



Introduction of Agile

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October 2, 2007

Pain Points



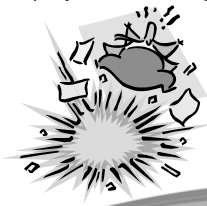
- What is the biggest problem you face in managing a software project?



Changing World of Requirements



- On average, 35% of a software projects requirements change.
- 52.7% of projects will cost 189% of their original estimate.
- Only 16.2% of software projects are completed on time and on budget.



*1995 Standish Group Report

Embrace The Change



- Changes to requirements are a natural, unavoidable and desirable aspect of software development.



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What is Agile?



Agile – (adj.) able to move quickly and lightly; able to handle change readily.

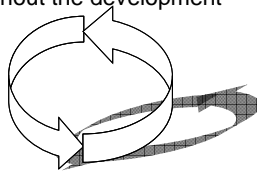


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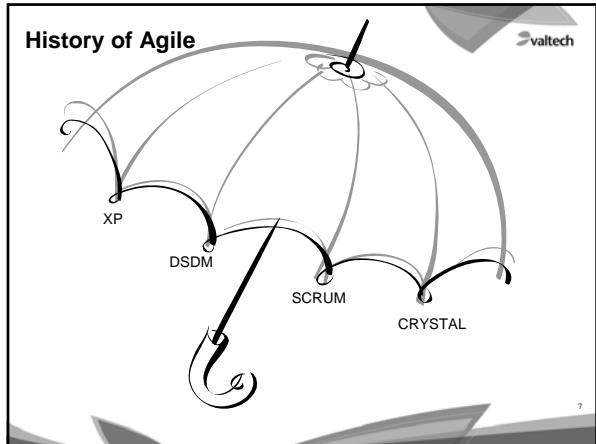
Keys to Agile



1. Deliver working, bug-free code early and often.
 - Iterative development
 - Short release cycles
2. Involve the user throughout the development process.
 - Communication
 - Iterative cycles
 - Constant feedback



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XP

- Concepts
What tools are used in Extreme Programming?
- Values
How does XP work?

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Dynamic Systems Development Method

- Values
 - continuous user involvement
 - iterative and incremental development
 - empowered project team
 - frequent delivery of products/releases
 - changes are reversible
 - continuous testing

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Scrum



- Bare Essentials
- Characteristics
- Practices



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Crystal



Properties

- Frequent delivery
- Reflective improvement
- Osmotic communication
- Personal safety
- Focus
- Easy access to expert users
- Technical environment with automated tests, configuration management, and frequent integration



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When To Use Agile



- Time to Market
- New features and enhancements
- Customer involvement



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Project Management



- Prioritize
- Collective ownership
- Rapid release cycles
- Scheduling
- No micromanaging



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Want to Know More?



- Oklahoma APLN
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Main References



- “Chaos” (The Standish Group Report, 1995)
- **Crystal Clear: A Human Powered Methodology for Small Teams** by Alistair Cockburn (Pearson Education, Inc., 2005)
- Alan MacCormack, Chris Kemerer, Michael Cusumano, and Bill Crandall, “**Trade-offs between Productivity and Quality in Selecting Software Development Practices**”, IEEE Software, September-October 2003. (HP Survey)

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