How to manage agile development?

Rose Pruyne | Jack Reed
What will we cover?

Introductions
Overview and principles
User story exercise
Retrospective exercise
Getting started
Q&A
About me:

Jack Reed

Geospatial Web Engineer, Stanford University

Passionate about making geospatial data accessible

Not an Agile Coach or a ScrumMaster
More than a buzzword?

The word “agile” has been subverted to the point where it is effectively meaningless, and what passes for an agile community seems to be largely an arena for consultants and vendors to hawk services and products.

Dave Turner - Agile Is Dead (Long Live Agility)
Waterfall vs. Agile
PROJECT

Requirements

Design

Implementation

Verification

Maintenance
Agile - A set of principles

1. Customer satisfaction by rapid delivery of useful software
2. Welcome changing requirements, even late in development
3. Working software is delivered frequently (weeks rather than months)
4. Close, daily cooperation between business people and developers
5. Projects are built around motivated individuals, who should be trusted
6. Face-to-face conversation is the best form of communication (co-location)
7. Working software is the principal measure of progress
8. Sustainable development, able to maintain a constant pace
9. Continuous attention to technical excellence and good design
10. Simplicity—the art of maximizing the amount of work not done—is essential
11. Self-organizing teams
12. Regular adaptation to changing circumstances
Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

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

That is, while there is value in the items on the right, we value the items on the left more.

http://agilemanifesto.org
Scrum is a framework, agility is a concept

http://scrummethodology.com/scrum-is-a-framework-agility-is-a-concept/
Agile - Scrum Approach

Scrum Roles

- Product Owner -- holds the vision for the product
- ScrumMaster -- helps the team best use Scrum to build the product
- Development team -- builds the product
Agile - Scrum Approach

- Product Backlog
- Sprint Planning
- Sprint Backlog
- Retrospective / Review
- Demo / Ship Product

Sprint (2 - 4 weeks)

Standup (Daily)
Builds business value sooner
My Hydra Project - Traditional Approach (Reality)
My Hydra Project - Agile Approach

- Business Value

Iteration 0, Iteration 1, Iteration 2, Iteration 3, Iteration 4, Iteration 5

- Database
- Data Access
- Business Logic
- UI
You know things sooner
Better quality product
What about the real world?
Back to basics

1. Customer satisfaction by rapid delivery of useful software
2. Welcome changing requirements, even late in development
3. Working software is delivered frequently (weeks rather than months)
4. Close, daily cooperation between business people and developers
5. Projects are built around motivated individuals, who should be trusted
6. Face-to-face conversation is the best form of communication (co-location)
7. Working software is the principal measure of progress
8. Sustainable development, able to maintain a constant pace
9. Continuous attention to technical excellence and good design
10. Simplicity—the art of maximizing the amount of work not done—is essential
11. Self-organizing teams
12. Regular adaptation to changing circumstances