

Integrating Testing into Agile Development

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Agenda



- What are the drivers behind Agile?
- Why testers feel left behind
- Redefining testing for Agile development
- Steps to building an effective Agile testing group
- Summary and Questions

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How Will You Benefit?



- Understand and apply testing principles to an Agile development methodology
- Comprehend the role of testing in Agile practices, and employ the lessons into your own practices
- Apply guidelines to integrate testing practices and tools into your agile development methodology



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Drivers for Agile Development



- Speed of business
 - We needed the application yesterday



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Drivers for Agile Development



- Rapid change in business opportunity



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Drivers for Agile Development



- Feedback
 - This isn't what we wanted



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Drivers to Agile Development



- Get important features into the hands of users more quickly
- Make mid-course corrections based on changing business needs
- Fine-tune with regular user feedback



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Why Testers Feel Left Behind



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Why Testers Feel Left Behind



- Agile testing requires a focus on quality and validity

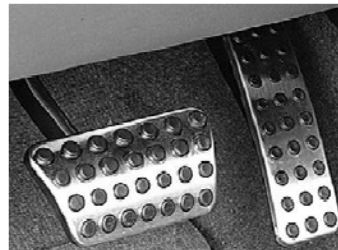


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Why Testers Feel Left Behind



- But there's no agreed-upon strategy for accelerating testing
 - Long-lead test plans, procedures aren't possible
 - Test cases aren't possible until stories and features are selected
- Testers can't test fast enough



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Why Testers Feel Left Behind



- Limited strategies for prioritizing testing
 - Everything is important
 - No defined criteria for prioritizing



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Why Testers Feel Left Behind



- No easy way to do regression testing
 - Not enough time for functional testing = not enough time for regression testing
 - Quality suffers as testing lags



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Why Testers Feel Left Behind



- The road ahead isn't clear



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Redefining Testing for Agile Development



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Redefining Testing for Agile Development



- Where do we begin?



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Redefining Testing for Agile Development



- Early involvement by testers
 - Defining and quantifying user stories
 - Working directly with project owners and business analysts



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Redefining Testing for Agile Development



- Work with Development
 - Insight into development decisions helps target testing
 - Testers have a better idea what needs testing

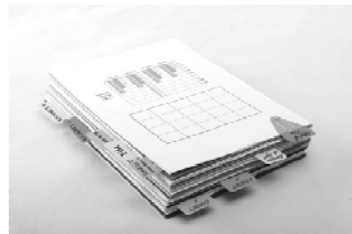


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Redefining Testing for Agile Development



- Triage and prioritize
 - Define a priority framework – what principles come first
 - Get buy-in on the framework
 - Organize testing according to the framework



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Redefining Testing for Agile Development



- Automate!
 - Testing can't be done without automation
 - Automation accelerates repetitive activities



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Redefining Testing for Agile Development



- Automate what?
 - Source code control
 - User stories
 - Test management
 - Test execution
 - Bug tracking



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Steps to Building an Effective Agile Testing Group



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Steps to Building an Effective Agile Testing Group



- Integrate testers at the beginning of the application development lifecycle
 - Testers help define project
 - Get a running start on quality and fitness



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Steps to Building an Effective Agile Testing Group



- Focus testing on features that make a difference to users
 - Work with business analysts
 - Build test cases by priority



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Steps to Building an Effective Agile Testing Group



- Ensure that testers take the lead on the building and execution of functional, regression, and acceptance test cases
 - Independence from development helps ensure objective evaluation



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Steps to Building an Effective Agile Testing Group



- Enable testers to work side-by-side with developers as coding decisions are made
 - Helps prioritize testing
 - Guide development in decision-making

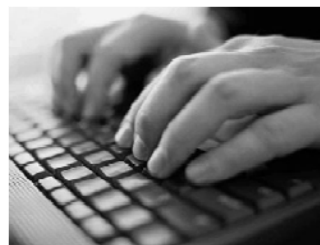


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Steps to Building an Effective Agile Testing Group



- Make automation an integral part of testing and the development process in general
 - Needed: lightweight tools supporting accelerated test
 - Especially for regression testing



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Summary

- It's a brave new world for testers
 - Change for the better
 - Involvement in the entire lifecycle process
- Testers need to step up to the challenge
 - This is a roadmap for doing so
- Better software, faster



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Questions?

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