

DCIT 419

AGILE METHODS

Session 01 – Why Agile?



Department of Computer
Science

2024/2025 Academic Year

Session Overview

- Exploring the relevance and importance of Agile development.

Learning Outcomes

By the end of this session, students will be able to:

- Explain why Agile development focuses on **success over speed**.
- Define the evolved meaning of project success, beyond traditional metrics.
- Discuss the three dimensions of success in Agile:
 - **Organizational success**: Delivering measurable business value.
 - **Technical success**: High-quality, maintainable software.
 - **Personal success**: Satisfaction and empowerment for all team members.
- Identify specific practices in Agile that contribute to success in these areas.

Introduction

Why Agile?

- Agile development has gained popularity among companies like Google, Microsoft, and Yahoo.
- The rise in popularity has led some companies to rebrand or misuse the term "Agile."
- Agile development is not a **silver bullet** for productivity:
 - Its value comes from **working differently**, not merely working faster.
 - Emphasizing speed can lead to shortcuts and harm productivity in the long run.
- The core question to ask: *Will Agile development help us be more successful?*

Understanding Success

Traditional Definitions of Success:

- **Successful projects:** Completed on time, on budget, and as specified.
- **Challenged projects:** Over budget or delayed, with fewer features delivered.
- **Impaired projects:** Cancelled during development.

Evolved Definitions of Success:

- Success isn't just meeting deadlines and budgets:
 - Projects may succeed in technical terms but fail to deliver **organizational value**.
 - Example: A financial services company launched a delayed and costly system that ultimately led to:
 - A \$33 million reduction in write-off accounts.
 - A 50% increase in concurrent collection strategy tests.
- **NB:** Success is about delivering value to the business and its stakeholders.

Organizational Success

What Organizations Value:

- Projects provide value in ways beyond direct revenue, such as:
 - Competitive differentiation.
 - Brand projection.
 - Enhanced customer loyalty.
 - Compliance with regulatory requirements.
 - Strategic insights and original research.

Agile's Contribution:

- Focus on delivering value early and often:
 - Release the most **valuable features first**.
 - Adapt to changing needs and seize unexpected opportunities.
- Reduces costs by:
 - Eliminating wasteful practices.
 - Early identification and cancellation of low-value projects.

Organizational Success

Why It Matters:

- Organizational success ensures the team's work aligns with business goals.
- Without it, managers may impose cost-cutting measures, such as aggressive deadlines or offshoring.

Technical Success

Core Practices in Agile Development:

- Extreme Programming (XP):
 - Emphasizes team collaboration and continuous integration.
 - Features are completed fully before starting new ones, preventing delays.
- Advanced Technical Practices:
 - **Test-Driven Development (TDD):** Ensures code behaves as expected.
 - **Simplified, evolving designs:** Adapts easily to changing plans.
- Impact on Success:
 - Agile teams produce fewer bugs and continuously improve code quality.
 - High technical standards lead to reliable, maintainable software.

Personal Success

Agile's Impact on Individuals:

- Agile fosters collaboration, autonomy, and ownership across roles:
 - **Executives and Senior Management:** Appreciate ROI focus and software longevity.
 - **Users and Stakeholders:** Enjoy influencing project direction and seeing frequent, valuable releases.
 - **Project Managers:** Value the ability to change direction as business needs evolve.
 - **Developers:** Gain autonomy and improve work quality.
 - **Testers:** Take on more challenging, less repetitive tasks.

Personal Motivation:

- Agile teams create camaraderie and a shared sense of purpose.
- Working in an Agile environment can lead to some of the most fulfilling moments in a software development career..

Benefits of Agile Development

- Organizational Success:
 - Early delivery of business value increases ROI.
 - Teams adapt to changes and identify opportunities to pivot effectively.
- Technical Success:
 - Ensures high-quality software through collaborative coding and rigorous testing.
 - Continuous improvement leads to easier maintenance and enhancement over time.
- Personal Success:
 - Creates an enjoyable and empowering work environment.
 - Encourages individuals to take pride in their contributions to valuable and high-quality projects.

Conclusion

- Agile development focuses on achieving success across **personal**, **technical**, and **organizational** dimensions.
- It redefines success as delivering value, not just meeting deadlines or budgets.
- Teams practicing Agile consistently experience:
 - Improved adaptability.
 - High-quality software deliveries.
 - Increased team satisfaction and productivity..

Questions

