

Projects: System Approach

PROJECT MANAGEMENT

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Key Topics

- Requirements for the project
- Project's environment
- Project's participants
- Project's structure

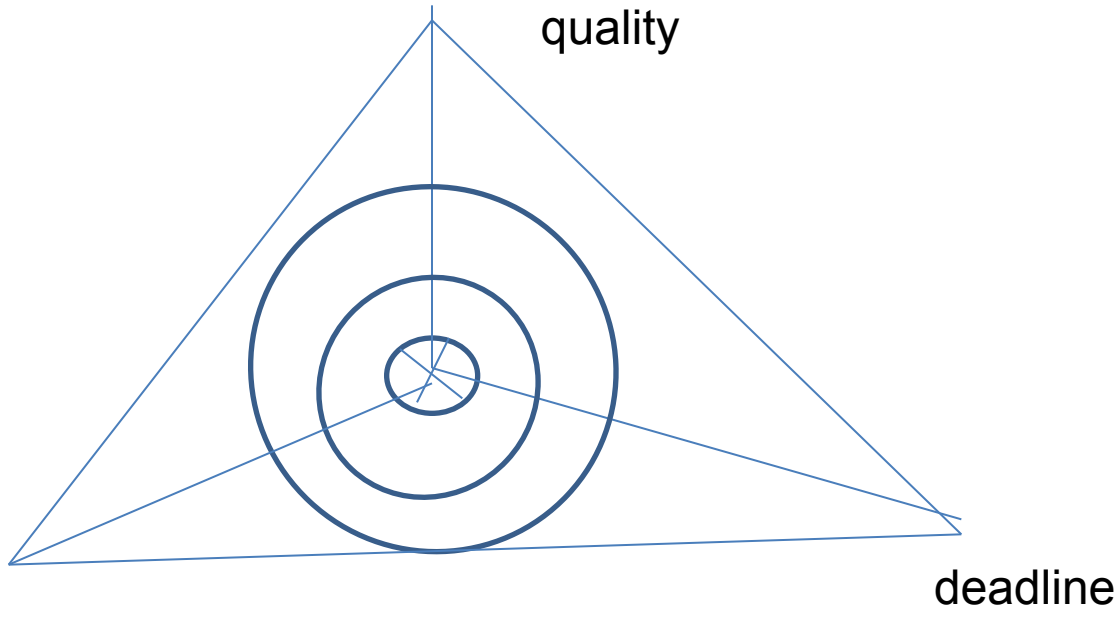
Requirements for the Project



- Costs
- Quality
- Deadline

We should find a compromise between these controversial objectives.

Requirements for the Project



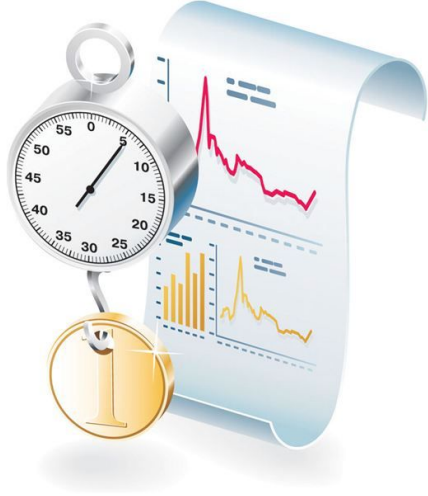
Magic triangle of the project management



Requirements for the Project

- Design to cost
- Design to time
- Design to quality

Task: Give the examples of the projects oriented on: 1) cost 2) time 3) quality



Project's environment

External environment

company

Corporate System of the PM

Project

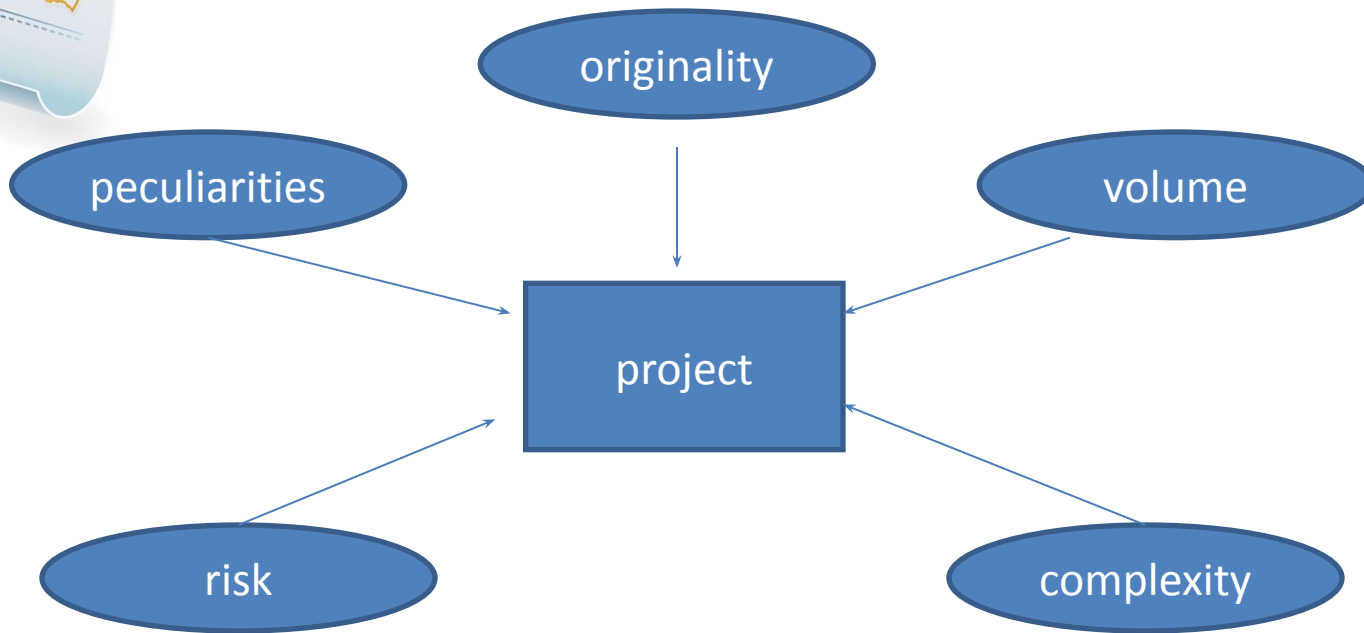


Project's environment

Factors that influence the project :

- Economic environment
- Political environment
- Social environment
- Legal environment
- Scientific and technological environment
- Natural Environment

Project's environment



Sometimes it is difficult to separate external and internal project environment. Why?



Project's participants

- Investor
- Customer
- Users
- Project manager
- Project Team

You should take into account that between different project's participants (stakeholders) the conflict of interests may appear. Give an examples the project with different objectives of the project stakeholders.

Controversial objectives of the project's participants

	deadline	costs	quality
Client (customer)	↓	↓	↑
Project team	↑	↑	↓
Management of the project team	↓	↓	↑



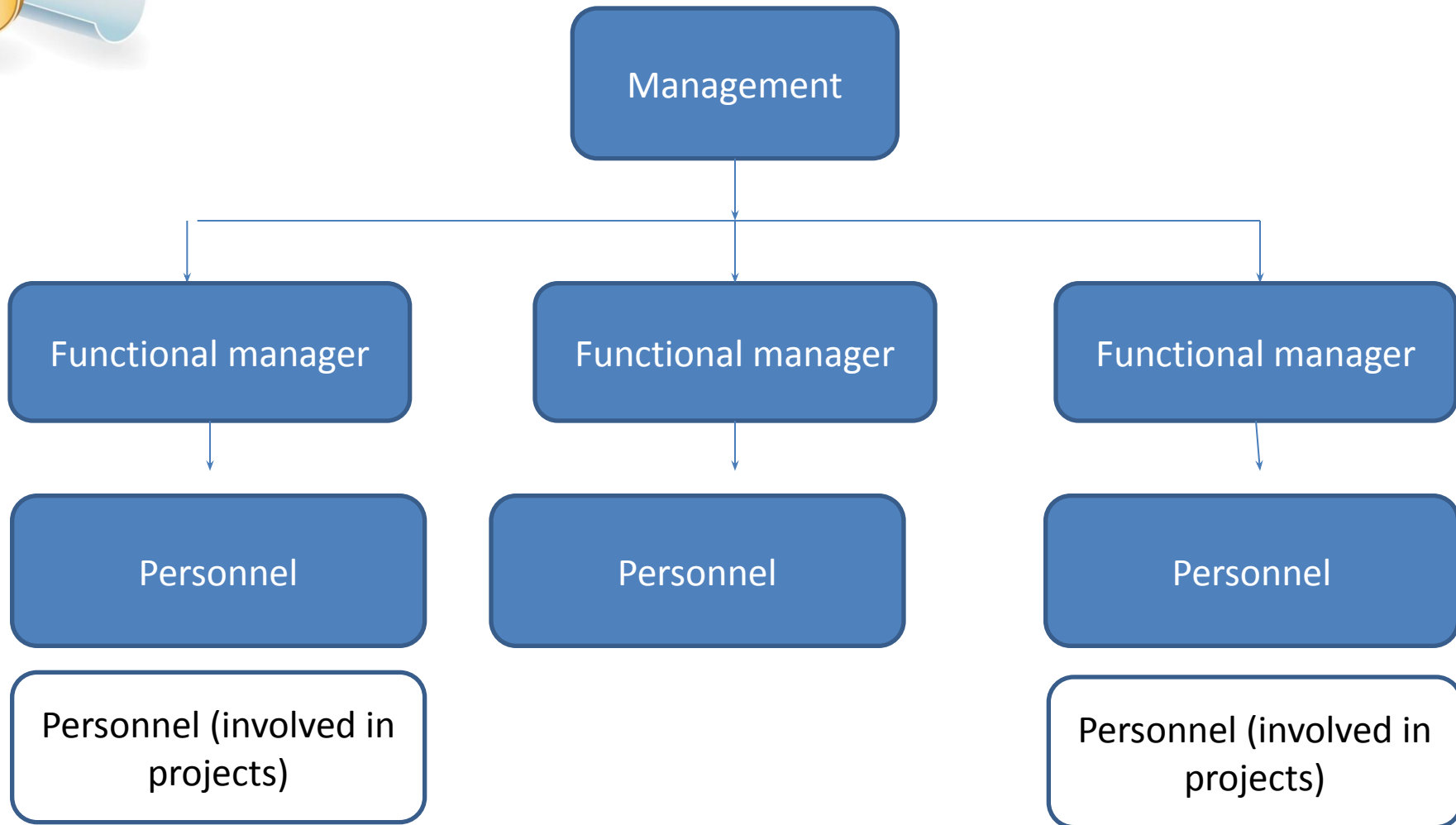


Project's structure

- Project is a system that consists of the elements and connections between them .
- To structure the project means :
 - To define main project objectives (goals), phases
 - To distribute the responsibilities taking into account the resources and organizational structure
 - To evaluate all costs
 - To create the system of planning, accounting

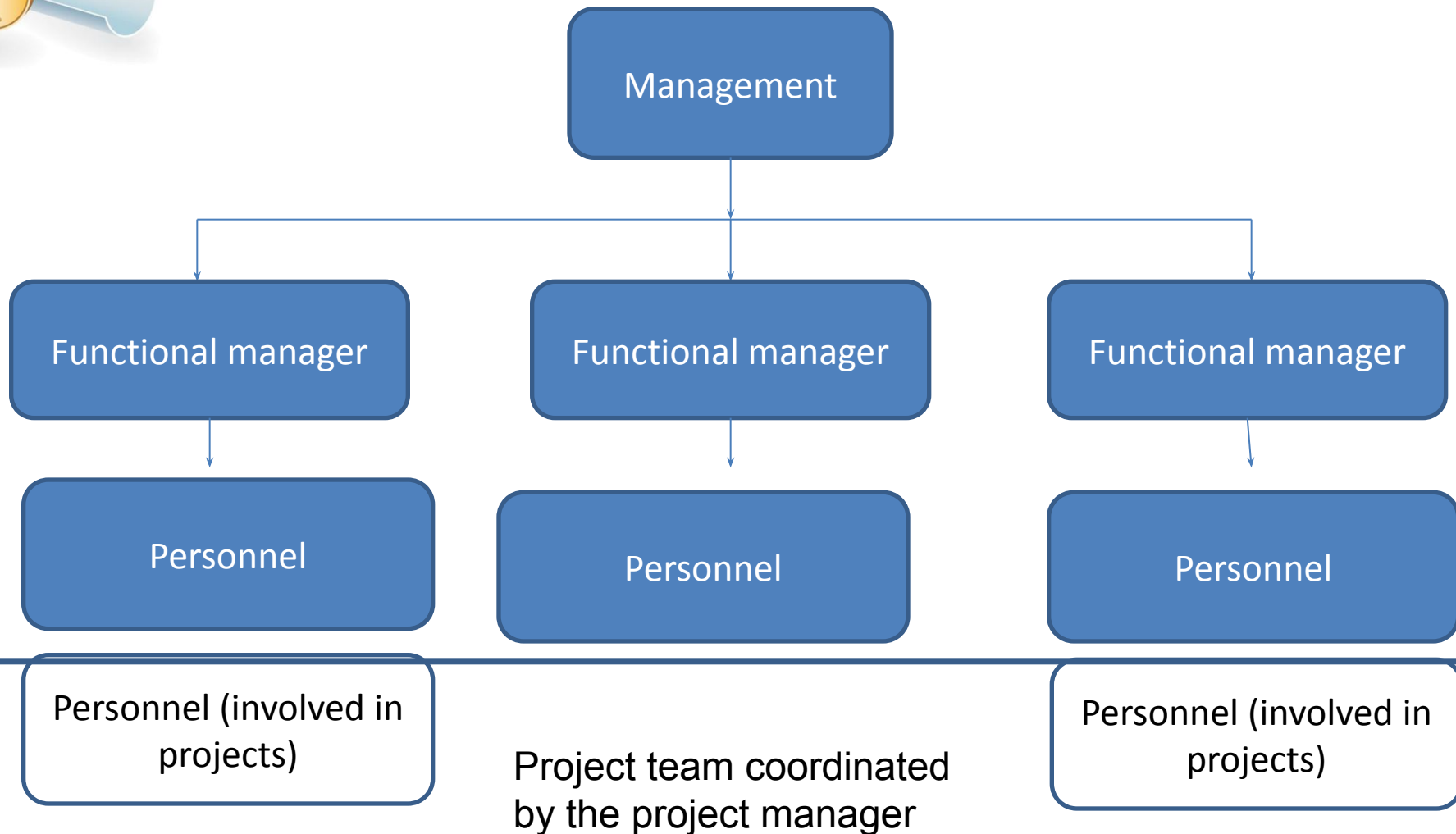


Functional structure



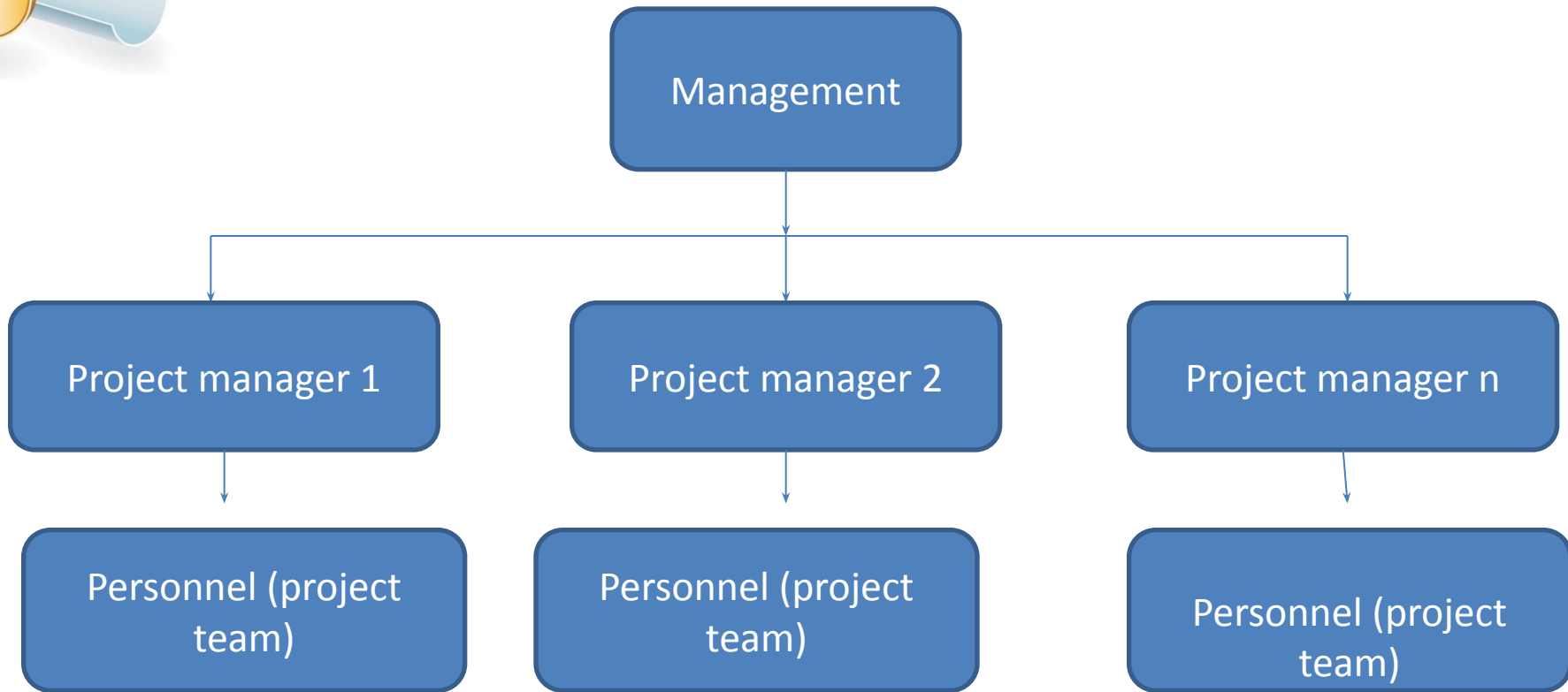


Matrix structure





Project structure



Criteria for choosing the appropriate structure

criteria	functional	matrix	project
Uncertainty of conditions of the project implementation	Low	High	High
Project Technology	Standard	Complicated	New
Project Complexity	Low	Medium	High
Project Duration	Small	Medium	Large
Connections between the project elements	Low	Medium	High
Importance of deadline	Low	Medium	High
Dependence on the systems of the higher level system	High	Medium	Low

Thank you for your attention!

