

Software Project Management

Lesson 2 – Strategy Phase

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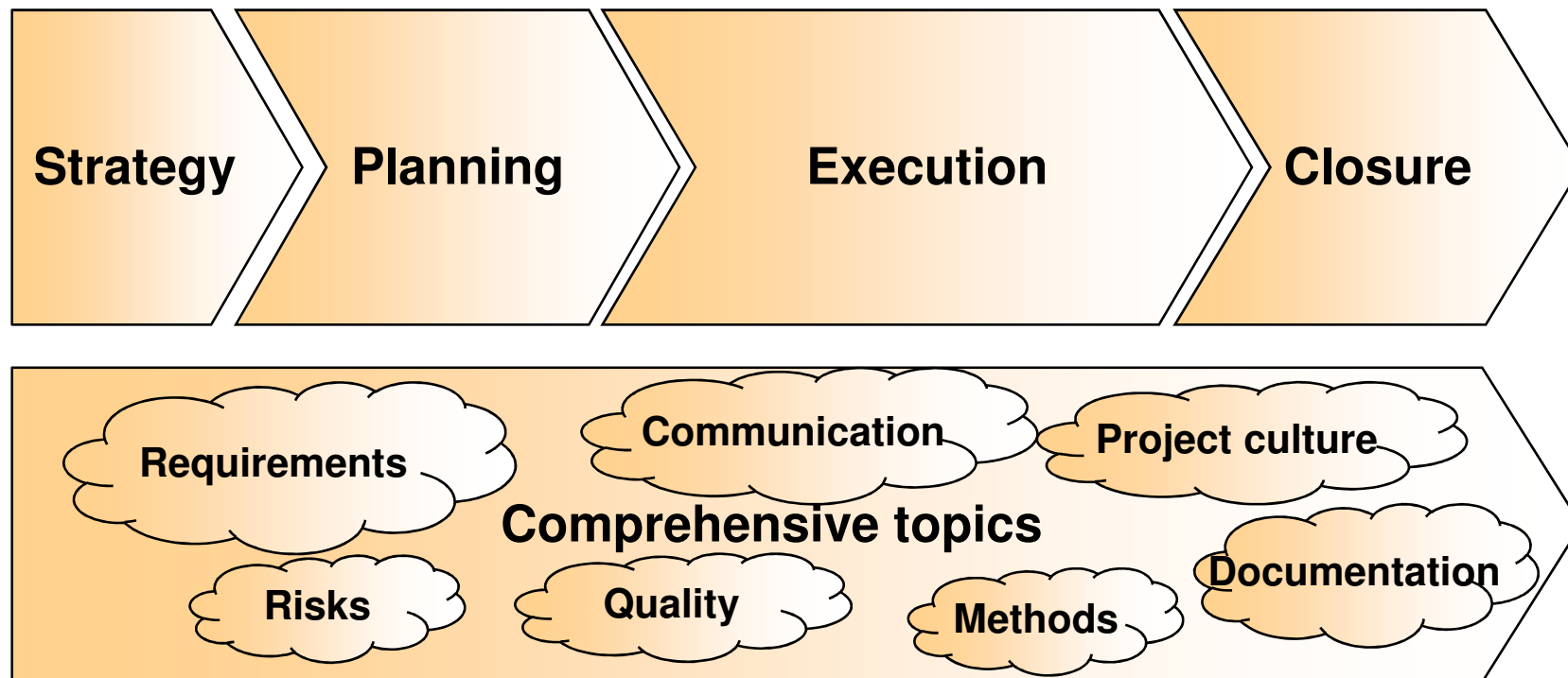


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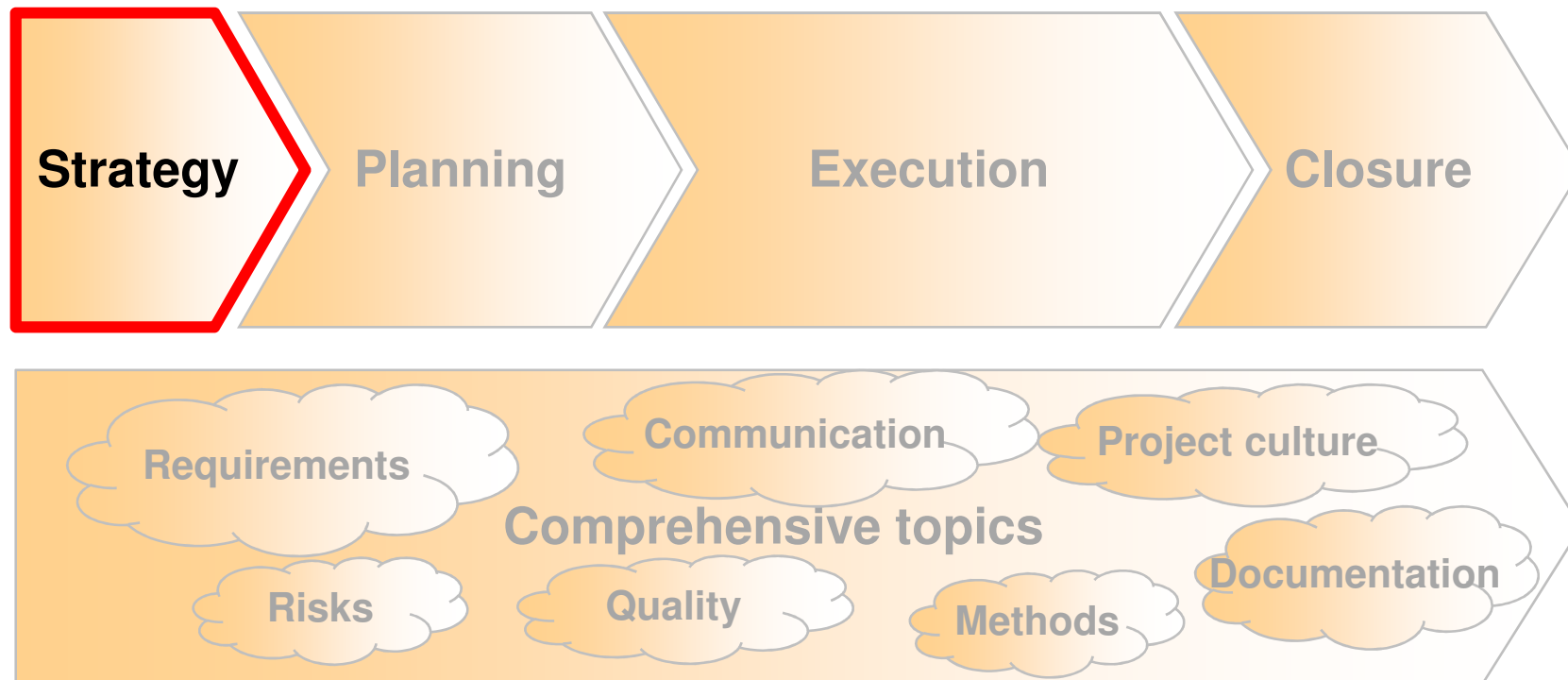


Introduction





Introduction





Goal / objective

- Project stage: Strategy Phase
Synonyms: Conception stage, initial stage
- Goal of the strategy phase is to achieve a project order
- Resulting documents:
 - Project order
 - Requirements specification document
 - Technical specification document



Situation analysis

- What is the situation?
 - Understanding the subject
- Why are we doing the project?
 - The larger the project the more important
 - Identification of actual problem
 - Trying to find several solutions
 - The best solution should be realized
- Involve related people
Initialization of a workshop, interviews,
contacting experts, research and investigation



Situation analysis

- Typically a project should solve an issue.
Following question should be answered
 - Which information, which data are available?
What are the facts?
 - Which opinions do exist?
 - Which problems are known already?
Which ideas and which requirements are available?
 - What are the causes for the given issue?
 - Which impact resolves out of the issue?
 - Which tasks, processes, and methods are related?
 - What are the priorities?



Environment analysis

- Synonyms: Project environment analysis, stakeholder analysis
- Goal: Identifying of all involved people, who (could) play a role in the project, and involving them
- Ideas
 - Who is confronted with the project, who is affected, who has to be integrated how?
 - Are there projects working on the same topic?
 - Are there projects needing the same resources?
 - Which systems, processes are involved?
 - Political situation: Are there sponsors, competitors?



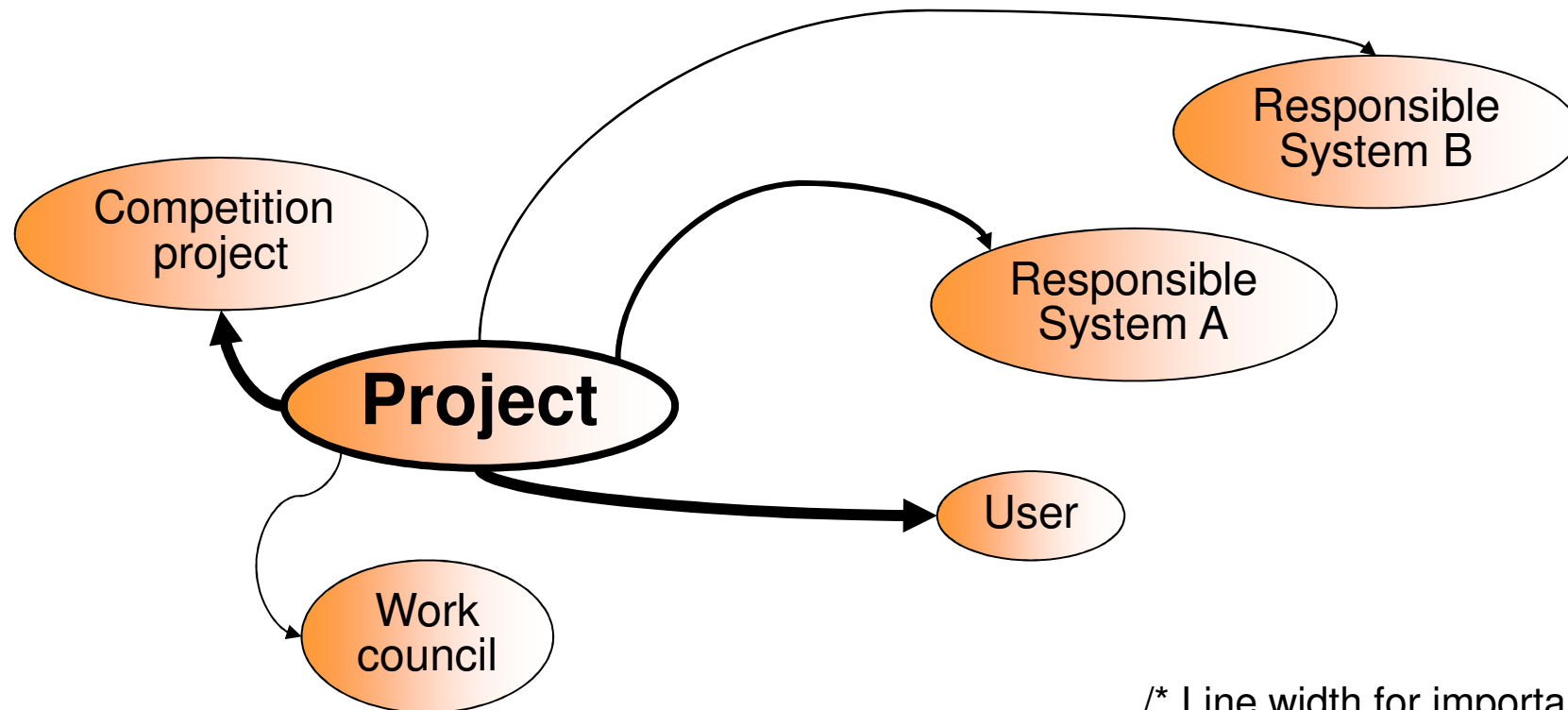
Environment analysis

- Recommended methods
 - Mind map
to get an overview
 - RACI-Matrix (Responsibility matrix)
 - **R**esponsible, i. e. disciplinary responsible
 - **A**ccountable, i. e. responsible concerning the cost center point of view
 - **C**onsulted, i. e. giving specialist advice
 - **I**nformed, i. e. needs information



Environment analysis

- Mind Map, example



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Environment analysis

- RACI, example

Stakeholder	Possible role in project	Attitude concerning project	Possible influence / power	Measures / strategies
Director	A	positive	Very high	<ul style="list-style-type: none">• Regular communication once a week
Project manager	R	positive	High	
Customer	I	negative	High	<ul style="list-style-type: none">• Regular meeting 2 times a week, to be considered in Beta testing
User	C	negative	Low	<ul style="list-style-type: none">• User workshop with demo
Work council	I	positive	Medium	<ul style="list-style-type: none">• Execution of an information event



Project goals

- Project goals
Synonym: Project charter
- DIN 69901 defines the project goal as "measurable result under defined constraints of a project" [DIN]
- The complete goal descriptions could be covered by the questions:
 - What?
 - When?
 - How much?
 - Where?
- Goals are desires!
- A strategy describes the path to the goal



Project goals

- Project goals are necessary
 - control the project
 - measure the project result
- **What** would we like to achieve?
 - Scope
 - Main goal
 - Sub goals
 - Non-goals
 - Constraints



Project goals

- How do I know the status of my project?
 - Making goals measurable
 - Description of solution concept (first draft)
 - Planning of review dates
- How could I make project goals measurable?
 - Prioritization
 - Describing, when I reached my goal
 - Operationalization of the goals
 - Performance goals
 - Time target
 - Cost target

Project goals



Description	Basic plan	Iteration 1	Iteration 2	Iteration 3
Main goals				
Sub goals				
Non-goals				
Constraints				



Project order

- Project order
Synonyms: Project assignment, project contract, project definition, project scope
- DIN 69905 defines „project order“ as „Agreement about deliveries and services of the parties to a contract.“ [DIN]
- Typically we talk about a mandatory contract document, where a signing contracting body (customer) instructs a contractor to perform the agreed services and commits to pay a corresponding commission



Project order

- Clarify everything and write it down
 - The project order should be confirmed in written form
 - The project order is the formal start of a project
From this time on the project life cycle could be traced
- Hint
During this stage you should try to find high ranked sponsors and to inform them regularly



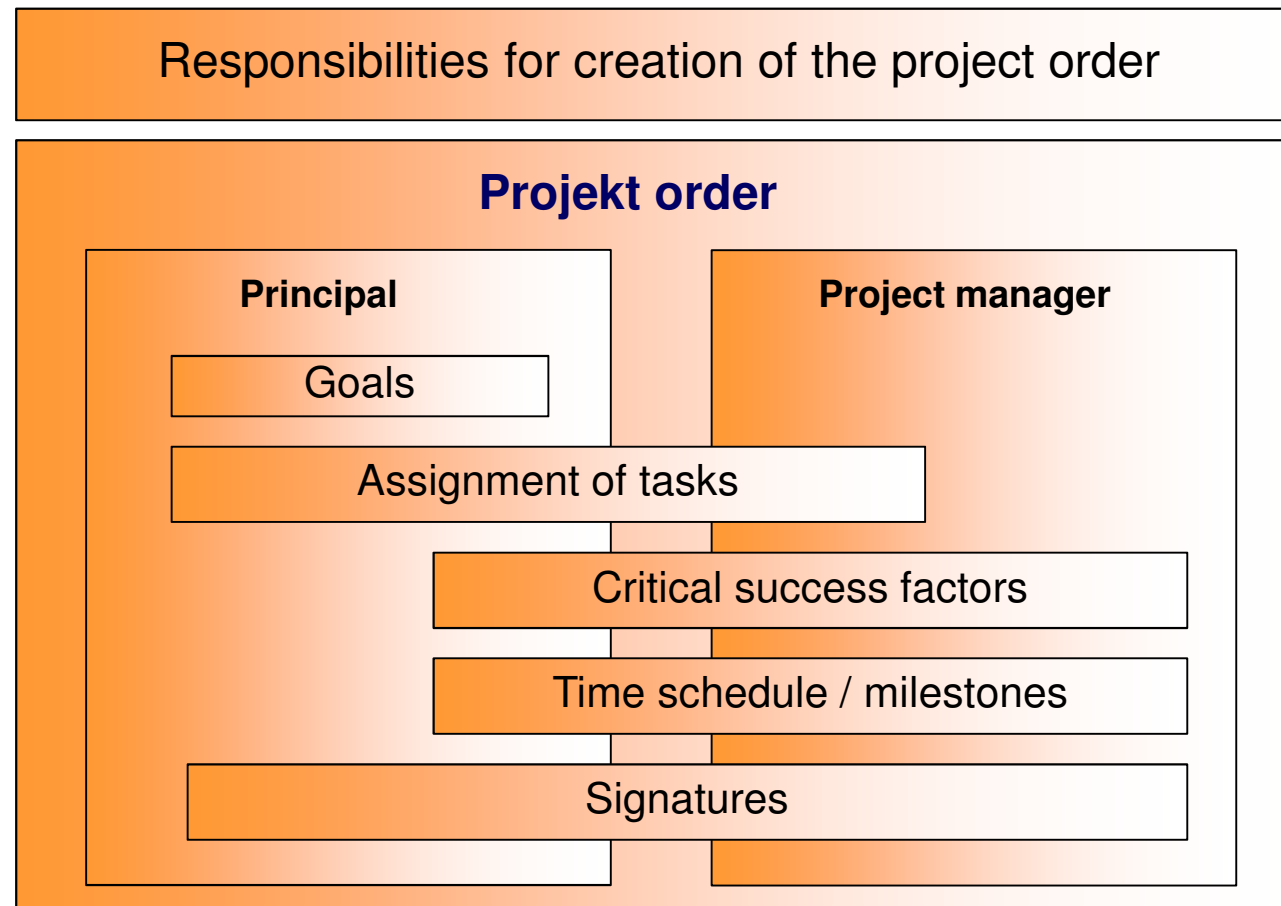
Project order

- Typical content:
 - People involved, especially principal and contractor
 - Initial position
 - Goal
 - Assignment of tasks
 - Expected project results
 - Critical success factors
 - Costs and benefits
 - Time schedule and milestones
 - Organization
 - Signature



Project order

- Overview





Project order

- Example

Project order	
Project name:	<Name of project>
Project no.	<Number of project>
Principal:	<Name of principal>
Project board	
Chairman:	<Name of chair>
	<NN1>
	<NN2>
Project team	
Project manager:	<Name of project manager>
Stand-in:	<Name stand-in of project manager>
	<NN1>
	<NN2>
	<NN3>
Project goals	
Main goals	<Goal1>
	<Goal2>

Requirements specification document



- Requirements specification document
Synonyms: Statement of Work, terms of reference, product requirements document
- DIN 69905: The requirement specification describes the “requirements by the customer concerning the deliveries and services of a contractor in a contract” [DIN].
- A requirement specification contents the expectations and desires concerning the planned product.
- It describes the requirements and covers the deliveries and services of a contractor.

Requirements specification document



- The principal should write the requirement specification, at least he should be responsible.
- It is the basis to ask contractors for "Request for proposals"
- **What** should be created and delivered?
- Contents
 - Specification of the product to be created
 - Product requirements
 - General conditions for the product and requested services
 - Contracted conditions
 - Contractor requirements

Technical specification document



- Technical specification document
Synonyms: Target specification, to-be-concept, feature specification, design specification
- Following DIN 69905: The technical specification covers "the developed realization plan by the contractor based on the requirements specification document by the customer."
- The target specification is the contracted, detailed description of a service to be fulfilled

Technical specification document



- The technical specification document contains the "plan how to realize the requirements", developed by the contractor.
- It describes how the "functional specification of the principal should be implemented"
- How should it be created and delivered?
- Depending on the project a collaborated target specification could contain additionally the complete project plan, including time schedule and resource plans.
⇒ It is then realized at the end of the planning phase

Technical specification document

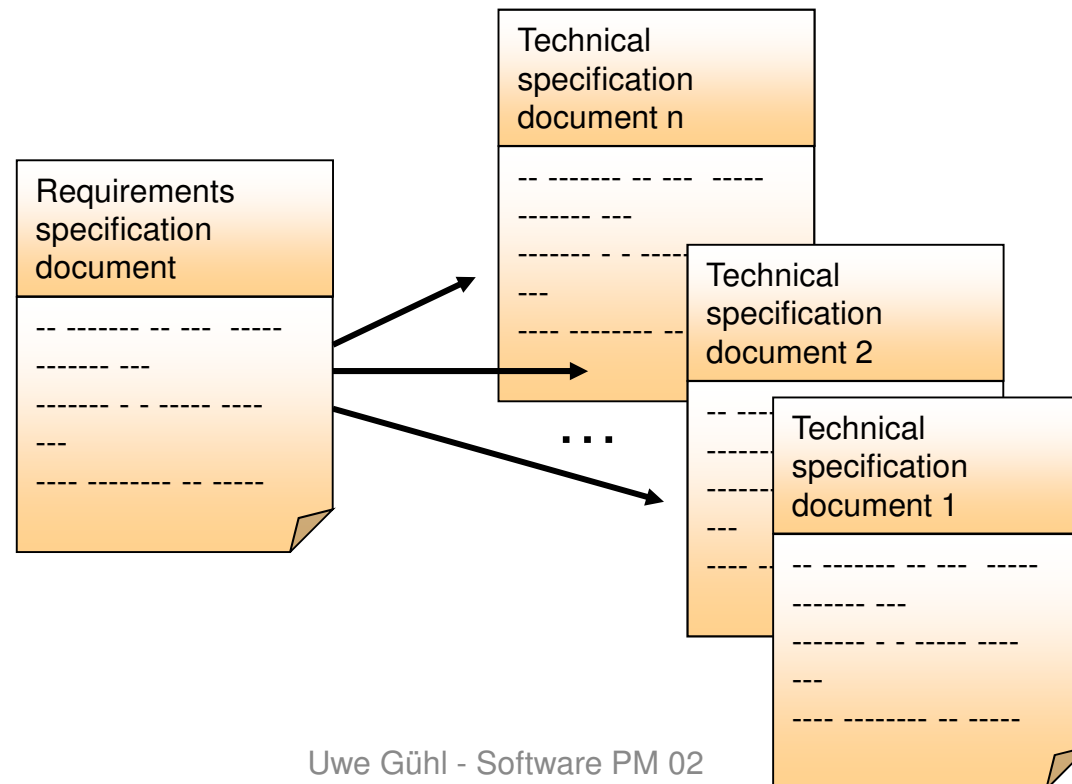


- Contents
 - Detailed contents of the functional specification
 - Definitions concerning the realization
- Differentiation
 - The functional specification document contents mainly the specification of the product.
 - The technical specification describes, how the contractor plans to performs

Technical specification document



- It's possible that out of the requirements specification document many technical specification documents result, e.g. if there are competitors





Summary

- Do a situation analysis to understand why a project is required
- An environmental analysis
 - helps in understanding the needs and concerns of people involved
 - is basic for stakeholder management
- A project order is the fundament of a project
 - Who is the principal, who is the contractor?
 - Project contract with agreement on project goals: Measurability, non-goals, constraints to be considered
 - First drafts for
 - Project structure / project organization
 - Resource plan and time schedule
 - Communication concept
 - Project team



Summary

- Project goals to
 - be able to control the project and
 - measure the project output
- Requirement specification document:
What should be created and delivered?
... by customer
- Technical specification document:
How should it be created and delivered?
... by contractor



Sources

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