

Traditional Testing R.I.P.

Alternatives to Testing

Some ideas

by Julian Harty



Today's climate

We live in an era where *quality has been replaced by speed* – people are trained to expect little to none, and are perfectly happy getting it.

In such world, testing for quality must redefine itself and find a new purpose.

Goranka Bjedov (Google)



Speed *is* the competitive advantage

- Faster, iterative, releases
- Testing for Productivity vs. Testing for Quality



Why test *at all*?

- Testing slows projects down
- It can mislead, or divert attention from other, more important work
- Most testing is futile!
- What's the risk of failure?



Cost of “doing the right thing”

“the cost of “doing it right” is far higher than the cost of only responding when someone does find a problem”

John Viega: CTO McAfee: The myths of security



Some impacts of “testing”

- Incorrect diagnosis
- Incorrect changes
- Irrelevant bugs

- Still unfixed bugs
(what we know *could* hurt us...)



Checking vs. Testing

Checking Is Confirmation

Testing Is Exploration and Learning

Checks Are Machine-Decidable; Tests
Require Sapience

<http://www.developsense.com/blog/category/testing-vs-checking/>



Some outputs of testing

- Data
- Error logs

Can we get these from other sources?



Watch, Correct, Learn

- Devise ways to quickly detect “undesirable effects”
- Use early warning mechanisms
- Implement fast, robust, mitigation
- Do root-cause-analysis
- Create automated tests as “guard code”



Canaries

- What are they good for?



Canaries

- What are they good for?
- We expect some to die

R.I.P.

Cheep
(2010)



Contributory Success Factors

- Quality and Speed of feedback
- Perception of failure
- Time to address and fix issues
- Risk and cost of failure
- The Art of Customer Relationships



What about automated tests?

- Regression Tests
- Continuous Build & Visible Results
- Security Tests
- T.D.D.



What about the Testers?

- “Traditional Testing” is waning
- Change brings Opportunity
- We can choose to apply our skills to more valuable & rewarding work



Testing competencies

- Recognizing there may be alternatives
- Design (of) Experiments
- Sapient Testing
- Roles
 - Engineers
 - Inquisitors
 - Reporters
 - Advocates



Strengths of Testers

We can

- Produces answers sooner
- Reduce doubt / Increase confidence
- Advocates for: bugs, users, developers, software
- Be Trusted Advisors
http://www.stickyminds.com/s.asp?F=S7849_CP_2
- Debunk mysteries & superstitions
- Test for productivity (better, faster, cheaper)
- Test for quality (of the end product)
- Be disruptive; yet likeable :)



Testing as a Leadership skill

- Probe
- Experiment
- Execute
- Decide
- Move on...



What now?

- Rethink what you do
- Consider:
 - The value you offer
 - The value you deliver
 - Your competencies
 - How you work
 - Who you work for
- Be willing to give up any “kindergarten testing”



Improving in your current role

Sapient Testing: Engage your brain when testing software

<http://www.satisfice.com/blog/archives/99>

<http://www.satisfice.com/blog/archives/358>

- Trinity Testing

<http://julianharty-softwaretesting.blogspot.com>

- Use automation appropriately



Possible new roles?

- Technical Due Diligence
- Disruptive Agent of Change
- Chief Engineer
- Spy?



Read on...

- Gordon M. Bragg: Principles of Experimentation and Measurement ISBN 0-13-701169-5
- Lloyd Roden: Trusted Advisors
http://www.stickyminds.com/s.asp?F=S7849_CP_2
- Alan Richardson: Be a better tester, be a Beta tester
<http://www.compendiumdev.co.uk/eurostar2003/default.php>
- Julian Harty: Trinity Testing
<http://julianharty-softwaretesting.blogspot.com>
- Dr Stuart Reid + Julian Harty
- Non Functional Testing (NFT) <http://www.commercetest.com/>
- P.T.M.M. <http://julianharty-softwaretesting.blogspot.com>



Q & A

Now?

Later?

julianharty@gmail.com

