

Discussion

Agile Project Management: Going Beyond Software Development

Location: Tysons Corner, VA
Date: July 28, 2009

Table Of Contents

- ▶ Case Study
- ▶ Agile Overview
- ▶ Current trends
- ▶ Using Agile practices for projects other than software development
- ▶ Summary

Agile Project Management: Not Just for IT

- ▶ Case Study

- ▶ Agile Overview

- ▶ Using Agile practices for projects other than software development

- ▶ Summary

The Information Services department provides IT support and applications to the entire firm. IS manages both daily operations and maintenance, as well as project management services

- ▶ IS is relatively small, with approximately 200 core staff supporting 20k staff
- ▶ Most of the IS staff members manage projects while supporting existing operations
- ▶ IS manages both large and small projects through methodologies – Standard and Lite

IS management initiated an Agility Program to make IS more agile. Several teams were assigned to look at what they could do in their areas to deliver quicker

- ▶ Feedback was given that IS clients wanted IS to deliver faster
- ▶ Senior leadership wanted to incorporate some of the Agile approaches – user stories, iterative approach, etc.
- ▶ The Applications Development team was pushing to pilot Scrum
- ▶ The Project Management team quickly took both Agile and Scrum training – and liked what they saw
- ▶ The program first had to define what Agile meant to IS – and for management it was rapid delivery
- ▶ Each group was asked to provide deliverables and milestones
- ▶ The program was renamed Rapid Delivery Program

The Project Management Office decided on a two-pronged approach – Scrum would be used when appropriate, and the existing methodologies would be streamlined where possible

- ▶ Although excited about Scrum, it was quickly determined that not many projects would qualify as Scrum candidates (dedicated resources required, heavy functional team involvement)
- ▶ There are many projects in the IS portfolio that are not software development related
- ▶ The biggest “bang for the buck” would be finding ways to speed delivery of the non-Scrum projects and increase the customer satisfaction for the end product

Agile Project Management: Not Just for IT

- ▶ Case Study

- ▶ Agile Overview

- ▶ Using Agile practices for projects other than software development

- ▶ Summary

Agile Project Management has recently gained a lot of attention and has become increasingly attractive in today's uncertain economic times

- ▶ Agile is increasing as a “buzzword”
- ▶ Several sessions dedicated to Agile Project Management at Fall PMI Global Congress
- ▶ Agility was a common theme at the Fall Gartner Conference
- ▶ Several Agile Summits held in the past year
- ▶ ScrumMaster certifications are rising and certification process tightening up
- ▶ Well over one million results if you Google “agile project management”

There is much confusion as to what Agile Project Management is

- ▶ Many people think Agile is one methodology
- ▶ There are many different Agile frameworks
 - XP
 - Rational
 - Scrum
 - RAD
 - RUP
 - Spiral
 - Lean
 - Dynamic System Development
 - Crystal
 - Others

The Agile Manifesto for Software Development was created in February 2001 by 17 representatives of new methodologies that were looking for lighter alternatives. It contained four values:

- ▶ **Individuals and interactions** over processes and tools
- ▶ **Working software** over comprehensive documentation
- ▶ **Customer collaboration** over contract negotiation
- ▶ **Responding to change** over following a plan

While there is value to the things on the right, we value the items on the left more.

Source: agilemanifesto.org

The Agile Manifesto also contained 12 general principles

- ▶ Our highest priority is to satisfy the customer through early and continuous delivery of valuable software
- ▶ Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage
- ▶ Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale
- ▶ Business people and developers must work together daily throughout the project
- ▶ Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done
- ▶ The most efficient and effective method of conveying information within a development team is face-to-face conversation

Source: [Agilemanifesto.org](http://agilemanifesto.org)

12 principles continued

- ▶ Working software is the primary measure of progress
- ▶ Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely
- ▶ Continuous attention to technical excellence and good design enhances agility
- ▶ Simplicity – the art of maximizing the amount of work not done – is essential
- ▶ The best architectures, requirements, and designs emerge from self-organizing teams
- ▶ At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly

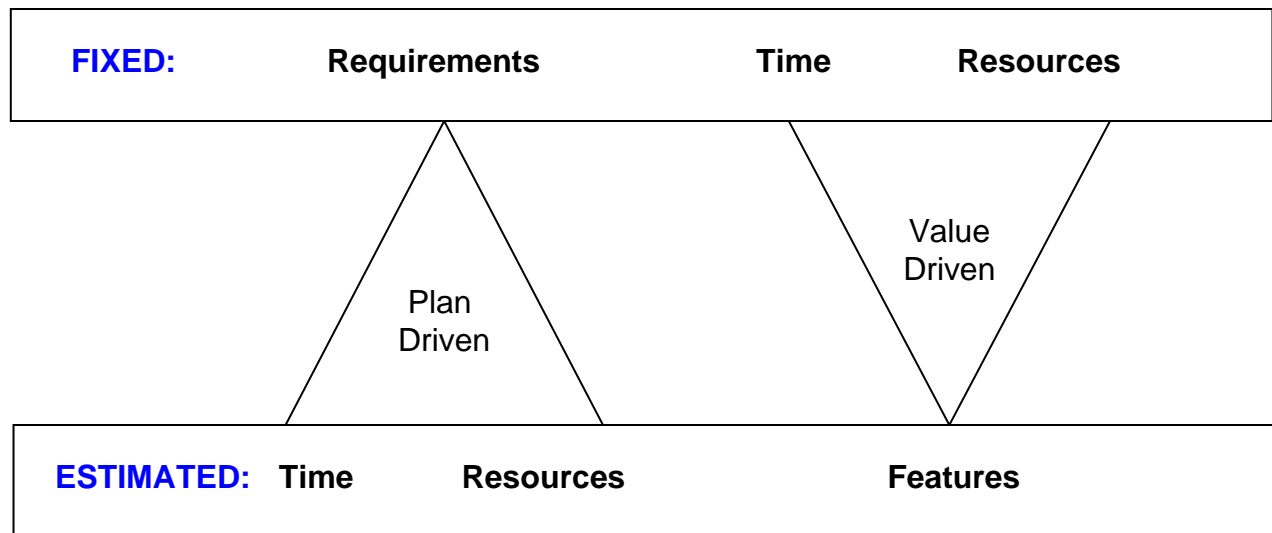
Source: Agilemanifesto.org

Many of these themes were inherited from Just in Time practices

- ▶ Eliminating waste
- ▶ Value is anything that increases the usefulness of the product or service to the customer
- ▶ The customer's definitions of quality and their criteria for evaluating it should drive product design
- ▶ Mutual respect and support based on openness and trust should exist between an organization and its customers
- ▶ The employee who performs a task often is the best suited to suggest operational improvements

Source: APBM CBM Exam Prep

The Agile approach is different than the standard waterfall methodology



Source: www.dsdm.org

Agile practices work best when the environment is already configured and most of the work is development related

- ▶ The cost estimates are based on resources for a certain duration
- ▶ There are not a lot of unknowns that require extensive planning
- ▶ It's easy to develop continuous prototypes this way
- ▶ The team can begin executing quickly and focus on actual work
- ▶ The PM has a different role in Agile frameworks than in the waterfall approach

Agile Project Management: Not Just for IT

- ▶ Case Study
- ▶ Agile Overview
- ▶ Using Agile practices for projects other than software development
- ▶ Summary

Agile concepts can be used for non-software development efforts

▶ Eliminate waste by streamlining unnecessary process steps

- Documentation that is redundant
- Additional steps that add no value to the final product
- Multiple, delayed approvals
- *Best practice: Add tailoring to existing processes*

▶ Change your approach to requirements

- Prototypes or check points to ensure to the right solution is delivered (value)
- Relax rigid requirements change management – but enforce timebox tradeoffs
- Educate customer on extra costs of unnecessary features
- Continuous customer prioritization (reduce unnecessary features)

Agile principles for use in non-IT projects continued

▶ Facilitation techniques

- Tasks assigned to team, not individuals (empower people to take stretch activities)
- Team members report progress to team members, not PM
- Collocation increases collaboration, speed, and cross-training
- Daily standup meetings over weekly meetings for productivity, quicker action
- PM takes ScrumMaster approach: Team has more ownership and commitment, PM focuses on clearing organizational roadblocks and creating a containment zone around team

▶ Focus on the customer experience

- Energy spent on customer rather than processes
- More customer involvement before the final release by building strong rapport
- Build trust by showing deliverables more frequently
- Keep customers posted about next steps

Agile principles for use in non-IT projects continued

▶ Sustainable pace

- Increased productivity with decreased hours
- First things first, prioritize then let the small impact items wait in queue
- Multi-tasking takes away focus from high impact items

▶ Regular retrospectives

- Don't wait until the end of the project for Lessons Learned
- Teach the teams to readjust their behavior when appropriate

▶ Change the way you plan

- Estimate effort rather than duration, detailed tasks broken down later in the project
- Delay decisions until complete information

Agile principles for use in non-IT projects continued

▶ Phased and/or iterative cycles

- Each phase is a project (e.g. BPR/requirements phase), budgeted separately
- Track milestones and report out clearly on progress regularly
- Build an iterative approach into your schedule – plan and design when appropriate
- Integrate customer reviews more often to increase satisfaction with delivery

▶ Quality approaches

- Requirements, design, and programming defects cost much more incrementally the longer it takes to identify them – test throughout by user groups and QC
- Paired programming, modular code, software standards – use concepts

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- ▶ Agile Overview
- ▶ Using Agile practices for projects other than software development
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Agile principles can be used for any type of project to speed up delivery and increase customer satisfaction

- ▶ Familiarize yourself with the principles of the Agile Manifesto and find ways to integrate them into your organization
- ▶ Deliver in smaller increments, communicate progress clearly
- ▶ Learn how Scrum or other Agile approaches are implemented, and identify which concepts may work for you
- ▶ Empower the project team members, let them find alternate ways to deliver
- ▶ Eliminate waste – reduce unnecessary features, streamline processes
- ▶ Communicate successes often!