

# Software Project Management

Lesson 11 – Quality in Projects

Uwe Gühl  
Winter 2015 / 2016

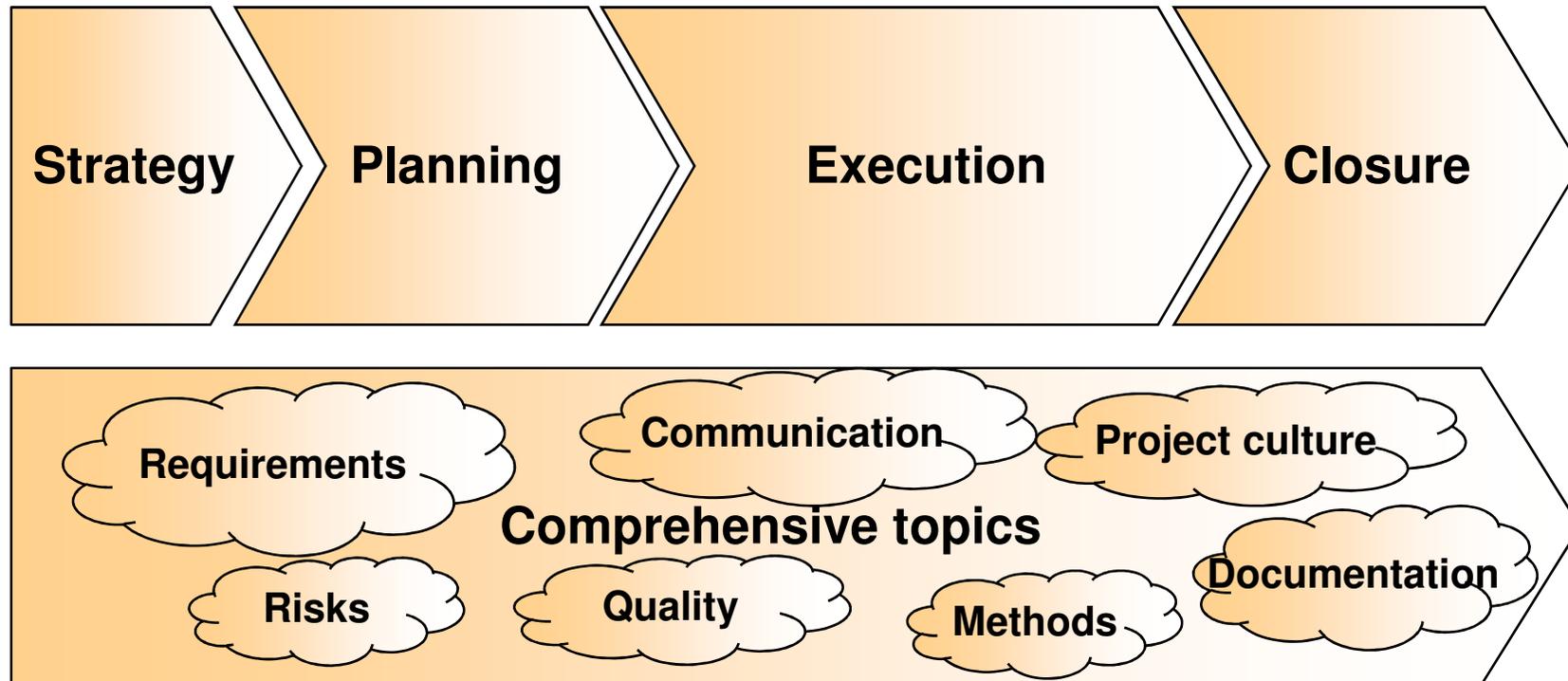




# Contents

- Project stage: Quality in Projects
  - Introduction
  - Definition
  - Goal / Results
  - Tasks
  - Summary

# 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

- [AG16] Daud Alam, Uwe Gühl:  
Projektmanagement für die Praxis, Springer  
Vieweg Berlin Heidelberg, 2016 (in German)
- [PMBOK10] Project Management Institute: A  
guide to the project management body of  
knowledge (PMBOK Guide), 4<sup>th</sup> edition.  
Newtown Square: Project Management Institute,  
2010
- [Wik16] Wikipedia: PDCA, 2016,  
<https://en.wikipedia.org/wiki/PDCA>