



Introduction to Agile Methods

Chennai Agile User Group Kickoff

Sanjiv Augustine

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Agenda

Agile at a Glance (20 Minutes)

- Landscape
- Basics
- Typical Benefits
- How is Agile Different?
- Misconceptions and Myths

Exercise: Airplane Production Line (15 Minutes)

- Agile Project Management Overview (10 Minutes)
 - APM Defined
 - Transitioning to APM

Discussion/Q&A (15 Minutes)



Agile at a Glance



The Agile Landscape

Agile Methodologies

- eXtreme Programming (Kent Beck, Ward Cunningham, Ron Jeffries)
- Scrum (Jeff Sutherland and Ken Schwaber)
- Crystal Methods (Alistair Cockburn)
- Feature Driven Development (Jeff DeLuca)
- Dynamic Systems Development Method (DSDM Consortium)

Agile Management

- Agile Project Management
 Jim Highsmith, Ken Schwaber, Sanjiv Augustine
- Agile Management David Anderson
- eXtreme Project Management Rob Thomsett, Doug DeCarlo

Corporate IT is Leading the Second Wave of IT Adoption

Agile software development processes are in use at 14% of North American and European enterprises, and another 19% of enterprises are either interested in adopting Agile or already planning to do so.

Early adopters of Agile processes were primarily small high-tech product companies. But a second wave of adoption is now underway, with enterprise IT shops taking the lead.

These shops are turning to Agile processes to cut time-to-market, improve quality, and strengthen their relationships with business stakeholders.

- Carey Schwaber, Forrester Research, Nov 30, 2005.



Agile Basics - Key Principles

Key Agile principles are:

- Focus on customer value Employ business-driven prioritization of features.
- Iterative & Incremental Delivery Create a flow of value to customers by "chunking" feature delivery into small increments.
- Intense Collaboration Face-to-face communication via collocation, etc; diversified roles on integrated teams.
- **Self Organization -** Team members self-organize to fulfill a shared project vision.
- Continuous Improvement Teams reflect, learn and adapt to change; work informs the plan.

What is Customer Value?

The right product for the right price at the right time:

The right product is the product with exactly the features that the customer wants.

- The right price is the price that customer believes is a fair deal.
 - The right time is when the customer wants it.

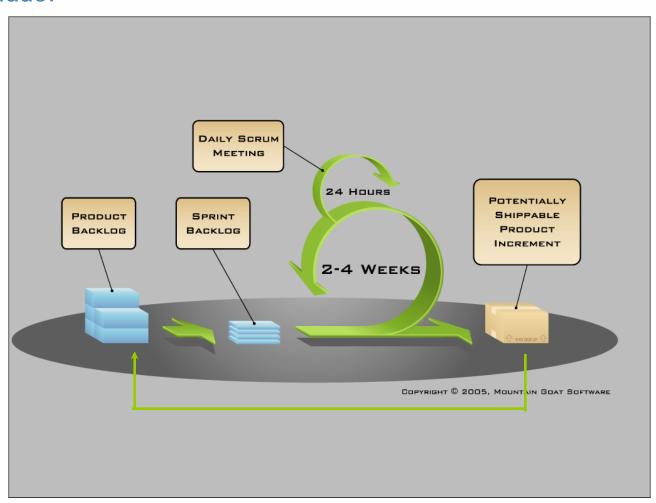


Agile Basics - Key Practices

Key Agile practices include:

- Release Planning (creates Product backlog)
- Sprint Planning (creates Sprint backlog)
- Daily Scrum Meeting
- Fixed-length sprints
- Feature Review

Identify the top-priority items and deliver them early and often.





Typical Benefits of Agile

Speed

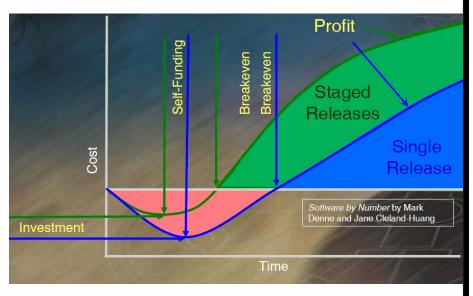
- Eliminate process waste and handoffs between multiple silos
- Reduce project and product time-tomarket by 30-50%

Flexibility

- Respond easily to changing project requirements
- Adapt rapidly to organizational and market changes
- Facilitate Business Customer working in lock step with IT

Innovation

- Create and sustain teams of enthusiastic, committed and engaged individuals
- Incorporate discipline of value delivery and continuous improvement



Source: Mary and Tom Poppendieck



How is Agile Different?

Waterfall/Traditional	Agile Methodologies
Batch Manufacturing	Flow of Value
Large, Specialized Silos	Small, Integrated Teams
Contract Negotiation	Customer Collaboration
Hierarchical Control	Self-Organization
Upfront Perfection	Continuous Improvement



Misconceptions and Myths: What Agile is Not

Misconceptions about Agile:

- Is a silver bullet
- Will solve my resource issues
- Has no planning/ documentation/ architecture/ <insert pet peeve>
- Is a license to hack
- Creates quality issues
- Is undisciplined
- Doesn't build on my previous experience/expertise
- Is not proven
- Is not being used by industry leaders





Exercise: Airplane Production Line



Exercise - Airplane Production Line

Four volunteers, please!

Round 1 - Push System

Performer 1

Fold paper in half.

Performer 2

Fold nose cone.

Performer 3

Fold wings, tail and ailerons.

Performer 4

Test plane (throw it into the trash).

Round 2 - Bediayatork as soon as your "inbox" is occupied.

Performer 1

Fold paper in half.

Performer 2

Fold nose cone.

Performer 3

Fold wings, tail and ailerons.

Performer 4

Test plane (throw it into the trash).

Round 3 - Belginystverrk with hy We heat i you Perfout boxs is empty.

Performer 1

Create airplane.

Performer 2

Create airplane.

Performer 3

Create airplane.

Performer 4

Test plane (throw it into the trash).

Pass plane to Performer 4 when you're done.



Agile Project Management Overview



APM Defined

- Agile Project Management (APM):
 - Is the work of energizing, empowering and enabling project teams to rapidly and reliably deliver customer value
 - By engaging customers, and
 - Continuously learning and adapting to their changing needs and environments
 - Focuses on project throughput, teamwork and leadership

From Managing Agile Projects, Sanjiv Augustine, Prentice Hall 2005



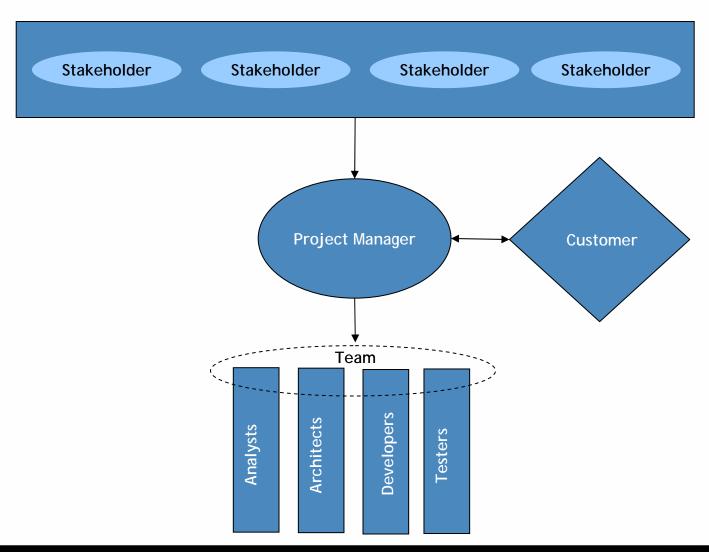
Transitioning to APM

	Agile	APM Transition
Throughput	Flow of Value	Manage The Flow of Value, Not Activities
Teamwork	Small, Integrated Teams	Create an Integrated Team
	Customer Collaboration	Focus on the Project Context, Not Content
	Continuous Improvement	Move from Lessons Learned to Project Reflections
Leadership	Self-Organization	Coordinate Execution through Commitments, Not Commands
		Lead through Presence, Not Power



Teamwork - Creating an Integrated Team

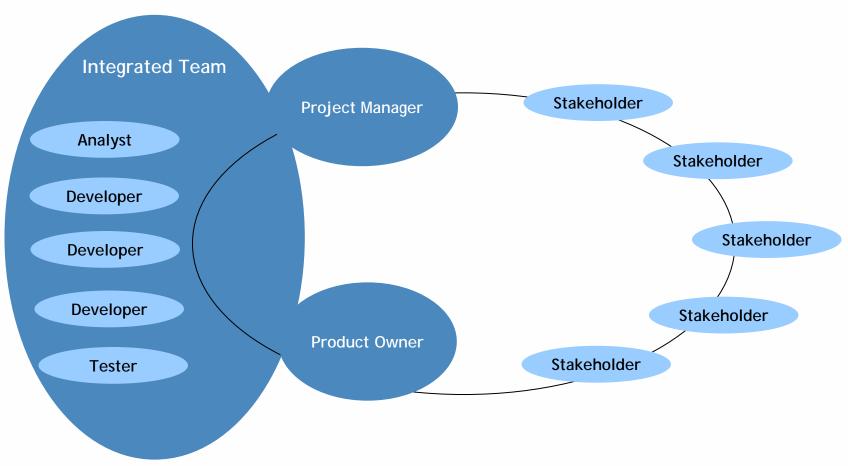
Traditional Project Organization:





Teamwork - Creating an Integrated Team (contd)

Agile Project Organization:



Scrum Team Size: 7 plus or minus 2 people



Discussion/Q&A



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