

# Quality Management in Agile Software Development

## *Training Description*

### **Overview**

This training prepares quality managers and testers for the opportunities and challenges of agile software development. The central interest is how to optimally integrate the advantages of the agile world with the accomplishments of traditional quality management. Case studies from agile development organizations—including large global development—provide concrete examples for practical quality management in agile contexts.

### **Target Groups**

Quality Management, Test Management, Product Owners, Project Management

### **Level**

Entry & Advanced

### **Contents**

- Objectives and principles of agile methods
- Overview of the agile method Scrum
- Facets of testing in agile projects
- The new role of testers in agile projects
- Integrating the testing process into sprints
- Defect management with user stories
- Views and dashboards for reporting progress and quality
- Scaling to multi team projects
- Tool aspects for quality management
- Transition to agile development

### **Duration**

1 Day

### **Maximum Number of Participants**

12 Persons

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## Summary

Agile software development is becoming widely applied, creating new challenges for quality managing and testing. On the one hand, agile techniques like test-driven development (TDD) and user acceptance test strengthen the quality of the developed software. On the other hand, some agile approaches deny the need for an independent quality assurance, neglect integration and system test, and require an extremely close coordination between development and testing during short iterative development cycles. How shall quality management and testing face this agile trend?

Quality managers and testers in agile software organizations need answers on the following questions:

- How does agile software development work?
- What changes does agile development cause for testing and the testers?
- How can effective test management in agile development be attained?
- How shall development and testing cooperate in agile contexts?
- How can the transition to agile development be designed, and how can it be extended to multi-team projects?

This training prepares quality managers and testers for the opportunities and challenges of agile software development. It introduces the foundations of agile development, explains the changes for quality management and testing, and it presents practical methods for testing, quality management and progress monitoring in agile development. The central interest is how to optimally integrate the advantages of the agile world with the accomplishments of traditional quality management.

Case studies from agile development organizations—including large-scale global development—provide concrete examples for practical quality management in an agile context. Participants learn how they can establish quality management and testing as important and central parts of agile software development.

## Trainer CVs

**Dr. Andreas Birk** is founder and principal consultant of Software.Process.Management. He helps organizations to optimally align their software processes with their business goals. His focus areas are requirements, test management, and software process improvement. In more than fifteen years in the software industry, Andreas Birk has built a profound understanding how software and IT contribute to sustained business success. He publishes in renowned IT journals and speaks regularly at international conferences.

**Gerald Heller** is a software process consultant with more than 20 years experience in global software product development. In this context, he has defined and implemented a broad range of development methods with a focus on requirements and test management for iterative incremental development. He has extensive experience in establishing software development processes with integrated support of application lifecycle tools. Gerald Heller publishes in software engineering magazines and speaks regularly at international conferences.

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