

A Revolution in Test Management



LYNN MCKEE

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@lynn_mckee #testing #management #leadership #stepauto

Changing Landscape of Software Testing



Management Roadblocks



Beyond the Narrow Vision of Testing



Valuing Testing Excellence



- Testing is not focused on confirmation, verification and validation
- Testing is better viewed as an interactive cognitive process

Valuing Testing as Sapient



- A *sapient* activity is one that requires an engaged, thinking human to perform
- A good tester doesn't just ask

Pass or Fail?



- A good tester asks

“Is there a problem here?”



- James Bach & Michael Bolton, Rapid Software Testing

Valuing Testing as Exploratory



- Our community* sees testing as a combination of

exploration

discovery

investigation

learning

- Tests are aimed not only at repeatability, but also for *adaptability, value, and threats to value*

*Context Driven Testing Community
- James Bach & Michael Bolton, Rapid Software Testing

Valuing Testing as Insight



Goal is “To try it and learn,
sufficiently, everything that matters
about whether it can work and
how it might not work.”

- James Bach & Michael Bolton, Rapid Software Testing

Beyond Best Practices & Standards



What do Standards & Templates Provide?

Potential Pros

- May provide standardization across projects and test teams within organizations
- May offer sense of security in the comprehensiveness of the testing effort
- May provide a starting point for those new to testing
- May provide governance and address audit requirements
- May provide visible, tangible artefacts to associate with the testing practices

Probable Cons

- Only standardizes the look of the testing practice not the effectiveness; false sense of security
- Can result in cookie cutter approaches
 - Limit adaptability and scalability
 - Limit thinking process and creativity
- Artefacts can provide the illusion of rigor and control within the testing process
- Misplaced sense of value in the testing practice

Valuing Adaptability



- Adopt the mindset that there are no *best practices*, only good practices in context
- Encourage diversity in testing approaches, skills and techniques
 - Consider exploratory testing, session based test management, test framing, etc
- Embrace flexibility and scalability in documentation
 - Develop documentation that is readily consumable by the testers and stakeholders
 - Challenge notions of regulatory or audit requirements for extensive documentation

Beyond Prediction & Control



Valuing Reality



- Testing projects are rarely delivered as initially planned
- Pre-emptive and prescriptive approaches are ineffective and low value
 - attempts to control testing are ineffective, change is inevitable
 - it is impossible to eliminate black swans and unknown unknowns that jeopardize testing efforts and project success

Valuing Empowerment & Sapience



- Testers are highly knowledgeable, skilled members of your project teams
- Testers need to be empowered to make decisions about their testing
- Testing is exploratory, continually revealing new insights that drive change in the direction of the testing and potentially the project

Valuing Exploratory Testing



- Exploratory software testing is...

- a *style* of software testing
- that emphasizes the *personal freedom* and *responsibility* of the individual tester
- to continually optimize the *value* of his or her work
- by treating test design, test execution, test result analysis, and test-related *learning* as *parallel* activities
- that run *parallel* throughout the project.



Highly
Accountable



“Parallel
test design,
test execution, and
learning.”



Manageable
&
Measurable

- Cem Kaner, James Bach & Michael Bolton,

Beyond Delivering Pretty Packages



Valuing the Testing Service



- **Redefine and communicate the testing service**
 - Testing is an information service; gathered through exploration, discovery, investigation, and learning
 - testing serves to illuminate, not to achieve arbitrary deadlines and coverage targets
- **Provide transparency to the complexity of testing and inevitability of change**

Valuing Inquiry & Context



- Establish measurement programs that tell the testing story
 - implement simplistic, qualitative measures over complex, quantitative measures
 - stories provide rich descriptive detail that sets quantitative results into their human context
- Question the validity of measurement models
- Use metrics to drive inquiry rather than to control

Transforming the Testing Service



- Educate on the need to move beyond testing that is focused on confirmation, verification and validation
- Implement sapient testing with an emphasis on exploration, discovery, investigation and learning
- Incorporate exploratory testing; provide proper training and coaching for testers
- Understand how to influence and implement change
- Be passionate about software testing and the potential for your team and organization
- Empower your testers!

Beyond Testing as a Career Stepping Stone



Value Inspired and Passionate Testers



- Recruit people passionate about the craft
- Provide ample opportunity for people to develop, and to fuel their passion and energy

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- Courses & Certifications
- Conferences & Workshops

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- Organizations & Associations
- Webinars & Interviews
- Books, Magazines, Newsletters
- **Twitter**, Discussion Forums & **Blogs**
- **Peer Conferences, Weekend Testing**
- Internal Cross Training & Lunch and Learn Sessions
- **Networking, Networking, Networking**

Beyond the Path of Least Resistance



A Journey in Advocating



A Fable About Testing



- Jerry Weinberg, Tea Time with Testers April 2011 Issue

Checking Your “Baggage”?



Questions?



Lynn McKee
Quality Perspectives

Calgary, AB Canada

lynnmckee@qualityperspectives.ca

www.qualityperspectives.ca



lmmckee



@lynn_mckee



lynnmckee

Web Resources



- **Michael Bolton**
 - <http://www.developsense.com>
- **James Bach**
 - <http://www.satisfice.com>
- **Cem Kaner**
 - <http://www.kaner.com>
- **Jerry Weinberg**
 - <http://www.geraldweinberg.com>
- **The Association for Software Testing**
 - <http://www.associationforsoftwaretesting.org/training/>

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 - by James Bach and Michael Bolton, http://www.satisfice.com/info_rst.shtml
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 - by Cem Kaner, <http://www.kaner.com/pdfs/ETat23.pdf>

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 - by Mary Lynn Manns and Linda Rising

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 - by Cem Kaner, <http://www.kaner.com/pdfs/metrics2004.pdf>
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- **Measurement Issues & Software Testing**
 - by Cem Kaner http://www.kaner.com/pdfs/measurement_segue.pdf
- **The Darker Side of Metrics**
 - by Doug Hoffman, <http://www.softwarequalitymethods.com/Papers/DarkMets%20Paper.pdf>