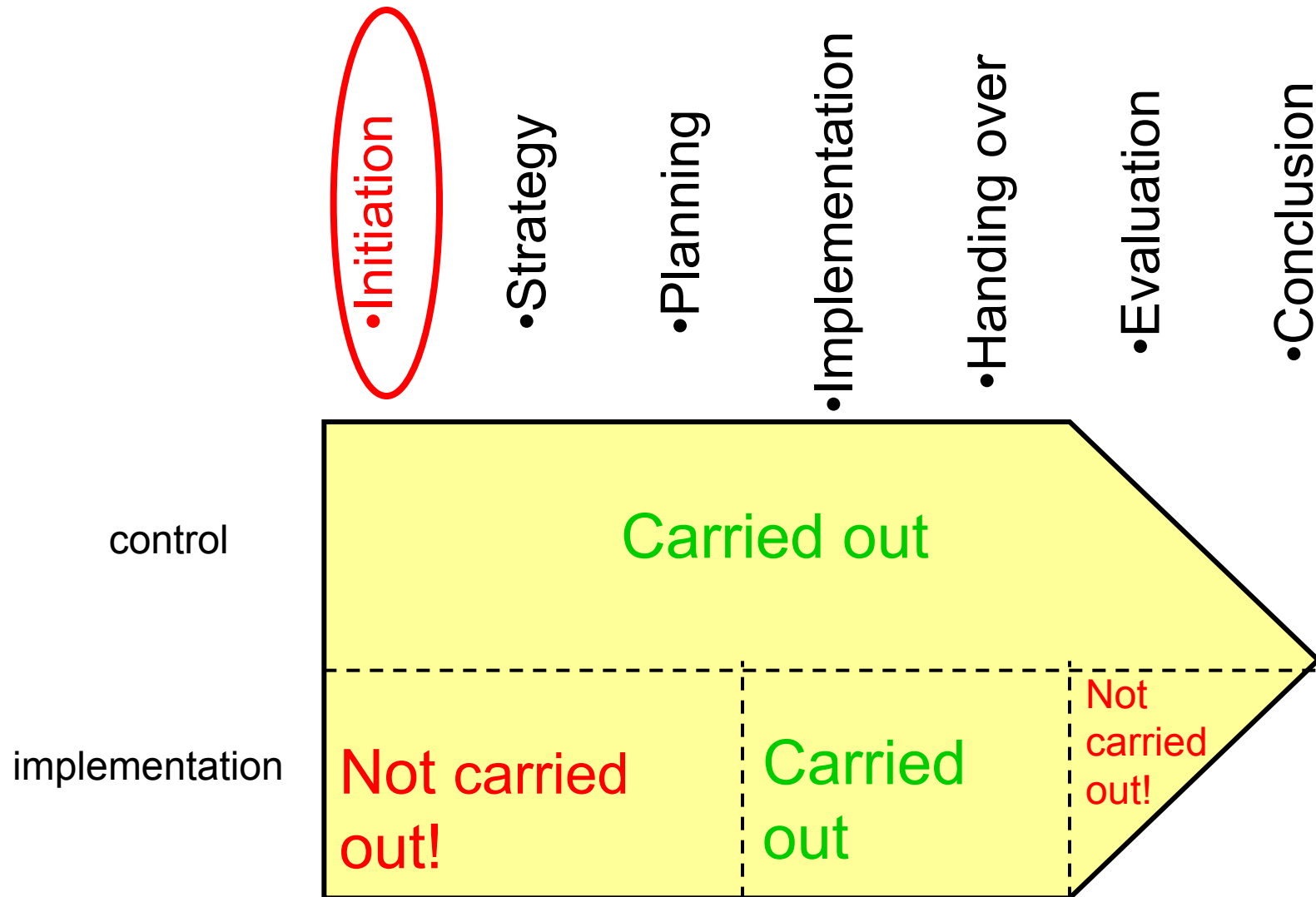
The project objective as the triple constraint





the ČSN ISO 10006 norm	IPMA	PMI
5.2 Strategy	1.1 Project management success	4.1 Develop Project Charter
7.3.3. Subject specification and its revision	1.2 Interested parties	
	1.3 Project requirement and objectives	

Project stages and project activities



Discussion



- What should be the content of a document entitled
“PRELIMINARY PROJECT CHARTER”
?

Preliminary Project Charter

Preliminary Project Charter

Problem/challenge identification

The objective as the project's triple constraint

Benefits from change implementation

WHAT

WHEN

FOR HOW MUCH

Key axis

**WHAT
(RESULT)**

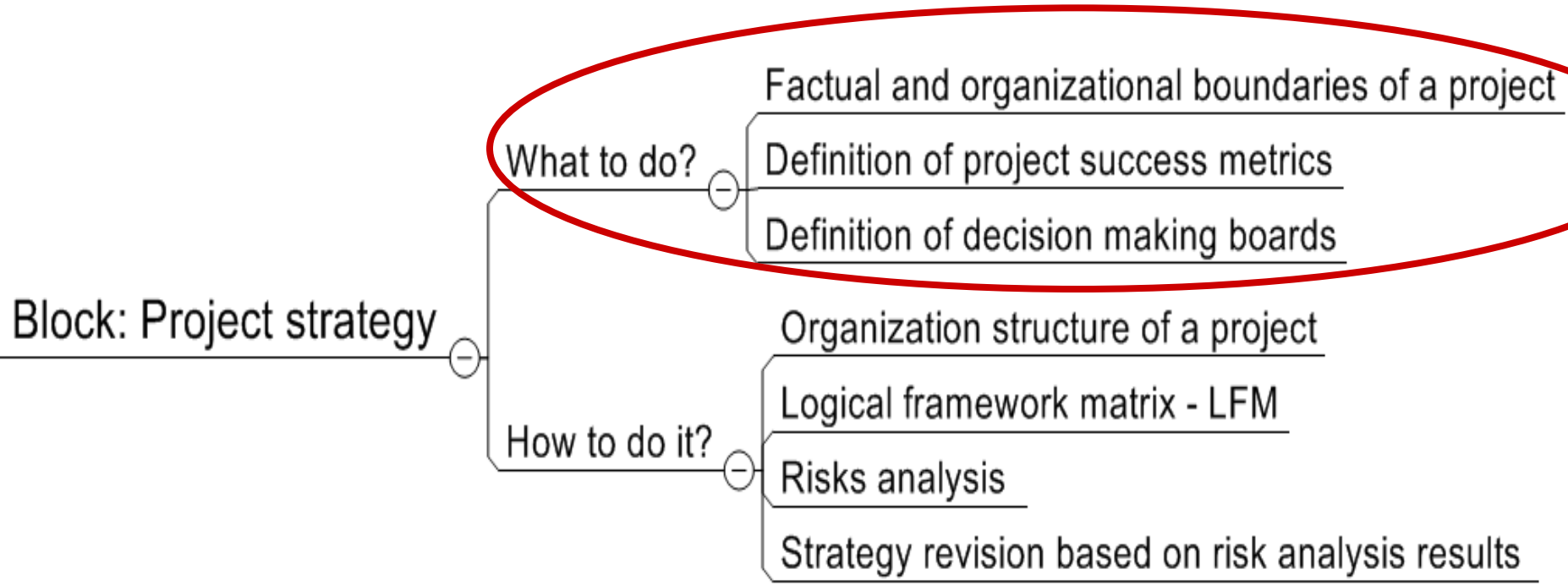
**WHEN
(TIME)**

**FOR HOW MUCH
(COST)**

An approved preliminary project charter:

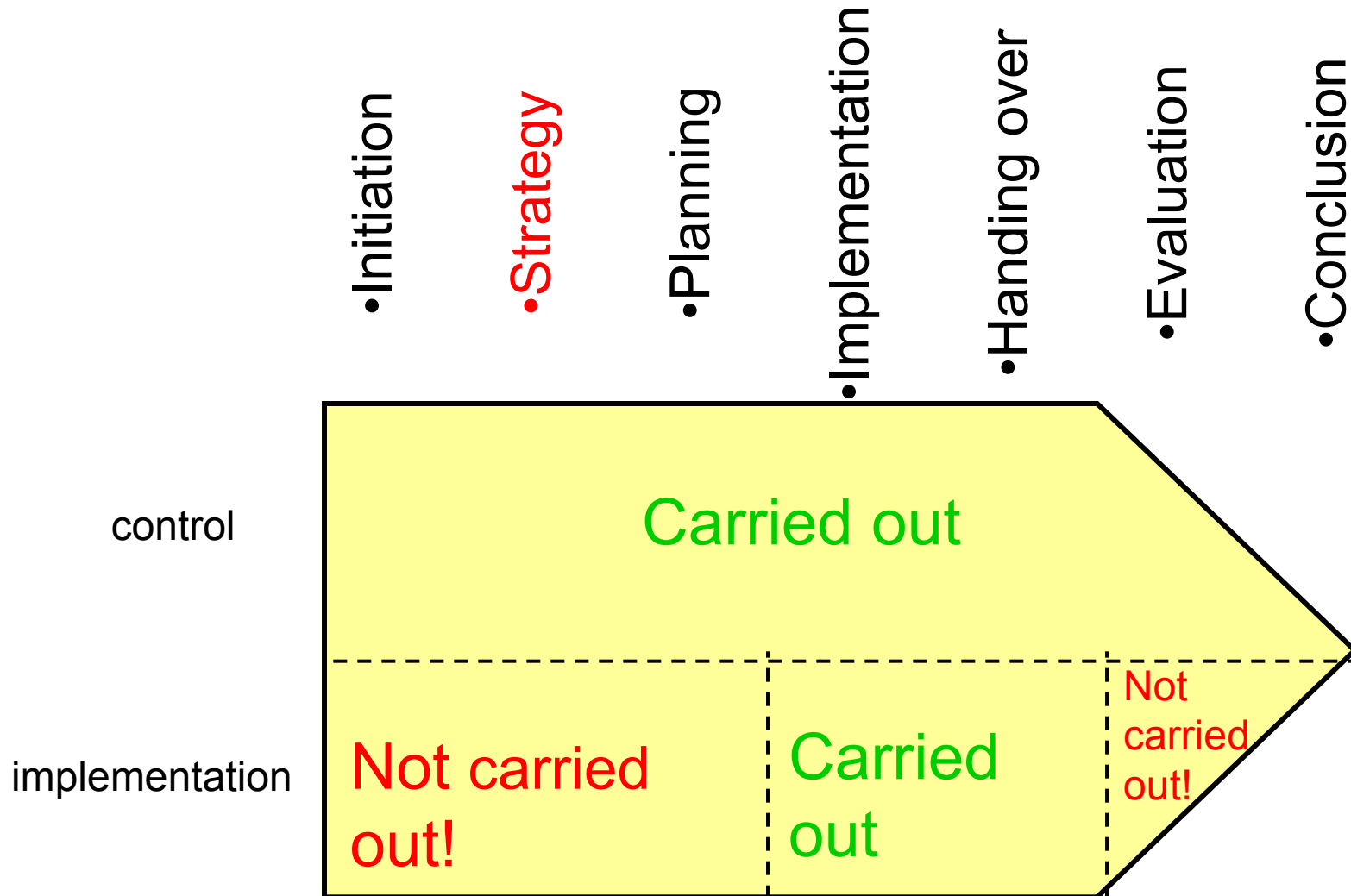
- allows the organization to start project management of the given matter;
- is the first definition of the **scope** of a new project;
- is usually further elaborated into the so called “Project Charter” that defines formally the initiation of a new project.

STRATEGY



It is as difficult to return from a place where you have never been as to reach a goal that you have never defined. *Zig Ziglar*

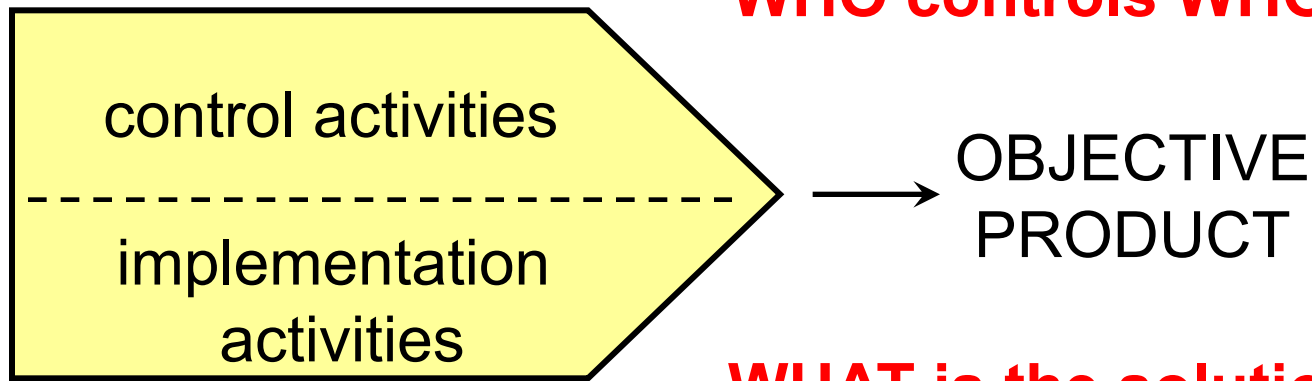
Project stages and project activities



Discussion

- What is a project strategy?
- What questions should the project strategy answer?
 - Why to implement a given project?
 - What is the particular benefit of the project?
 - What is the objective of the project?
 - What is the project implementation environment like?
 - What are the implementation risks?

Setting project boundaries



unique process

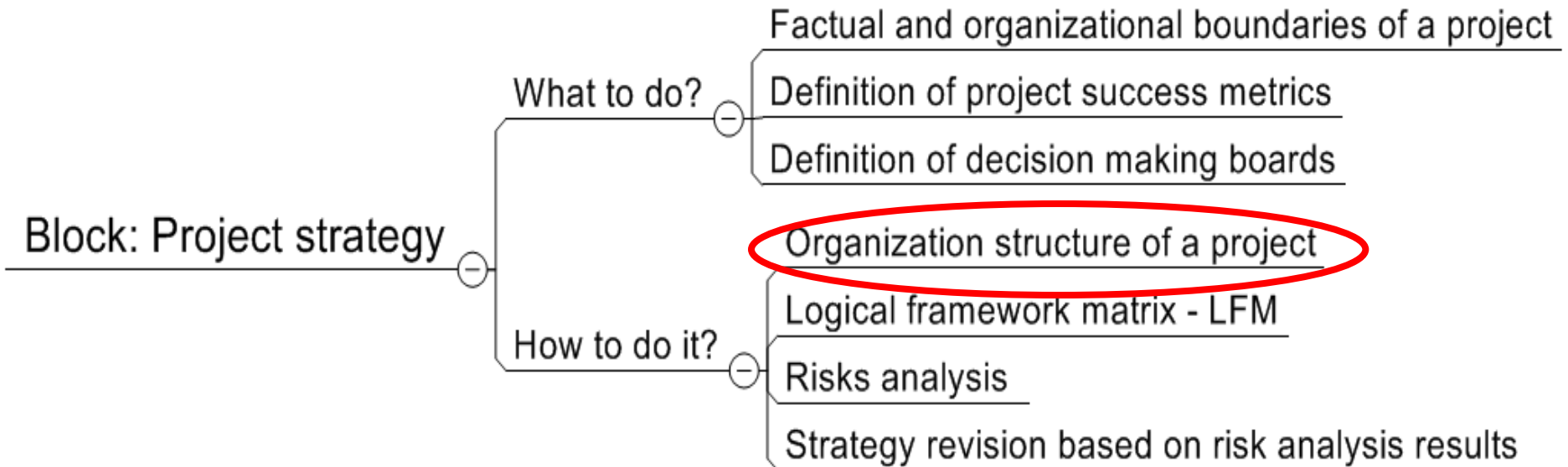
WHO participates directly
in the change?
WHO controls **WHOM**?

WHAT is the solution content?
WHICH products imply
achieving the objective?
HOW can we recognize we
have reached the objective?

Strategy as a written document

- represents an agreement between a project CLIENT and project PROVIDER, regarding:
 - the project objective,
 - main project deliverables,
 - project boundaries,
 - powers and responsibilities of the CLIENT and the PROVIDER.

Project is about VALUE CO-CREATION !!!



the ČSN ISO 10006 norm	IPMA	PMI
6.2.2 Design of project organization structure	1.2 Interested parties	9.1 Human resource planning
6.2.3 Assignment of employees	1.6 Project organization	9.2 Acquire project team
	1.7 Teamwork	9.3. Develop project team

Creating internal conditions for the project

You always have to decide:

- which bodies will exist;
- what are their competencies;
- to whom they are assigned.

Discussion:

Who belongs to the project team?

Main bodies and their functions

Steering committee

- main legislative body
- **final decisions in all matters**

Project management team

- progress management
- scope/quality management
- administration

Implementation team

- creates deliverables

Support team

- counseling
- reviewing
- support

Assignment of individual bodies

Steering committee

CLIENT

- statutory body
- user of deliverables
- “payer”

PROVIDER

- statutory body
- project author
- project administrator

Project management team

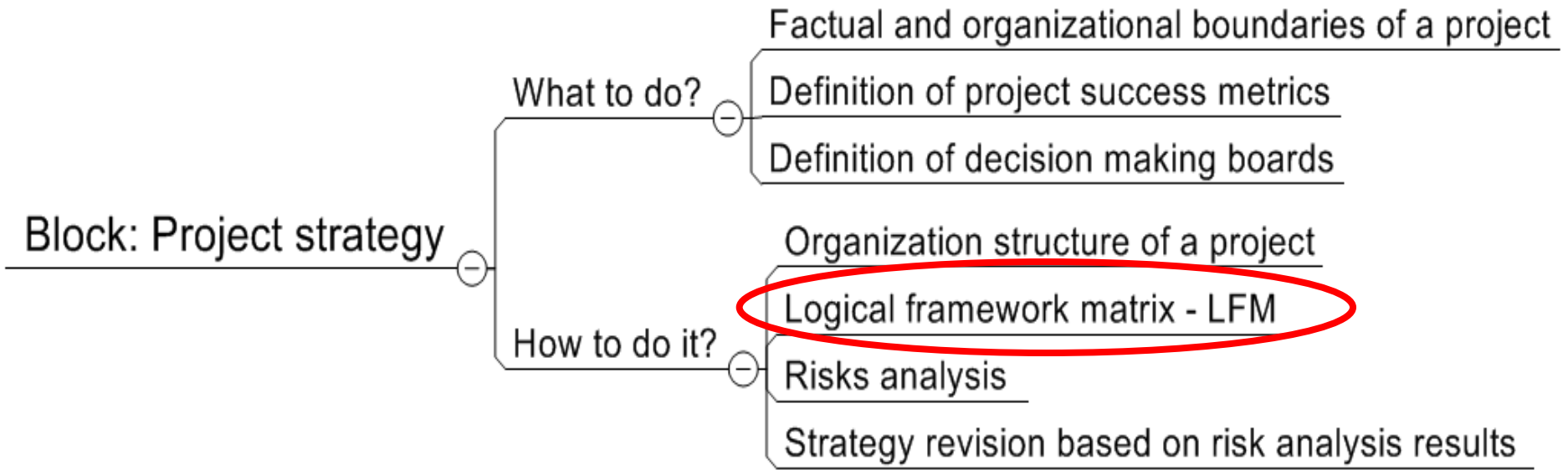
- project author
- project administrator

Implementation team

- employees of the Provider
- (employees of the Client)

Support team

- employees of the Client

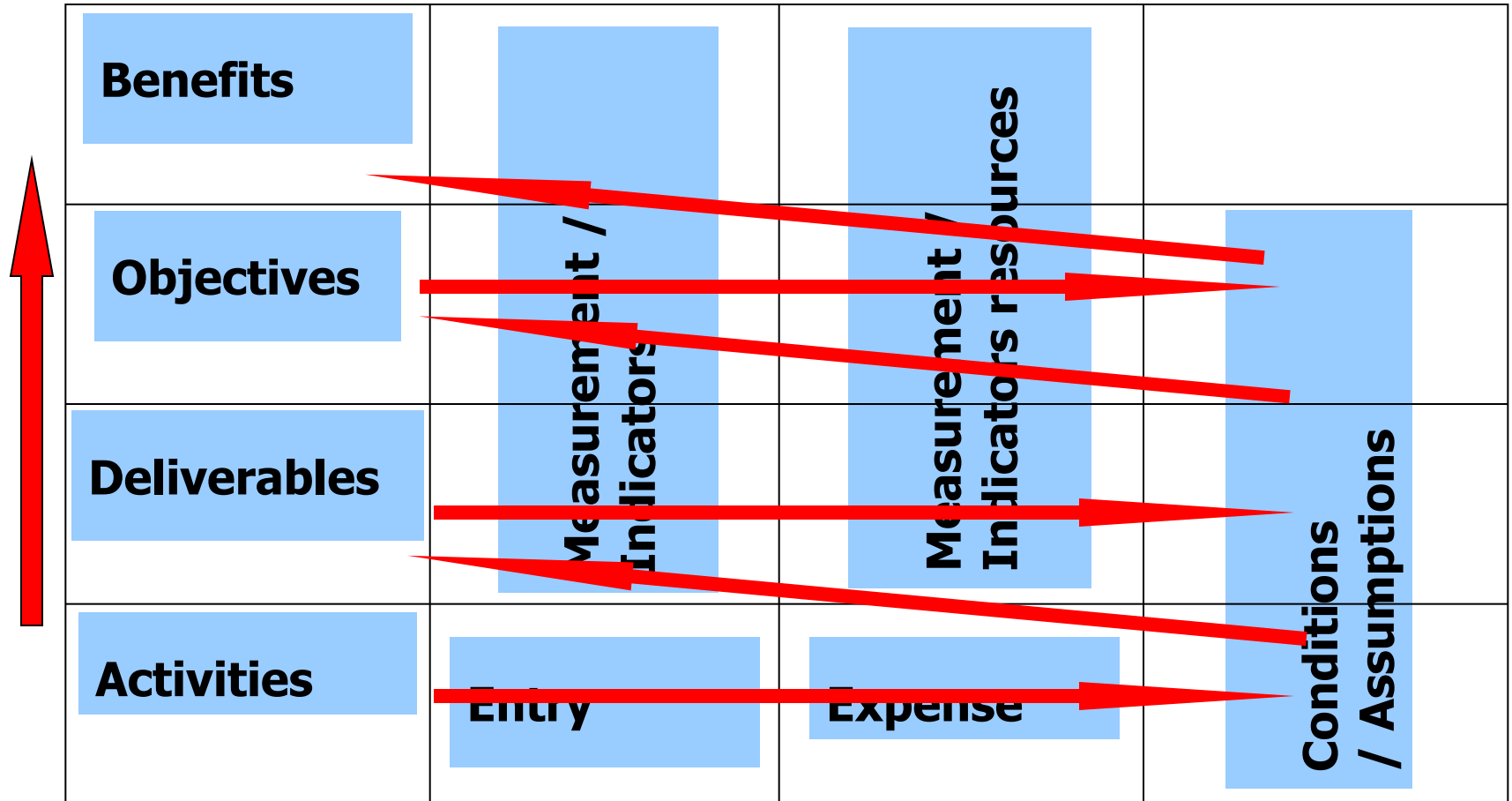


the ČSN ISO 10006 norm	IPMA	PMI
5.2 Strategic Process	1.1 PM Success	4.1 Develop Project Charter
	2.11 Negotiation	5.1 Scope Planning
	3.6 Business	

Logical Framework Matrix (LFM)

Benefits			
Objectives	Measurement / Indicators	Measurement / Indicators resources	Conditions / Assumptions
Deliverables			
Activities	Entry	Expense	

Project scope - Logical Framework Matrix (LFM)



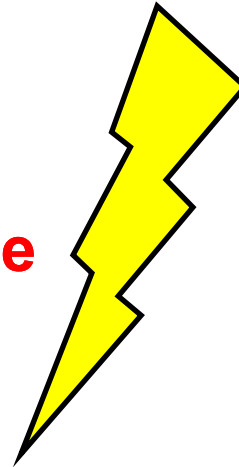
An assumption is not a risk!

ASSUMPTION
(necessary state
of the world)

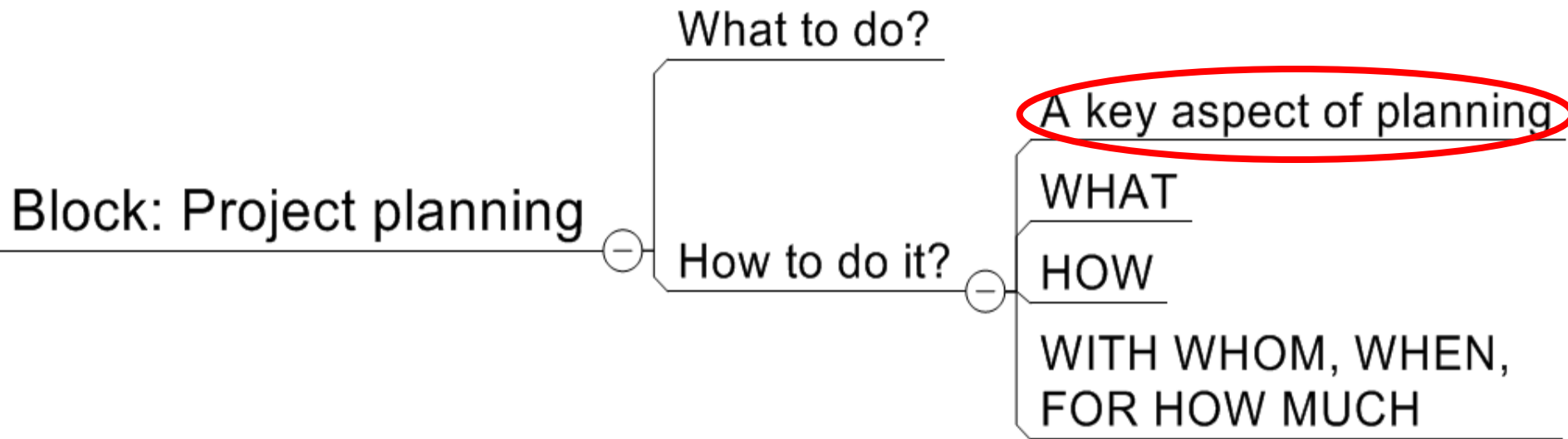


REALITY
(real state
of the world)

RISK
(discussed in the
Risk analysis
block)



PLANNING



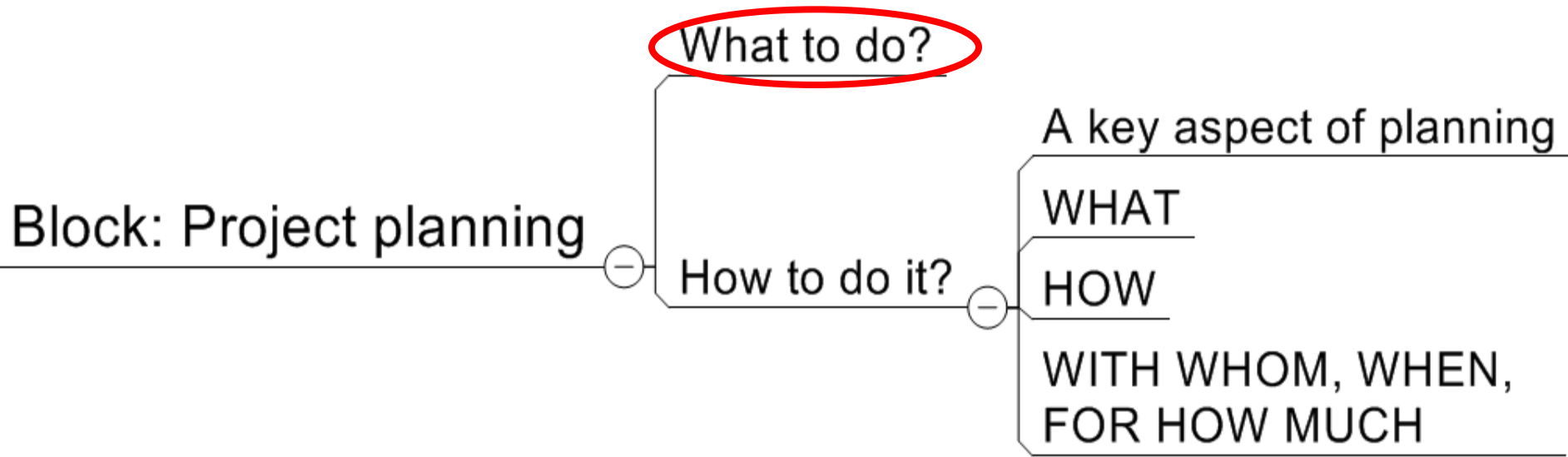
Not to have a plan means to plan a failure.

An example, a CLIMBER vs. a TOURIST:

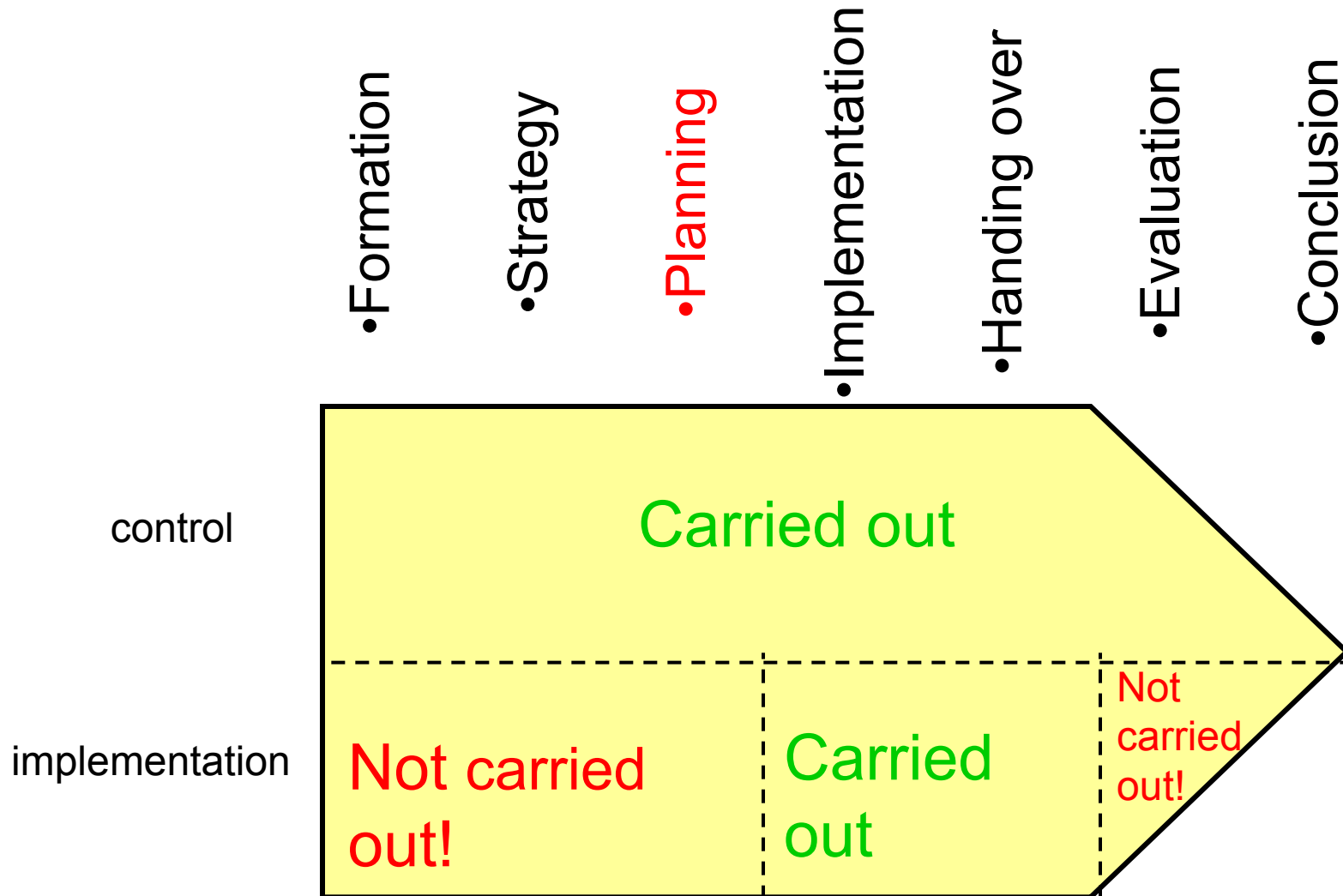
- Our objective is to carry a flag to the top of a hill.
- What will we do?
- We see a mountain and we start to climb it.
- However, the route is steep, there are a number of overhanging rocks, we need equipment, a fellow climber, we have to return several times.
- But if the objective is to take the flag to the top, why not to look round the hill? There may be an easier route on the other side of the hill – even with a refreshment stall.
- Mountain climbing is not our objective, the goal is to bring the flag to the top!!!

An example, an IT MANAGER in ŠKODA TRAMS:

- A manager was hired for tram production, a former software engineer.
- First of all no one trusted him.
- He won their trust by a new approach: He speeded up the tram production by using a different process.
- Ever since they build trams sequentially: chassis→beams →roofs →equipment. If the beams were delayed, everything waited.
- The IT manager used wooden beams and put in equipment, and only then he replaced the beams.
- He changed the process (HOW) in order to reach WHAT.



Project stages and project activities



Discussion

- What needs to be planned?
 - enumerate the necessary plans
 - describe shortly their content
 - what they are about

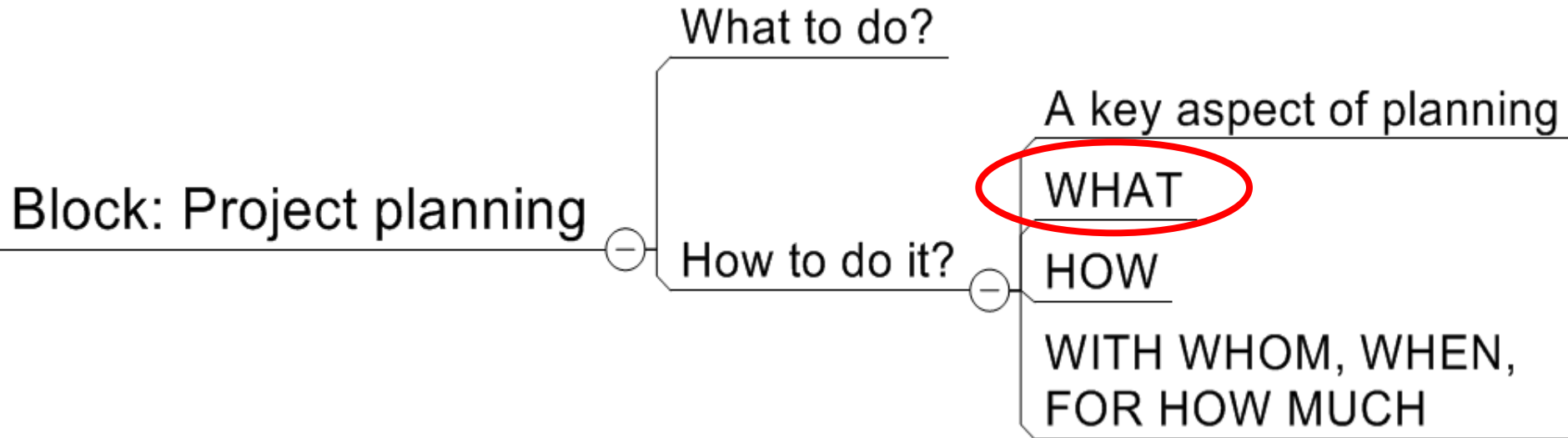
Project plans

- WHAT (**RESULT**)
 - specification of project products (supplies/deliveries)
- HOW (**PROCESS**)
 - way of their creation
- WITH WHOM (**RESOURCES**)
 - who will do it and how they will be controlled
- WHEN (**TIME**)
 - when the products will be created
- FOR HOW MUCH (**COSTS**)
 - how much it will cost



Triple Constraint

Block: Project planning



The ČSN ISO 10006	IPMA	PMI
5.2. Strategy	1.9 Project structures	5.3 Create WBS
7.3.2. Concept Development	1.10 Scope and deliverables	8.1 Quality planning
7.3.3. Intention development and control		9.3 Develop project team

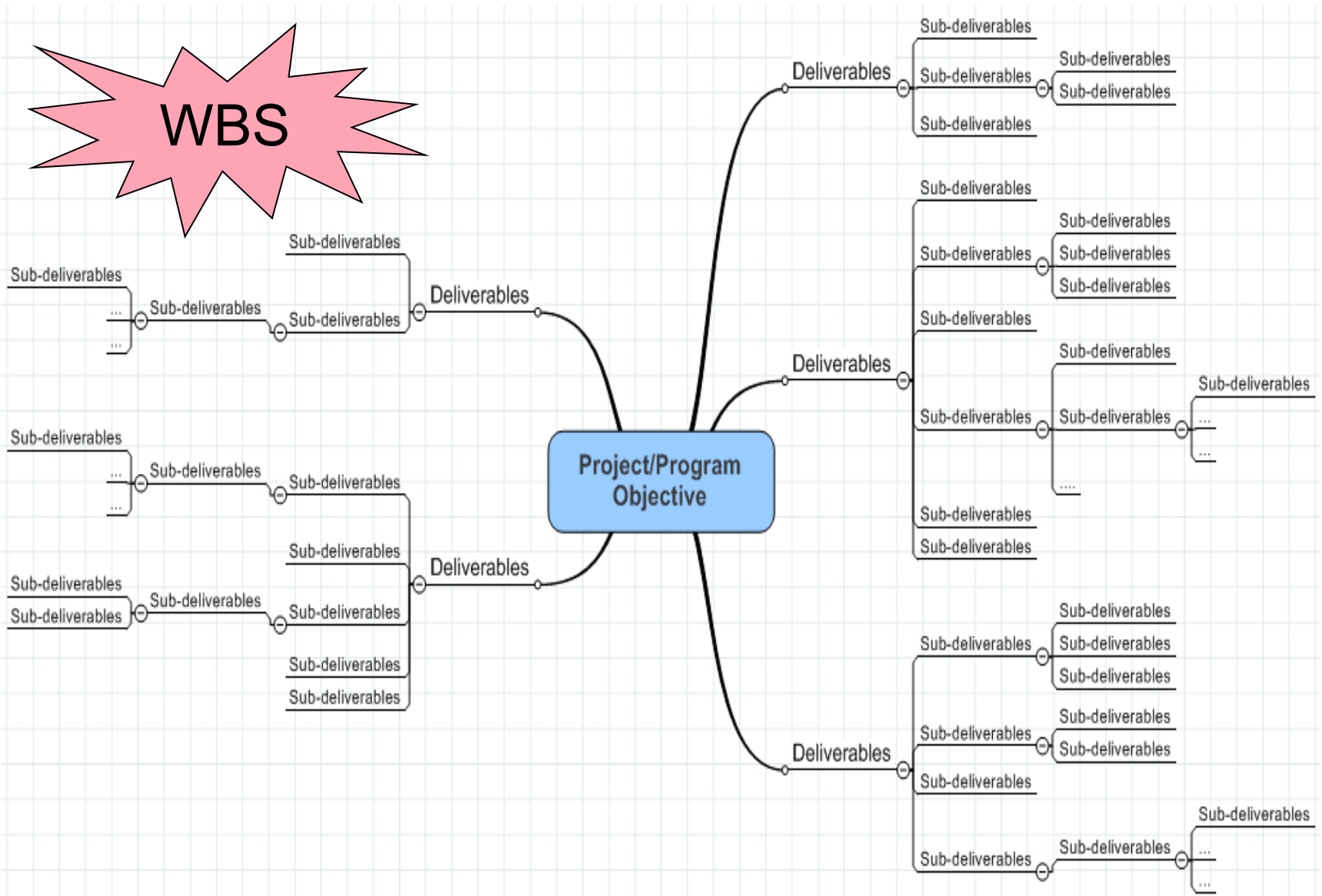
The WHAT plan = WBS

- What is WBS
(Work Breakdown Structure)?

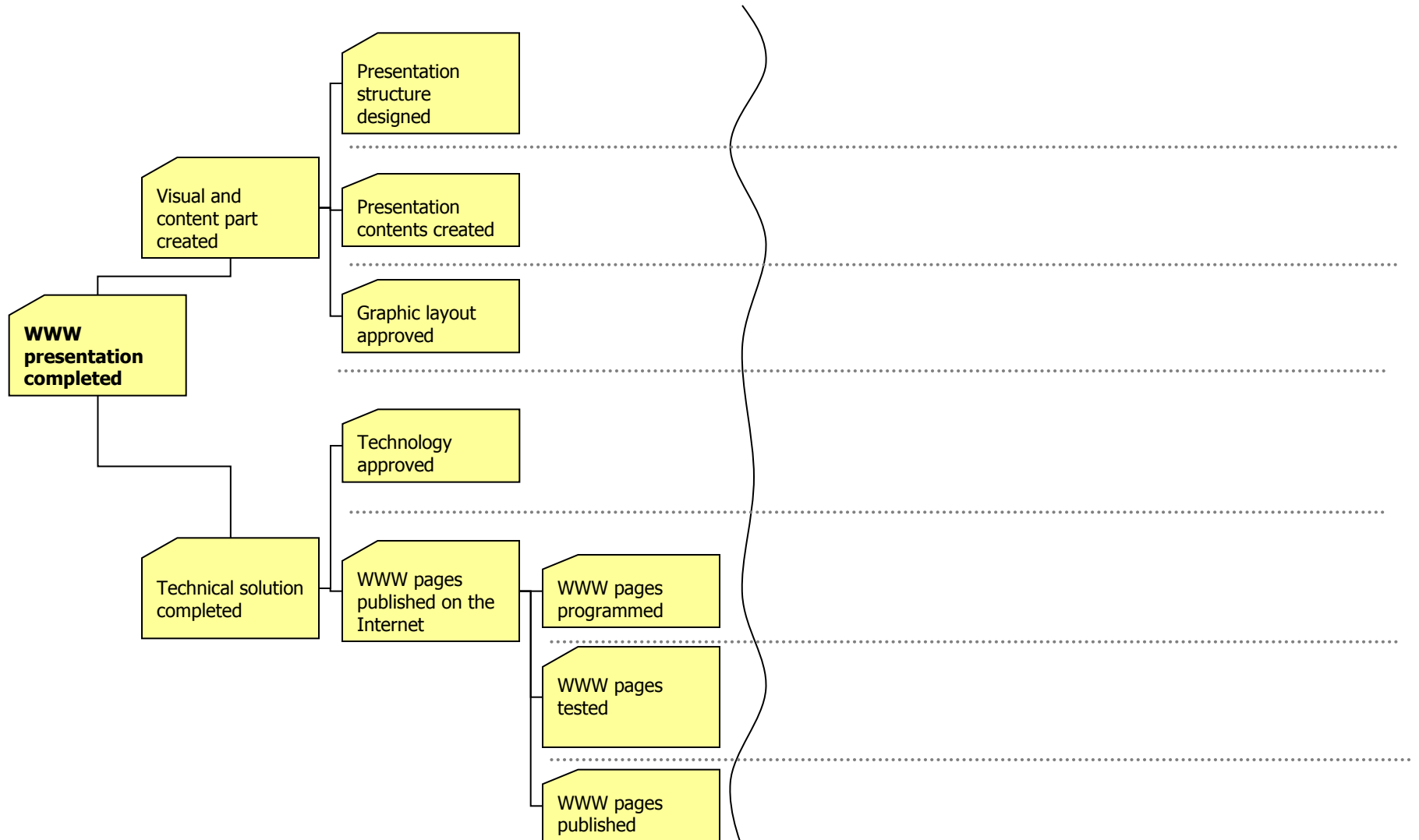
Work Breakdown Structure

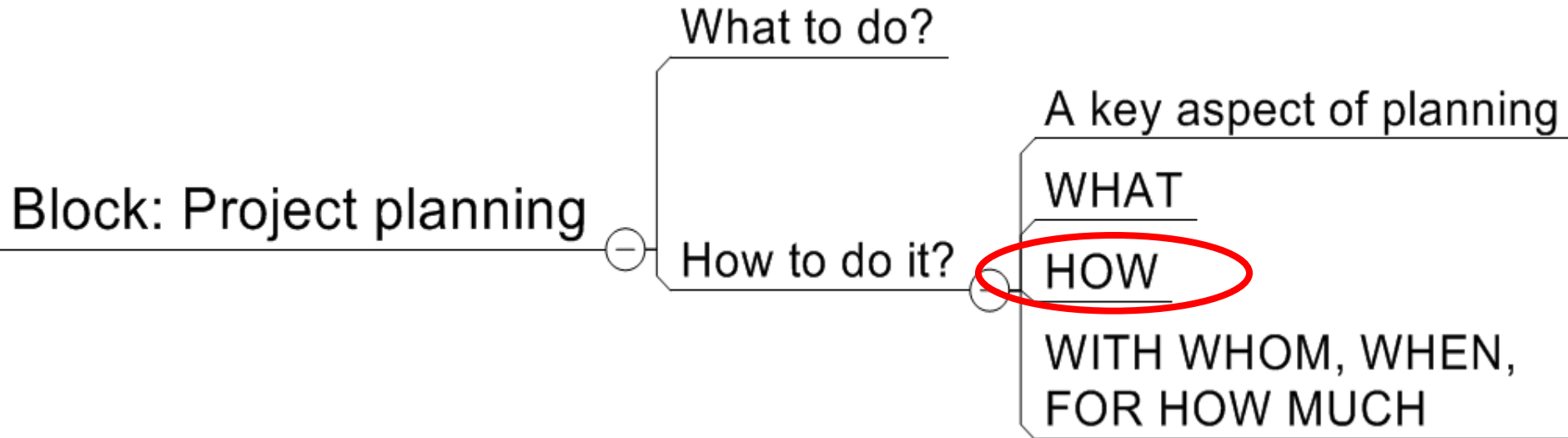
- In specialized literature the concept of “Work Breakdown Structure” is usually utilized for two things:
 1. for a hierarchical analysis of project deliverables (i.e. WHAT); but also for
 2. an analysis of workflow (i.e. the HOW part of the plan).
- If this is confused, the clear separation of the WHAT plan from the HOW plan disappears.
- Our strict recommendation (according to PMI):
 - WHAT = work breakdown structure (WBS)
 - HOW = project chart

An exact application of the so called “Fundamental Hierarchy”



1. Create the Work Breakdown Structure of deliverables (WHAT) – practical use



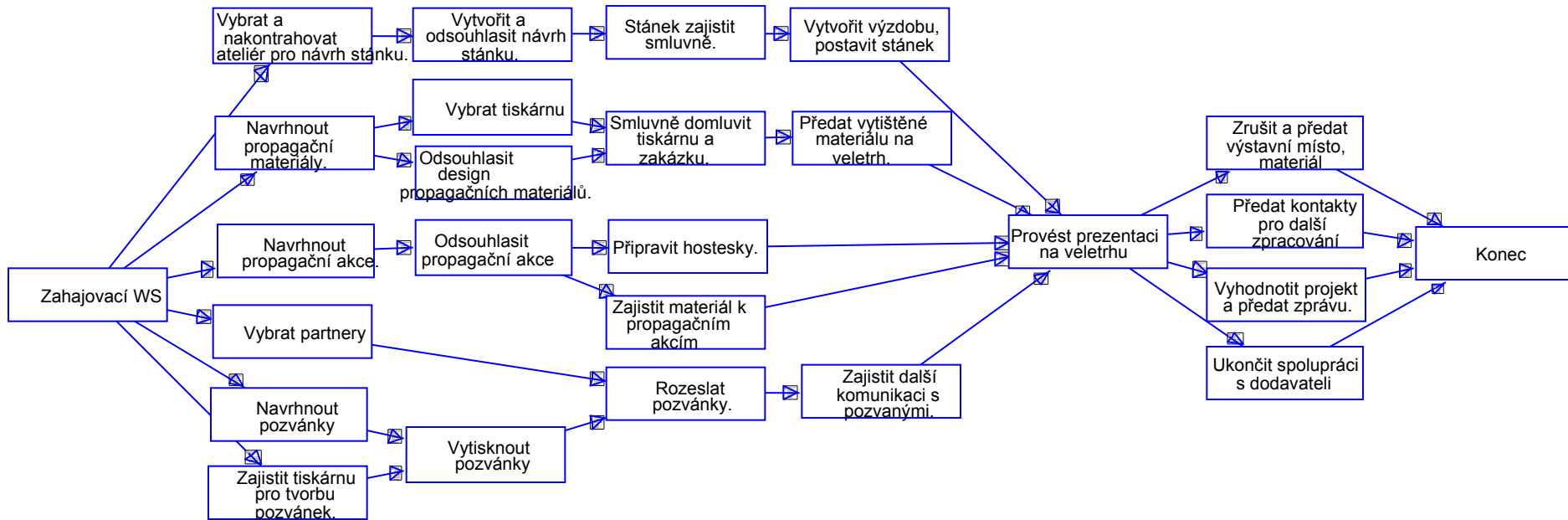


The ČSN ISO 10006	IPMA	PMI
7.3.4 Specification of Activities	1.9 Project structures	6.1 Activity definition
7.4.2. Activities relationships establishing		6.2 Activity Sequencing

To plan a project means 2)

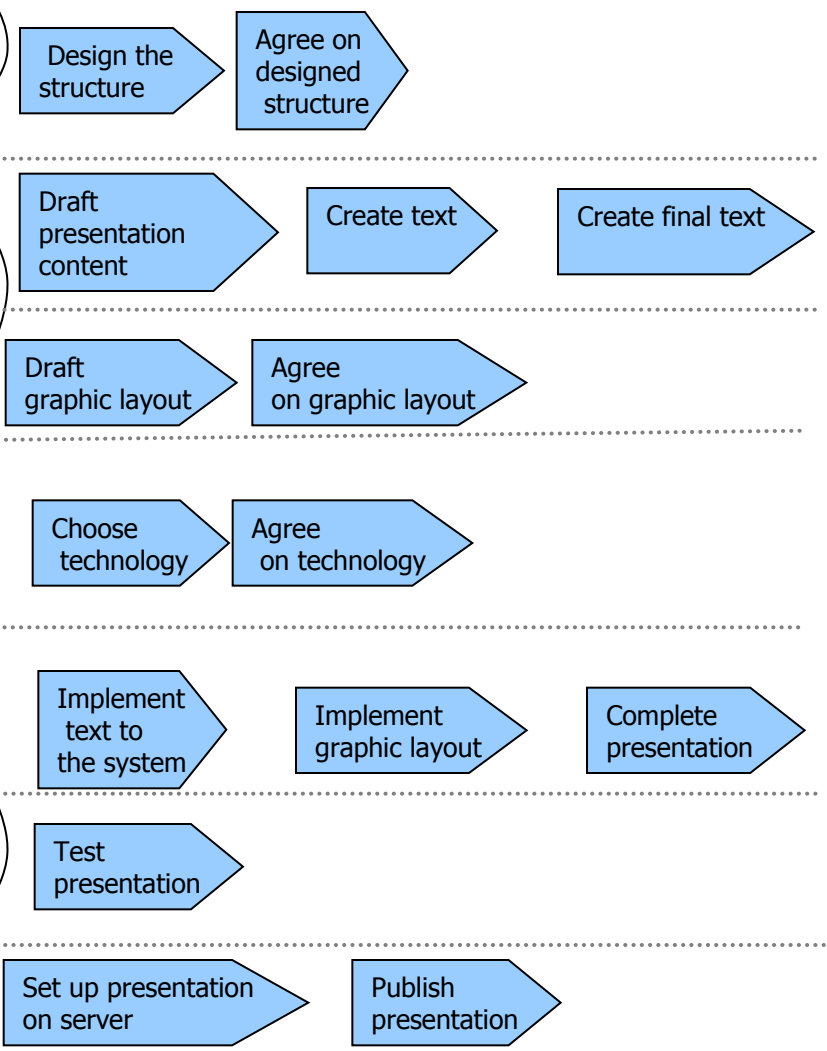
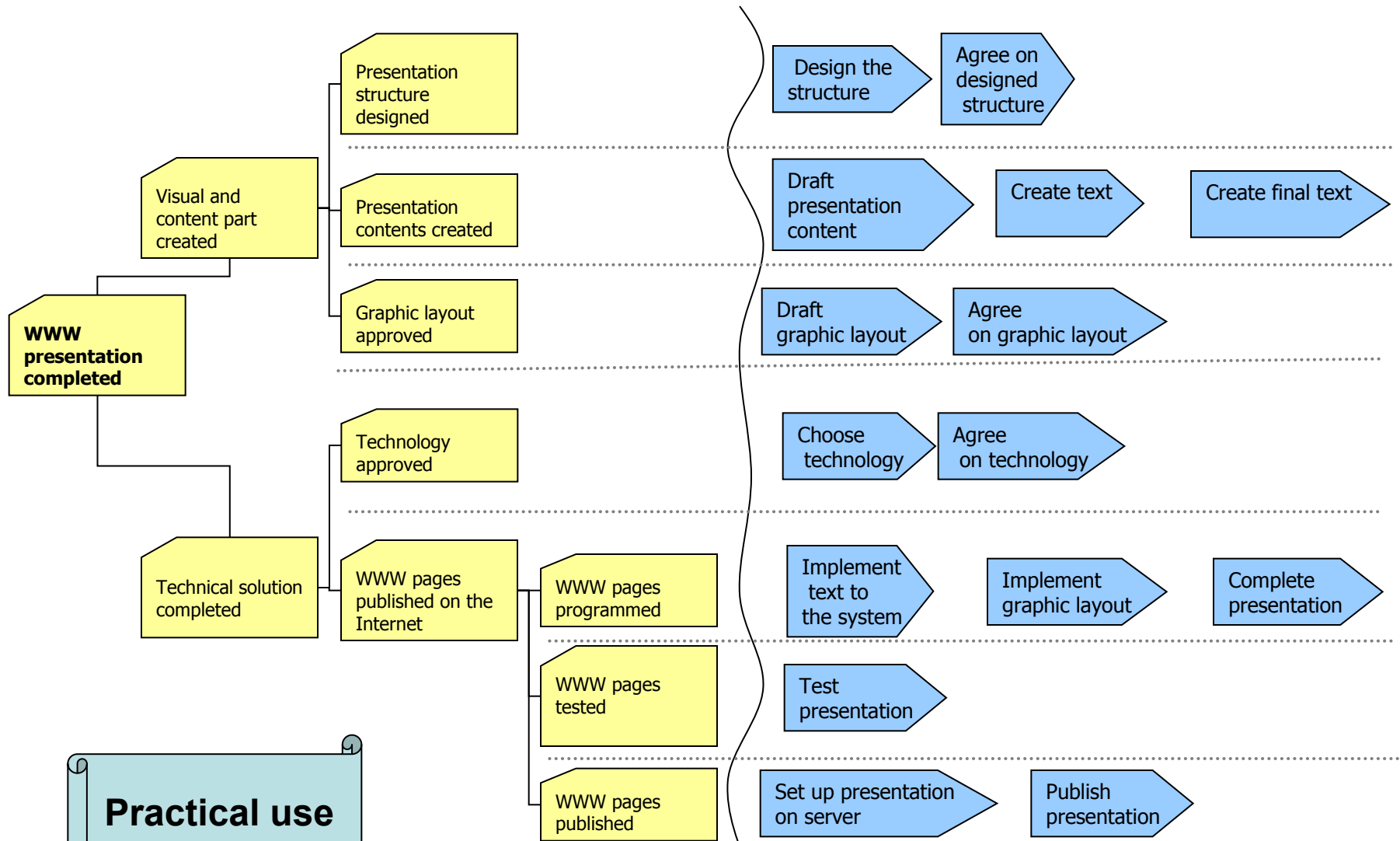
- To plan **HOW** individual deliverables from the **WHAT** plan will emerge.
 - In other words, what activities and in what logical sequence will create project products.
 - It is important not to include time perspective or resource availability into the process!
 - It is acquired by elaborating WBS and by its ordering into the logic of a sequential execution of activities.
 - If there is no model: **DO IT FROM THE END!**

The HOW plan – a network chart



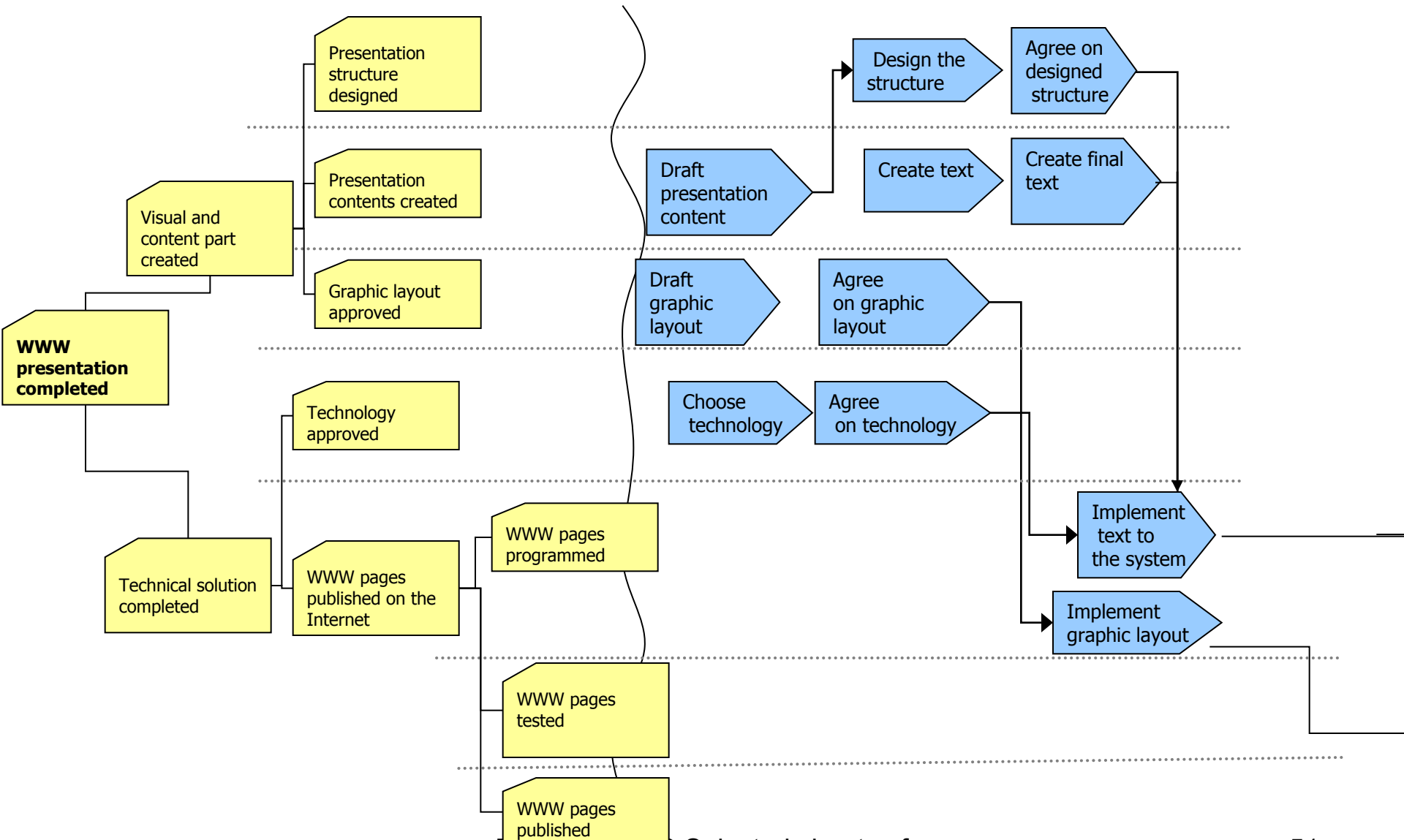
1. Create the work breakdown structure of products (WHAT)

2. Create the tasks list (HOW)



Practical use

3. Record the task sequence



Project management phases versus Project stages

Project Management Phases

Formation

Strategy

Planning

Implementation

Handing over

Evaluation

Conclusion

control

Carried out

implementation

Not carried out!

Carried out

Not carried out!

Project Stages

Analysis

Design

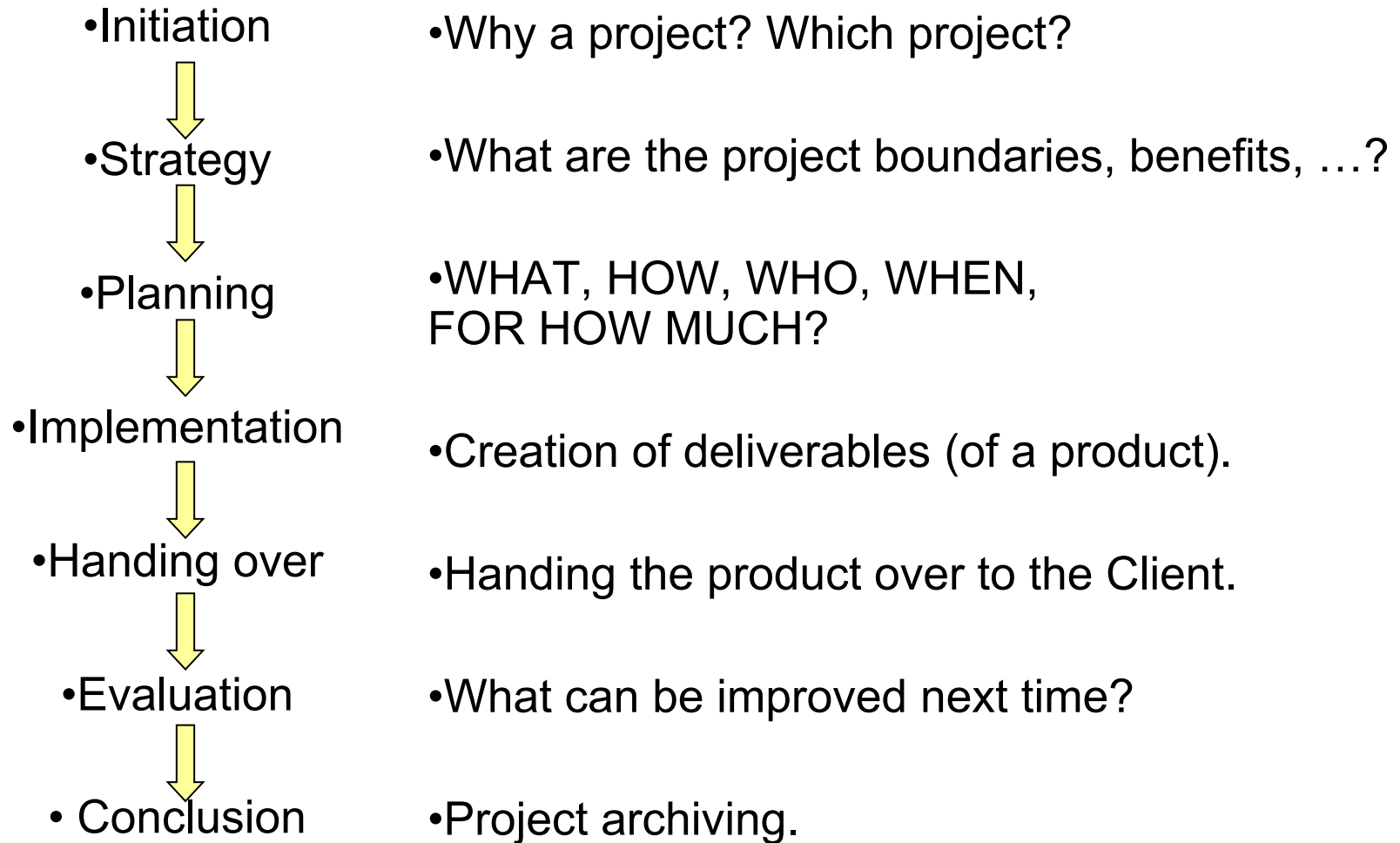
Implementation

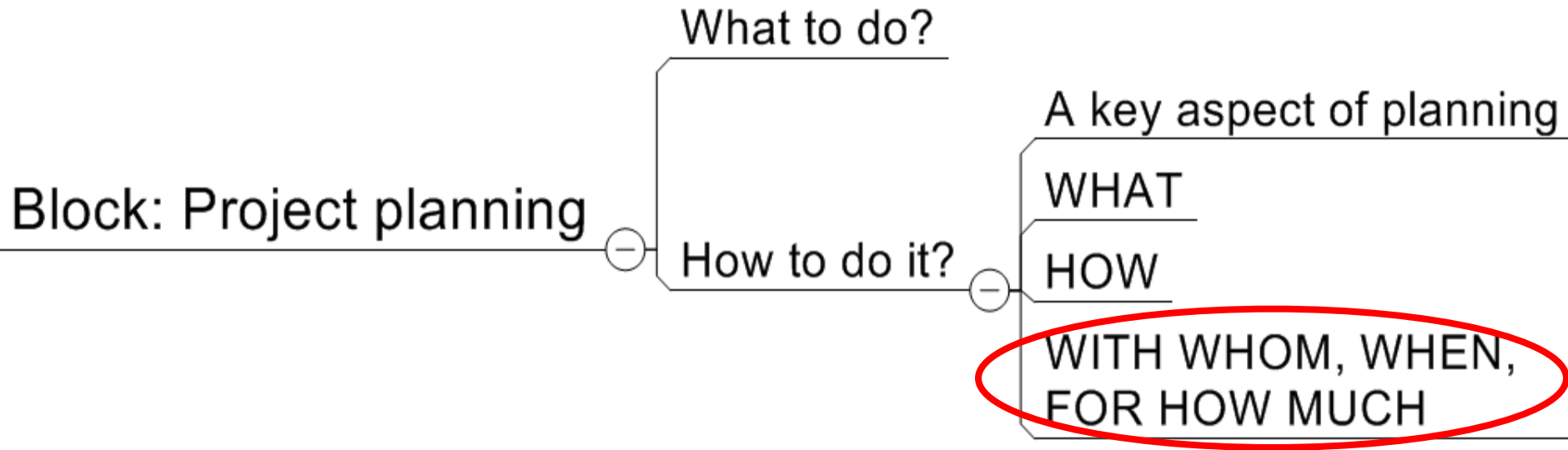
Testing

Pilot operation

Final operation

Project management phases





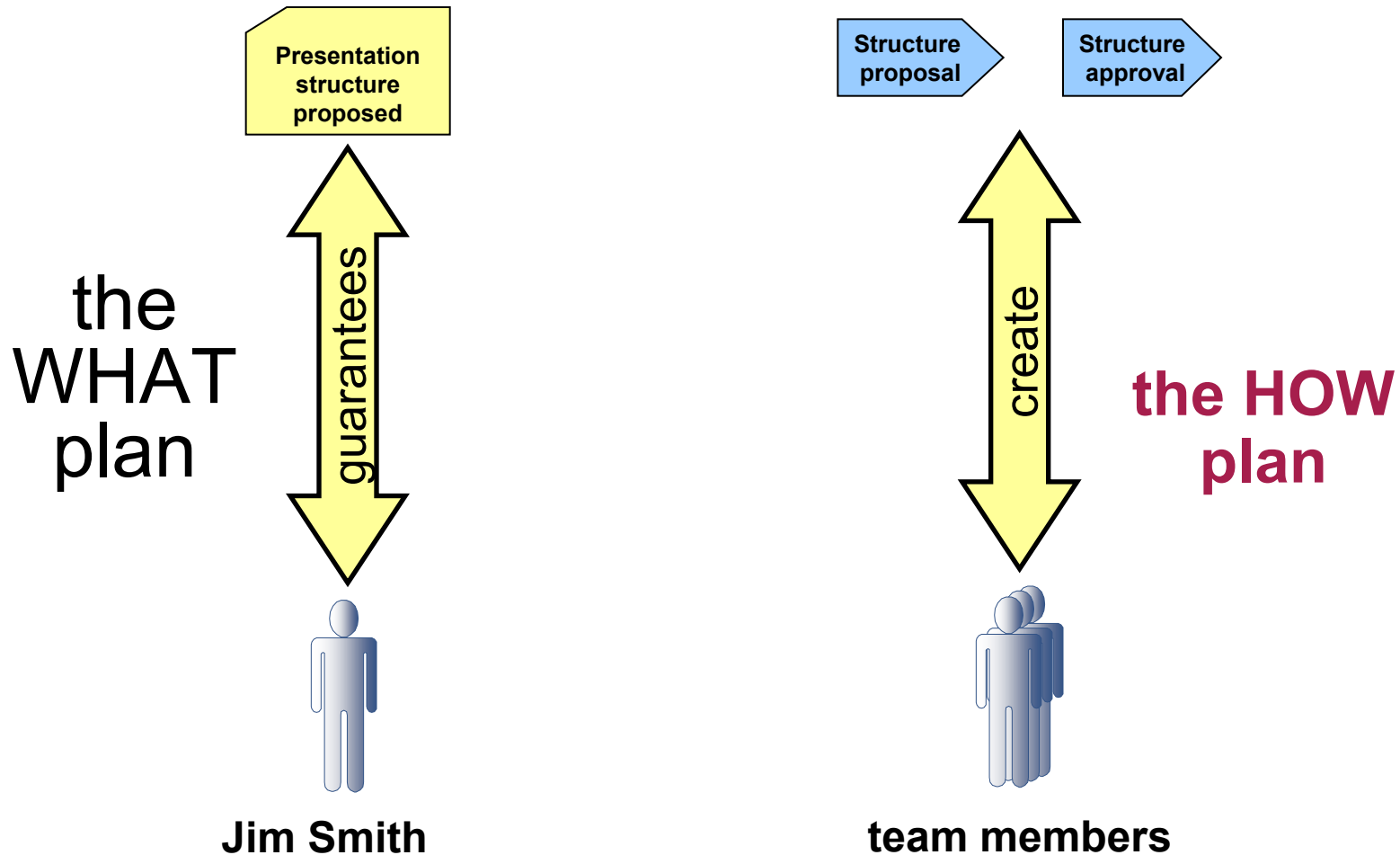
the ČSN ISO 10006 norm	IPMA	PMI
6.1.2 Resource planning	1.6 Project organization	6.3 Activity resource estimating
6.1.3 Resource management	1.7 Teamwork	9.2 Acquire project team
6.2.3 Assignment of employees	1.12 Resources	9.3 Develop project team

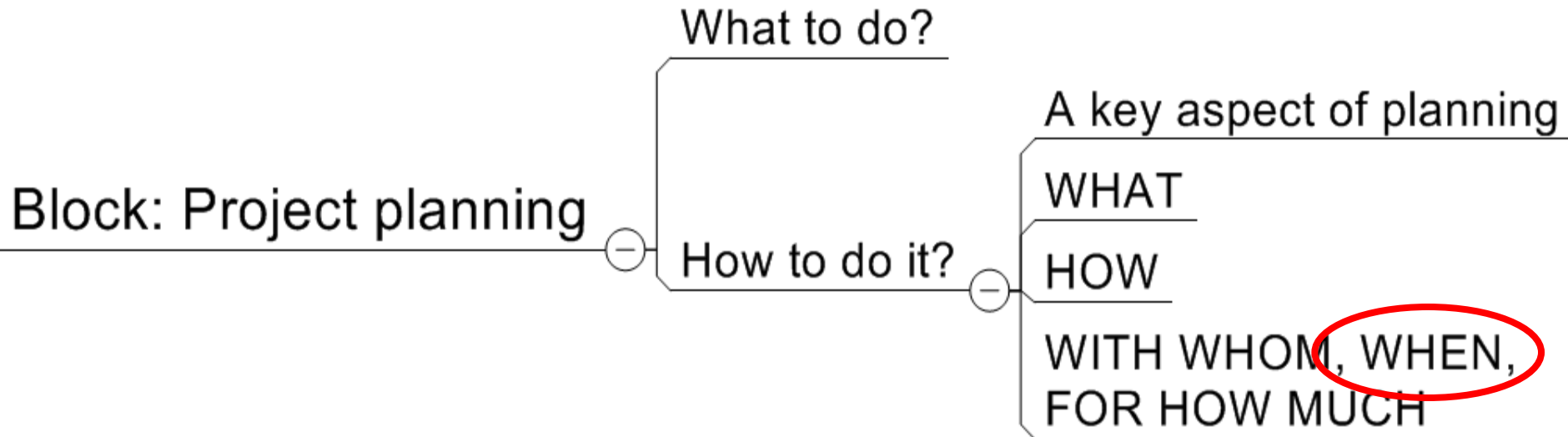
To plan a project means 3)

To plan **WITH WHOM** the partial objectives and the global objective will be met,

- i.e. what resources we will need;
- and how we will fill these resources with people.

WITH WHOM – guarantee of quality and process





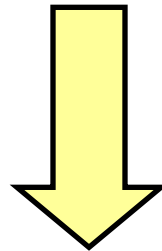
the ČSN ISO 10006 norm	IPMA	PMI
6.1.2 Resources planning	1.11 Time and project phases	6.4 Activity duration estimating
7.4.3 Duration estimate		6.5 Schedule development
7.4.4 Schedule development		

To plan a project means 4)

we know WHAT

we know HOW

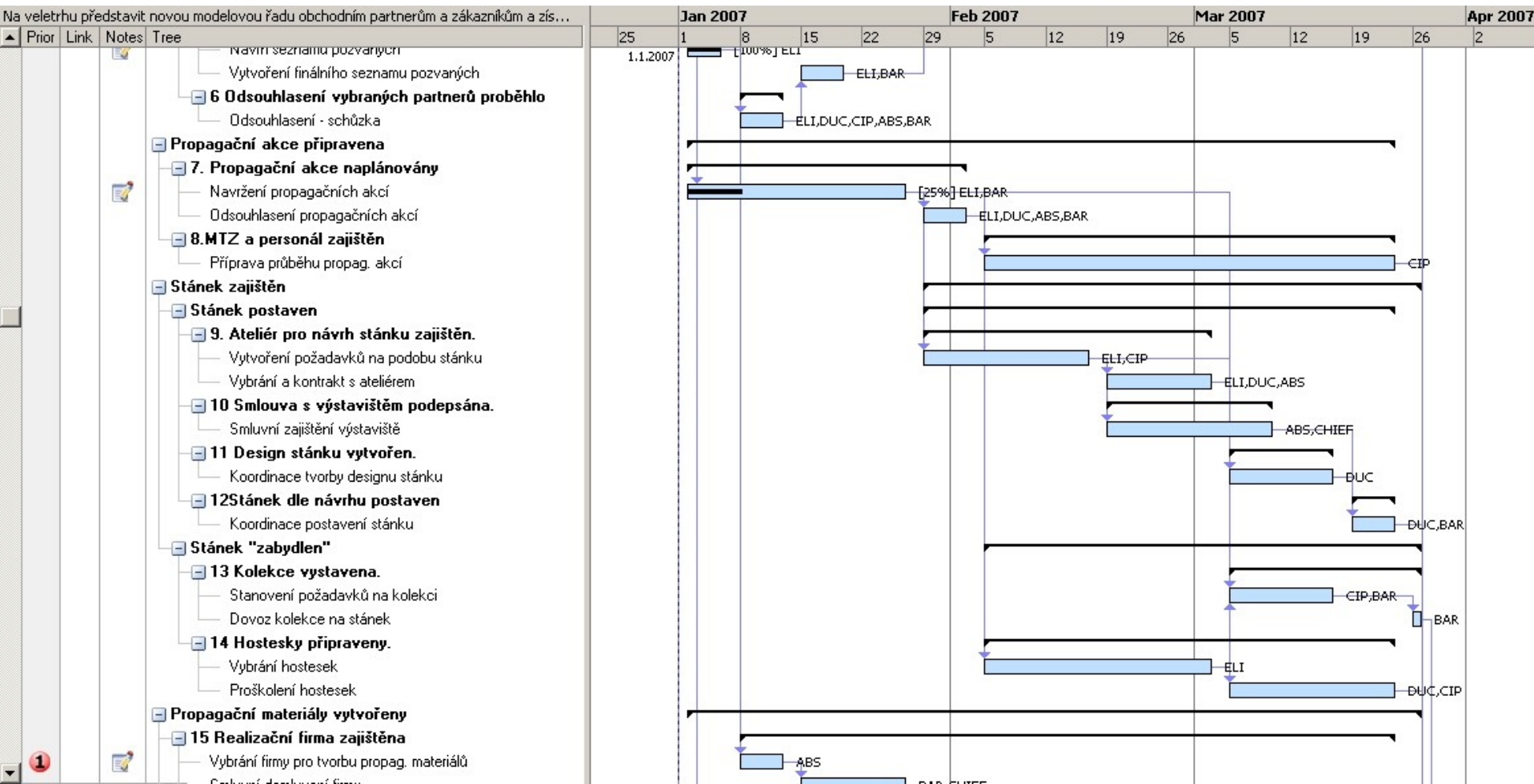
we know WITH WHOM

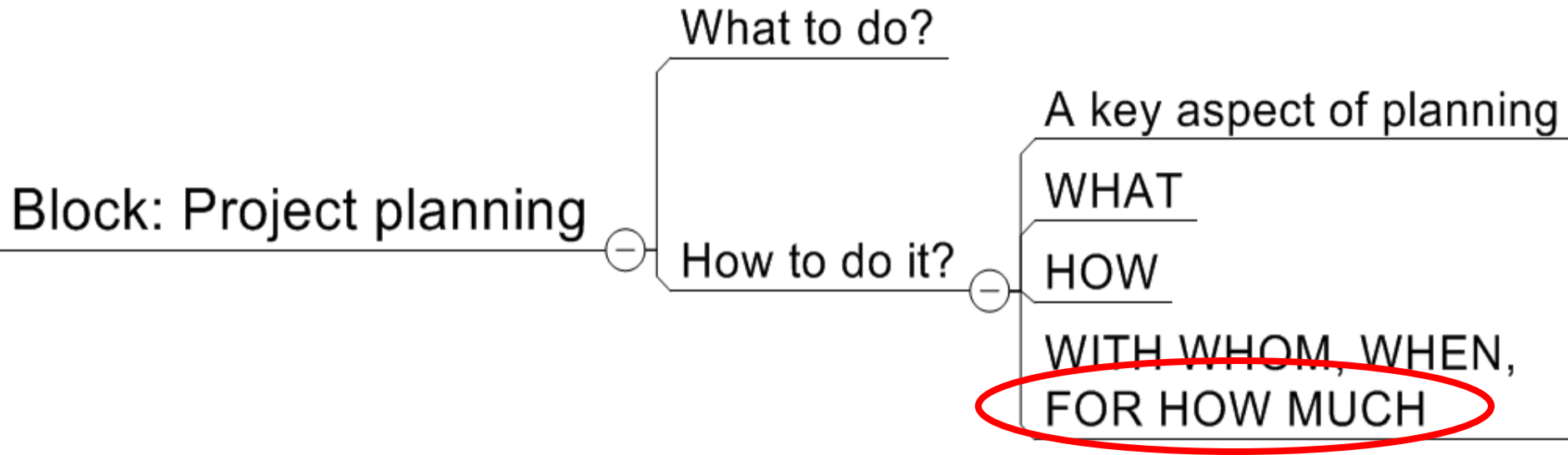


WHEN means to determine:

- activity starting date
- activity ending date

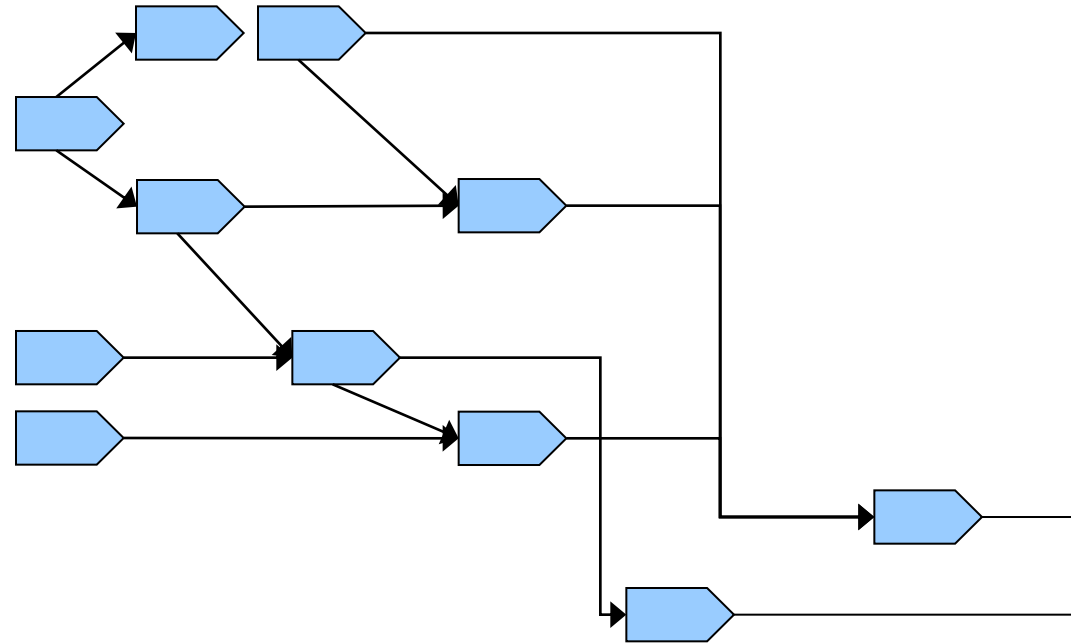
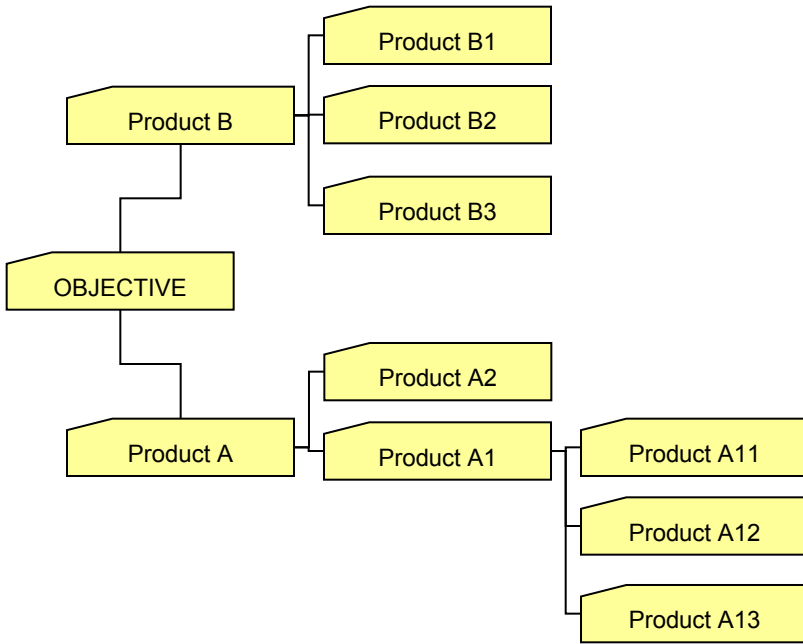
WHEN – Gantt chart



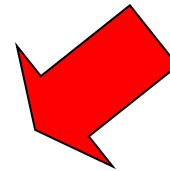
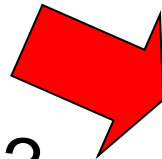


the ČSN ISO 10006 norm	IPMA	PMI
7.5.3 Drawing up a budget	1.13 Cost and finance	7.1 Cost estimating
7.8.2 Purchase planning and management	1.14 Procurement and contract	7.2 Cost budgeting
		12. Project Procurement Management

To plan a project means 5)



Material
/Products
/Services
to purchase?



Work load?
Cooperating
companies?

Project budget

Implementation

Handing over
Evaluation
Conclusion

Multitasking and work efficiency

What is managed

The management principle

What to do?



Block: Project implementation

How to start implementation?

Best management practices

Management of multiple projects - the principle

How to do it?

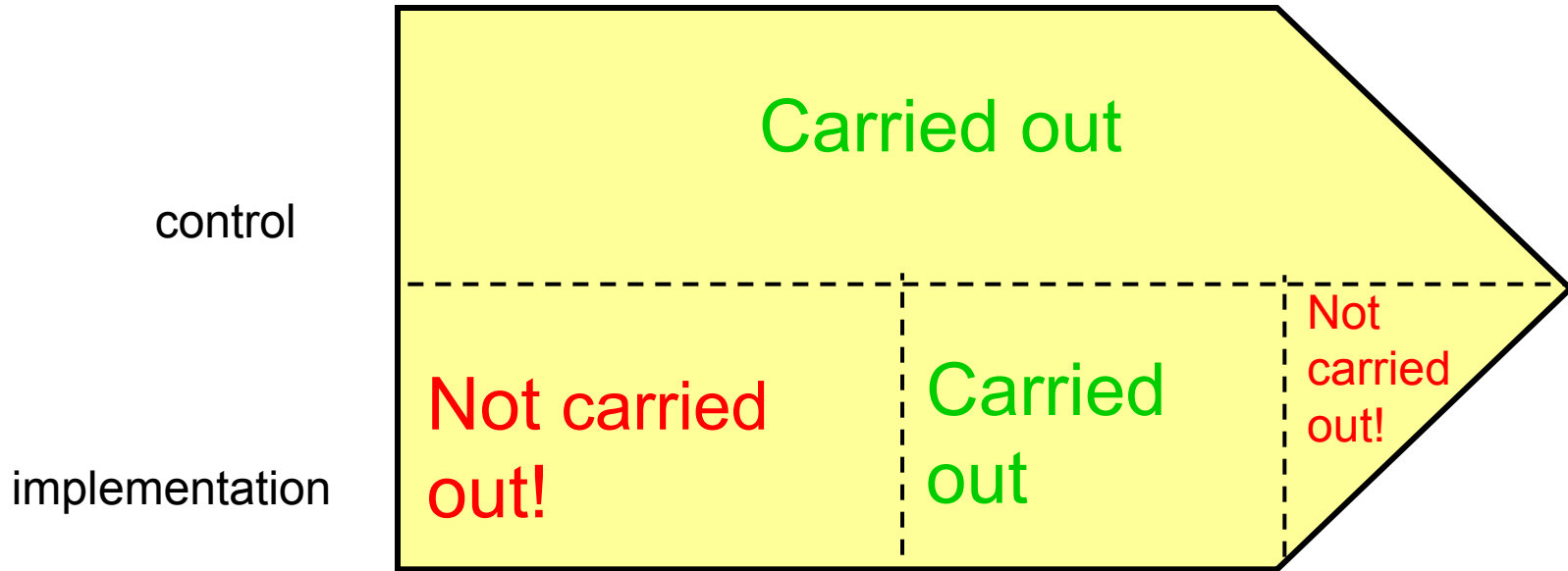


Relation to international standards

the ČSN ISO 10006 norm	IPMA	PMI
7.2.3 Management of mutual influences	1.4 Risk and opportunity	4.6 Integrated change control
7.2.4 Change management	1.5 Quality	5.5 Scope control
7.3.3 Goal creation and control	1.8 Problem solution	6.6 Schedule control
7.3.4 Definition of activities	1.9 Project structures	8.3 Perform quality control
7.3.5 Monitoring of activities	1.10 Scope and deliverables	11.2 Risk identification
7.4.2 Planning of activity sequencing	1.11 Time and project phases	11.3 Qualitative risk analysis
7.4.3 Duration estimate	1.12 Resources	11.5 Risk response planning
7.4.4 Schedule development	1.15 Changes	11.6 Risk monitoring and control
7.4.5 Management according to schedule	1.16 Control and reports	
7.7.2 Risk identification	1.19 Start-up	
7.7.3 Risk assessment		
7.7.4 Risk handling		
7.7.5 Risk management		

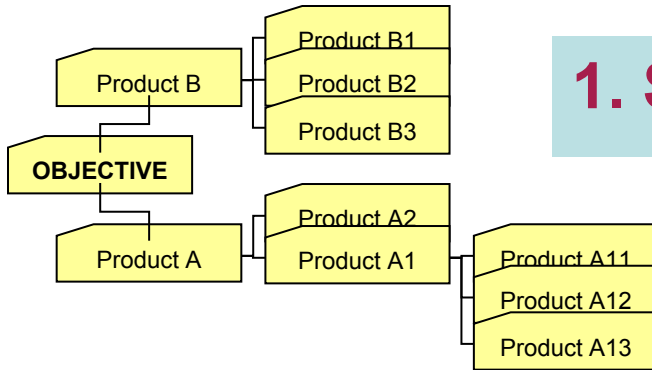
Project management phases

Initiation
Strategy
Planning
Implementation
Handing over
Evaluation
Conclusion



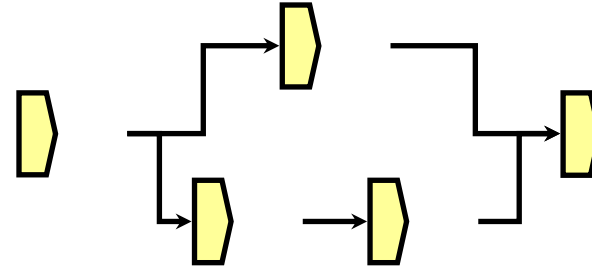
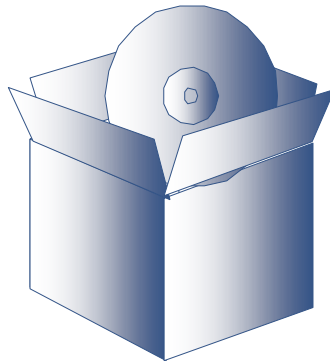
Stages

What must be managed?



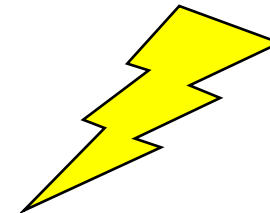
1. SCOPE / CONFIGURATION

2. PROCESS



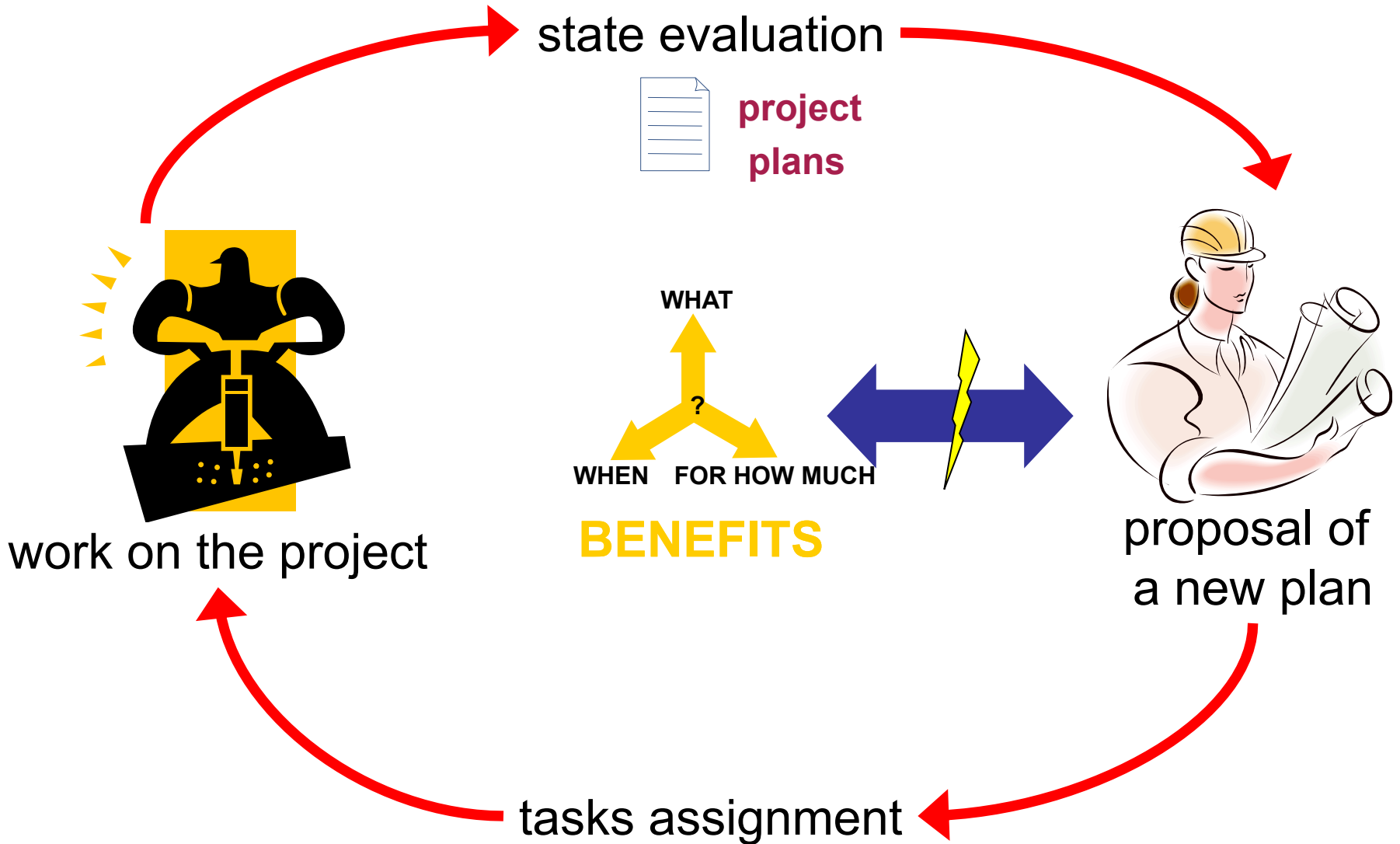
3. QUALITY

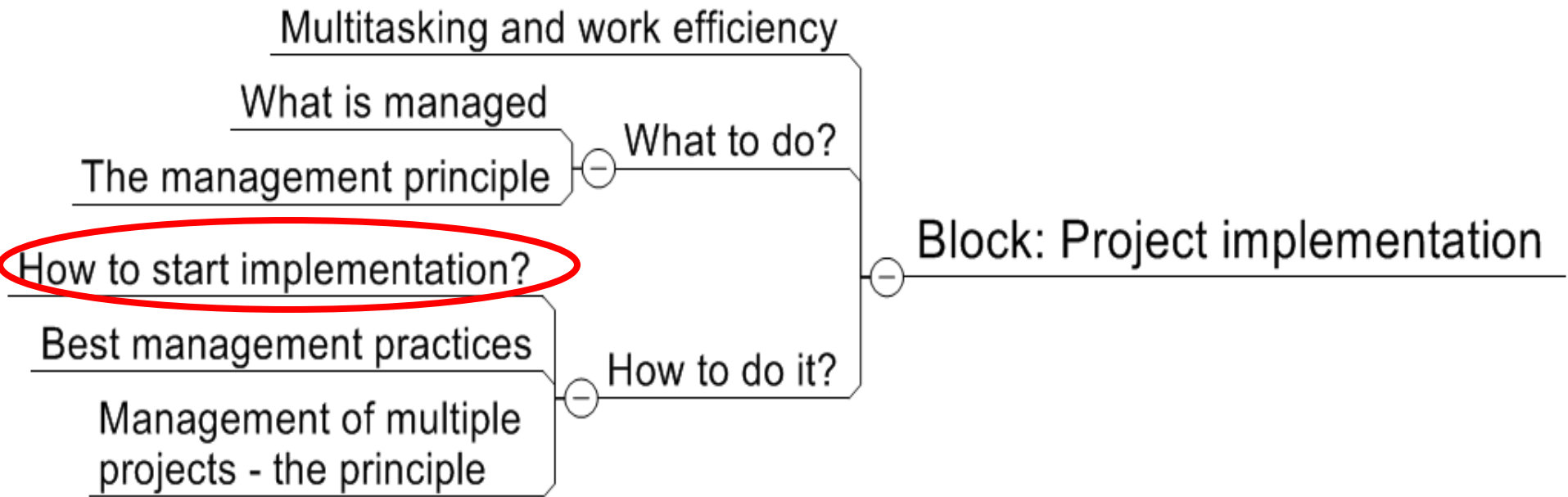
4. RISKS



5. CHANGES OF ALL THE ABOVE

The principle of project management





Discussion

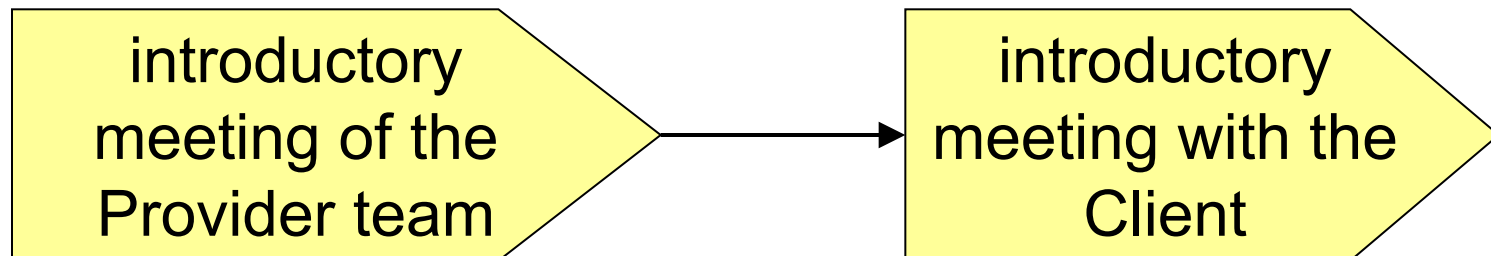
- What are the first steps of project implementation?
 - What to start with?



Forming

- Self-forming / Forming of the **Provider**
- Forming of the project **Client**

(Forming can (a little bit) substitute a non-existing strategy.)



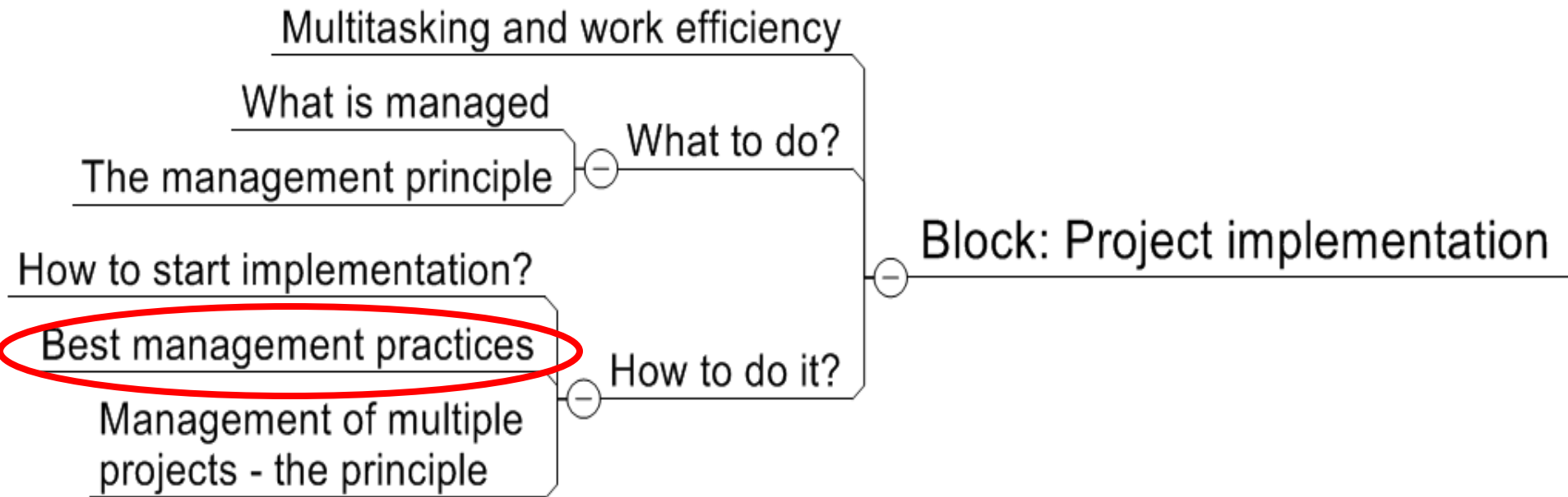
Introductory meetings

•Team of the Provider

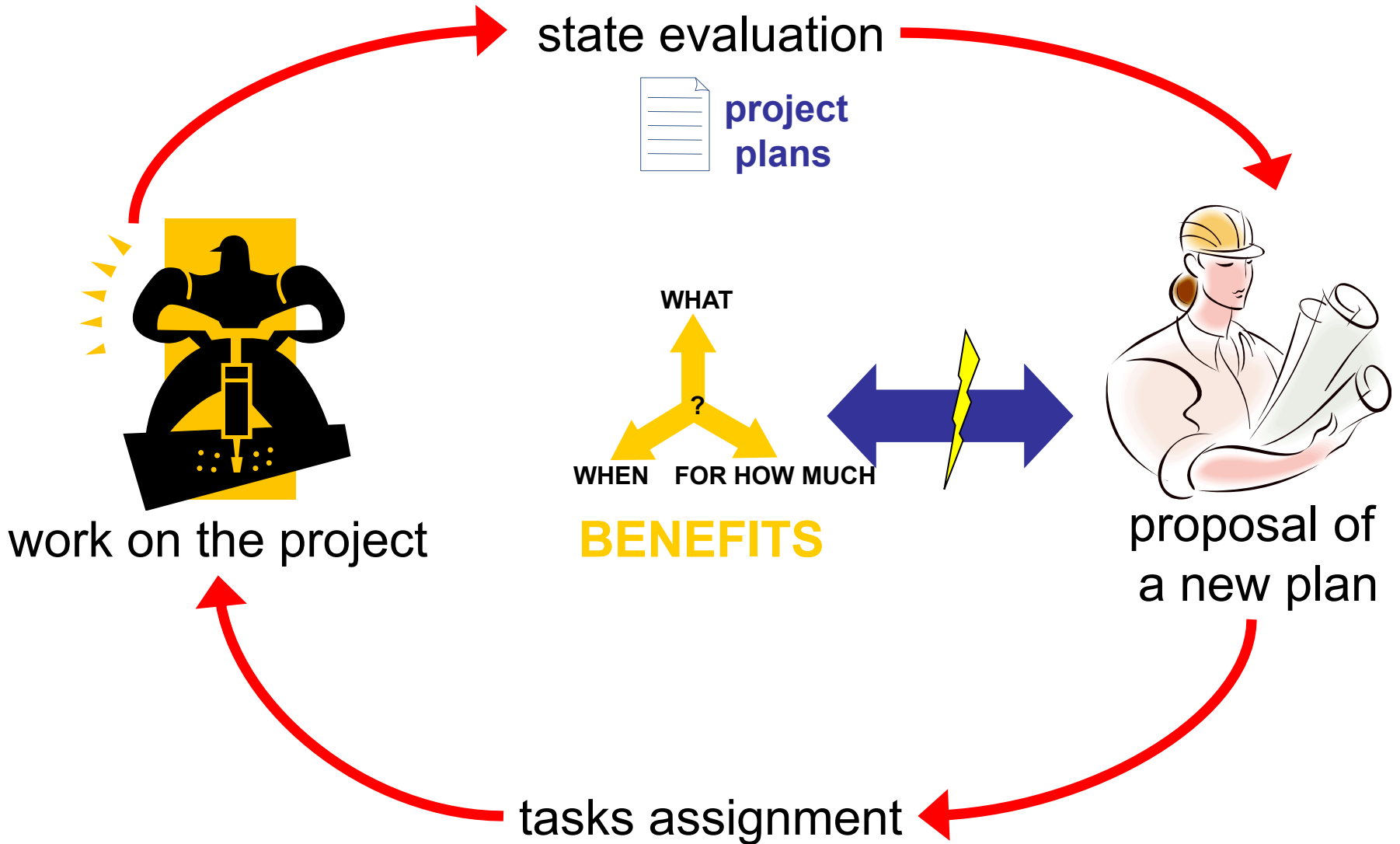
- triple constraint and project benefits
- process and products, including metrics
- clarification of roles
- communication standards and project glossary
- project work standards
- project documentation models
- getting acquainted with project risks

•Team of the Client

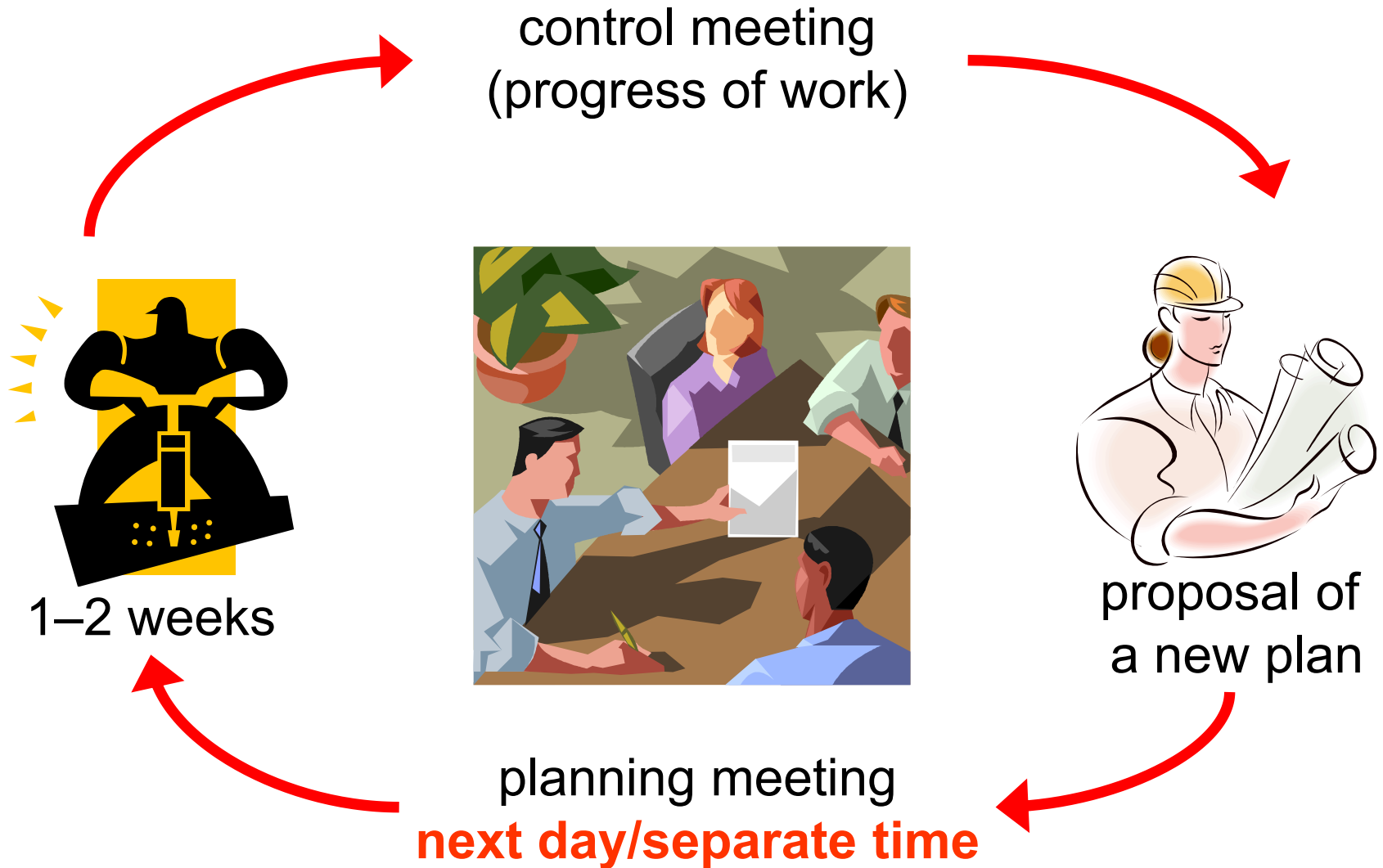
- triple constraint and project benefits
- approximate process and key products
- communication standards and project glossary
- contact data of TeamP and TeamC members
- project documentation models
- getting acquainted with project risks



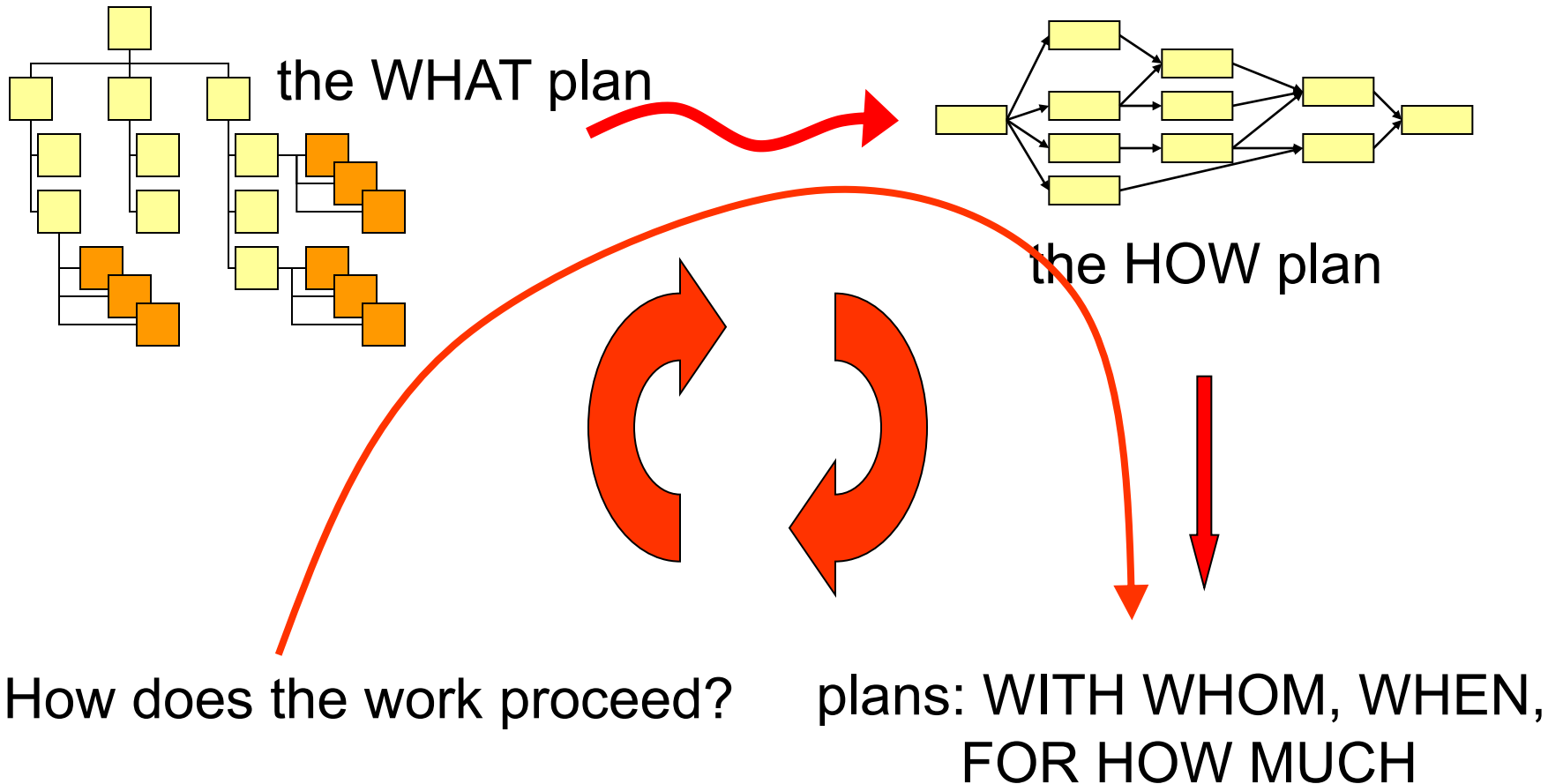
The principle of project management



Project management cycle in practice



Cyclical changes of the plan



Meeting goals

•Control meeting

- PROCESS:
 - determining the progress of work
- SCOPE/QUALITY:
 - determining the current degree of product completion
 - discovering inter-product dependences
- RISKS:
 - finding out about the current state of risks
 - identification of new threats
 - quantification of new risks

•Planning meeting

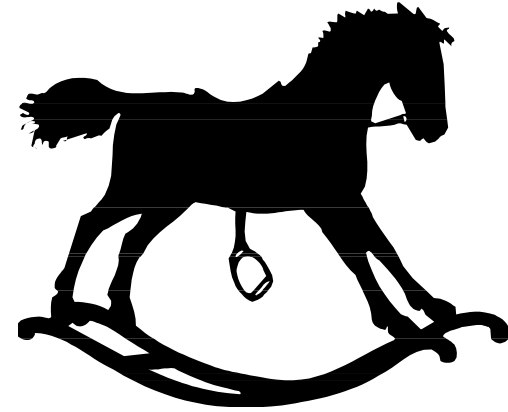
- SCOPE/QUALITY:
 - agreement on a new extent and quality of products (the WHAT plan)
- PROCESS:
 - agreement on a new version of the HOW, WITH WHOM and WHEN plans (re-allocation of sources to activities)
- RISKS:
 - agreement on a plan of activities eliminating risks

Conditions for high quality management



reality

= ? =



vision

- Without a plan, high quality management is impossible.
- **A PLAN IS THE COMPARATIVE BASIS FOR PROJECT MONITORING.**

Useful recommendations

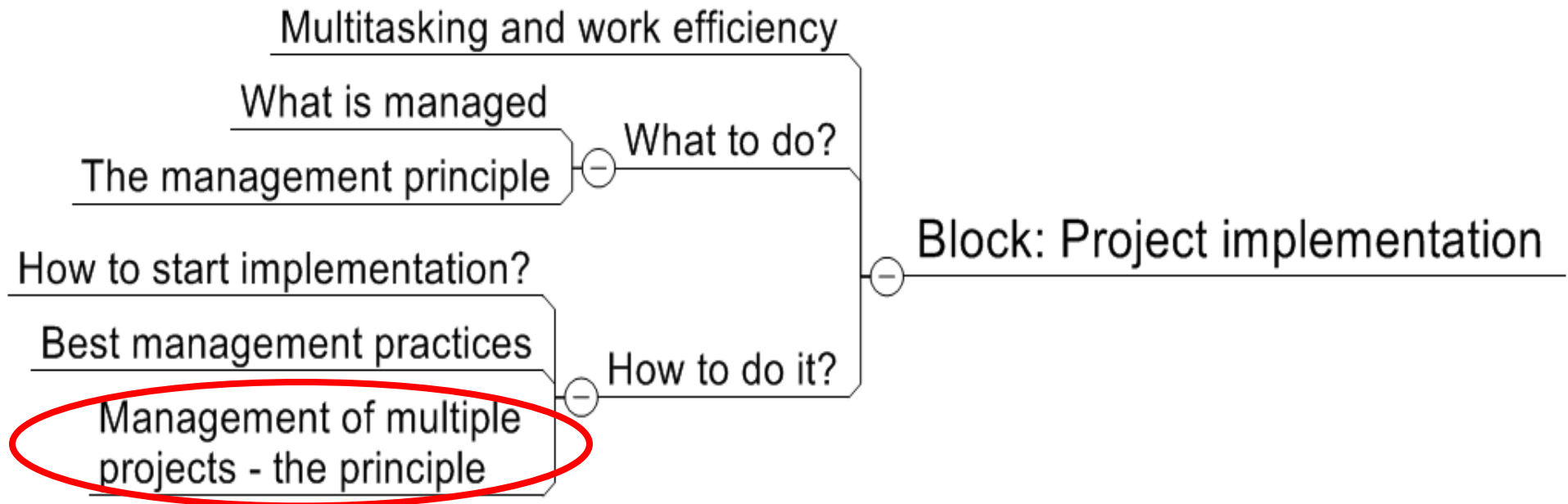
1. Do not mix meetings

***evaluative vs. planning vs. problem-solving
vs. operative***

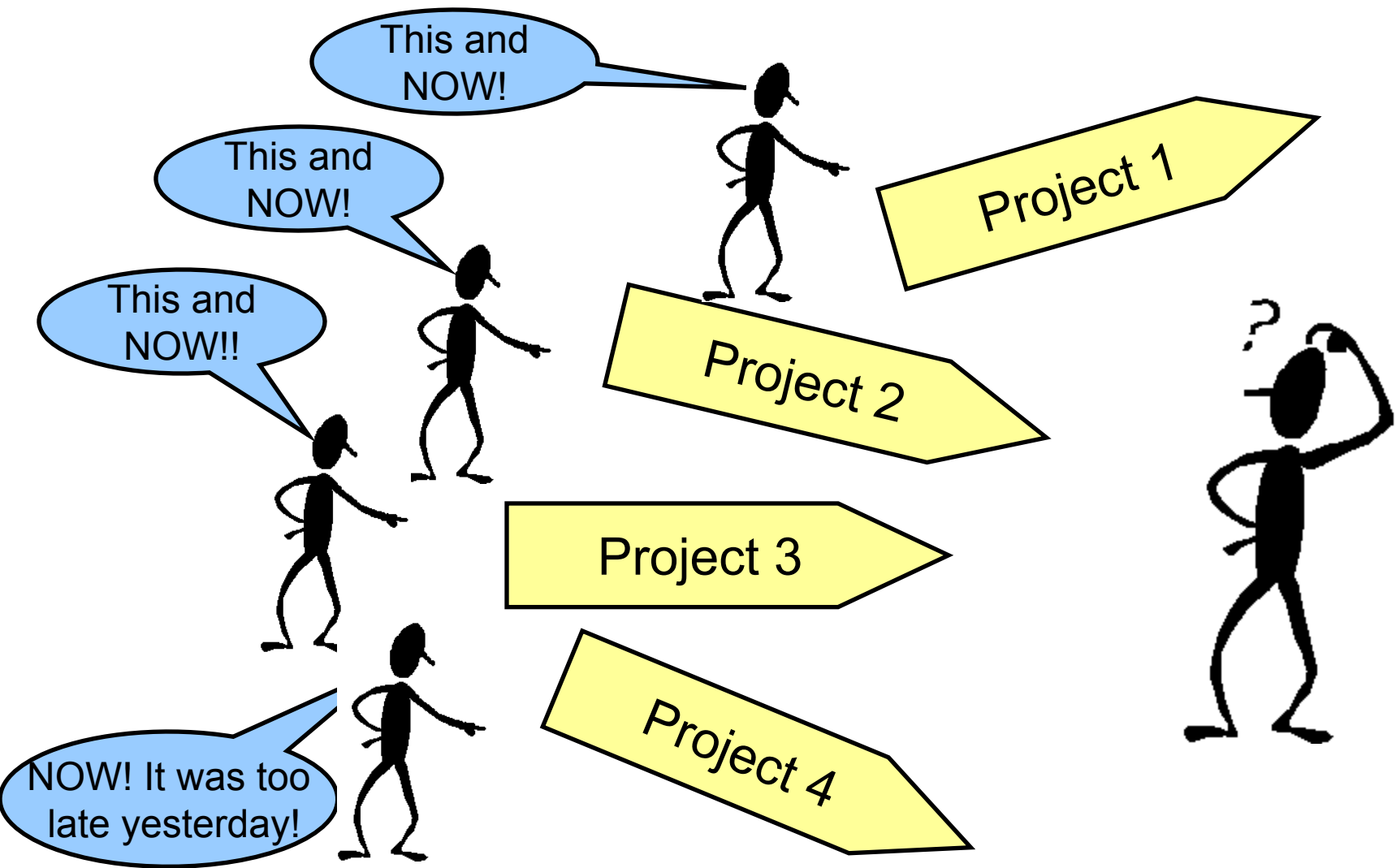
2. Splitting up into small tasks helps to determine exactly the current state.

- (recommendation of agile techniques)
- Do not get stuck in details.

Use the “Steering Wheel” to
steer PPP !



Multitasking and priorities



How do projects influence one another?

What do projects share? What do they pass on to one another?

RESOURCES

PRODUCTS

MONEY

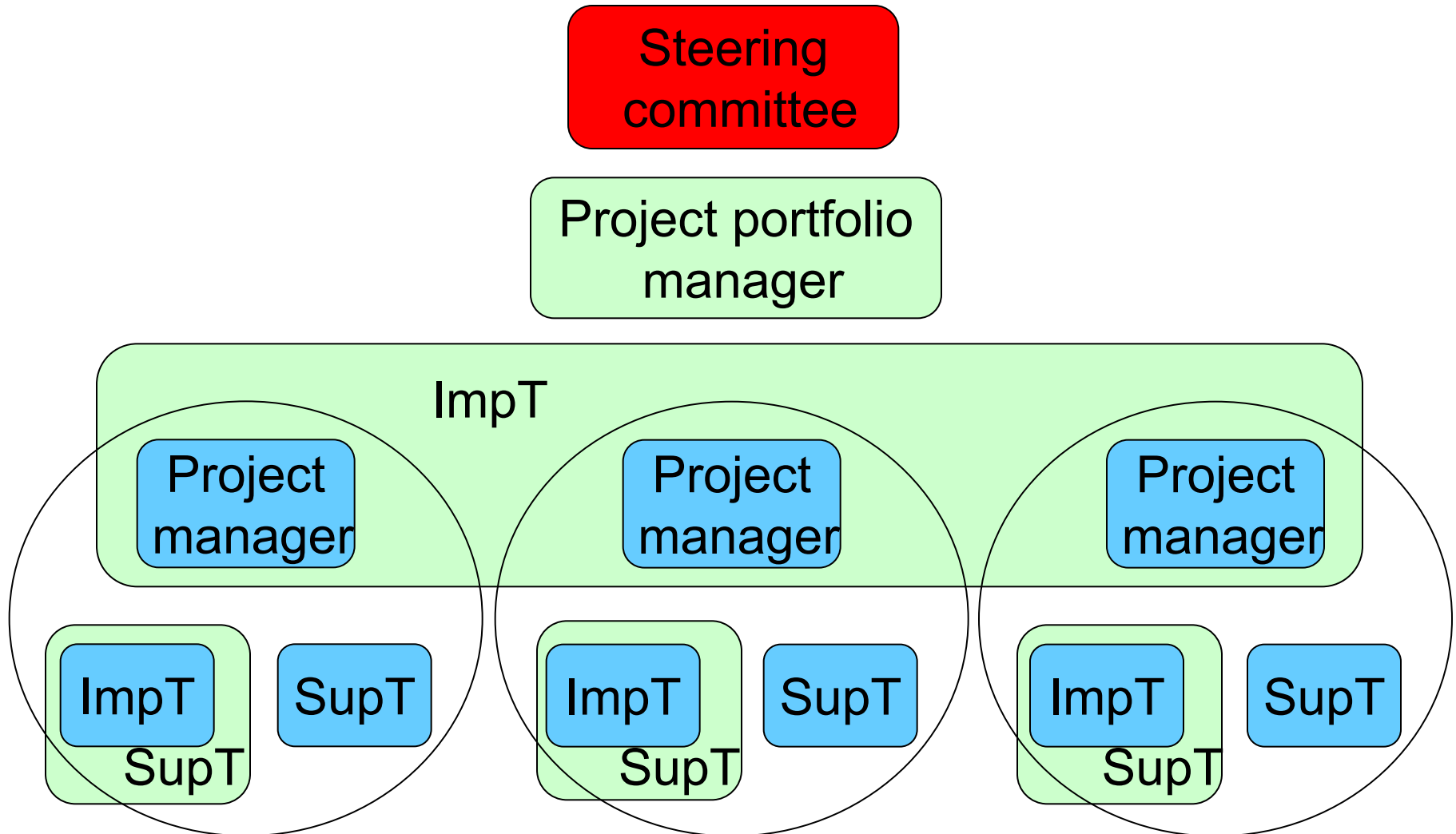
TIME

COORDINATE



DECIDE ON PRIORITIES

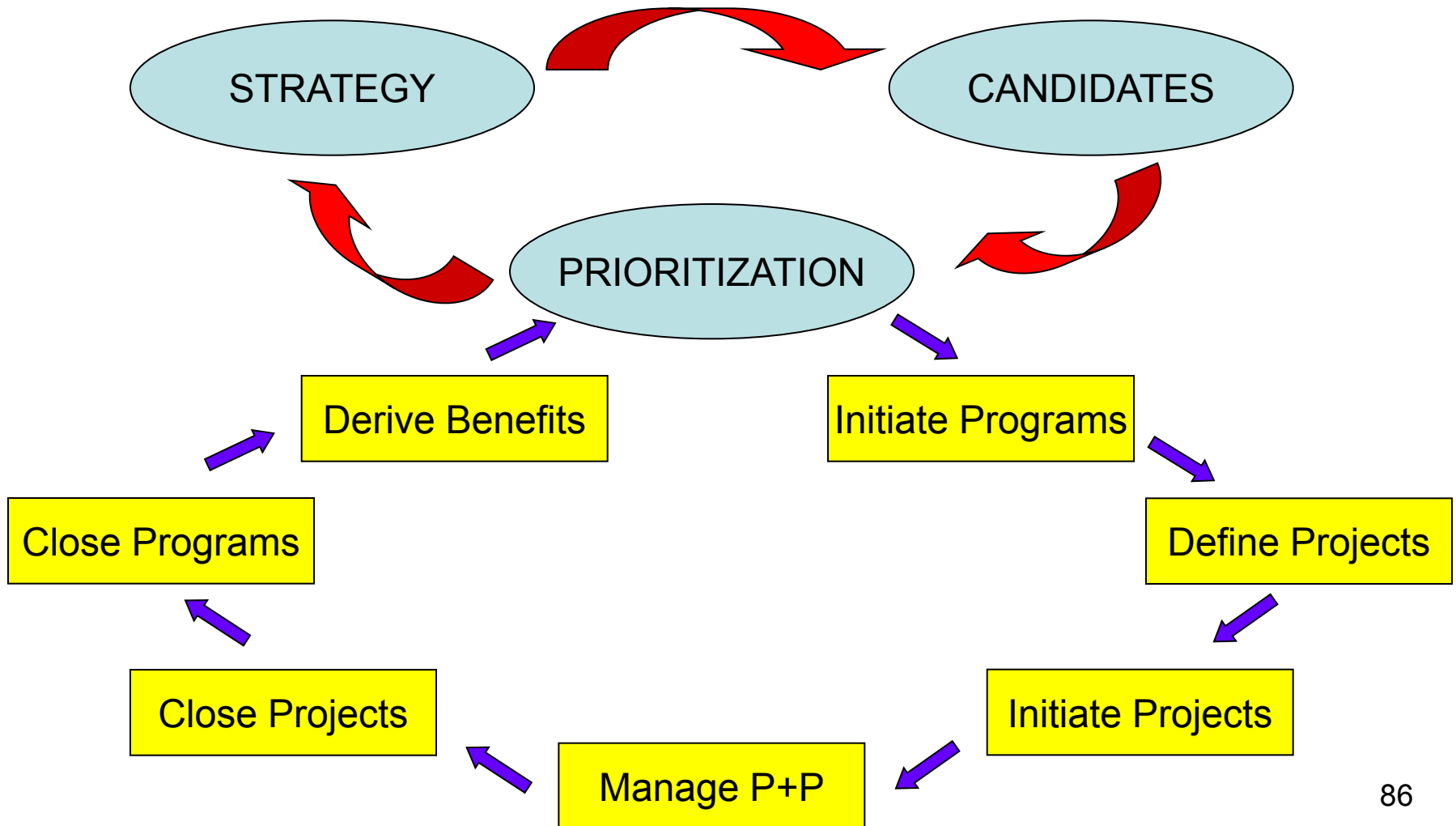
Two-level management structure



Amendments

- Program management according to GOWER Handbook of Program Management
- Some comments from PMI approach

Program management from the organization perspective



The Program Management Cycle

- outer loop

1. Define the organization's strategy
2. Collect and evaluate candidate programs
3. Select and prioritize candidate programs

Define the organization's strategy

- The objectives set by the senior management; whenever possible in numerical terms
 - (5 percent increase turnover
10 percent decrease in wastage
7 percent less accidents , or
6 percent reduction in staff turnover)
- Non-financial objectives
 - Balanced scorecard
 - KPI

Collect and evaluate candidate programs

- The organization is encouraged to come up with ideas for change
- Each idea joins the list of candidates
- Each candidate program will vie with others to prove itself worthy of investment.

Select and prioritize candidate programs

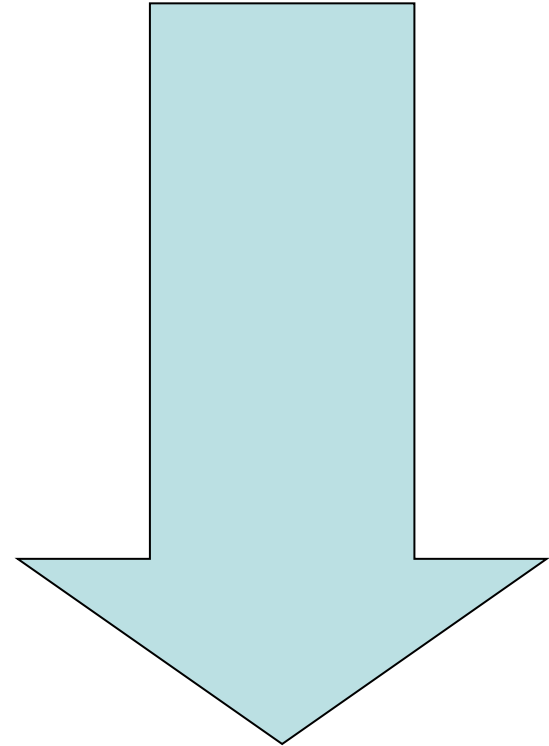
- Each (serious) candidate program is evaluated in terms of
 - Financial and resource investments required to deliver the change
 - The financial and non-financial benefits expected from the change
 - The risks
 - The timescales
 - Their alignment with the delivery of the organization's stated objectives

The Program Management Cycle - inner loop

1. Indicate selected programs
2. Define projects to deliver programs
3. Initiate projects
4. Manage program and projects
5. Close projects
6. Close programs
7. Derive and monitor benefits

The Value Path

- Projects
- Deliverables
- **Programs**
- **Capability**
- **Benefits**



PMI approach to Program management

- More like cookbook again
- Guideline what to do in any particular situation
- Inputs-Process-Outputs
- Data-flow diagrams
- Special Blend of Knowledge, Skills & Competence of Program Manager

Special Blend of Knowledge, Skills & Competence of Program Manager

- Leadership
- Political
- Technical Knowledge
- Strategic Vision
- Organizational
- Environmental Awareness
- Program Management
- Time Management
- Communications
- People skills