



INTRODUCING LARGE SCALE AGILE TESTING

John Coogan, Oct 2013

ERICSSON OSS

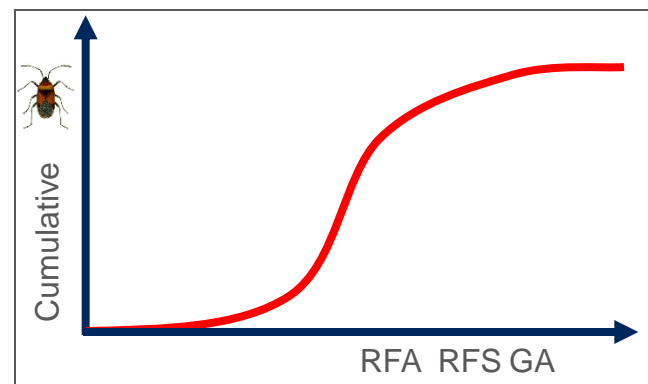
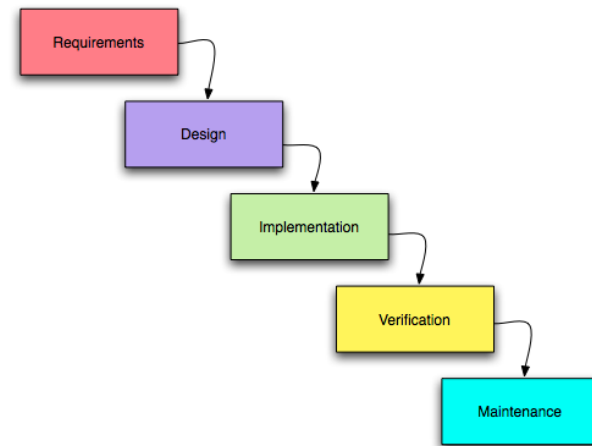
- › Operator Support System
- › 1 Billion Subscribers
- › 320 Operators
- › Over 1000 Deployments
- › PDU OSS Based in Athlone



Complex Networks, Simple Management

BACKGROUND

- › Incremental waterfall projects
- › 2 major releases per year
- › Heavy handover process
- › Back-ended test
- › Fault profile



WHY AGILE?

Change



- › New product and architecture
 - › New opportunity
- › Culture
- › Environment

Speed



- › Increased output
- › Shorter TTM
- › Maintain high level of quality

Flexibility



- › Decrease dependencies
- › Customer feedback

An Opportunity to Excel



**LIGHTSPEED IS TOO SLOW. WE'LL HAVE
TO GO RIGHT TO LUDICROUS SPEED.**

TEST STRATEGY: KEY POINTS

Quality in Teams



- › Development Team has test responsibility and ownership
- › Every sprint potentially releasable
- › Test and automated part of “done”

Continuous Integration



- › Continuous Integration and test at all levels
- › Fast Failure, fast feedback

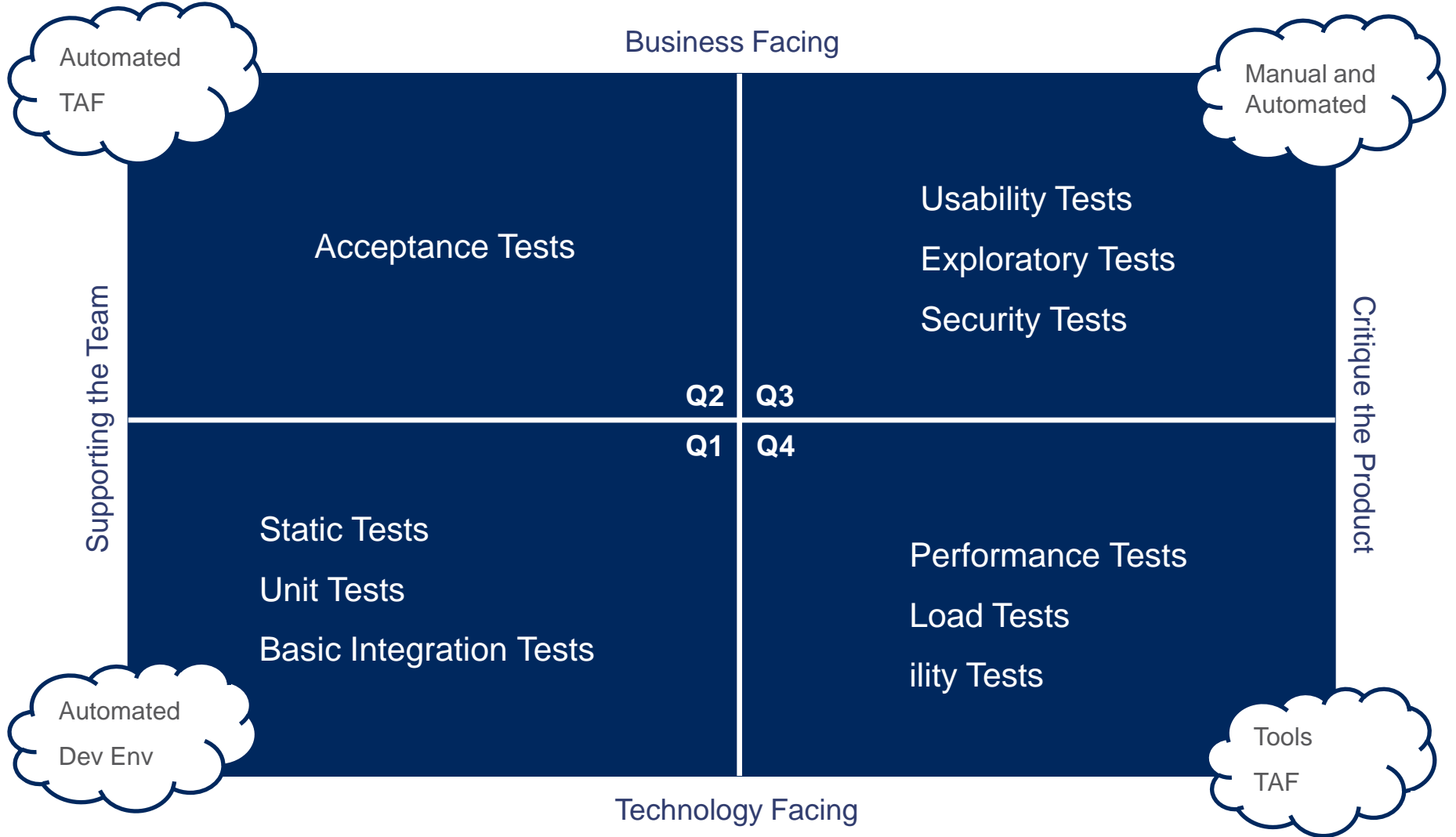
Customer Collaboration



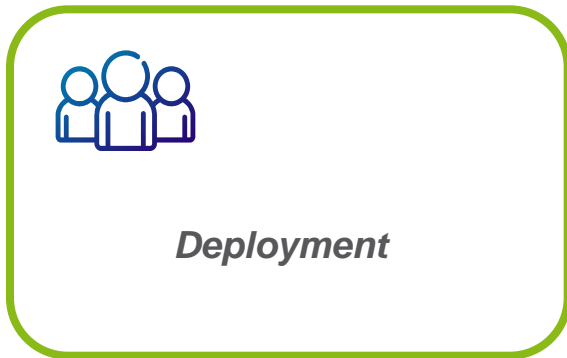
- › Reduced TTM
- › Customer focus - always on
- › Release Verification Clean Room and system level performance

Agile Principles: Better Quality

AGILE TEST QUADRANTS

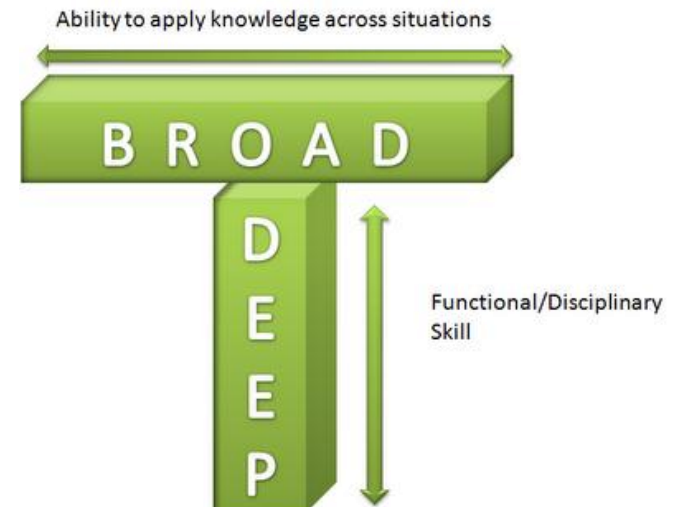
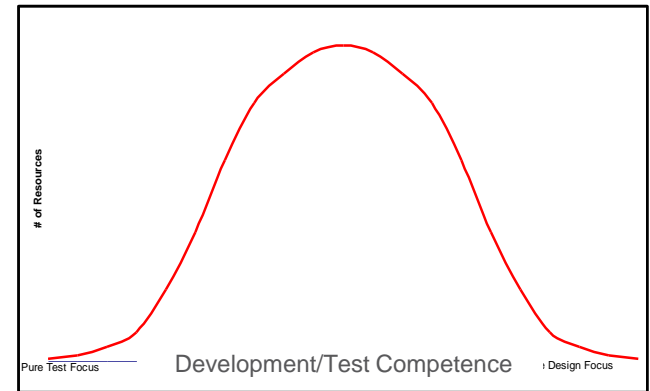


TEAM STRUCTURE



CHALLENGES – TEST PROFILE

- › Teams from various backgrounds
- › Dedicated testers versus generalists
- › Different levels of adoption
- › Reliance on others
- › Mindset!



CHALLENGES – INTEGRATION

- › Parallel development of CI Framework
- › Manual deployment of test servers
- › Early and frequent check-in
- › User story size
- › Big bang!



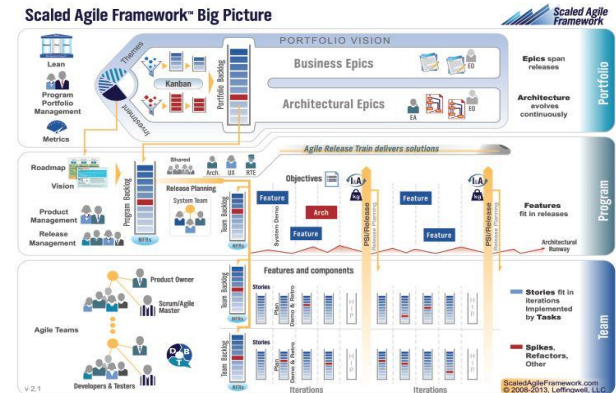
CHALLENGES – TEST ENVIRONMENT

- › Parallel development of platform and deployment procedures
- › Complex production environments
- › Evolving toolset
- › Competence level



CHALLENGES - SCALE

- › Large number of teams and rising
- › Strong focus on individual teams
- › Geographical diversity
- › Vision gets lost



BENEFITS



Ownership

Automation and Efficiency

Fast Feedback

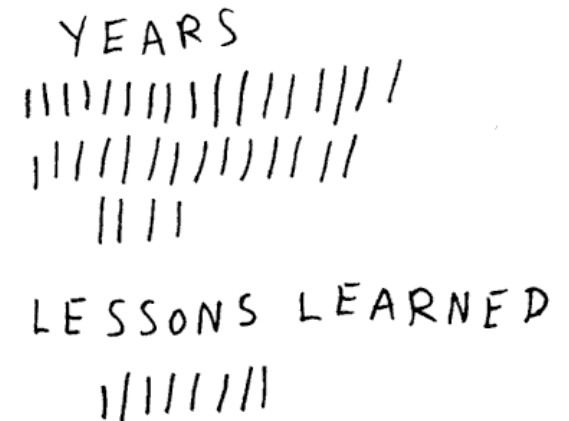
Customer Engagement

Quality Improvement

Knowledge Sharing and Collaboration

WHAT HAVE WE LEARNED?

- › Full versus Incremental Devolution of Test Responsibility
- › Whole Team Test Approach is, sometimes, not enough
- › The Value of Release Verification
- › Strong central strategy, decentralized execution
- › Test Coaching, Support to Teams
- › Dedicated Testers in Development teams



WHAT HAVE WE LEARNED?

- › Central provision of complex customer like test environment
- › Building a CI Framework and populating it with quantity and quality test cases takes time
- › Task force needed to drive key CI implementation
- › Performance test in development teams, small wins
- › Running Scrum ceremonies is the easy part...

YEARS

LESSONS LEARNED
|||||

Principles behind the Agile Manifesto.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

Business people and developers

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software

Customer Value Frequently

Working software is the primary measure of progress.

Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

Continuous attention to technical excellence and good design enhances agility.

Simplicity--the art of maximizing the amount of work not done--is essential.

The best architectures, requirements, and designs

QUESTIONS





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