

# Software Project Management

Lesson 11 – Quality in Projects

Uwe Gühl  
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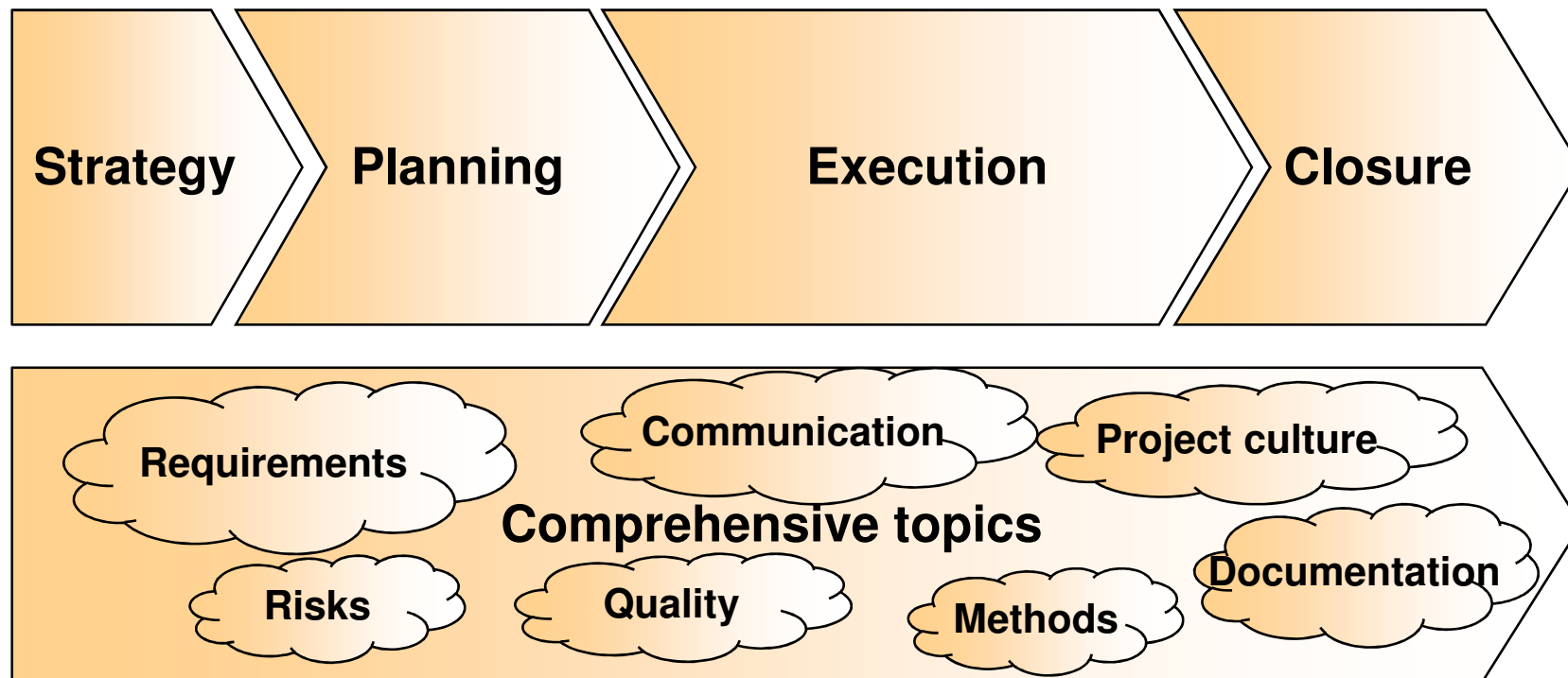


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# Introduction





# Introduction





# Introduction

- Based on the objectives, a project delivers something at the end of the project execution.
- During the project life cycle, deliveries are made. All deliveries should follow
  - requirements
  - quality standards
- That's why all deliveries should be validated and verified before delivered to the client
- A quality management function should be established from the beginning of a project
  - Quality management (QM)
  - Synonym: Project assurance, Quality assurance



# Goal / objective

- Focus is the quality of the technical project contents.
- Quality Management (QM) ensures, that the results of work follow the project goals.
- Coverage
- Check and assure consistence
- Check and assure the use and achievement of defined methods and standards in the project
- Test of working results



# Definition

- Quality management [PMBOK10] defines and controls processes to ensure quality in project (management)
  - quality planning
  - quality assurance
  - quality control



# Tasks

- Development of a project quality plan (PQP) or quality handbook
- Planning and use of checklists especially during milestone approval
- Regular reviews, especially in phase transitions
- Consolidation with project partners
- Development of a learning organization
  - We all make mistakes, but we would like to learn from them!
  - Lessons Learned Workshops





# Tasks

- Consideration of
  - Industry standards (ISO 9000ff)
  - company specific guidelines and regulations
- Audits
  - Analysis and reviewing of the project and the progress of the project
- Management of process problems locally (Gemba principle), where the problem occurs
  - Problem analysis
  - Development of a proposal / solution
  - Implementation of developed proposal / solution



# Tasks

- Continuous improvement
- Processes used in managing a project should always perform. A method to continuously improve processes is PDCA (Deming Cycle) [Wik16]
  - PLAN  
Definition how a process should work or be updated
  - DO  
Execute the planned process or process changes.  
If possible, collect data for the following steps.
  - CHECK  
How is the process / updated process working?  
Evaluate and compare actual results to planned results.
  - ACT  
Take action based on what has been learned

# Summary



- Quality management is an important part of project management to ensure quality achievements of deliveries to the client



# Sources

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