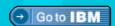


IBM Software Group

Scaling Agile Software Development for the Real World



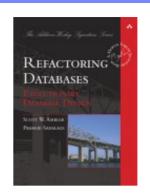


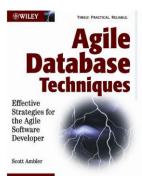


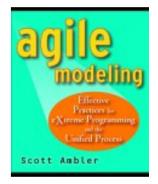


Scott Ambler - Background

- Practice Leader Agile Development
- Senior Contributing Editor, DDJ
- Fellow International Association of Software Architects
- www.ibm.com/rational/bios/ambler.html
- www.ibm.com/developerworks/blogs/page/ambler

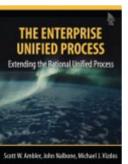
























- Agile Software Development
- Agile Adoption and Success Rates
- Scaling Agile Development
- Conclusion









- Agile Software Development
 - What have you heard?
 - Defining Agile
 - ▶ How Agile is Different
- Agile Adoption and Success Rates
- Scaling Agile Development
- Conclusion







Discussion: What Have You Heard About Agile?

- What is Agile?
- What are your concerns?
- When doesn't Agile apply?
- Are you doing Agile?
- Are you thinking about doing Agile?







Defining Agile

An iterative and incremental (evolutionary) approach performed in a highly collaborative and self-organizing manner with just the right amount of ceremony to frequently produce high quality software in a cost effective and timely manner which meets the changing needs of its stakeholders.

Core principles

- "Fits just right" process
- Continuous testing and validation
- Consistent team collaboration
- Rapid response to change
- Ongoing customer involvement
- Frequent delivery of working software







How Agile is Different

- Focus on collaboration:
 - Less paperwork and more conversation
 - Stakeholders actively involved
- Focus on quality
 - We have a full regression test suite for our systems
 - We develop loosely-coupled, highly cohesive architectures
 - We refactor to keep them this way
- Focus on working software:
 - Greater feedback makes agile projects easier to manage
 - Less documentation is required
 - Less bureaucracy
- Agilists are generalizing specialists:
 - Less hand offs between people
 - Less people required
 - Specialists find it difficult at first to fit into the team
- Agile is based on practice, not theory:
 - ▶ This is a significant change from traditional
 - You need to see how agile works in practice to truly understand it



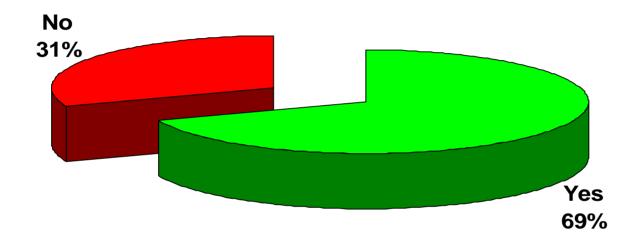
- Agile Software Development
- Agile Adoption and Success Rates
 - Adoption rates
 - Success rates
- Scaling Agile Development
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Has Your Organization Adopted One or More Agile Techniques?



18% are still in the "pilot phase"

15% of "No" respondents hope to do Agile this year

Source: Interim results from Dr Dobb's 2008 Agile Adoption Survey,

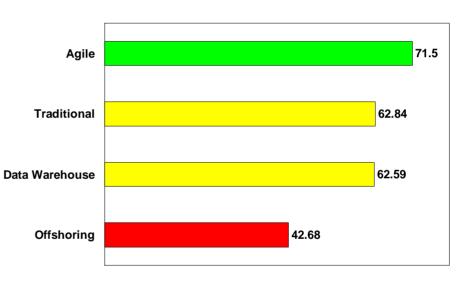
Updated results to be posted at www.ambysoft.com/surveys/ in May





Why Agile/Lean? It's More Successful

- Quality: 87.3% believe that delivering high quality is more important than delivering on time and on budget
- Scope: 87.3% believe that meeting actual needs of stakeholders is more important than building the system to specification
- Money: 79.6% believe that providing the best ROI is more important than delivering under budget
- Staff: 75.8% believe that having a healthy workplace is more important than delivering on time and on budget
- Schedule: 61.3% believe that delivering when the system is ready to be shipped is more important than delivering on schedule



Source: Dr Dobb's 2007 Project Success Survey







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Discussion: Does Agile Scale?

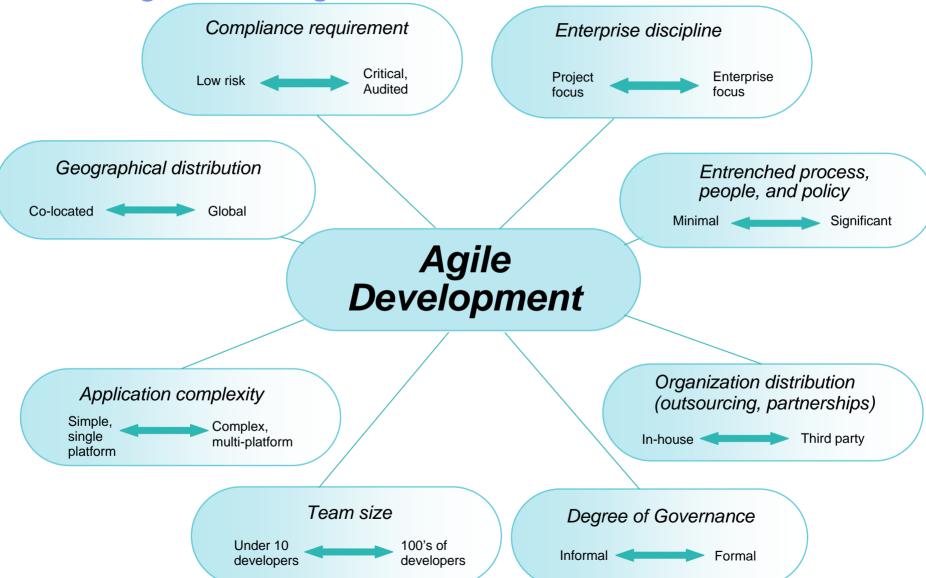
- What are the issues that concern you?
- What are your experiences with Agile in practice?
- Have you tried to scale agile?







Challenges with Agile in the Mainstream







Agility is Relative – It Depends on Project Dynamics

Organizational Drivers

Team Size Geographical Distribution Organization Distribution Entrenched process, people, policy

Mature or existing projects

- 50+ developers
- Complex, multi-platform applications
- Distributed teams
- Need for scalability, reproducibility, and traceability

- Maturing projects
- Multi-platform
- Growing in complexity
- Remote or offshore work
- Greater need for
- coordination and handoffs

- Small team
- New projects
- Simple application
- Co-located
 - Minimal need for documentation

Technical and Regulatory Drivers

Compliance Governance **Application complexity**

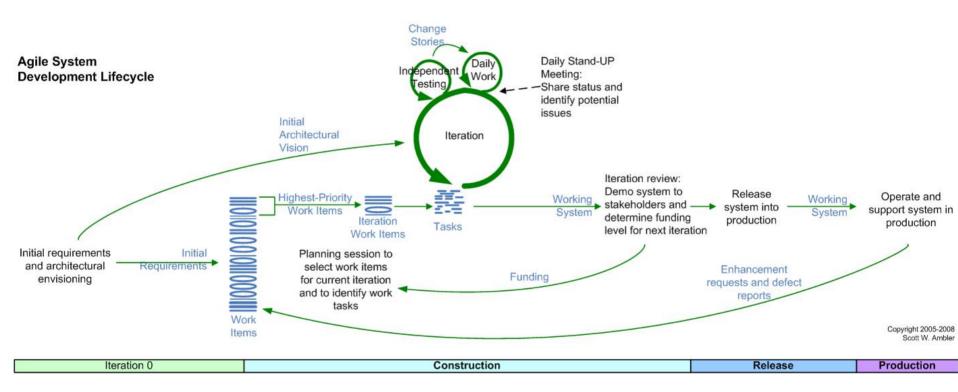








The Agile System Development Lifecycle (SDLC)









- Agile Software Development
- Agile Adoption and Success Rates
- Scaling Agile Development
- Conclusion
 - Parting Thoughts?
 - Critical Resources







Discussion: Parting Thoughts?

- Can you make Agile work in your organizations?
- Is it worth trying?
- What impediments do you think there will be?







Critical IBM Agile Resources

www.jazz.net

www.ibm.com/rational/agile/

www.ibm.com/developerworks/

www.ibm.com/developerworks/blogs/page/ambler







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- Process and portfolio management
- Change and release management
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