Going Agile at Siemens Communications UK – Making Scrum and XP Work

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Our IP Phone Products

optiPoint 410  optiPoint 420  optiPoint 600
# Agile vs. Conventional Product Development

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**“Lean”**                  **“Mass Production”**
Our Motivation for Using Agile

- Reduce development time, improve on-time delivery
- Increase product quality
- Increase productivity
- Improve employee morale
- Gain a competitive advantage as a development site in a high-cost country
Silver Bullet?

**Panel 1:**
- We need three more programmers.
- Use agile programming methods.

**Panel 2:**
- Agile programming doesn’t just mean doing more work with fewer people.

**Panel 3:**
- Find me some words that do mean that and ask again.

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Scrum!
IP Phones Sprint Process: Overview

- User stories
- Constraints
- Sprint Planning
- Development Activities
- Sprint Review
- Defects
- Improvements
IP Phones Sprint Process: Details

Start of Sprint

Perform sprint review and planning

Write acceptance tests and create rough upfront design using metaphor and simple design

Make acceptance tests succeed by applying test-driven development, refactoring, pair programming, continuous integration, coding standards, collective ownership

Create documentation

End of Sprint
Agile at Work: Review
Agile at Work: Retrospective
Agile at Work: Goal Selection
Agile at Work: Task Identification
Agile at Work: Sprint Backlog
Agile at Work: Pair Programming and Cross-team Collaboration
Agile at Work: Daily Scrum
Challenges

Sustainable pace

- Team members tended to over-commit in the early sprints and work long hours

User stories

- Getting the granularity right
- Linking user stories consistently with constraints (NFRs and UI requirements)
- Specifying conditions of satisfaction prior to sprint planning
Challenges Cont.

Release planning
  ▪ Story point-based planning: Forecasting velocity on an innovative new product development project is challenging
  ▪ Prioritizing user stories to optimize flow, anticipating capacity can be difficult

Test-driven development
  ▪ Becoming fully test-infected is a process that takes time
  ▪ Difficult to apply to legacy and third-party code and driver/OS-related development work
Challenges Cont.

Build environment and continuous integration

- Attaining stable fully automated build environment using CruiseControl
- Ensuring everybody makes micro code changes and waits for the next integration build to succeed before new coding takes place

Suppliers and partners

- Understand our new way of working, improve turn-around time
Benefits Gained

- Rapid project progress
- High morale, great commitment and hard work
- High visibility of the project progress
- High visibility of impediments and issues
- Continuous improvement (inspect and adapt)
Summary

Going agile has been pleasure and pain

We are very happy to have embarked on the journey
to become fully agile
Questions?