

Project Management Reasons and Principles

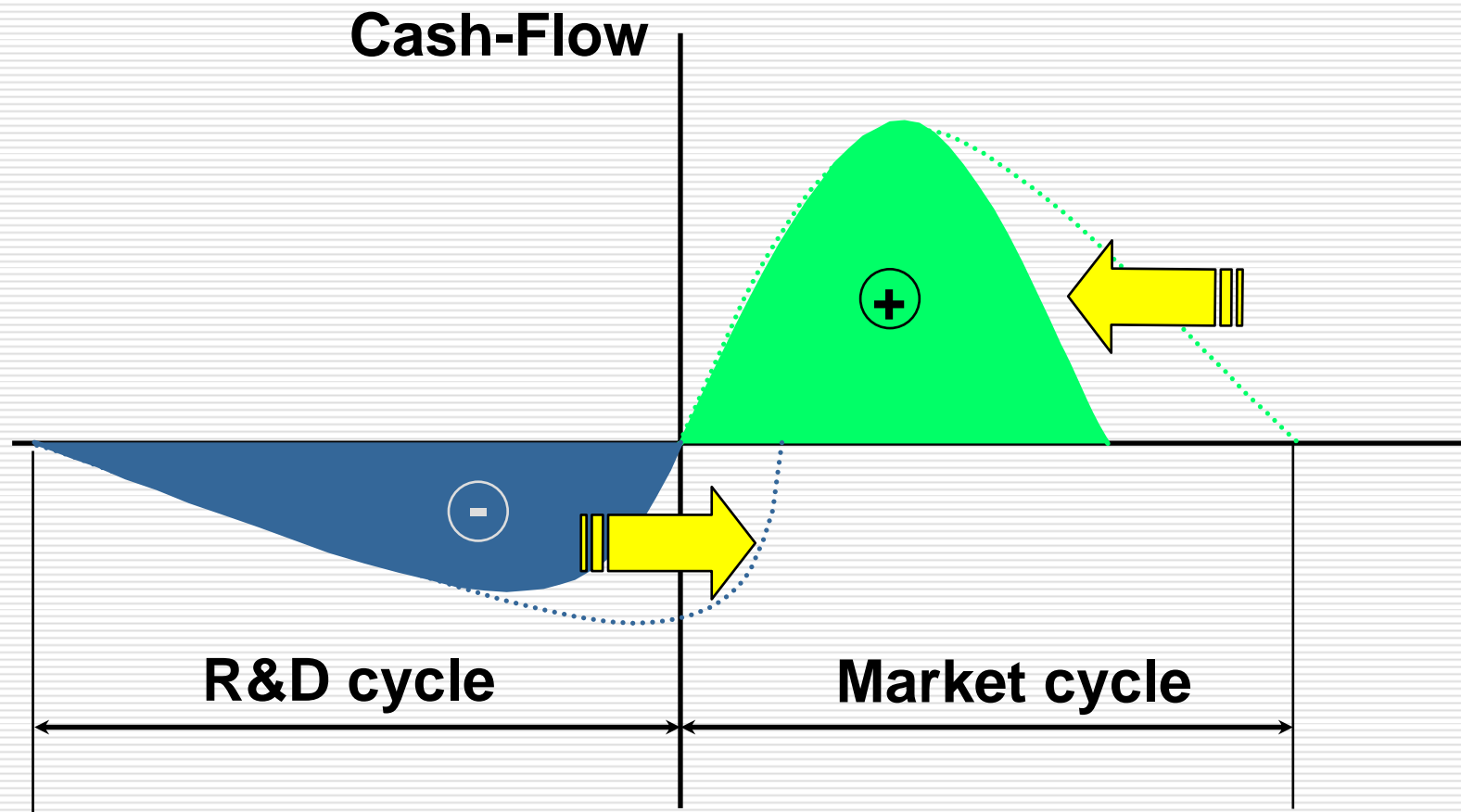
Syngenta Crop Protection AG
Product Development

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Items

- Reasons for Project Management
 - *What trends have a growing effect on the success of business?*
 - *What are the benefits of using project management?*
- Principles of Project Management
 - *What main principles should be followed in order to increase the probability of the success of a project?*

Product lifecycle: opposite tendencies



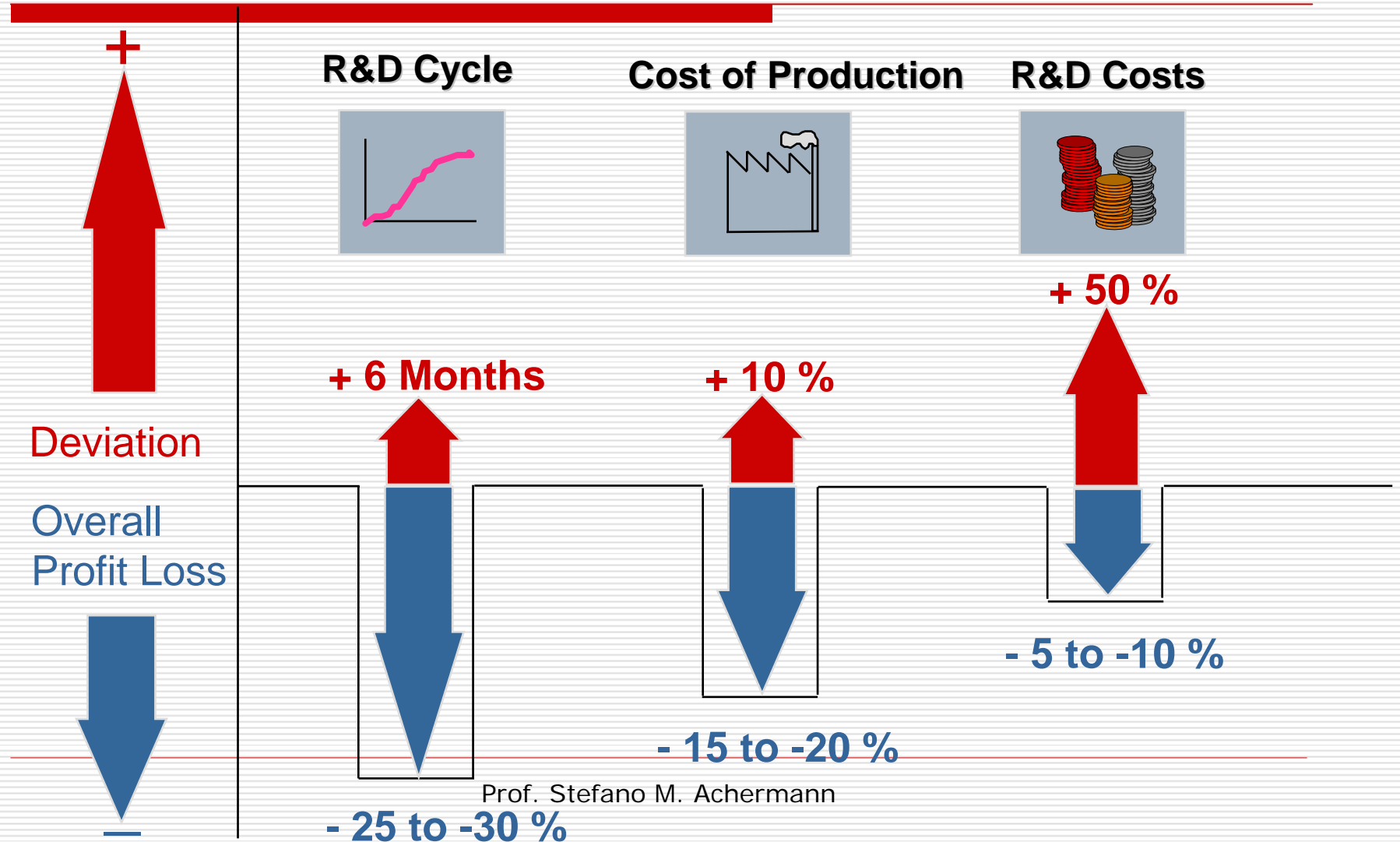
Growing development cycles example: office computers

<i>year</i>	<i>development cycle [months]</i>	<i>R&D costs [% turnover]</i>
1950	18	3
1960	18	5
1970	24	7
1980	32	10

Decreasing market cycles

<i>Examples</i>	<i>in the fifties</i>	<i>today</i>
typewriter	10-15 years	3-5 years
booking machine / office computer	10-15	3-5
pocket calculator	10-15	1-3
TV set	5-10	3-5
hi-fi system	5	2-3
car	5-10	5-10
camera	10	3-5

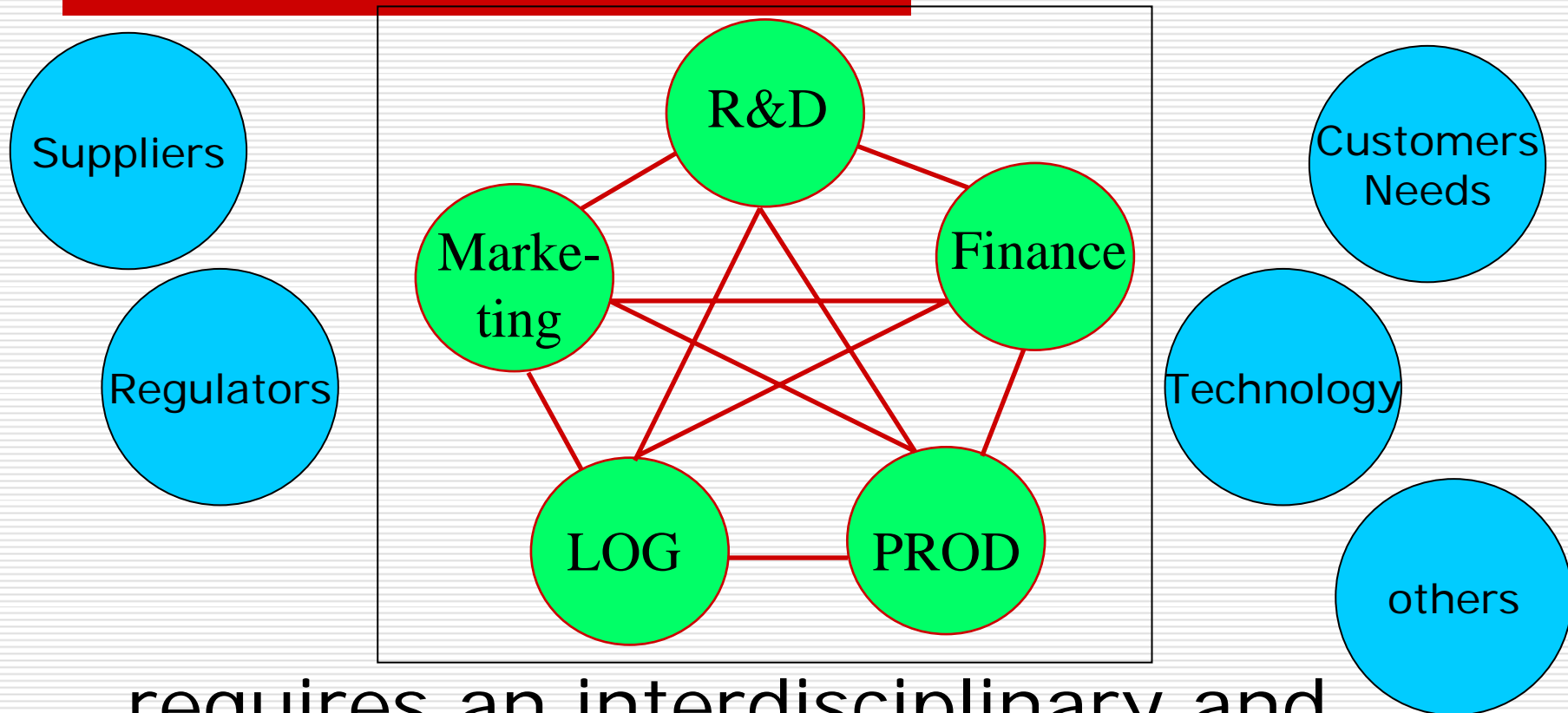
Importance of time factor for product development



Project management helps speed up processes

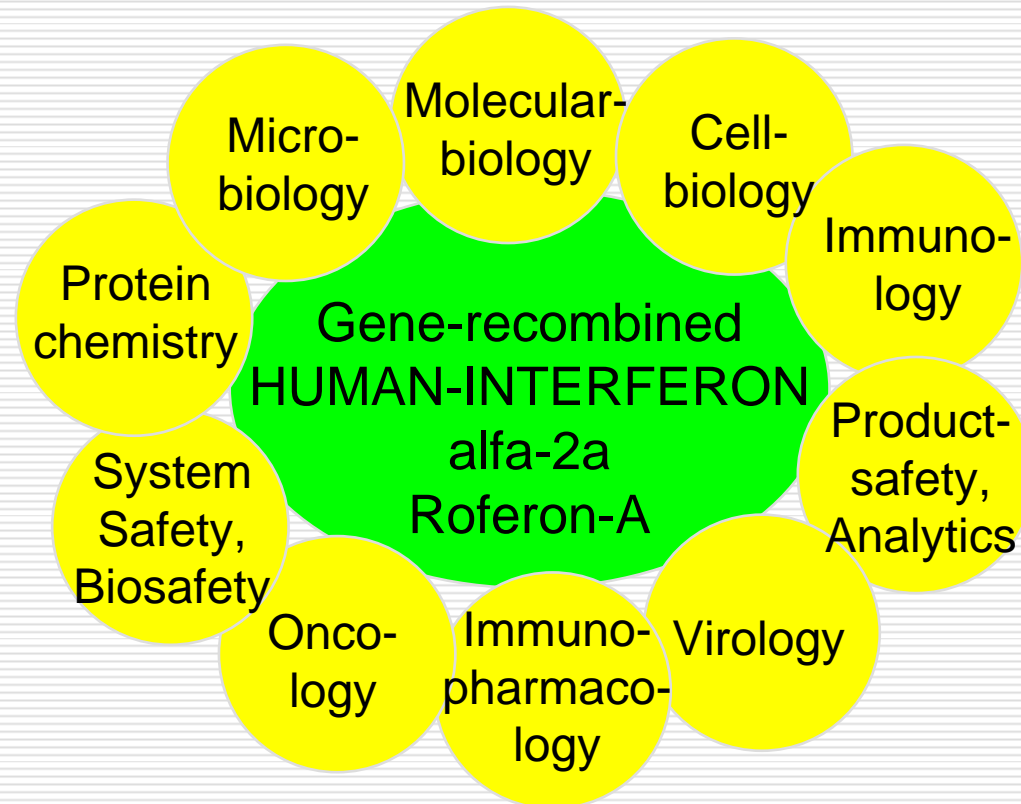
- ❑ Speed and agility become a success factor
- ❑ **Problem:**
Functional specialization creates a need for coordination and enhances process complexity
- ❑ **What to do?**
Reduce duration of communication, decision, coordination and control processes
- ❑ **Solution:**
specific design of project organization

Growing complexity of tasks and problems...



...requires an interdisciplinary and interdepartmental approach

Example: Interferon development



Project management helps cope with complexity

- ❑ Risk identification in an early phase through interdisciplinary and interdepartmental project teams
- ❑ Better use of available knowledge
- ❑ Capability to manage projects becomes a competitive advantage

Principles

- ➡ Project structuring
- ➡ Strong focus on definition phase
 - Clear objectives and guidelines known to the persons involved
 - Transparency of current project status
- ➡ Identification of risks as early as possible
 - Fast response to disturbances
- ➡ Personalized responsibility

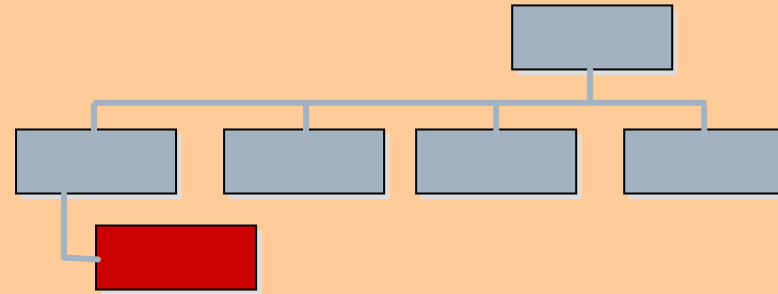
Project structuring

- ❑ What are the tasks to be dealt within the project?
(Work breakdown structuring)
- ❑ In which order and at what point of time must things be done?
(Scheduling / Planning)
- ❑ What are the main milestones?
(results, cost, date)

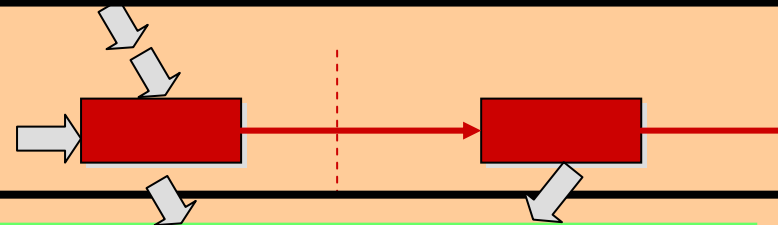
Development of flow chart

Results of planning steps

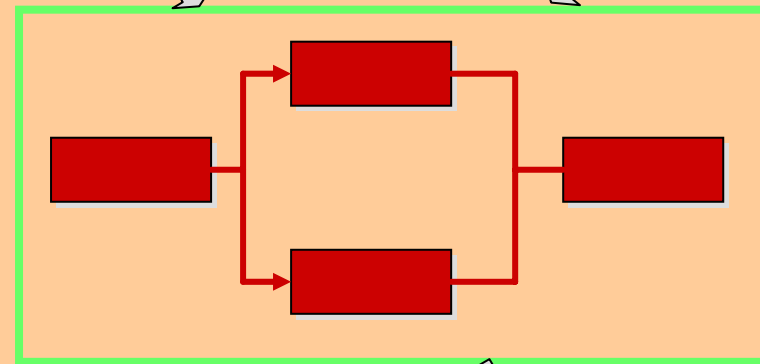
1st Building the project structure plan



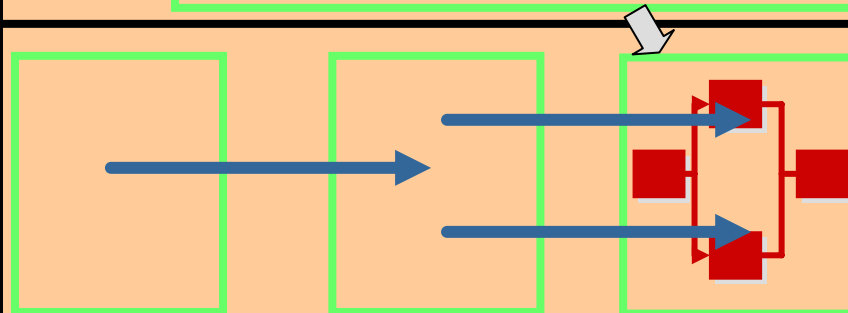
2nd Work breakdown



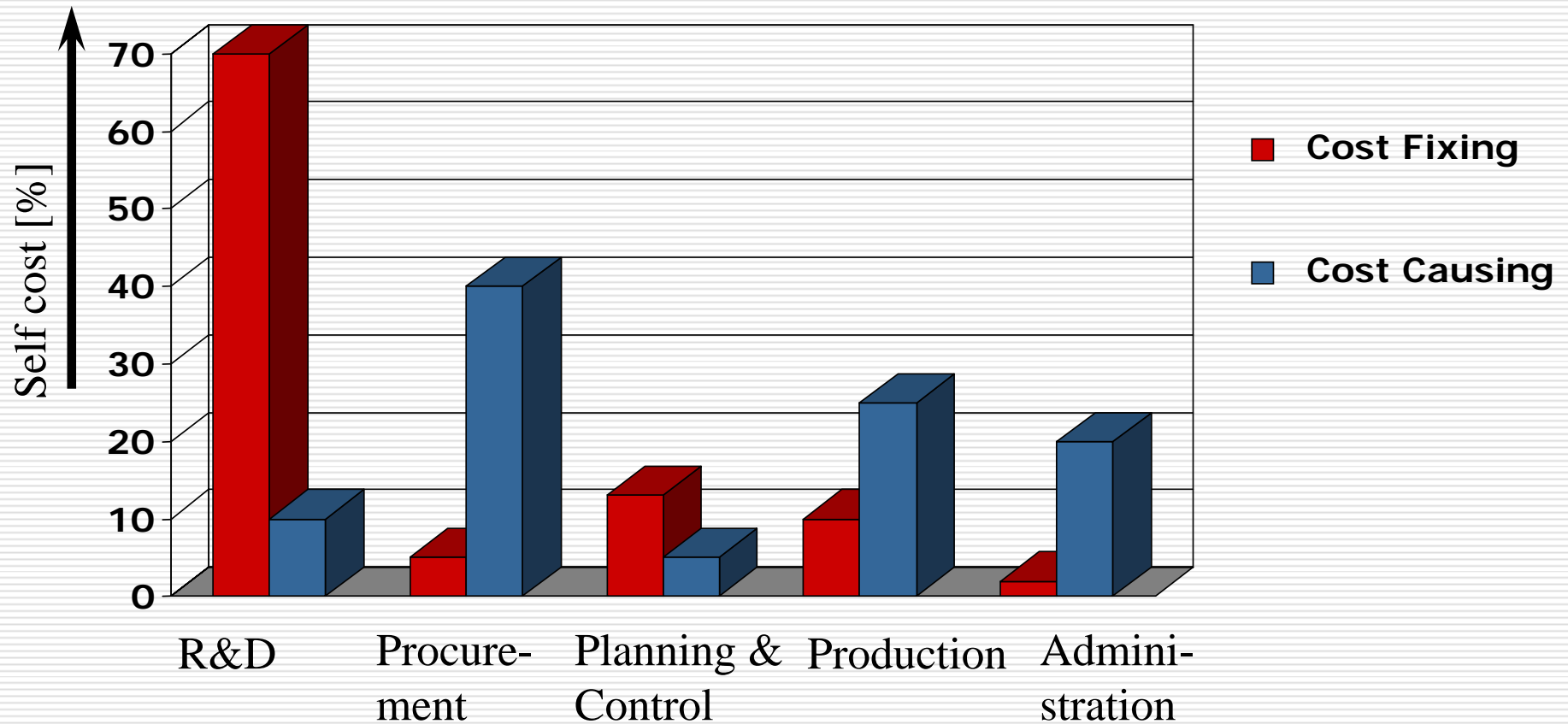
3rd Set up the partial flow charts



4th Connection of the partial flow charts

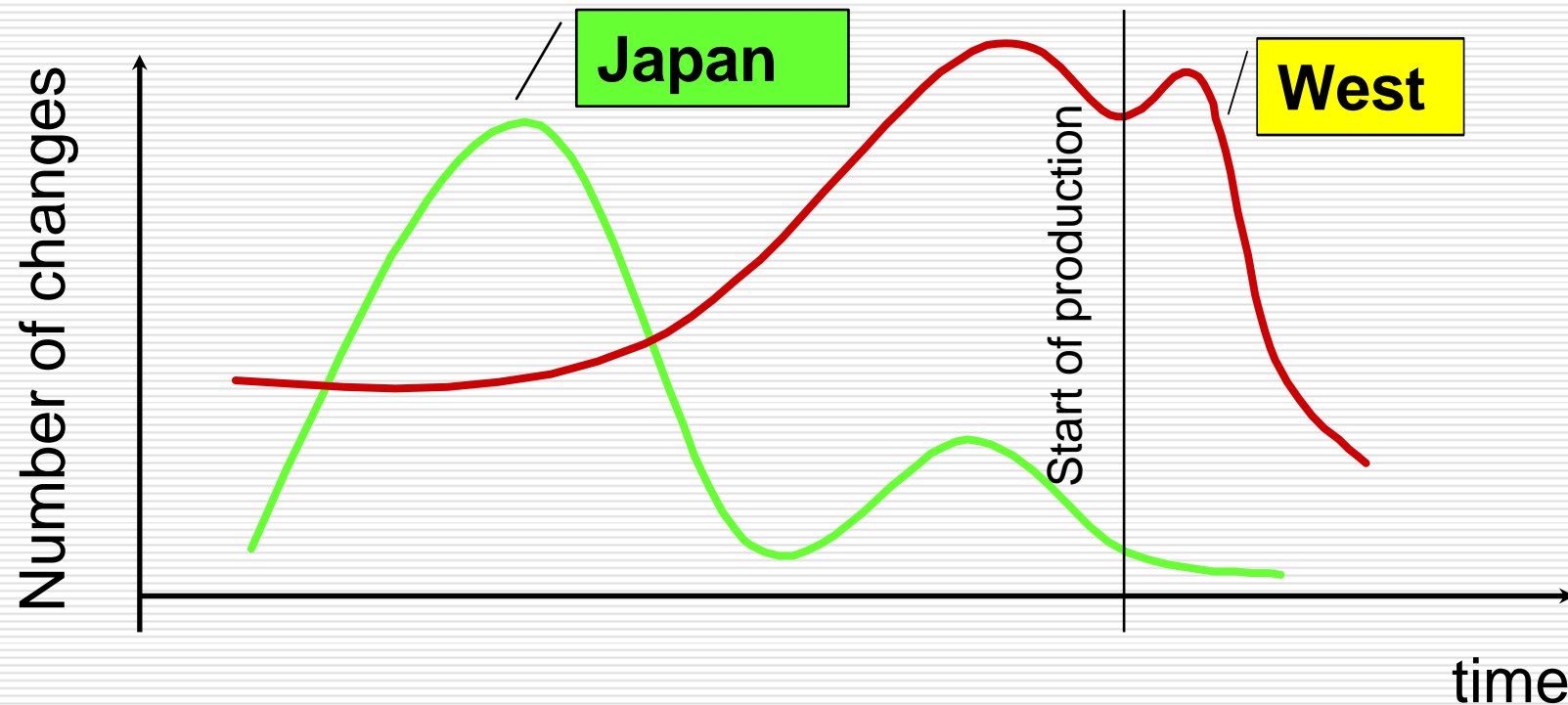


Where cost are fixed and caused



Different approaches in Japan and the West

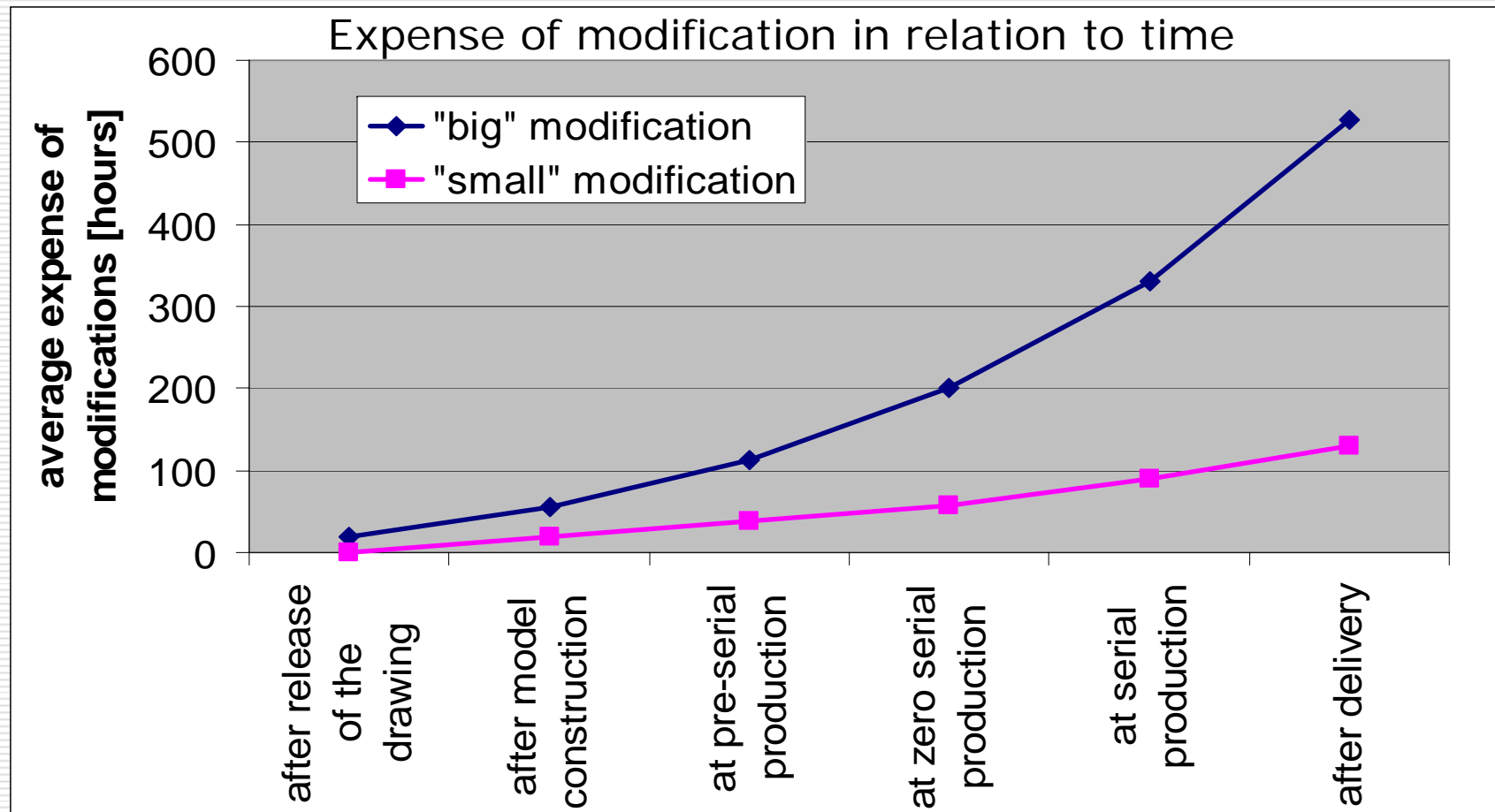
Cost of changes during development phase



Example: *Auto Industries*

	JAPAN	USA	EUROPE
<i>Average Engineering Hours Per New Car (Millions)</i>	1.7	3.1	2.9
<i>Average Development Time Per New Car (Months)</i>	46.2	60.4	59.9
<i>Delayed Product Introduction</i>	1 in 6	1 in 2	1 in 3
<i>Ramp-up Time To Normal Productivity (Months)</i>	4	5	12
<i>Months To Normal Quality Levels</i>	1.4	11	12

Strong focus on definition phase



3 step procedure of risk analysis

1st Identification of risks

- What tasks are critical?
- Different points of view required (performance, quality, dates, cost, resources...)

2nd Risk assessment

- What is the probability that a specific risk take place?
- What effects are to be expected when the event take place?

3rd Risk avoidance or reduction

- Are appropriate actions to be launched?

Risk-Matrix

Work package		Risks				
		Organizational	Personal	Financial	Technical	Timing
Nr.	Description					
1106	construction chassis					
1107	construction steering					
1602	procurement drive units for the pump					

Risk	Assess-ment	Action(s)	who ?	until ?
Poor quality	A	Quality tests at place	Smith	01.04.

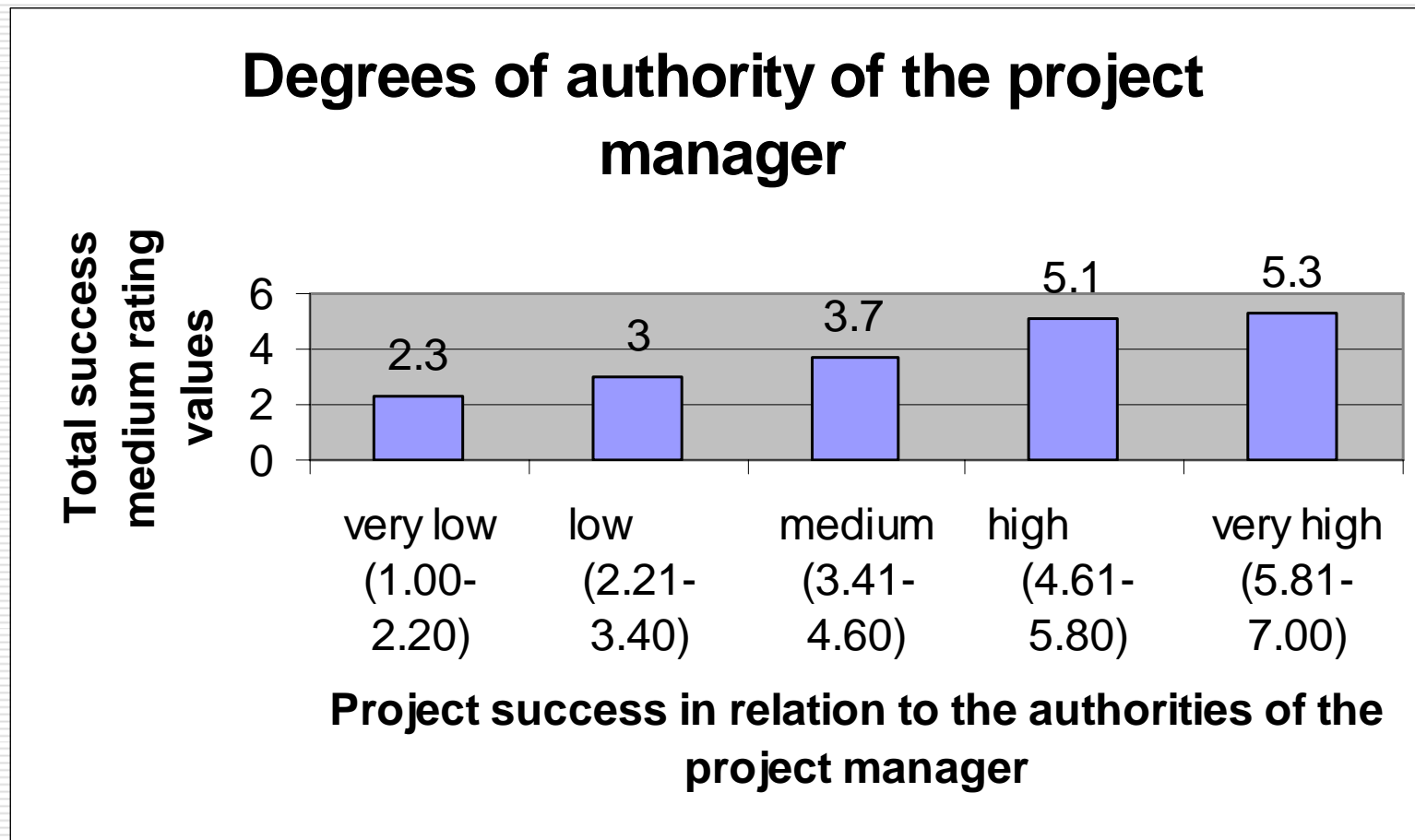
1st step: clarify the role of the project manager

- What do we expect from a project manager?
- What do we make him responsible for?
- Different understanding of roles:
 - Project coordinator
 - Project manager
- Choose an appropriate project organization
- Pay attention to the Congruency of task, authority and responsibility
- Tool: role description

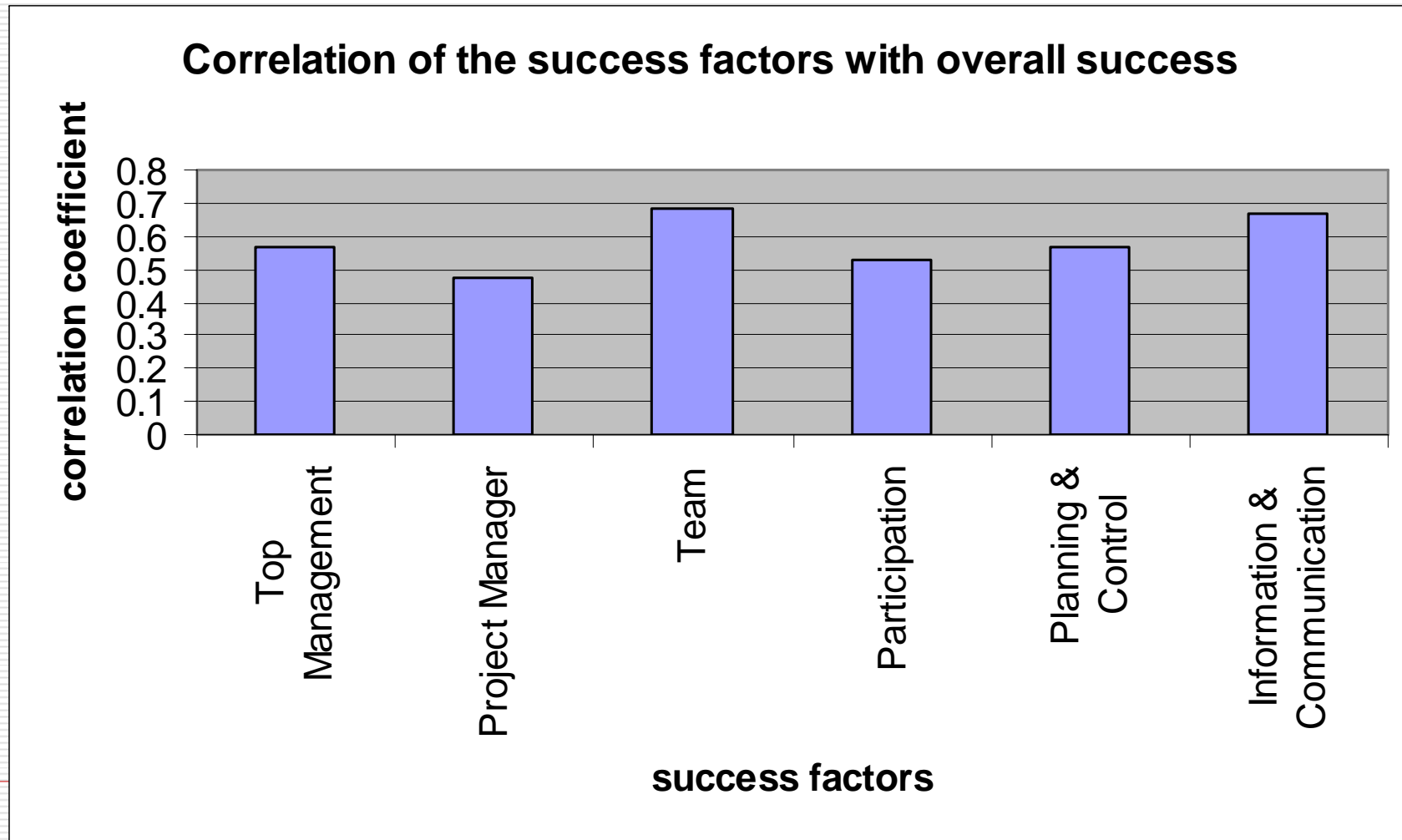
2nd step: Identify the required knowledge for the defined role

- How much professional / leadership knowledge should a project manager have?
- Professional knowledge:
 - In many cases not so critical
 - But: connections, jargon is important
- Methodical knowledge: Is a must
- Leadership knowledge:
 - As a rule: complementary to the professional knowledge
 - Also dependent on type and size of projects
- Rather a generalist than specialist (80%/20%-type)

How much authority does the project manager need?



Success Factors

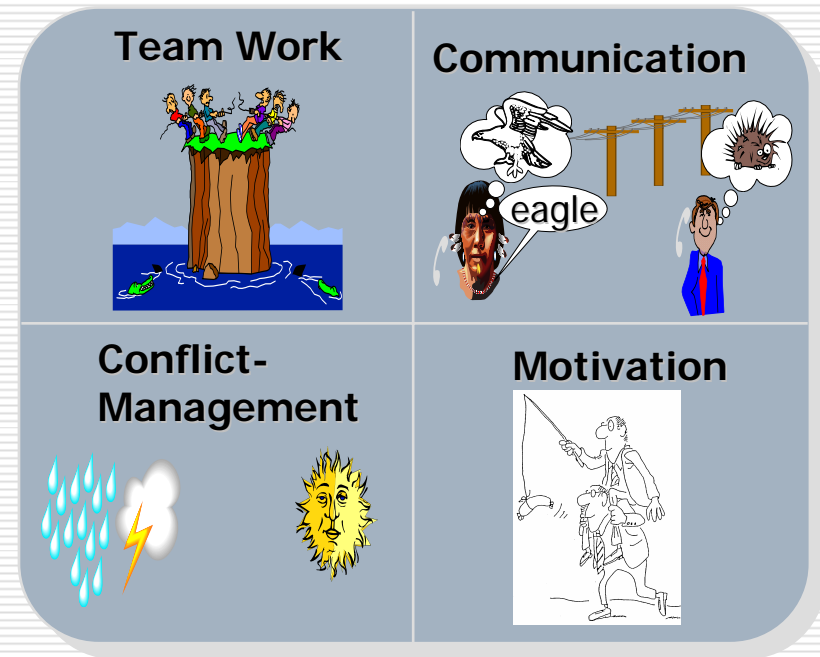


Holistic approach to PM

Factual level

+

Psychological-social level



Most common pitfalls

- 1. Unclear objectives*
- 2. Project management „by fire brigade“*
- 3. „Quick shots“ as problem intervention*
- 4. Time pressure*
- 5. Lack of support of the decision-makers*
- 6. Wrong people in the project team*

Source: Survey of the Academy for executives, 230 Managers in Germany and Austria

Conclusions

- ❑ Project Management is a discipline that can be learnt
- ❑ Work breakdown structure shows the functions and skills needed in a specific project
- ❑ The role of the project leader and other persons involved must be clarified
- ❑ The project leader must be given as much authority as possible (entrepreneur)
- ❑ Strong focus on early phase is important
- ❑ Prevention instead of repairing (risk management)