Agile & Lean Software Development in Industrial Practice

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Robert Feldt & Helena Holmström Olsson
Chalmers, Software Engineering Division
Agenda

- 13:30-13:40 Intro by Robert: Transitioning to Agile and Lean Software Development
- 13:40-14:20 Kai: Implementing Agile and Lean Software Development in Industry
- 14:20-15:00 Discussions and short presentation(s) from "agile" SW companies in Gothenburg
- 15:00-15:30 Coffee and further discussions - how can we collaborate, research needed etc.
Agile is Lean?

- Deferral of commitment
- Optimize the whole
- Eliminate waste
- Respect people
- Focus on learning
- Deliver fast / Limit work to capacity / Pull scheduling

Build quality in (jidoka/automation/TDD)

[Kniberg2008]
Transitioning to Agile - Previous results

- Not many studies on the transition, here to SCRUM:
  - Advantages
    - SW dev is a continuous learning process!
    - Quality increase! (but other studies disagree)
  - Obstacles
    - Too focused on showing progress => Quality suffered
    - Short-term deliverables => long-term arch & maintainability problems
    - Lack of metrics on remaining work

[Schatz2005]
Agile Practices - Pro / Con

Face2Face communication & User stories

- Saves time
- Customer drives
- Requires trust
- Not all user groups represented
- Customer on site

Iterative req engineering

- Clearer reqs
- Customer relation
- Minimal docs when problems
- Cost & schedule estimation
- Non-functional requirements

[Cao2008]

torsdag den 4 november 2010
Agile Practices - Pro / Con

“Extreme” Prioritization

- Clearer reasons
- Re-prio is easier
- “Business Value” to narrow
- Instable with re-prio

Managing Change through Constant replanning

- Fewer changes
- Smaller changes
- Architecture suffers
- “Refactoring” not enough

[Cao2008]
Agile Practices - Pro / Con

Prototypes
- Quicker feedback
- Unrealistic dev speed expectations

Test-driven Development
- Tests capture reqs
- Requires close customer collab
- Freedom to experiment
- Developers resist

Reviews & Acceptance tests
- Status report to customers
- Hard to create acc. tests

[Cao2008]
torsdag den 4 november 2010
Goals

- Listen: New results on Agile & Lean in SW Industry
- Discuss: Your Challenges, Solutions, Thoughts
References