Agile Practices at Kuali

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Agenda

- Kuali Project Organization
- Introduction: Agile Manifesto, Scrum, and Kanban
- Kuali Infrastructure: Kanban
- Kuali Rice: Scrum
- Kuali Student: Scrum

Questions
Kuali Foundation Projects
KFS Project Organization

blue = governing staff, red = dedicated staff, green = partner contributors
Introduction: **Agile Manifesto**

"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."
Scrum

Resources Scrum Training, Guide
Kanban Method

- Start with existing process
- Agree to pursue incremental, evolutionary change
- Respect the current process, roles, responsibilities and titles
- **Leadership at all levels**
  - Captain of a submarine (David Marquet)
Kanban

- Kanban Board
- All work is on board
- Continuous flow of work
- Limit work in progress
Kanban: Limit Work In Progress (WIP)

- WIP limit expose issues, highlight bottlenecks
- Help you focus on priority tasks
- Ensure we are not overwelmed
- Eliminate task switching
Kuali Infrastructure : Board
Infrastructure: Kanban Implementation

- All work must be on board
- Work cannot move back
- Anyone can pull from backlog
- Must work on priority items first (Blockers)
- 15 mins tasks should be done straight away
- Agreed on a "Definition of Done"
- Daily 15min Meeting. Cannot close own work
- Weekly backlog refinement

"Sharpened focus, enabling us to continuously improve"
Kuali Rice:

- Teams size: 25-30 members, 3 teams (Framework, Middleware, QA)
- Core Kuali framework used by KFS, KC, Student, OLE, KHR
- Already have an Agile Engineering culture
  - **DevOps: Continuous delivery**
  - Release cycles have continuously shortan
    - Project Milestone Builds
  - Test Driven Development
  - Track code coverage
  - Enforce coding standards
  - Developer learning sessions
  - Live Chat, Skype, Hangouts, 4 x meetings /yr
Kuali Rice: Scrum

Scrum training: March 2014 : Not fully implemented

- Provides common terminology and path to improving current process
- Stimulated a discussion up the chain (Board)
- Sharpended focused in daily stand-ups meetings
  - Time-boxing helped focus other meetings
- Moved teams to become more cross-functional (QA in teams)
  - Accelerated a culture of learning/sharing (Developer sessions)
  - More pair programming
Kuali Student

- Team members 40+ before attempting Agile at Scale
- Geographically distributed
Kuali Student: Scrum

- Start using Scrum two years ago
- Overcoming limitations of Scrum
  - Multiple Development Teams: scrum (PDTs)
  - Core Team (highly performing scrum team)
  - Minimized the timezone distribution among teams
  - Minimized handoffs between teams
  - Adopted Spotify Agile ideas

"Enabled them to deliver product"
Conclusions

- Agile and Lean principles are valuable.
- Kanban is an easy way to start.
  - Ideal for small teams, or support
- Scrum is hard
  - Will help build highly performing teams
Questions