



ICGSE 2013

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On the Identification of Best Practices for Improving the Efficiency of Testing Activities in Distributed Software Projects

Preliminary Findings from an Empirical Study



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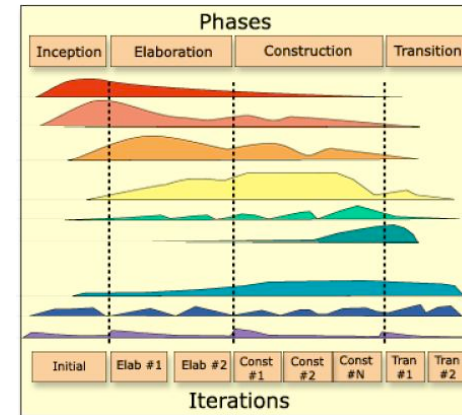
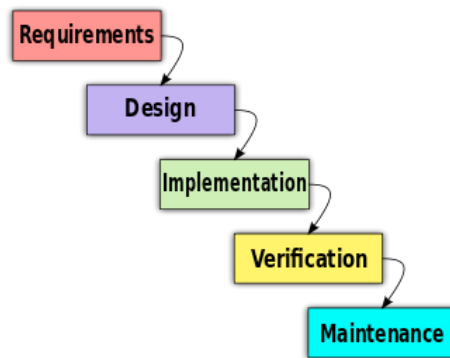
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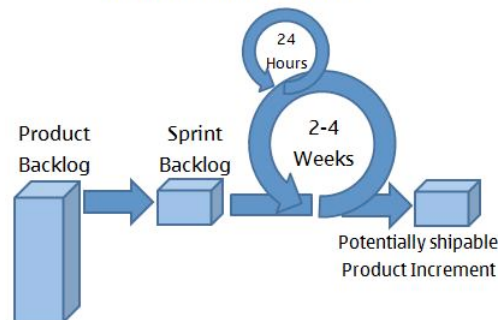
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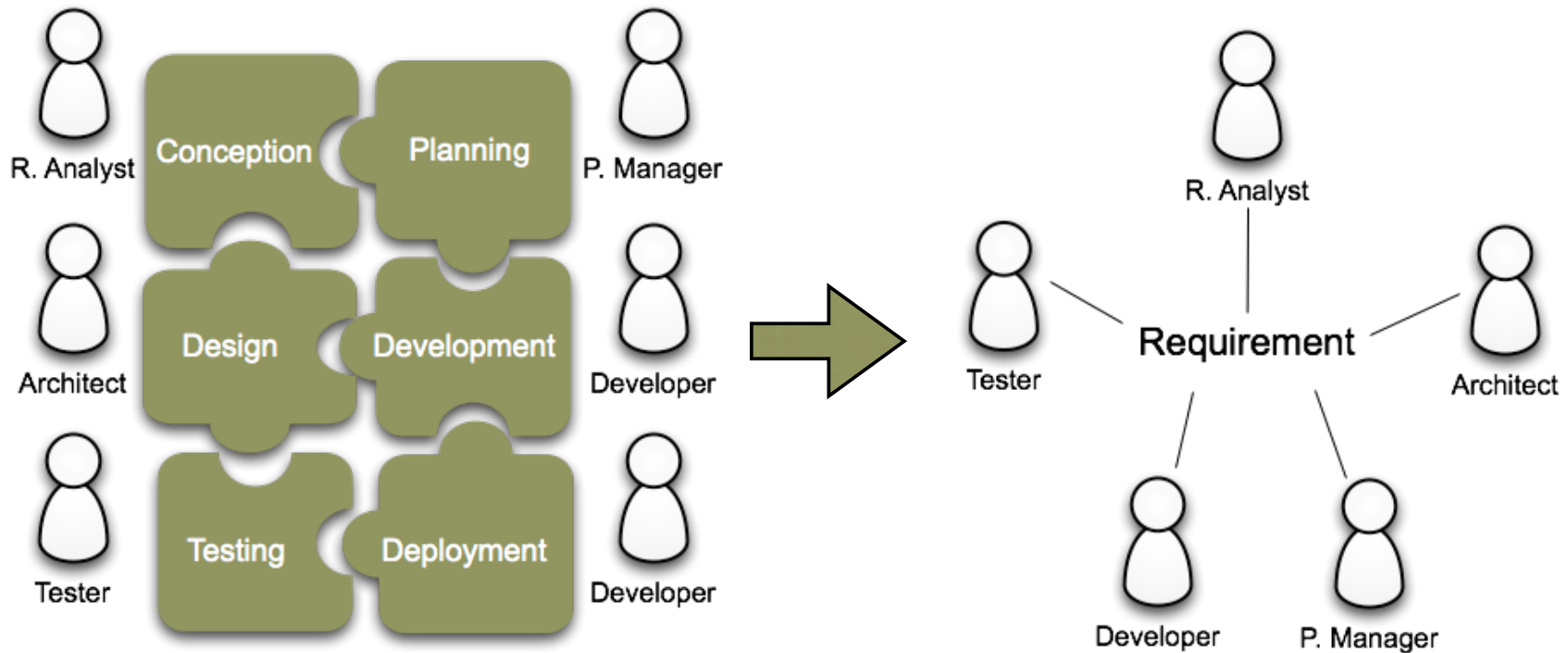
Software Development



Scrum Framework



Software Development



Software Development

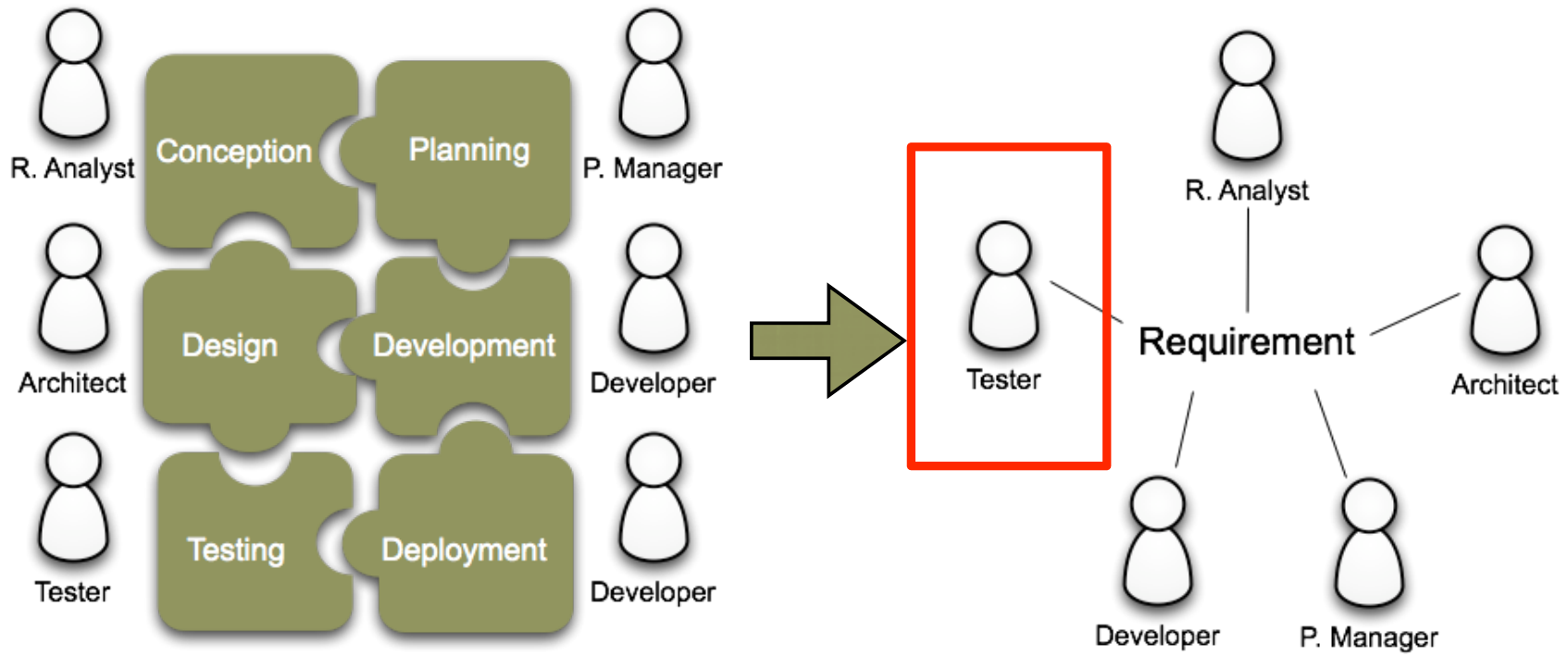


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- Collaboration
- Coordination
- Communication

Changes
Tasks
Dependencies
Deadlines

Our Interest



Our Goal



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To empirically explore what are the **challenges** faced by test teams working in distributed settings and what are the **best practices** they adopt to minimize the impact of such challenges

Our Study



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- Interviews
- 16 participants
- Test team

Findings



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I. Long defect reports lacking focus on their description

Standardization of reports

Clearer and sharper descriptions

Technical details last

Findings



2. Difficulty communicating with remote colleagues due to the lack of a common ground and a shared vocabulary

Review of terms and vocabulary as early as possible with the team regardless the role

Customer and business analysts should be included in the review

Findings



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3. Lack of availability of remote colleagues to discuss the identified defects.

Detailed defect report

Detailed defect fix report

Findings



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4. Difficulty gathering data to test applications from remote colleagues

Negotiate shifting working hours

Clearly request colleagues to read the text messages

5. High requirements volatility causing documentation to be obsolete

Requirements analyst should make a more thorough work with business representatives in earlier phases to avoid constant changes

Adoption of requirements management and issues tracking tools

Findings



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6. Poorly written documentation to support testing activities

Detailed requirement description

7. Difficulty identifying non-functional testing requirements

Test Analyst to get included earlier on in the requirement review sessions

Training for Dev Team members about non-functional testing

Findings



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8. Poorly prepared datasets for performing tests

Dedicated team to prepare testing data

Validate test data with business

9. Difficulty gathering information required for preparing test environment

Dedicated resources to manage testing environments per project instead of having a shared serviced across business areas and projects

Why is this Important?



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- Test teams ensure quality
- They need to be kept ‘on the loop’

Contribution



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- To call attention that test teams also face challenges and need processes and tools to help them perform their work!



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Thank you!

Questions?
Comments?
Suggestions?



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