

Agile Testing Practices

This paper is going to talk about following points:-

- Why Agile?
- Agile test practices
- Challenges in testing agile projects
- Possible solutions to issues in testing agile projects
- Future of Agile.....
- Benefits and Drawbacks....

Description of contents in brief

There are many differences between the normal testing and Agile Testing which we need to understand. This paper tries to provide info on what are the current test practices followed in IT industry when it comes to testing a Agile project. What are the challenges testers and test managers face and how they can overcome them with better planning and seeing the complete picture instead of targeting bricks as they call in the Agile SCRUM model. It also talks about one tried Agile testing lifecycle which can reduce lot of the testing work and increase productivity of the test team....result world class product using Agile development.

My Experience @ project using Agile

- Worked in Honeywell, Bangalore for around 1 year on Telematics application
- SCRUM model
- Daily Scrum meeting with SCRUM master
- Testing in Agile project was a challenge...slowly turned into FUN 😊

Challenges faced in day-2-work in AGILE project

- Test Estimation and Management
- Integration Testing
- Test case design
- White Box (code coverage, stubs, drivers...)

Case study

- Very basic of Agile is to have development at Fast phase...
- Handle the large application in smaller bricks
- Adapt to frequently changing requirements
- Dev and Test teams work closer than in any other SDLC model
- Coder-Tester role required in QA team

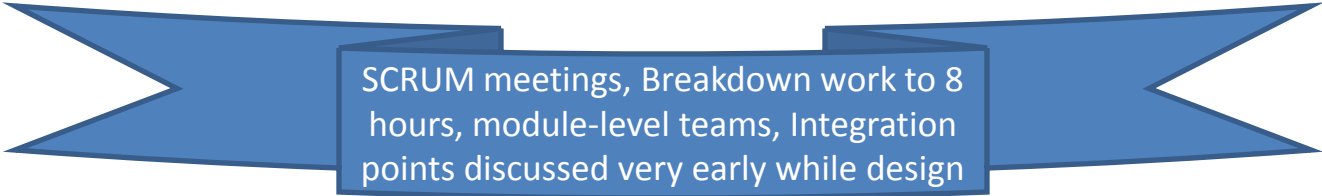
Case Study.....cont...

Challenges we had in project:-

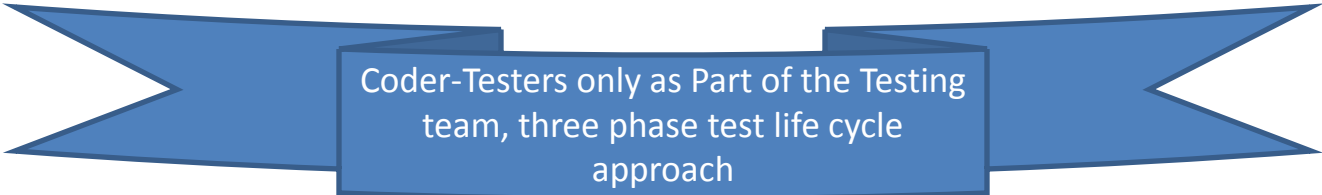
- Requirements were changing on daily basis and this could have effected the whole product so we decided to go for Agile method
- End date to deliver the project was fixed
- Customer wanted to be part of the development closely
- Budget was not an constraint here but delivering lot of functionality within fixed deadline was a challenge
- First try with Agile programming and test for the team

Case Study... Cont..

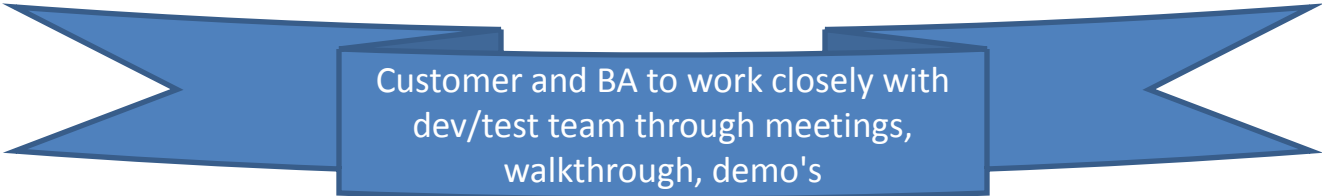
How we handled those challenges:-



SCRUM meetings, Breakdown work to 8 hours, module-level teams, Integration points discussed very early while design

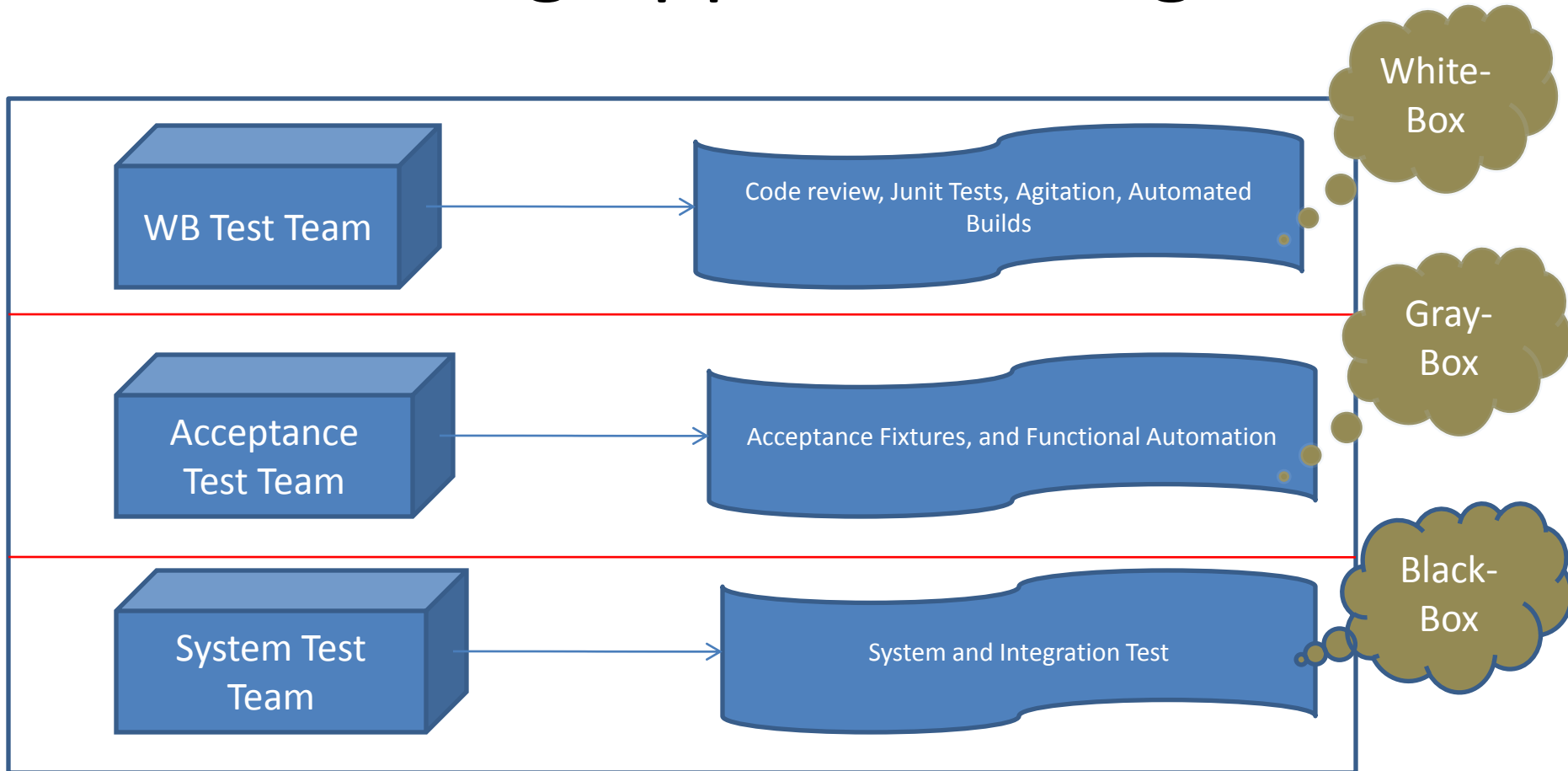


Coder-Testers only as Part of the Testing team, three phase test life cycle approach



Customer and BA to work closely with dev/test team through meetings, walkthrough, demo's

Testing Approach @Agile



Case Study...cont...

- Everyone to tell status of his 8 hours work done y'day, roadblocks, learning's in daily SCRUM meeting...meeting documented by SCRUM master
- Daily SCRUM to be completed within 15 mins... no decisions or solutions to roadblocks discussed in SCRUM meetings

3 teams within testing team:

- **White Box test team** – (Build Automation using Cruisecontrol and Yahoo widgets, Code review, coverage, writing Junits, and Agitation)
- **Acceptance test team** –(Writing acceptance fixtures and UI test)
- **System Testing team**

Case Study..cont..

- Automated test cases generation and test scenarios using Use-case based technique and CTE tool (Time to write test cases was short like 40-50 hours in every iteration)
- Automation was the MANTRA for testing team ... in every testing activity.. Automate pages as and when released by dev team
- Understanding the BIG picture while testing was the key
- Buddy Testing... very effective.. After all our goal is to make world-class product not the heaps of defects 😊
- Work closely with Dev team.. Till they get fixed

Profile

Author holds B.E in CSE from REC Bhopal and has around 4 years of experience in software testing. He has worked on Datawarehouse, Aerospace, and financial domain based full lifecycle projects. Expertise includes testing web-based applications, data-warehouses, cookie testing and automation.

Interests include Testcase design automation and new testing process map which will reduce redundant & manual work.

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Conclusions: what are the 3 key learning?

- Testing in Agile process needs Coder-Testers profile
- Ready to accommodate changes is the key
- Agile gives you production ready code at end of every sprint... Business may decide to go live with it any time 😊