Back to Basics: The Role of Agile Principles in Success with an Distributed Scrum Team

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August 2007

Overview

– Who, what, where, and why
– The problems
– Things that worked
– Things that didn’t work
– Recommendations
What & Why

- Develop an eBusiness application for retail
- Key customer based in US
- Core search platform knowledge in Norway
- Application Team in Boston
- Subtext: encouraging interactions between offices

Who & Where (Geography)

- Developers in Norway and the US
- Application team based in US
The Story

– Using Scrum
  • Motivations
  • Training
– The Team
  • Skills
  • Location/Migration

Scrum

– Why Agile?
  • New Application with requirements in flux
– But…
  • The team had people based in 2 countries
  • Team was new to Scrum
  • Norwegian team:
    – Platform knowledge
    – New to Java
  • US Team:
    – New to search platform
    – Web app experience
Factors

– Success Factors:
  • Management support for Scrum and the application
  • Talented team
  • Clear end goal
– Risk Factors:
  • Distance
  • Aggressive and changing requirements

Team Building

– Team initially co-located
  • This formed the basis for future collaboration.
  • This is a best practice for any project team
– Maintaining connections
  • Clocks and other tokens
Rules of The Road

– Distance made the usual problems worse.
– Overcome these problems by following the rules of your process
– Modify the rules after you have experience

Backlog Management

– Essential for time-boxed, iterative development
– Even more essential when teams are distributed
– More distance = slower feedback (When remote)
– Keeping commitments is what scrum is about
Tracking and Status

– Index Cards work!
  • Not so much when you have teams distributed
– Crisp backlog
– Remote tracking
  • Index cards with proxies?
  • Tools
– Burndown tracking is key!
  • Not about saying "no" but about embracing the reality that there are priorities.

Collaboration Tools

– Index Cards (pro/con)
– XPlanner
– Jira
– Wikis
  • MoinMoin
  • Confluence
Iteration Length

– “The Book” says 4-Weeks
– Can be hard when:
  • Customer issues
  • Code quality (engineering practices)
– Better to keep to an iteration, even if it is shorter!

Daily Scrum

– Essential
– Time Zones make one Scrum tricky
– Tools can help
  • Teleconference - good conference phones
  • Skype
  • Video
Engineering Practices

– Feedback is essential to agility
– Continuous Integration is the best feedback
  • Unit Testing
  • Integration Testing
– Better Engineering practices make collaboration easier

Sprint Review

– The Best way to focus the team
– Distance made the review harder
  • In person better than remote
  • Technology can help
– There is power in having to do a demo
  • Harder to “fake it”
Agile Values and Distribution

- Agility needs feedback
- Locality simplifies feedback
- But people need to buy in

Factors

- Burndown Tracking
- Backlog Quality
- Iteration Length
- Engineering Practices
**Conway’s Law**

– “Any organization that designs a system will inevitably produce a design whose structure is a copy of the organization’s communication structure.”
  • Melvin E. Conway *Datamation*, April 1968
– *Communication* structure not just
  • Location
  • Organization chart
– Communication paths can span location

**Avoid**

– Scrum of Scrums based on location
  • Conways Law (the bad)
  • Don’t force it
– Tools the team does not embrace
  • But you can encourage the team to try anything once
  • Be agile in your approach to tools
– Excuse about distance making collaboration hard
  • There are often deeper causes
Recommendations

– Start Co-located
  • Establish tools and practices when together
– Maintain Communication
  • Use tools as needed
  • Conway's law (the good)
– Keep Status Visible
– Establish Basic Agile Practices
  • Backlog
  • Product Owner sets priorities
– Use good engineering practices
  • Continuous Integration
  • Testing

Footnote

– Distribution prepared the team for other experiences:
  • Time on site with customer
  • Family commitments
– Skills and tools are useful in other contexts!
Thank you