

Agile Testing Techniques

How to Incorporate Testers onto
Agile Teams

Alex Kell 12/2010

Twitter: @wiggly

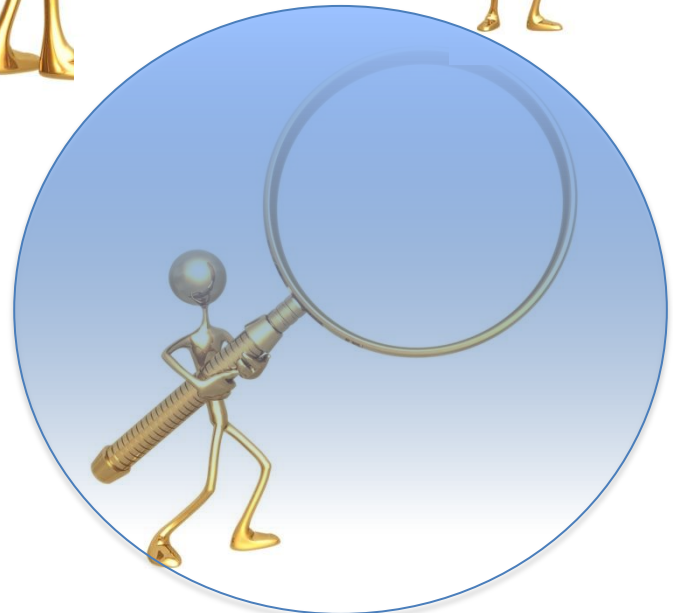
Blog: ManageToTest.com

Testers are like tigers

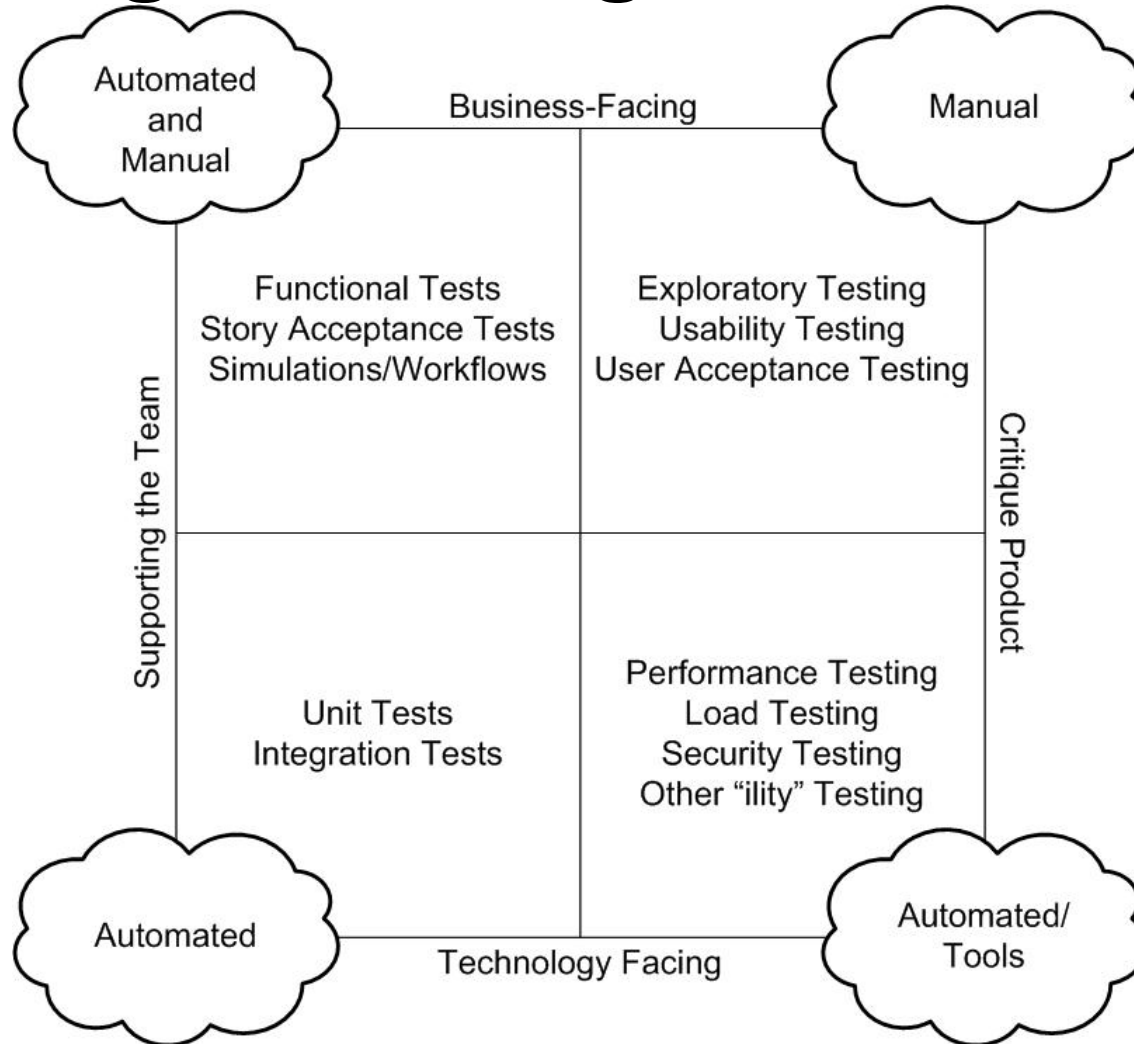


Photo by Michelle Meiklejohn

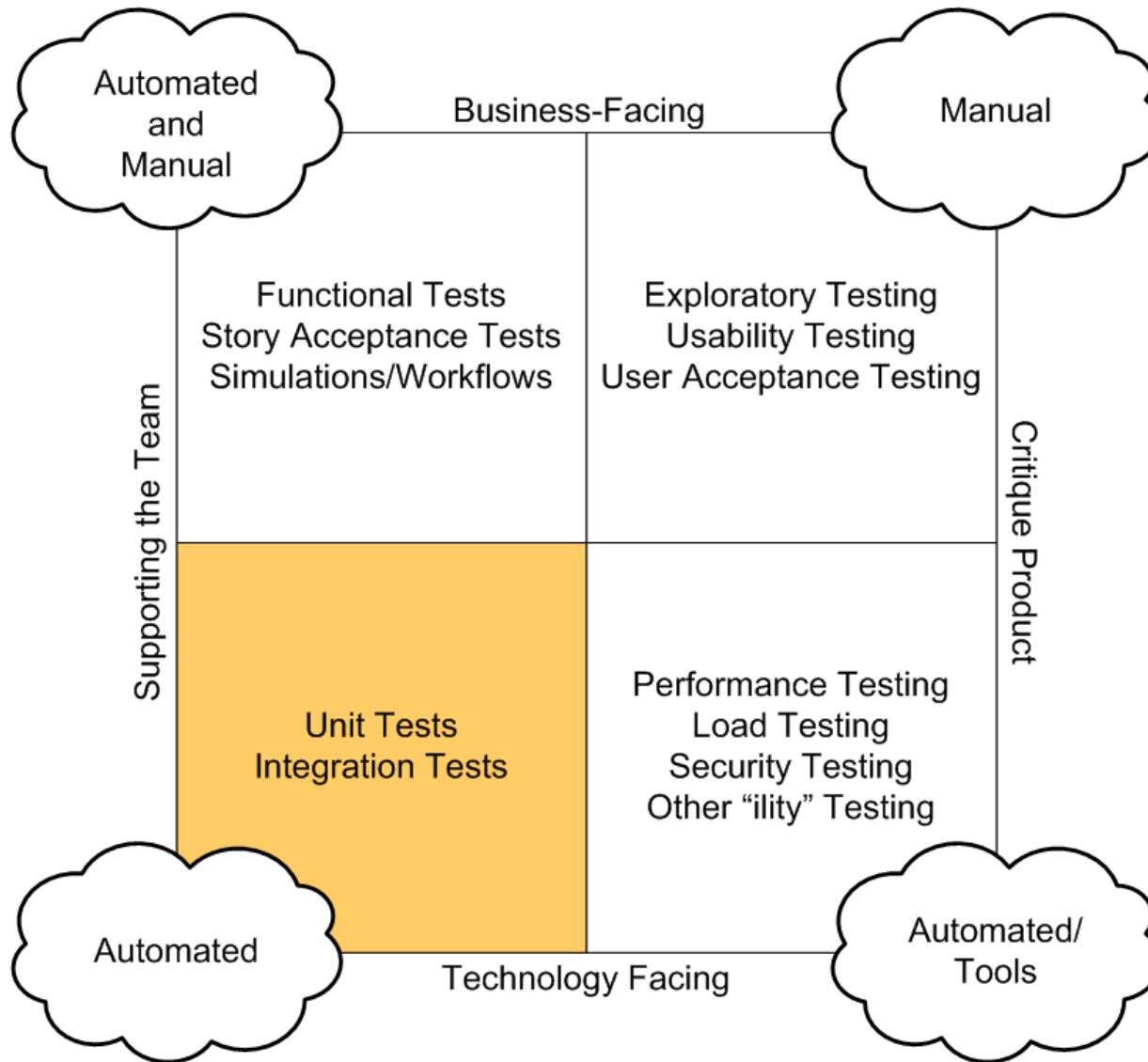
The Problem



Agile Testing Quadrants



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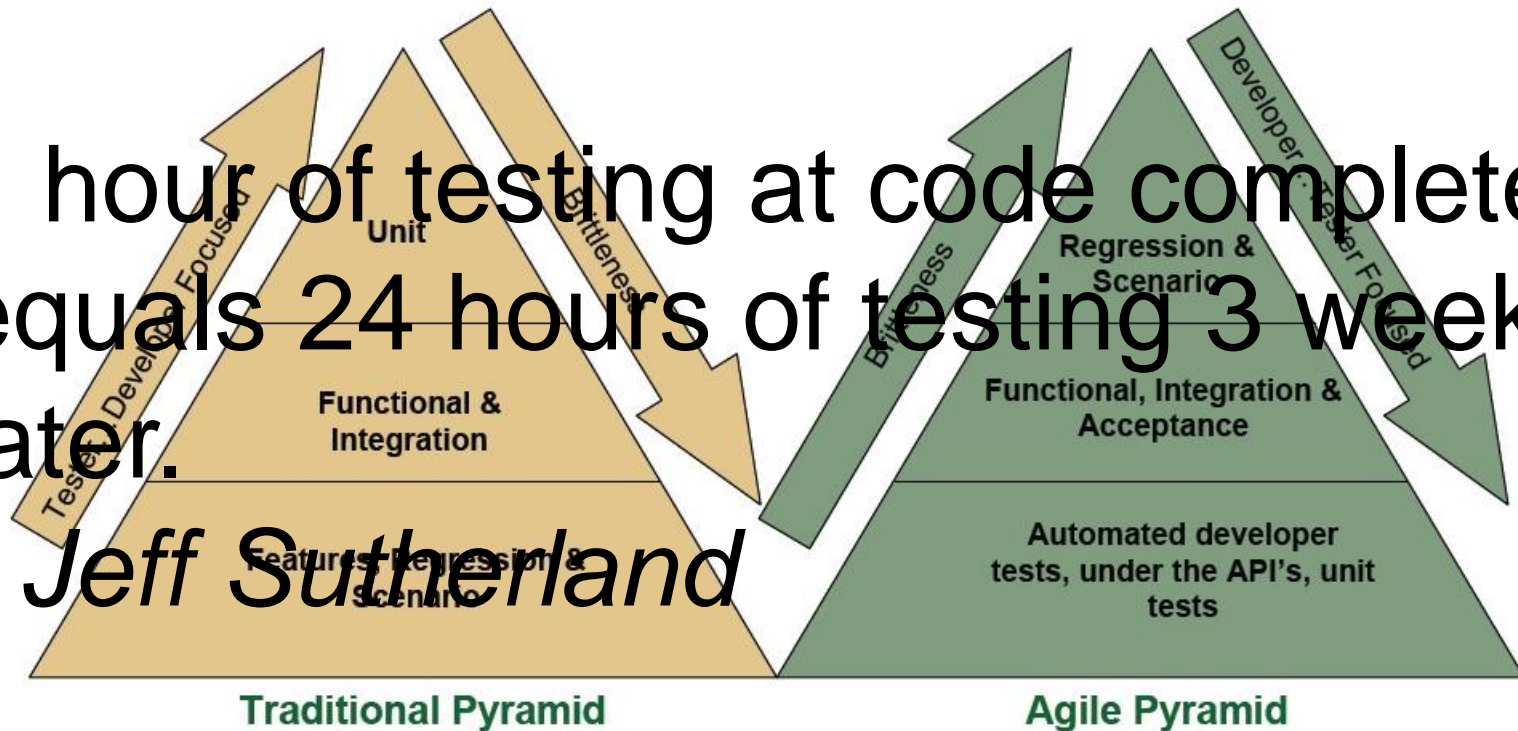


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The Automation Pyramid

1 hour of testing at code complete equals 24 hours of testing 3 weeks later.

- *Jeff Sutherland*



We need automated tests to provide fast feedback.

Someone needs to write these tests.

It has the word “test” in it, so it must belong to the QA/Test group.

The QA/Test group doesn't have much in the way of programming skills.

So, do testers need to be programmers?

No

But it can help.

Dev Shadowing/Pairing



Testers and Devs...together!

Test/Build Integration

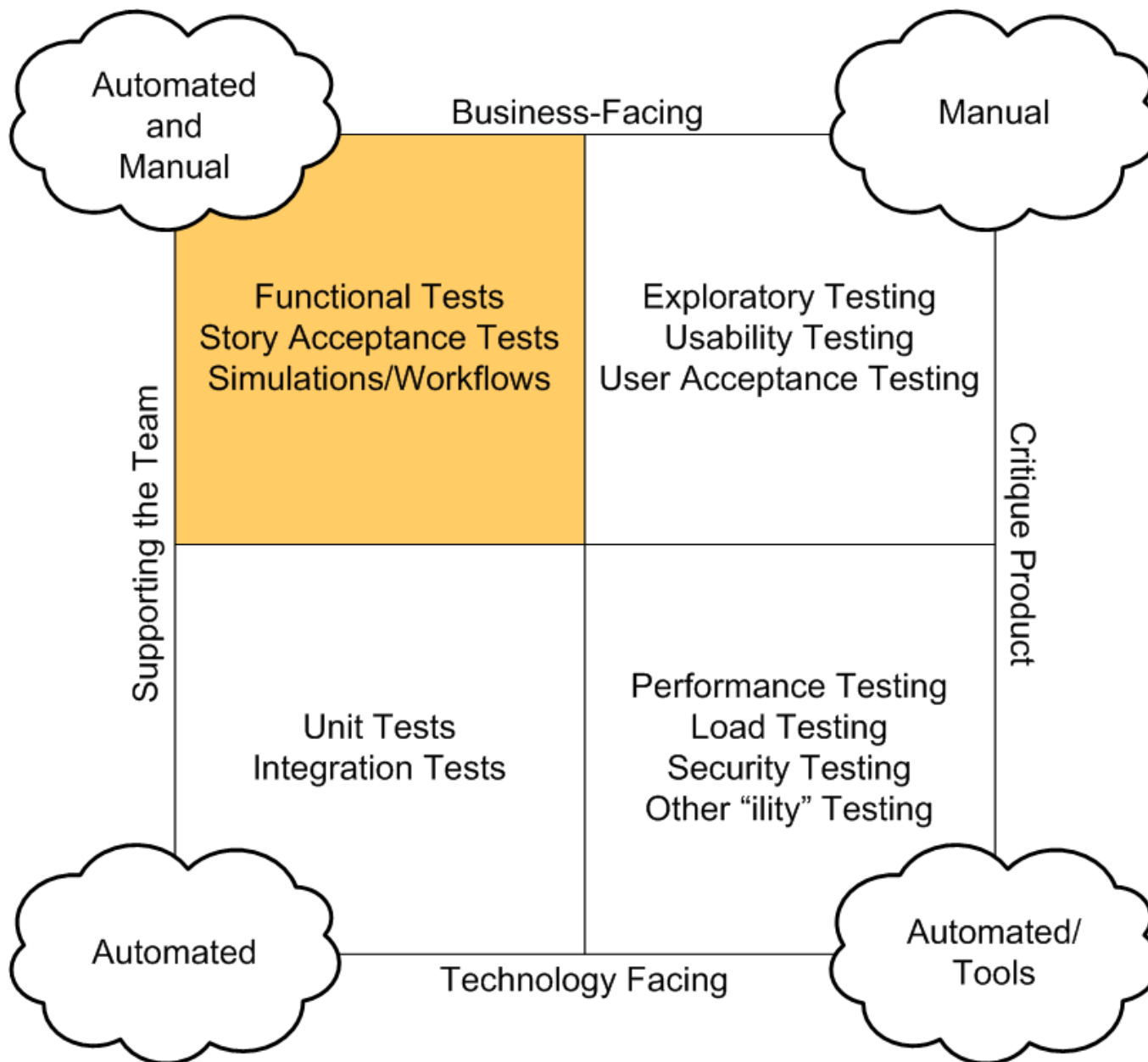
Check-In

Unit tests

Code-level automated tests (if fast)

Migration

All automated tests (including GUI)



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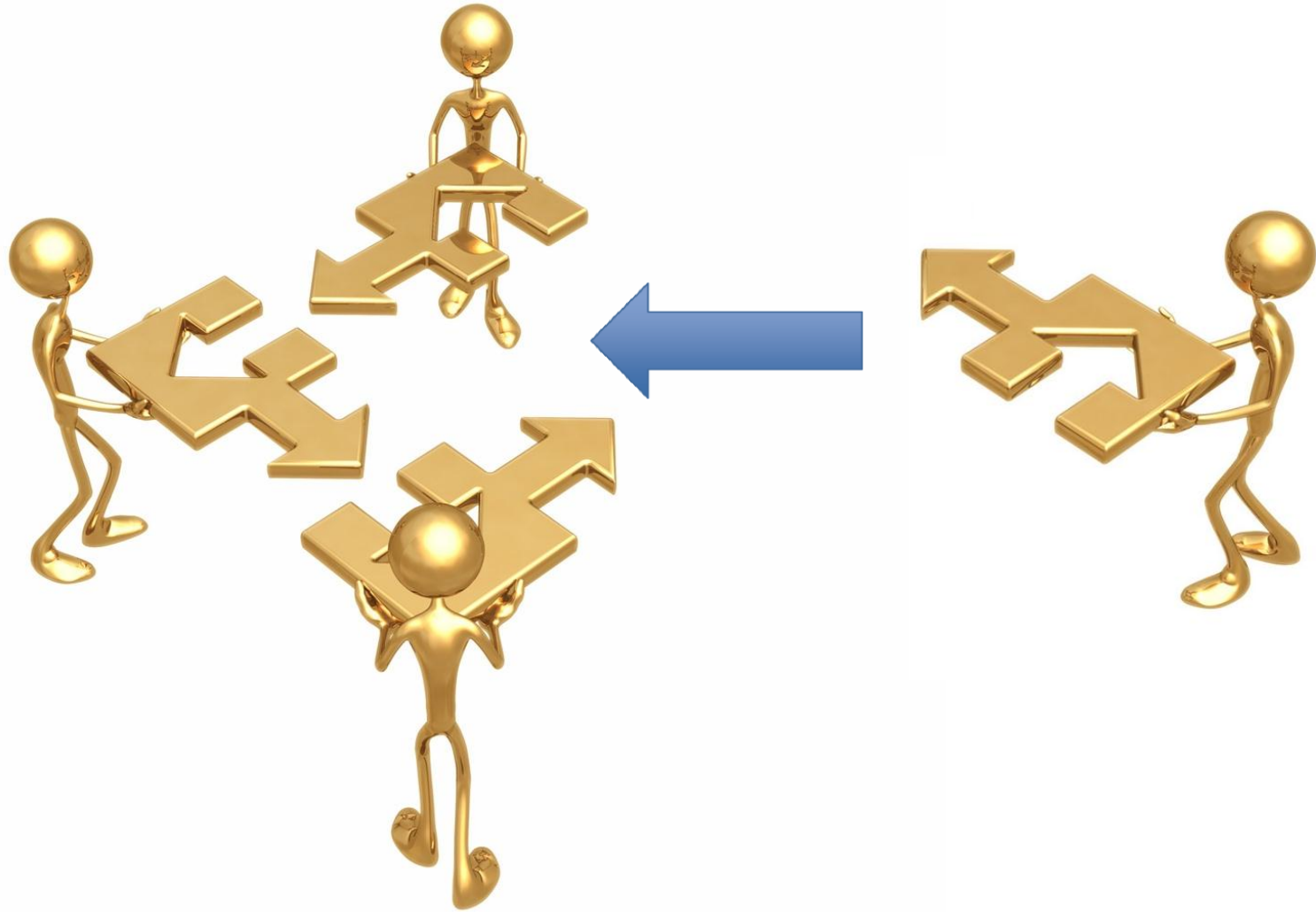
Story Acceptance Test Collaboration

- Verify Testability
- Check for gaps
- Clarify, clarify, clarify

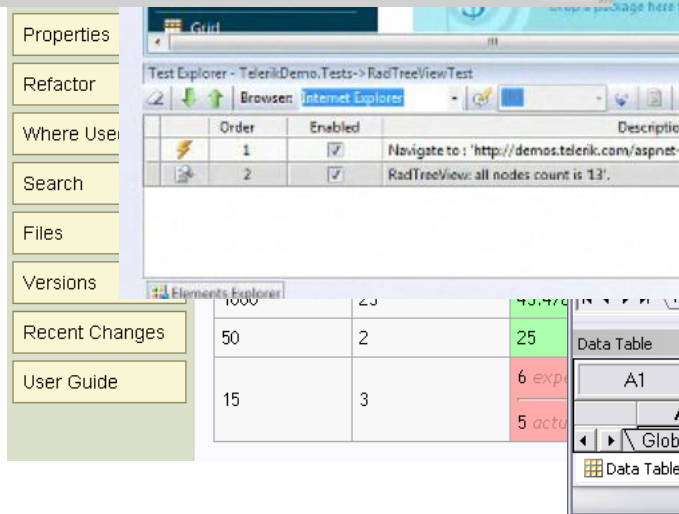
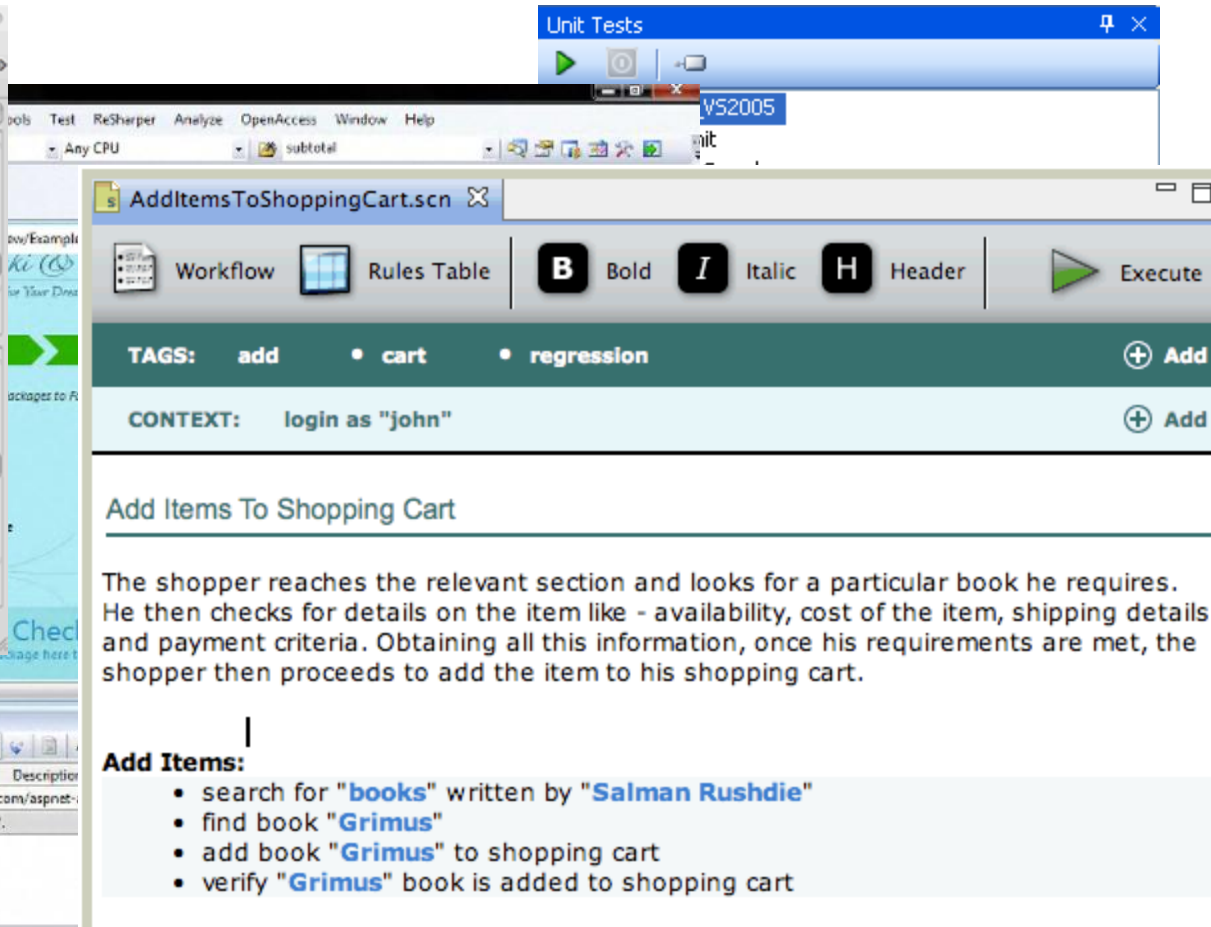
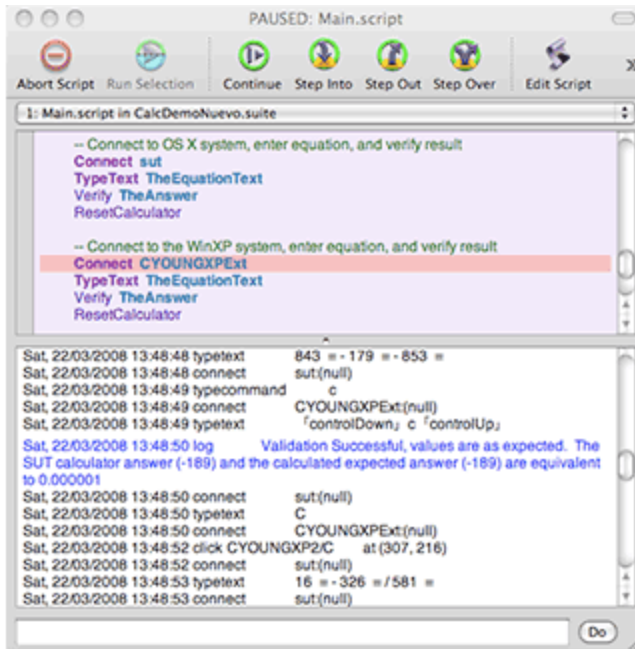


The Tester must **drive** the process!

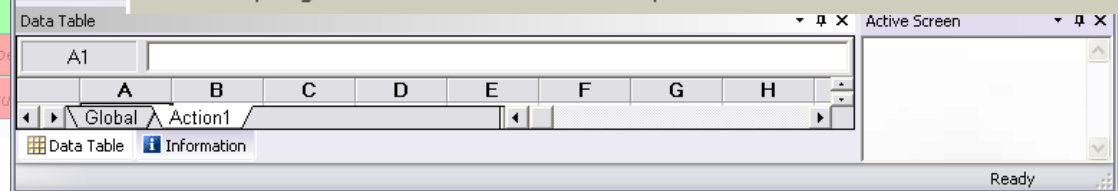
Tester Inclusion!



Automation



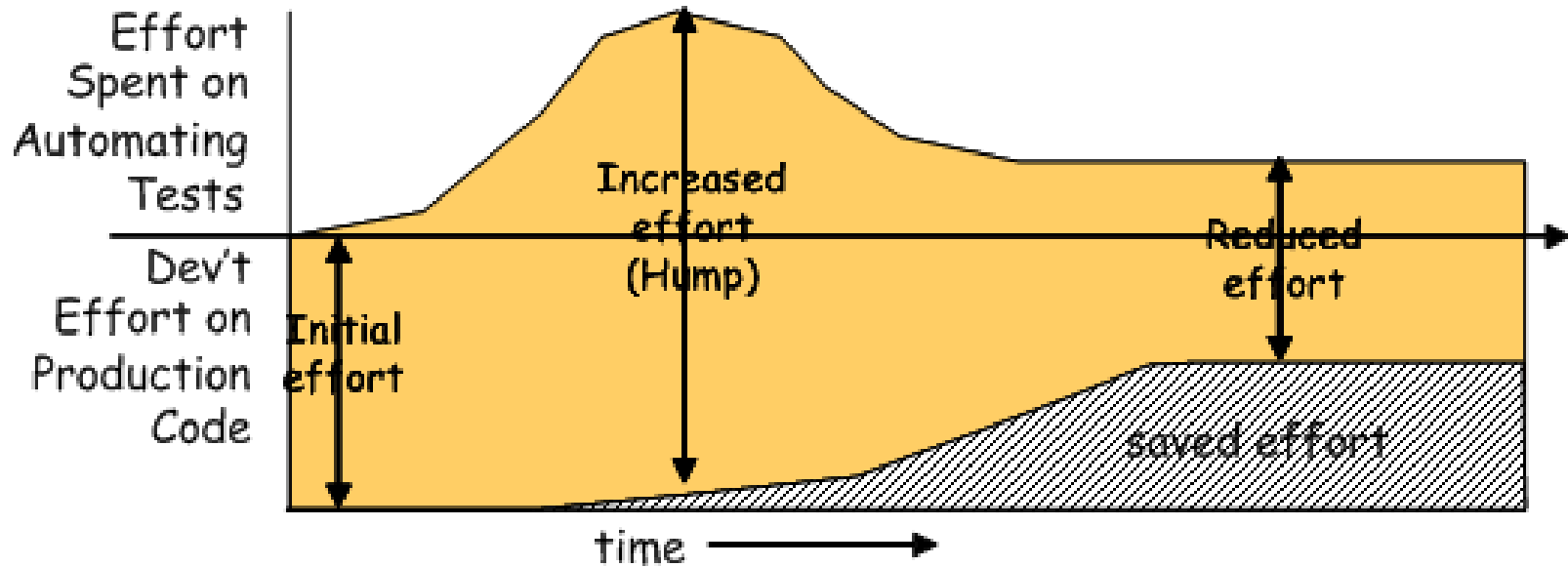
Test a script's generated stubs and method implementations



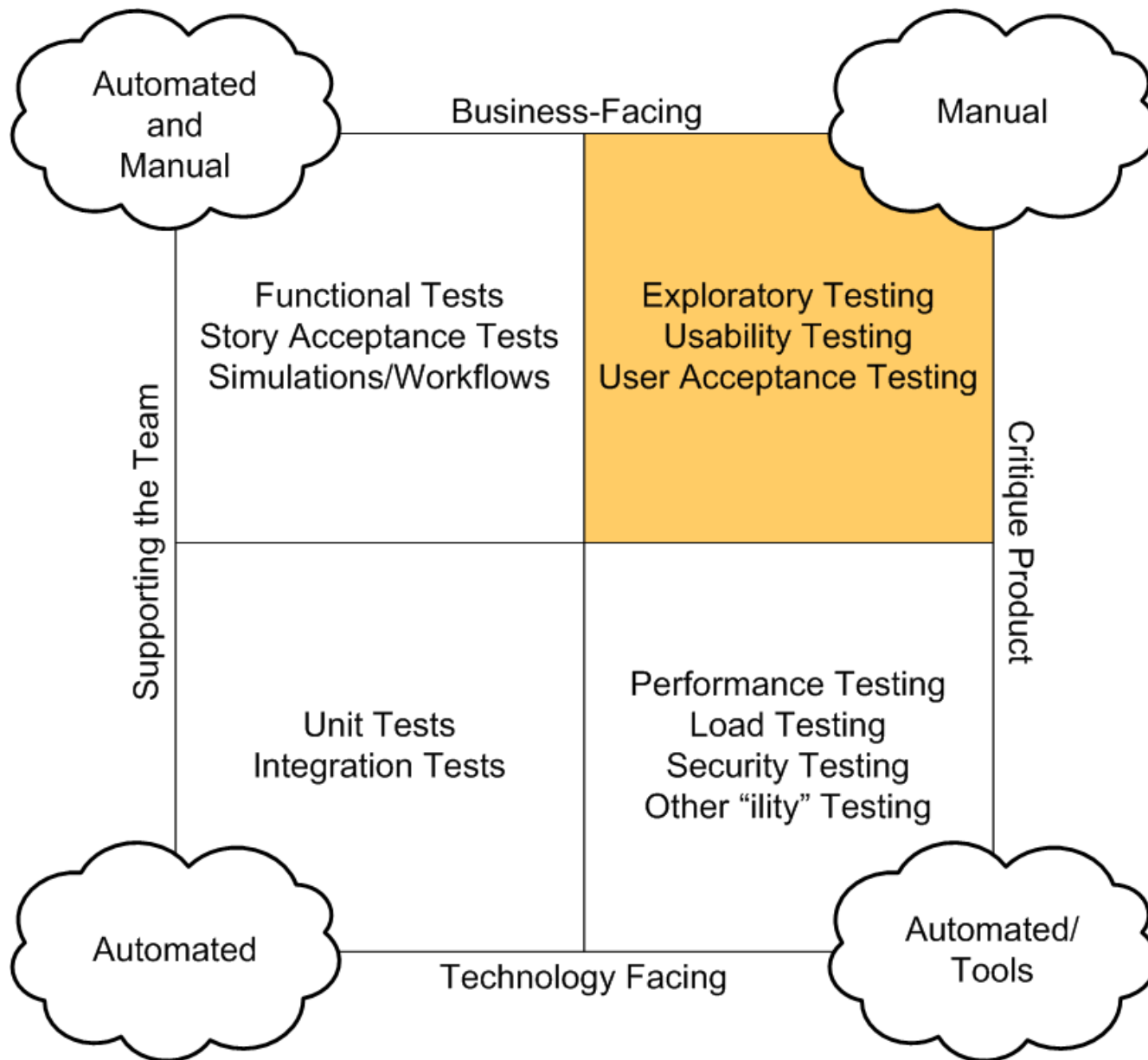
Automation:

- Encourages Experimentation and Innovation
- Is fast and persistent
- Allows for deeper and wider Exploration
- Is not free...

ROI of Automation



Copyright © 2003-2008 [Gerard Meszaros](http://xUnitpatterns.com)
"Goals of Test Automation" – <http://xUnitpatterns.com>



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Exploratory Testing

- Vs. Automation

Emphasizes individuals and interactions over processes and tools

- Discover tests, seek problems

Emphasizes responding to change over following a plan

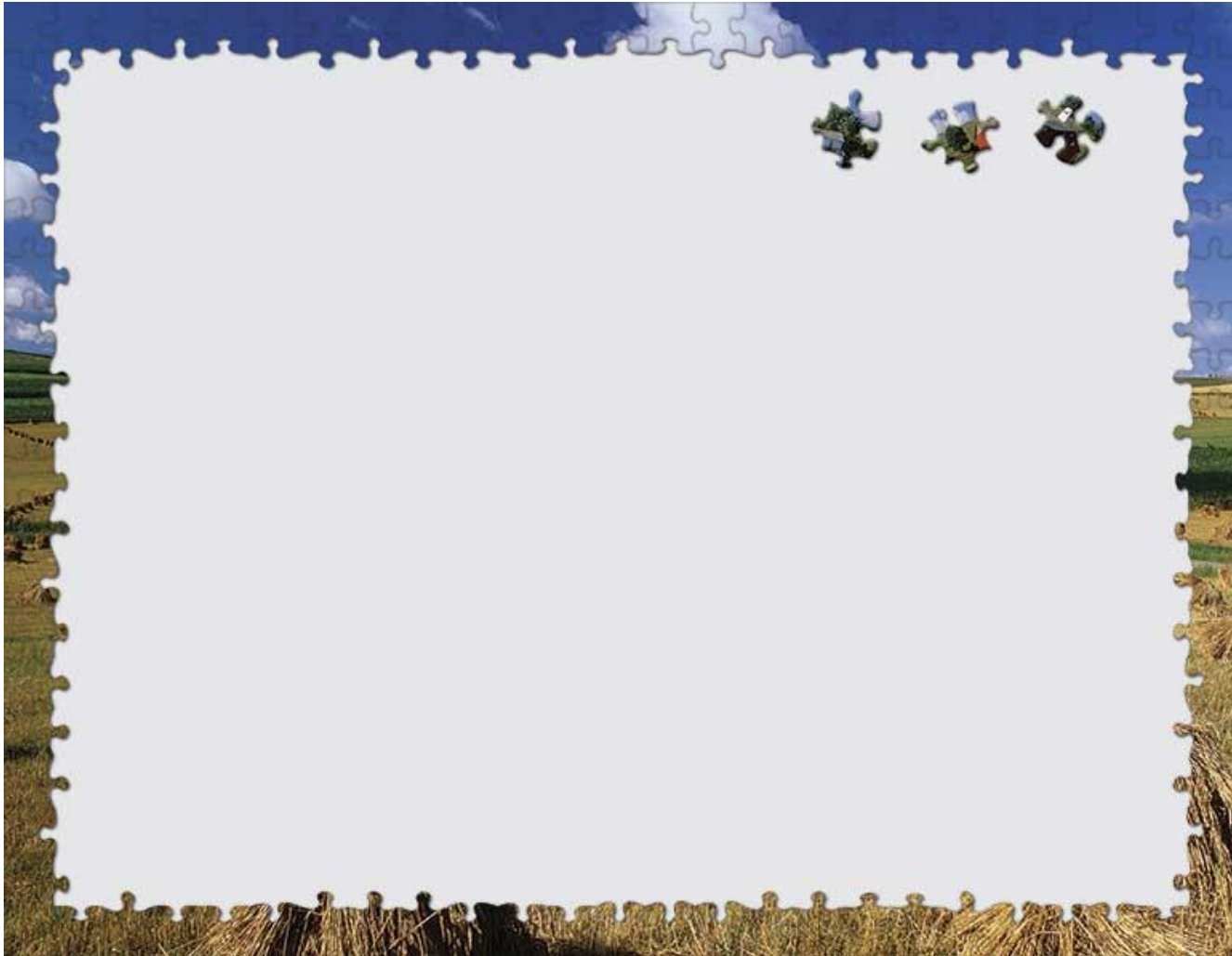
- Vs. Scripted Testing

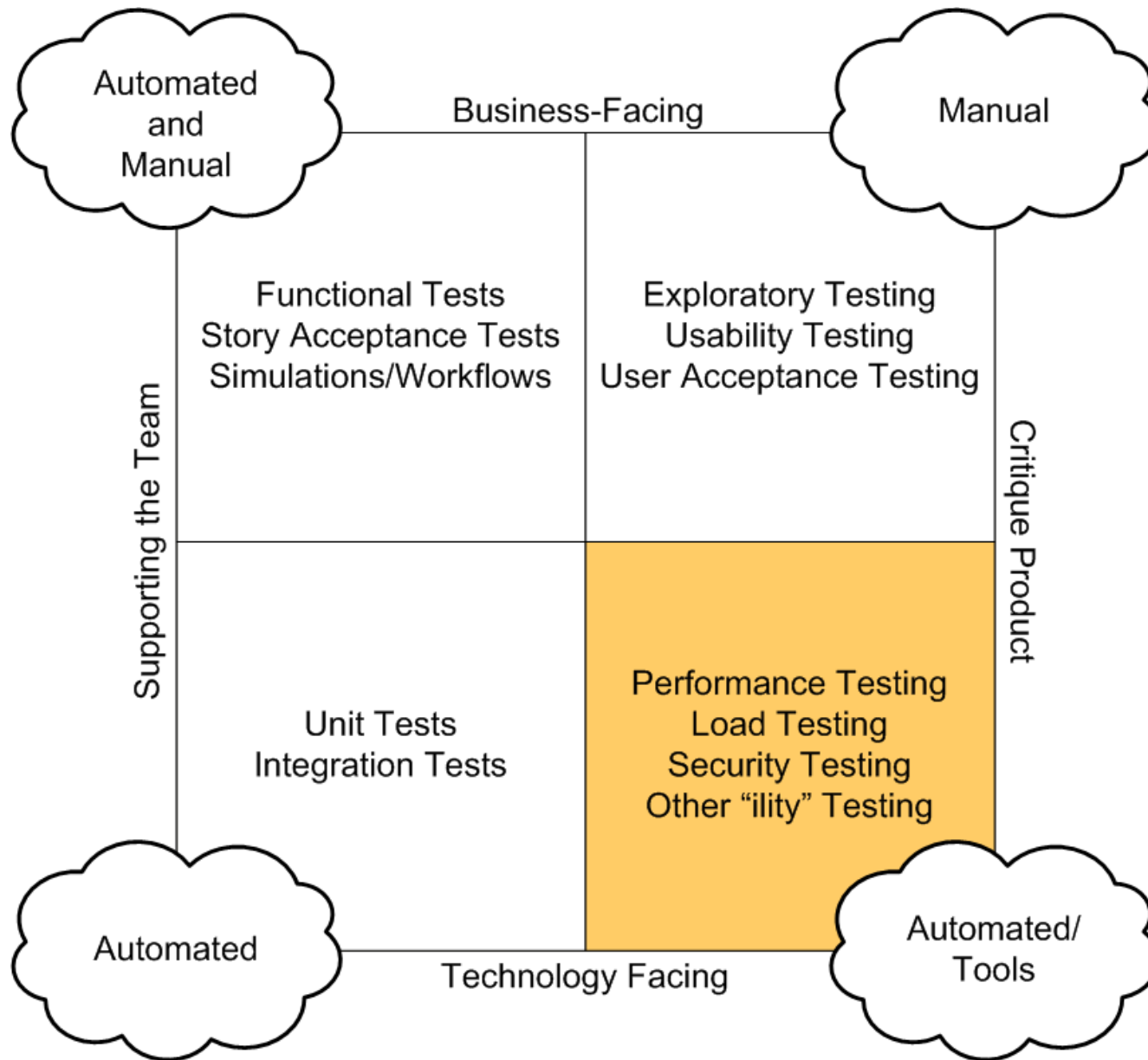
Emphasizes working software over comprehensive documentation

- Frequent feedback

Emphasizes customer collaboration over negotiated contracts

Session-Based Testing





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Four Basic Questions

- How Fast? ← Performance
- How Long? ← Stability
- How Often? ← Reliability
- How Much? ← Scalability

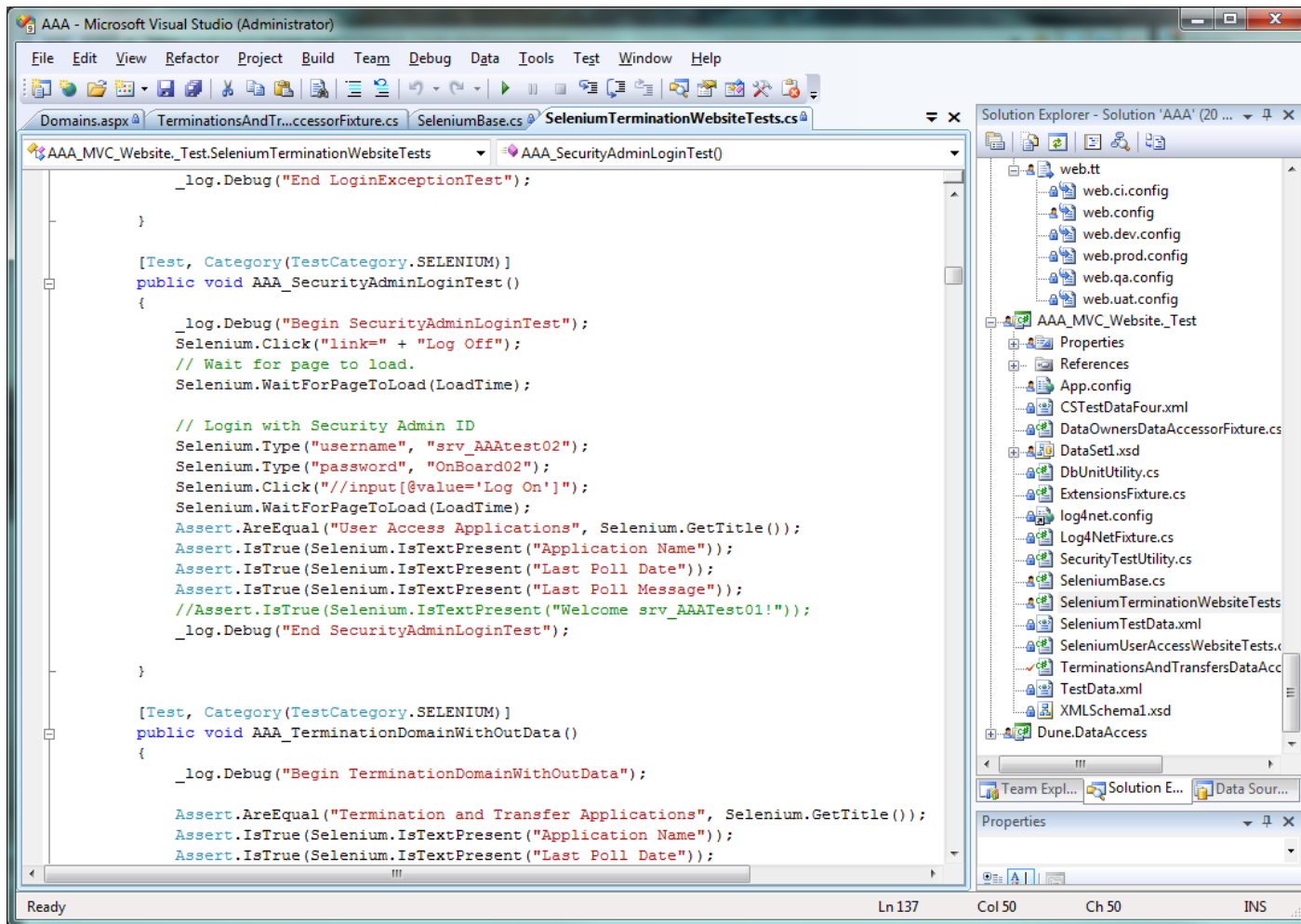
What did you say again?

- **Use the “Whole Team Approach”**
 - Get testers involved in all phases
- **Continuous Integration**
- **Automation**
 - For feedback and to aid testing
 - Executable Specifications
- **Techniques**
 - Pairing
 - Exploratory Testing (and SBTM)
 - Time for learning
- **Do Performance/“ilities” continuously**

What we do



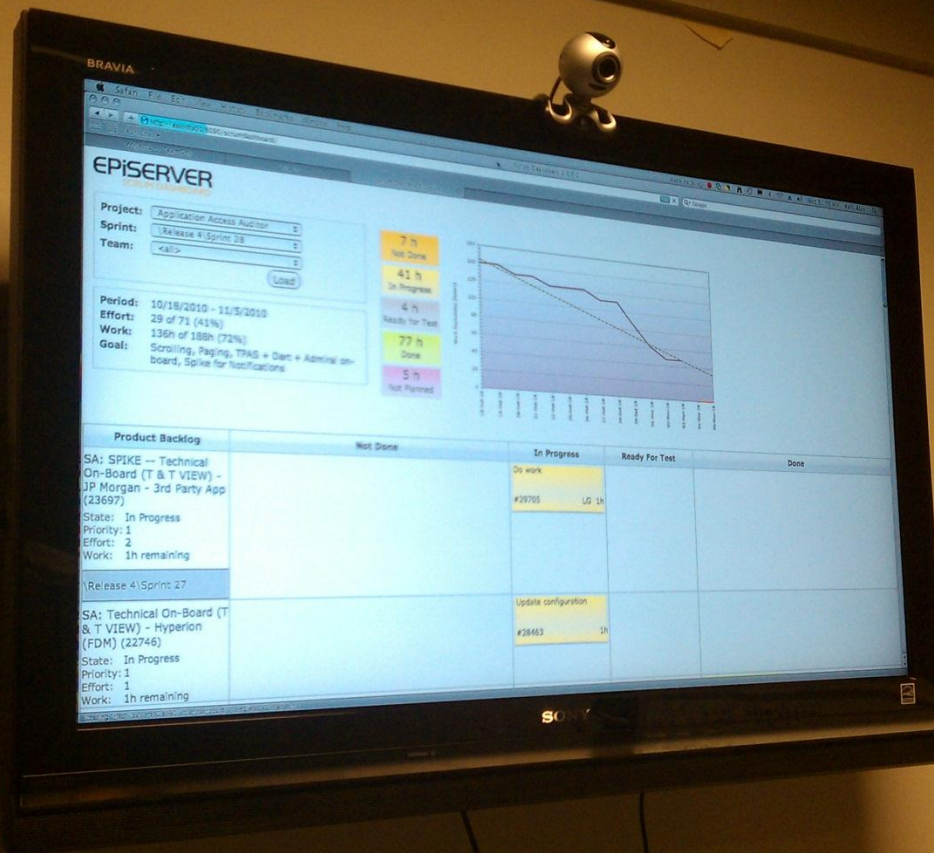






2010/11/03 11:00

Mobile Development



2010/11/03 11:01
Agile Development

References

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