Seven Key Factors for Agile Testing Success

Agile Development Practices
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With Material from Janet Gregory
Introduction

- Tester on agile teams since 2000
- My teams:
  - Delight customers
  - Deliver production-ready value every 2 weeks
  - Drive development with tests, examples
  - 100% regression test automation
Your Agile Experience

How about you?

- How many on agile teams?
- How many in transition?
- How many planning a transition?
- How many on more traditional teams?
  - Agile testing works on those, too.
- Managers, testers, developers...?
Takeaways

- Keys to agile testing success
- Overcoming barriers
- Practical steps you can take today
Key Success Factors

- Look at the Big Picture
- Use the Whole Team Approach
- Adopt an Agile Testing Mindset
- Automate Regression Testing
- Provide and Obtain Feedback
- Collaborate with Customers
- Build a Foundation of Core Agile Practices
The Whole Team Approach

- Team committed to testing, quality
- Daily collaboration
- Testers get support, training
- Anyone can do any task
- Testers transfer testing knowledge
- Get the right people
Who’s On Your Team?

- Separate test team?
  - How could you integrate more with developers?
  - How could you collaborate more with customers?
- Does your team have all the roles, skills needed?
Agile Testing Mindset

- No Quality Police
- Continually improve
- Don’t sit and wait – be proactive
- Coding and testing are part of one process
- Apply agile principles and values
What Do You Do To Improve?

- Professional development
- Team, process improvement
- How can you be more proactive?
Automate Regression Testing

- Drive development with tests
- Quick feedback
- Time for exploratory testing
- Design for testability
- Team effort
- Team chooses tools
- Start simple
Regression Test Automation Issues?

- Make it a team problem to solve
- Get over “hump of pain”
- Unit tests have best ROI
- GUI smoke tests option for legacy code
  - But choose tool carefully
Test Automation Pyramid

- Manual Tests
- GUI Tests
- Acceptance Tests (API Layer)
- Unit Tests / Component Tests
Getting Started with Automation

Tips from Jared Richardson:

- Defect Driven Testing
  - Find a bug, write a test, jazz it up
- Blitzkrieg – Dash across the product
- Recognize, reward tests
- Prove yourself
  - Easier for people to copy you than start from scratch
  - Install CI yourself, do DDT…
Provide and Obtain Feedback

- Core agile value
- Team uses feedback to improve
- Testers are expert feedback providers
- Make course corrections
- Respect the tests
Focusing on Feedback

- Big Visible Charts
- Retrospectives
- Email test results from build process
- Take advantage of short iterations
- Discoveries during exploratory testing
- Collaboration with users, customers
Foundation of Core Practices

- Continuous integration
  - Frequent and fast feedback
- Coding and testing one process
- Test environments
- Manage technical debt
- Work incrementally
- Synergy
Implementing Core Practices

- Self-organizing team
- Plan stories/tasks to build infrastructure
- “Refactoring iterations”
- Baby steps – address one thing at a time
- Balloon pattern
Collaborate with Customers

- Elicit examples
- Whiteboard discussions
- Adapt for distributed teams
- Power of Three
Getting Customers on Board

- Build trust
- Learn their jobs
- Ask for concrete examples, scenarios
  - “How will you use this?”
  - “What’s the worst that can happen?”
- Facilitate developer-customer communication
  - But don’t get in the way
Look at the Big Picture

- Drive development with business-facing tests, examples
- Use real world test data
- Think about impacts on other areas
- Use exploratory testing
- Use the Agile Testing Quadrants
Agile Testing Quadrants

- **Q1**: Unit Tests, Component Tests
- **Q2**: Functional Tests
  - Examples
  - Story Tests
  - Prototypes
  - Simulations
- **Q3**: Exploratory Testing
  - Scenarios
  - Usability Testing
  - UAT (User Acceptance Testing)
  - Alpha / Beta
- **Q4**: Performance & Load Testing
  - Security Testing
  - “ility” Testing

**Axes**:
- **Automated & Manual**
- **Business Facing**
- **Manual**
- **Supporting the Team**
- **Critique Product**
- **Automated**
- **Technology Facing**
- **Tools**
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Questions?
Some Agile Testing Resources

- lisacrispin.com
- janetgregory.ca
- exampler.com
- testobsessed.com
- testingreflections.com
- pairwith.us
- ci-guys.com
- code.google.com/p/testifywizard
- agile-testing@yahooogroups.com
Bridging the Communication Gap

Specification By Example and Acceptance Testing

Gojko Adzic
Now Available

*Agile Testing: A Practical Guide for Testers and Agile Teams*

By Lisa Crispin and Janet Gregory

www.agiletester.ca