



MARCH 12-14, 2013



Finding Defects: Tips, Tools & Techniques

Session-Based Test Management

Presented By:
Paul Carvalho
Testing/Quality/Agile Coach
Software Testing and Quality Services

 @can_test



Get Things Done



Challenges:

- 1) Internal interruptions
 - e.g. mind wanders, yaks, food/drinks, Internet searches, etc.
- 2) External interruptions
 - e.g. email, people coming by, phone, etc.



What do you need to get done?

- Make a To Do list and prioritize it:
 - Meetings (project updates, daily stand-ups, ...)
 - Research & investigation
 - Set up a test environment
 - Test something
 - New feature testing
 - Regression testing
 - Smoke/Sanity testing, ...
 - Create/maintain automation scripts
 - Create/maintain test documentation



Session-Based Test Management



STP ONLINE SUMMIT

SBTM in a Nutshell

- SBTM is a *container*
- It is a wrapper around your daily testing activities that allows you to:
 - Keep track of the **who, what, where, when, how** and **why** of the testing performed
 - Generate new insights and patterns into the testing activities
 - Complement Exploratory Testing with a learning and knowledge-sharing framework

STP ONLINE SUMMIT

Where does it fit in?

Radiate information to Customers/Users

Radiate information to Development team members

Quality / Value

↕

Test Strategy

↕

SBTM

Q: Is SBTM for Agile? for Waterfall?

=> Yes.

Sits above the Testing activities and **below** the high-level reporting

Lab Environment Setup & Maintenance

Automation

Research & Investigation

Testing, Design, Test Case Execution

Bug Reporting

Test Documentation

Debriefs, Reviews

What SBTM is NOT

- SBTM is not a “type” or “approach” to Testing
- The following does NOT make sense:
 - “We do Functional testing, SBTM, Regression testing and some automation on our team.”
- SBTM is not Exploratory Testing
- SBTM is a way of managing **all** the daily testing work
 - It’s like the **Pomodoro Technique** - Get Things Done
 - If you choose to use SBTM, I recommend you use it to manage **all** your testing activities

SBTM Framework


- Four Basic Elements:
 - 1) Charters
 - Mission or purpose - it drives everything
 - 2) Time box
 - No interruptions for a set amount of time - stay focussed
 - 30 - 120 minutes (i.e. 1-4 pomodoros)
 - 3) Reviewable Result
 - Capture your thoughts, record observations, synthesize
 - 4) Debrief
 - Discuss/share your findings

STP ONLINE SUMMIT

Special Attention

- Charters are tricky. They take practice.
 - Elisabeth Hendrickson’s book “Explore It!” has the best coverage on Chartering I know.
 - EH’s book covers Exploratory Testing and not all sessions will necessarily be ET
 - In all cases, I often refer to this quote:


I keep six honest serving-men
(They taught me all I knew);
Their names are What and Why and When
And How and Where and Who.
~ “The Elephant’s Child” by Rudyard Kipling



STP ONLINE SUMMIT

! Extra Special Attention

- Debriefs are the hardest part of this whole framework
 - Giving and receiving feedback
 - Many ways to do it:
 - One-on-one
 - Team-based
- G. Weinberg on the *Satir Interaction Model*:
 - Intake
 - Meaning
 - Significance
 - Response



Practice



STP ONLINE
SUMMIT

Practical Tips

1. "Senior" Tester required for Test Lead role
 - Someone who is experienced and knowledgeable in Testing - to coach juniors and fill in gaps
 - Someone who is disciplined - to maintain the practice
 - Passionate - motivate others to learn and grow

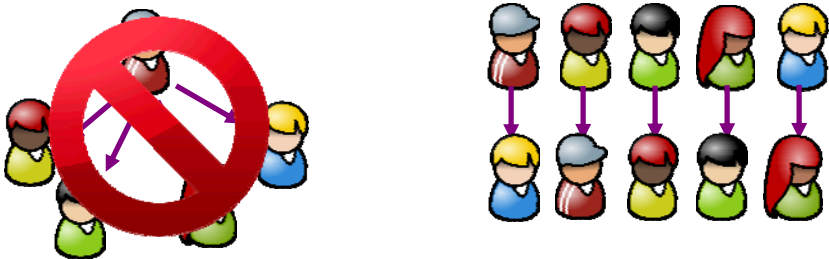


STP ONLINE SUMMIT

Practical Tips

2. Debrief Every Day

- These are like Scrum daily stand-ups
 1. Learn what happened
 2. Identify potential risks
 3. Set the priorities for the day ahead
- **Especially** do them when you are very busy!




STP ONLINE SUMMIT

Practical Tips

3. Writing good concise notes takes time, practice, and **good** feedback.

- A Test Session is like an experiment
- Think of a Science Report:
 - Objective/Purpose (the Charter)
 - Materials & Methods
 - Data and Observations
 - Conclusions/Inferences
- ❖ **WARNING:** Don't write essays!
- **Focus:** Clarity, Coverage, Completeness




STP ONLINE SUMMIT

Practical Tips

4. Testing History at your fingertips

- **Question:** Can you bring up all the testing notes for a particular feature or component within the last year? (you have 60 seconds)
- Having searchable notes helps build & share knowledge
- Strengthens regression testing
- Provides audit trail for when you need it





STP ONLINE SUMMIT


Practical Tips

5. Mine your Test Notes - Create *Test Guides*

- Project info: # testers, total time, # bugs found
- Setup info, environments tested, ...
- Important risks, unique charters
- Testing checklists, tables, mind maps, ...
- Issues, obstacles, roadblocks encountered





Accelerate Your Testing!
Exploratory Testing -> Automation Guide





STP ONLINE SUMMIT

 **Cautionary Note!**

- Metrics help you transition from SBT -> SBTM
- I only use metrics **within** the test team
 - I *don't* share them with anyone outside the team
 - Productivity Metrics are dangerous, especially for individuals -> always **aggregate** the data
 - Metrics will be gamed when testers are measured to them
- Good metrics provide insights, raise more questions

STP ONLINE SUMMIT

Tips on Metrics

- These examples follow the Satisfice SBTM framework
 - Tools: Sessions.exe (Perl) or CLR-Sessions (Ruby)
- The original Satisfice SBTM framework suggests the following *Activity Hierarchy* for a tester's work day:

```

graph TD
    all_work[all work] --- non_session[non-session inferred]
    all_work --- session[session]
    session --- opportunity[opportunity]
    session --- on_charter[on charter]
    on_charter --- test[test]
    on_charter --- bug[bug]
    on_charter --- setup[setup]
    
```

(FYI: Test cases happen in here somewhere)

This is okay for a start. With experience you may expand this view/model.

STP ONLINE SUMMIT

Starter Metrics

- The 'Sessions' tool includes a spreadsheet called "et.xls"
 - Open it. Point it to your data files. Update it.
 - Basic data reports on *Activity Hierarchy* elements:

Date	07-Mar
Number of Sheets	675
Bugs Reported	795
Issues Reported	30

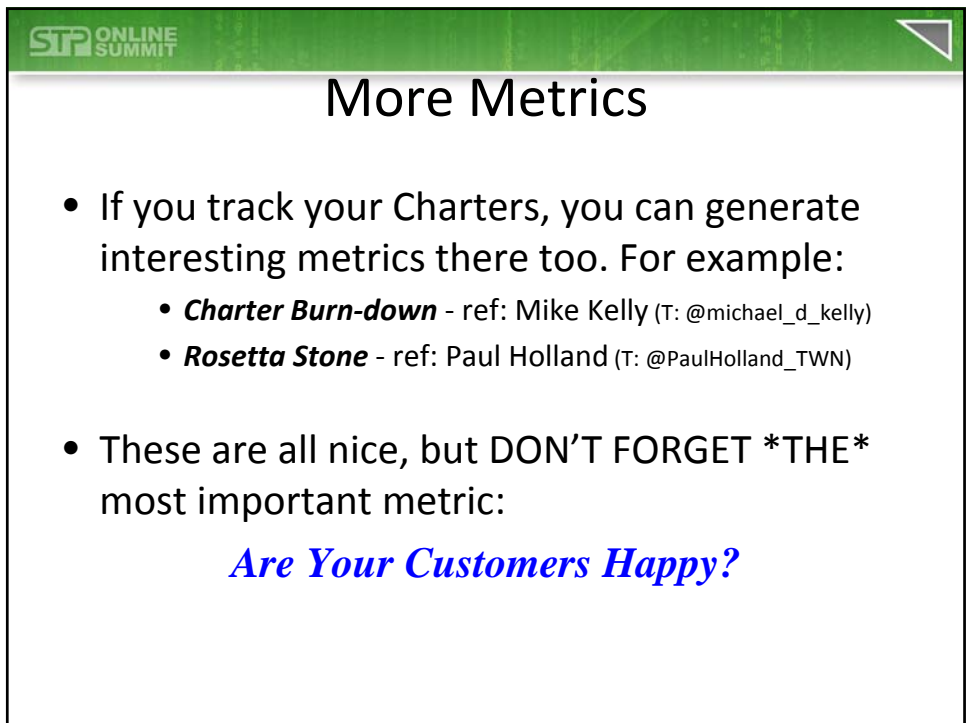
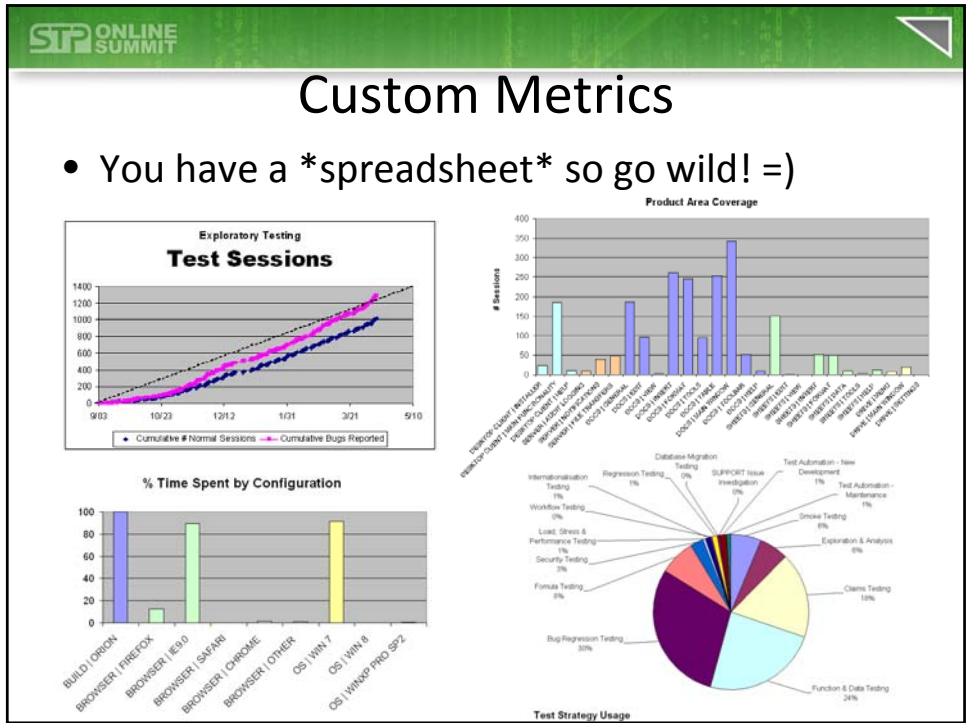
Exploratory Testing
TBS Breakdown

Legend: Test (71%), Bug (18%), Setup (11%)

Exploratory Testing
Total Work Breakdown

Legend: Test (42%), Non-Session (39%), Opportunity (11%), Bug (7%), Setup (1%)

Exploratory Testing
Test Sessions



Summary



Summary

- SBTM is about getting things done
- It helps you manage your testing activities
 - There are other ways. Choose responsibly.
 - Value is primarily *within* the test/development team
 - *Doesn't* help you manage or communicate your Testing Strategy (that's a level higher)
- Metrics may provide additional insights and patterns into your testing activities
 - Keep these within the team

STP ONLINE SUMMIT


Tool Warning

- I **don't** recommend the command-line Sessions tool/framework for extended project work
 - It's okay for short projects (< few weeks) and as a learning/teaching aid for Exploratory Testing
 - It is difficult to try and manage large or multiple (realistic) projects this way. Look to other solutions
- Select the right tool for your project & team needs

STP ONLINE SUMMIT

SBTM Resource Page

- <http://www.MinistryofTesting.com/resources/session-based-test-management/>
- Resources include:
 - Videos
 - Blog Posts
 - Articles
 - Tools
 - Books
 - Training (YMMV)




Contact Information

Paul Carvalho

Software Testing and Quality Services

Paul@STAQS.com

<http://STAQS.com>

 @can_test



Thanks!
