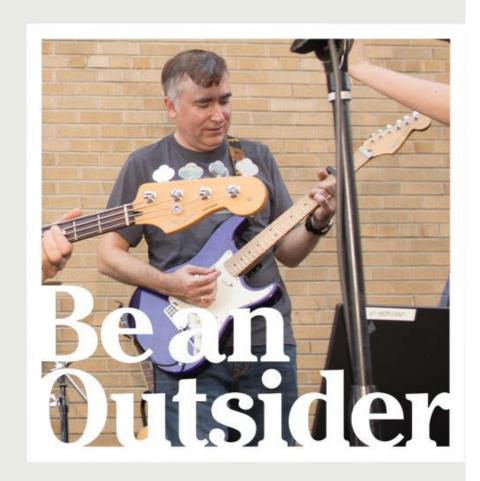
Agile in the Trenches

A Technologist's View of Agile in the Real World

Who am I?

- Senior Technical Lead at LL Bean
- 20 years professional software development experience
- 10+ years working on teams at LL Bean following Agile methodologies to varying degrees
- Rock Star (obviously)



What is Agile?

- Continuous delivery of small pieces of working software
- Work comes to a standing team; teams are not assembled for particular projects
- Project plan broken into short time periods called sprints
- Work is broken down into chunks: Epics, Stories, and Sub-tasks



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.

Unpacking the Manifesto

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



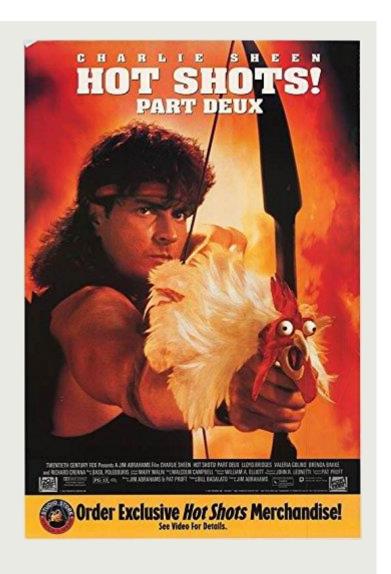
Principles behind the Agile Manifesto, Part 1

- 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.



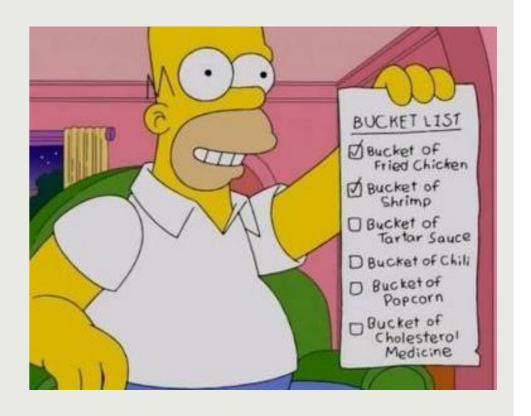
Principles behind the Agile Manifesto, Part Deux

- 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 to and within a development team is faceto-face conversation.
- 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.



Principles behind the Agile Manifesto, Part 3

- 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.



Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

 Make sure you have in-house expertise in devops, or have management buy-in to hire and/or develop, or else this will be a painful process



Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

- Shift from getting all requirements nailed down up front to only defining enough to get started
- Understand the concept of Minimal
 Viable Product (MVP) and start with that



Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

- Shift from getting all requirements nailed down up front to only defining enough to get started
- Don't try to go here all at once. Work towards it incrementally -- go from once or twice a year to quarterly first.



Business people and developers must work together daily throughout the project.

- Have daily check-ins that involve whole team.
- Keep them brief. 15 min preferably, 30 min max.
- Each person answers three standard questions
- Vary format based on where you are in the sprint



Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

- Team makeup is important; you want a good balance of developers, QA testers, and analysts.
- If you have too few QA testers, QA can quickly become a bottleneck. This is a common problem
- Scrum master can be either a Project Manager or a Technical Lead. Either can work, but technical understanding is a valuable attribute for a scrum master to have.



The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

- This is not always practical or possible. I currently have team members in Maine, Costa Rica, India, California, Washington, and Oregon, for example.
- Technology to facilitate on-line collaboration is essential
- Where there is critical mass, try to have team members sit next to or at least near each other



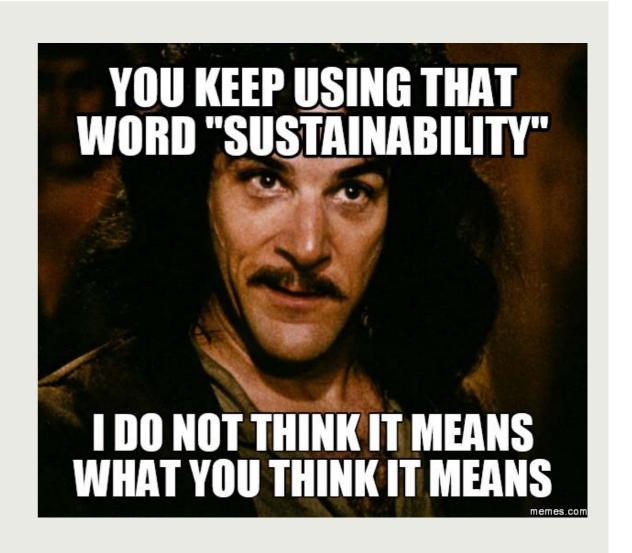
Working software is the primary measure of progress.

- At the end of each sprint there should be something working and deployed to a shared environment, even if it's just a test/development environment
- Working software should be demoed at a Sprint Demo meeting, which should be scheduled at the end of each sprint and should include business stakeholders and interested parties outside the team
- Software to be deployed to production should be reviewed in a prep meeting near the end of the sprint to ensure that the deployment plan is solid



Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

- Develop and maintain good practices around estimating and planning
- Have a process to ensure the right things are in the backlog in the right order
- www.pointingpoker.com is a useful tool
- Track productivity over time



Continuous attention to technical excellence and good design enhances agility.

- Schedule regular meetings to review technical designs and code -- "Code Safari"
- Ensure that each development story
 has a design subtask and a subtask for
 the team to review the design



Simplicity--the art of maximizing the amount of work not done--is essential.

 Stories should be groomed regularly by business analysts/owner and senior members of the technical team to "weed out" unnecessary work and reevaluate priorities



The best architectures, requirements, and designs emerge from self-organizing teams.

- The team should be given the latitude to do so, with only high level direction from outside the team
- The team still needs to adhere to organizational architectural directions.



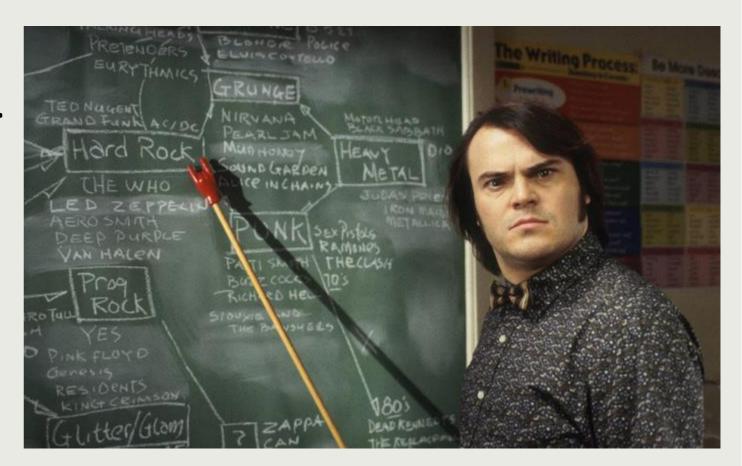
At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

- Retrospective after every sprint!
- Less focused on the actual work that was done than on how that work was done
- Identify action items for three different categories: Start Doing, Stop Doing, Keep Doing



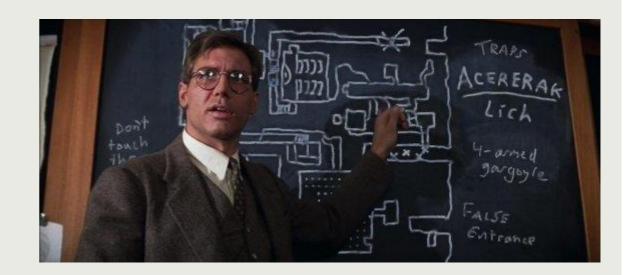
Lessons Learned

- A transition to Agile can't happen with a flip of a switch.
- Start small and get bigger
- Be flexible, be patient
- Don't be afraid to fail
- Be a good human



Want to Learn More?

- Agile Maine is an organization dedicated to the promotion of Agile practices in the state
- Monthly meetups around the area
- Agile Maine Day annual conference each spring at USM
- FMI: www.agilemaine.com



• Questions?