Titel, samenvatting en biografie

Franck Mignet
Test planning and cost optimization in an uncontrolled project
Voorjaarsevent Testnet: 22 juni 2009

Summary

In their everyday practice, testers and test managers work with real projects, that is: chaotic, lacking process and control. What can a test manager do to accurately and optimally plan the test activities and at the same time reduce the costs?
As Test Manager for a typically uncontrolled project last year, Franck Mignet computed a first estimate using structured preparation and test design which both suffered from a high margin of error and was exceeding by 50% the required delivery date. The dilemma was solved by using an innovative mix of agile and structured testing.
This presentation will present the solution which was used to bring the project under control, reduce the error margin on the planning and optimize the cost. The key idea was to start with a phase of Exploratory Testing supported by test sheets, which served as an analysis phase. It simultaneously allowed the test team to rapidly find a large number of major defects. This phase represented about 45% of the total test effort.
As a result of the work of the first phase, the costs of the second phase, consisting of scripted testing, was divided by two. Using this method, team members were able to re-gain control of the project, delivering with a delay equivalent to 10% of the test time, which we could announce at mid project.

This method was later reused during a second, related, project. Looking back at the two projects, the presentation will also present the lessons learned from this experience and indicate some difficult points requiring attention.

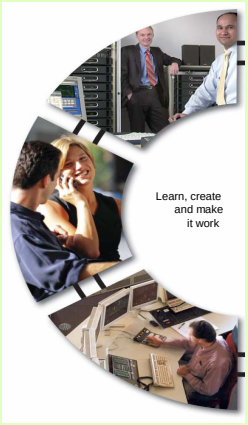
Biography

Entering the world of software testing in 2000, Franck Mignet built up experience in the telecommunication industry as a Test Manager and Test Process Improvement specialist. Since 2005, he has worked for Cimsolutions (www.cimsolutions.nl) carrying out assignments as a Senior Tester and Test Manager for clients. Convinced of the importance of methodologies and test

strategies, he approaches this field without dogmatic ideology, adapting to the context of the project.

Case study:
test planning and cost optimization in an uncontrolled project

Franck Mignet



Who Am I

Franck Mignet, 34, French
Climbing, AI, jazz, kayak
10 years of software testing Industry
Test Manager, Test Process consultant.

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10 years of software testing.
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I believe in adaptation, not in ideology

Overview

- System - Project – Problem
- Chosen solution
- Planning and estimate
- Results
- Adaptation, Challenges
- The Next project… making progress?
- When can you use this method?
- Conclusion

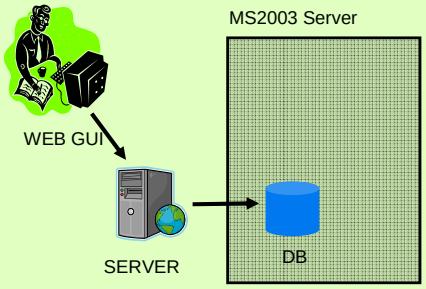
The system

Internal customer

WEB GUI

The system

Internal customer



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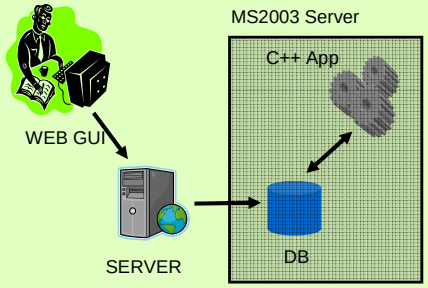

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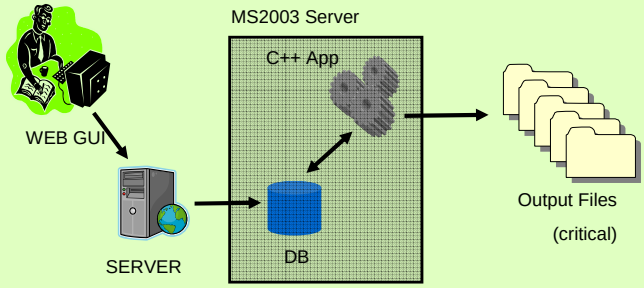

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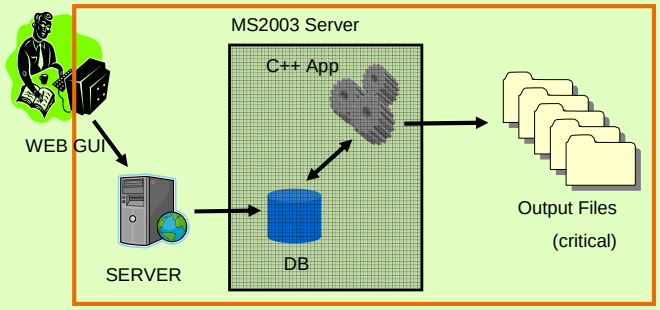
SCOPE



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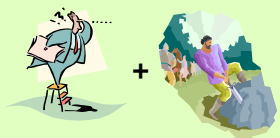
Requirements: "oral tradition"
Components Design = 2 x A4



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23 Functionalities in the Project Plan
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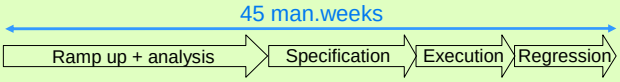
Estimating…

Trying to use the structured approach



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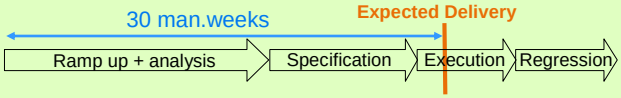

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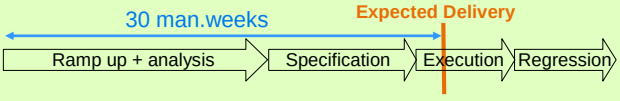

And the management's reaction

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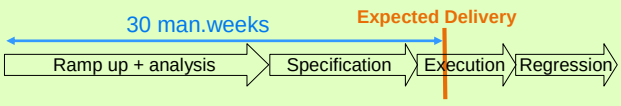

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Back to the “planning” board

We have to “discover” the requirements
Analysis/Test design/ramp up cost too high
Test execution starts too late => too risky

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One of the **Agile** techniques
simultaneous learning, test design and test execution

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Discover, learn, use attacks
Tester’s thought process and **creativity**
No scripted tests

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Discover, learn, use attacks
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Strong/Weak points

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Supporting processes:

Test sheets
“Done” , “Test Ideas”

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Agile planning (SCRUM like)

Burn down, self-organizing

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Agile planning (SCRUM like)

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Whiteboard/ "Kanban"
for tasks & communication

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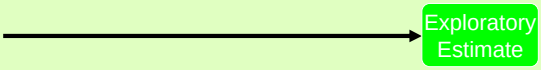
Input for Estimation:



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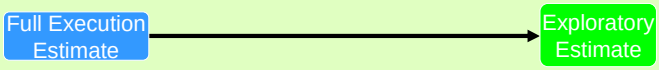

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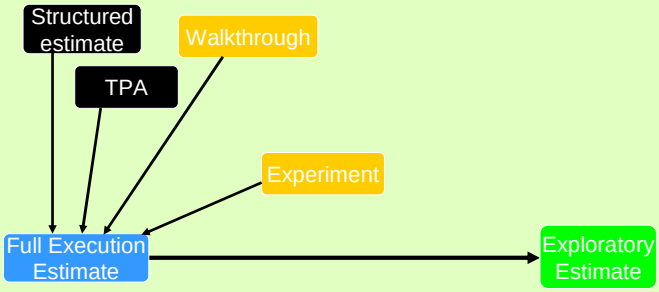

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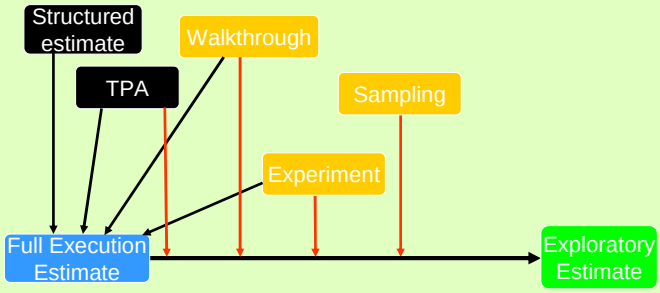

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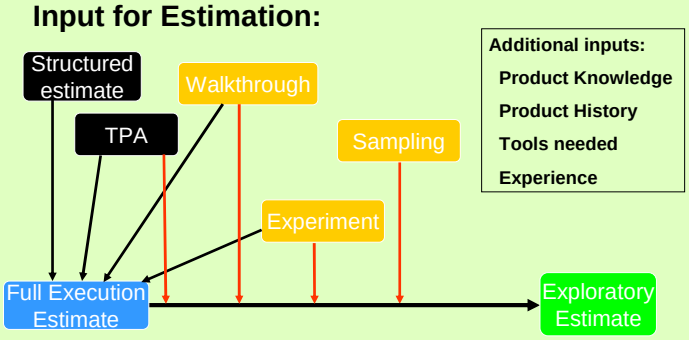
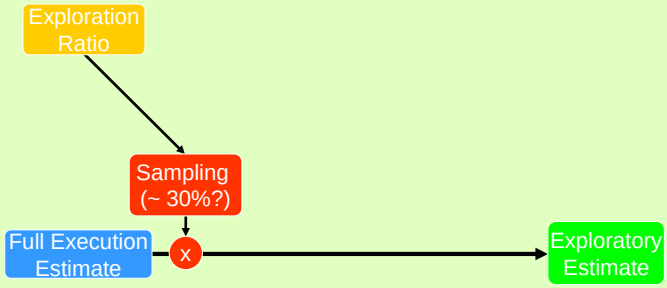


Estimating Exploratory Phase :



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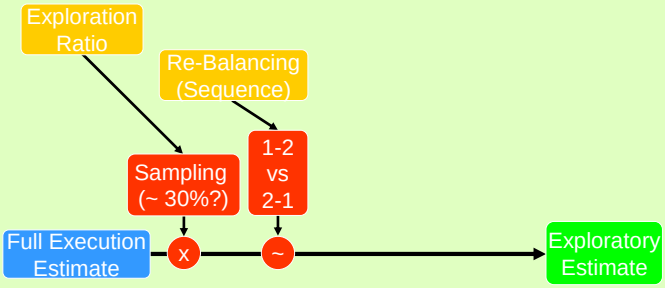

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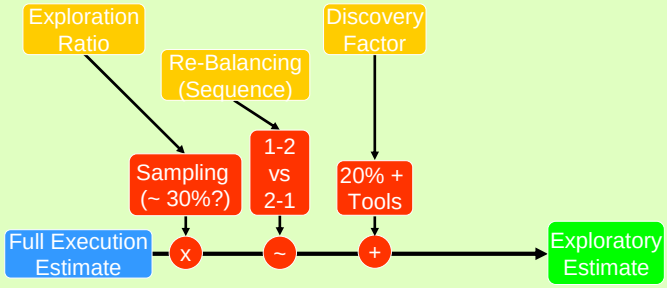

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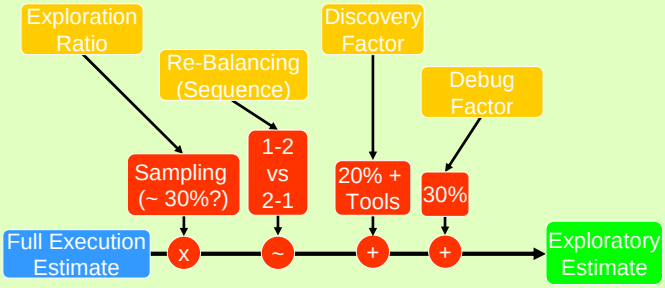

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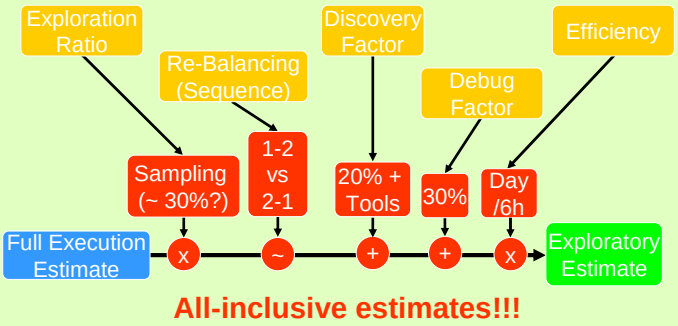
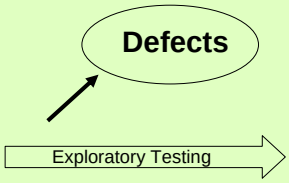


All-inclusive estimates!!!

The solution:



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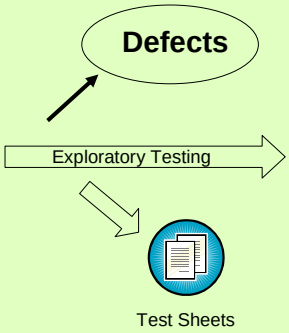

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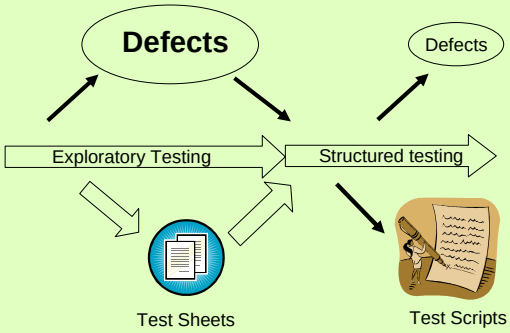

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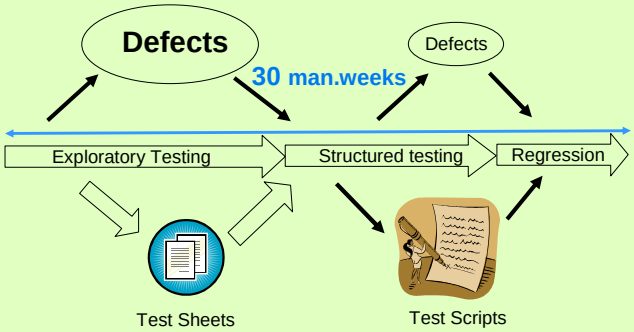
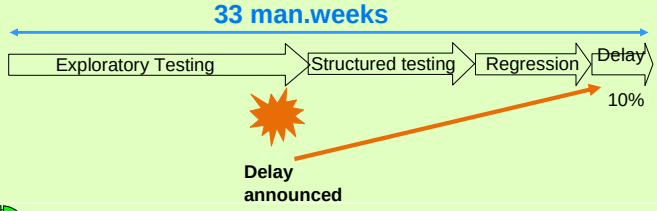


Did it work? Yes it worked!



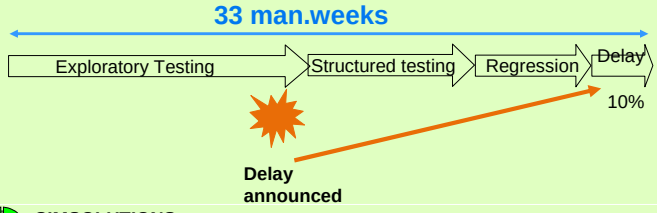
Did it work? Yes it worked!

~250 defects found, ~170 fixed

4 defects found during acceptance, 1 critical

1 new defect found in 6 month

Variability of estimates per functionality



Adaptation for the team:

Testers

- Looking inside the product
- Trusting the methodology
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Project Manager

- Understanding the approach
- Delegating control
- Avoiding over-reactions

Challenges for the Test Manager:

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Keeping an eye on everything

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Knowing what not to test

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Risk assessment

Product knowledge
Intuition

The next project:

Subset of previous system:

Migration + Top priority functionalities

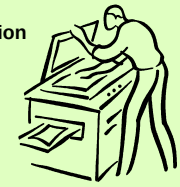
Similar Situation

Same Method

Exploratory phase, **structured** phase, **regression**

Similar results

2 man x weeks late (on 22 total)
55% of costs spent in exploratory phase



Lessons learned after 2 projects:

Learning curve complete
Reusing tools

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Reliability of estimates

High variability
Development quality

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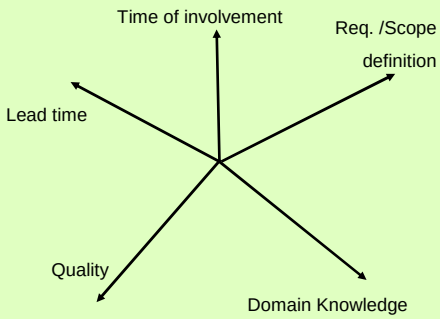
Long term issues

Product and Process Improvement

When can you use this approach?



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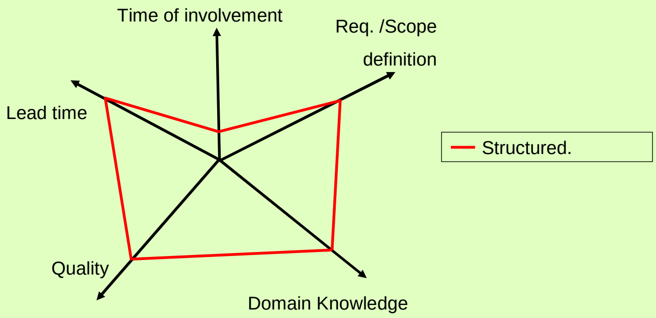

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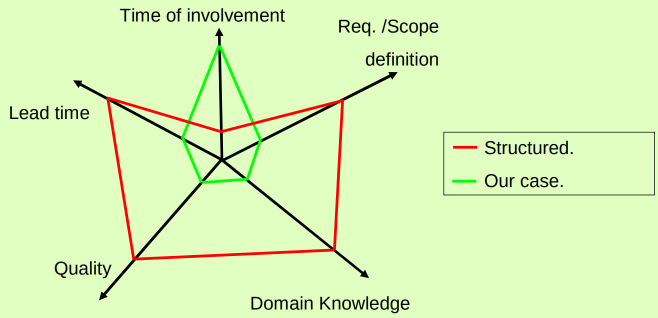

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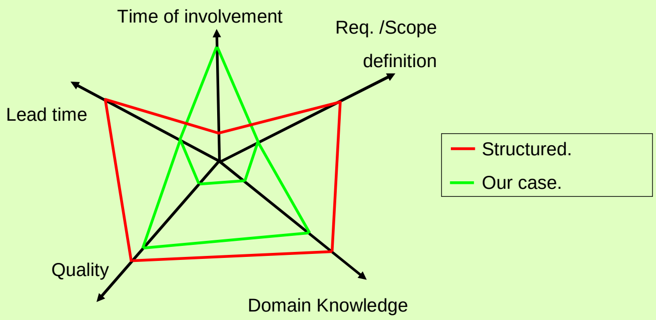

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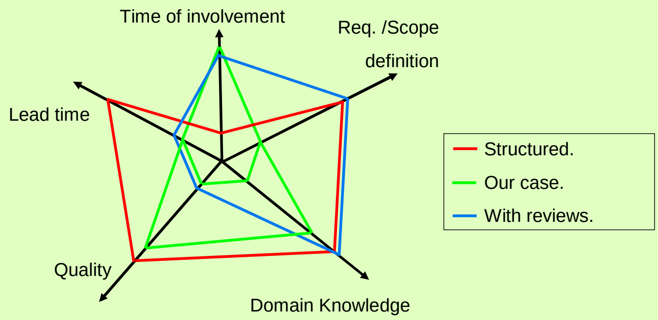

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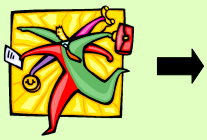

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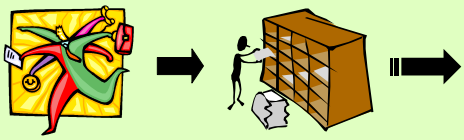

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