

Testing

A Project Manager's Perspective

not Bill Corcoran, Peng

Instead

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26 April 2011

Outline

- Context
 - Project?
 - Testing?
- Project Management and Testing
- Testing
 - the Good, the Bad...
- Qualitative vs Quantitative Testing
- Recipe for Success in Testing
- Introducing Testing (again) for the First Time
- Q & A

Context

- Project Management –what is it?
 - A body of work undertaken to deliver a specific result in a specific period of time
 - Characteristics
 - Has a plan (scope, objectives, timeline,...)
 - Follows a process
 - Has a beginning
 - Has an end
 - Has a defined result –COS –Conditions of Satisfaction

Context

- Testing
 - An assessment of how well something meets specified qualities
 - Stated (hopefully documented) Qualities
 - Standards
 - Requirements
 - Procedures
 - Constraints
 - Implied (rarely documented) Qualities
 - Preferences
 - Late Emerging Requirements
 - Look and Feel Familiarity
 - Ease of Use (user-friendly)

Testing and Project Management

- Testing is integral and intrinsic part of every project
- May be a separate activity (set of tasks)
- May be implied in assessment of deliverable
- Projects themselves are tested continuously for
 - Scope (change from baseline)
 - Schedule (SPI)
 - Deliverables (complete vs planned complete)
 - Cost (CPI)
 - Risk

Testing in Projects

- Testing as an activity in projects
 - Often overlooked >> Assumed or implied; considered necessary but less important
 - Often (always) under-estimated >> additional requirements that appear late
 - Often (usually) under resourced (time, talent, tools)
 - Usually delayed >> late
 - Often compressed >> rushed
 - Qualities poorly or undefined, fuzzy, and/or changing
 - Scope of testing uncertain or undefined.

Project Manager & Testing

“What is a project manager looking for in testing?”

- Defined
 - Conditions of Satisfaction (required quality to be tested)
 - Scoped to the testing needed
 - Planned to address scope and COS
- Supported
 - Sponsor committed and actively involved in success
 - Project Manager and Test Manager aligned
 - Testers briefed, motivated and dedicated
- Resourced
 - sufficient time allocated
 - Tools pertinent to the testing
 - Knowledgeable and motivated testers
- Managed
 - Resources
 - Communication
 - Change
 - Commitment

Project Manager & Testing 😊

What makes a PM happier?

- Empowered Sponsor (and Owner) involvement
 - Well respected
 - Knowledgeable
 - Motivated
 - Authority
- Test Plan
 - Plan within the project plan
 - Defined test requirements, scope, schedule, resources....
- Sufficient resources (time, money, talent)
- Testing (reviews, tabletops, storyboards, etc) earlier in project
- Test cases and scenarios defined by requirements not the deliverable
- The “Right” testers
 - Dedicated
 - Caring
 - Communicative

Project Manager & Testing ☹️

- What makes a PM grumpier?
 - Good intention and little commitment
 - No plan other than “we have to get it out by...”
 - Undefined or creeping (sometimes galloping) scope for testing (and the project)
 - Fuzzy test criteria, strategy, approach,
 - Usually based on evolving and late breaking requirements
 - Test cases not defined
 - Test results define the test cases
- Inadequate test resources (talent, time, tools)
 - Little (or no) time for testing
 - Testing on weekends especially long weekends!!
- Testers who really don't want to be there (but have to)
- Testers who believe they know better
- Sponsor commitment
 - None
 - Changing (revolving door)
 - MIA –missing in action
 - Too many sponsors

Good Tester

- Motivated
- Conscientious, Thorough
- Innovative
- Dedicated
- Process oriented, methodical
- Respected
- Respectful
- Effective written and verbal communications skills,
 - listening especially

Poor Tester

- Poor attitude, “just a job/pay check” –doesn’t want to test
- Untruthful
- Unreliable
- Well-meaning but marching to their own drum
- Appeasing and trying to please
- Critical but not constructive

Controversy

- My Contentions
 - Anyone (properly briefed, motivated and supported) can test
 - Everyone should (and does) test
 - Users are not always the best testers
 - Sponsor (and/or Owner) is ultimate tester
 - Test tools can be useful but they are limited
 - Need people to define
 - Need people to test the tool, or tool setup

Qualitative vs. Quantitative Testing

- Qualitative
 - Subjective: “I’ll know it (required quality) when I see it.”
 - Easier to plan and harder to execute
 - Simple, dynamic plans (test like crazy for 1 week)
 - Open-ended, possibly never ending
 - (“begin at the beginning and go until the end, then stop”)
 - Quality and the product risk are often unknown
 - Quality, like art, “in the eye of the beholder”, the tester
 - Need testers who are subject matter experts (users)
 - SME who defined requirements are best
 - Will pass eventually
 - when time and money run out

Qualitative vs. Quantitative Testing

- Quantitative
 - Defined requirements
 - Quality and product risk are known
 - Test Plan
 - Test Cases/Scenarios with documented, expected outcomes
 - More work to plan and coordinate, but easier to execute
 - Not open-ended
 - Eg: Y2K. Data Center Relocation

Recipe for Success in Testing

- As a Test Manager
- As a Sponsor
- As a Tester

Successful Test Manager

- Know and understand your sponsor, project manager, & testers
 - Promote mutual respect and understanding
- Understand (and confirm understanding of) testing
 - What
 - Why
 - Where
 - When
 - Whom
 - How
- Communicate
 - Read
 - Ask
 - Listen
 - Confirm
 - Document
 - Share
- Provide Leadership
 - Assign clear, achievable tasks
 - Guide
 - Assist (or get out of the way!)
 - Clear obstacles and issues

Successful Test Manager

- Right Resources
 - Time, Talent, Tools
 - A promise of future resources must be fulfilled to proceed
- Plan the Test (Work)
 - Simple
 - Complete
 - Flexible
 - plan for change and
 - manage the changes that will happen
- Define and manage risk
 - Outline contingencies
- Test the plan
 - review and/or walkthrough with sponsor, PM and testers (where possible)
- Propagate a common vision of the Conditions of Satisfaction –“what will constitute a successful test?”
- Build team and teamwork

Successful Test Manager

- Work the Plan
 - Initiate
 - Educate
 - Communicate
 - Motivate (educate and train)
 - Sponsor
 - Testers
 - Other stakeholders (where and when needed)
- Ameliorate/Mitigate
 - Learn & Improve
 - Avoid and remove obstacles
- Remain nimble
 - Open to change and worthwhile suggestions
 - Mitigate risk
- Report test progress frequently (at least daily) to all stakeholders

Successful Test Manager

- Recognize Success
 - Little gains acknowledged earlier result in bigger gains later on
- Deal with Failure
 - Take responsibility –it’s yours anyway!
 - Don’t procrastinate –bad news ages poorly
 - Fix it... and move on
- Celebrate the outcomes – positive and negative
- Close gracefully with lessons learned

Successful Sponsor

- Support Testing actively
- Contribute to the plan and work
- Provide the best resources available
- Communicate the required quality (Conditions of Satisfaction)
- Get involved in the testing
- Support the PM/Test Manager
- Encourage Testers
- Recognise value and achievement

Successful Tester

- Understand the plan, make it better collectively
- Understand, accept and complete assigned tasks as required
- Complete tests as defined
- Suggest improvement as needed
- Document test cases and results diligently, legibly, completely
- Communicate success and failure conscientiously and tactfully in a timely manner
- Be respectful and responsible
- Assist other team members. Understand and acknowledge their contribution. Their success (or failure) is yours as well

Justification for Testing

- Profitability
 - Retained business
 - New business
 - Reduced costs
- Risk
 - Reputation
 - Brand Appeal
 - Industry
 - Employee Relations
- Balance
 - Effective Tests
 - Efficient Testing

Introducing Testing (again)

How to get testing accepted in an organisation that does not have it, recognize it, or think they don't need it?

- Discover what they test currently or tested in the past. Every business tests, even if they don't realize it.
- Given formal, informal or intrinsic testing, determine why they do it. Therein lays what they value and why they test.
 - For example, projects are under constant test. The schedule sets out what happens when. Testing for schedule completion will be found herein
- Document their process of testing.
- Communicate and confirm understanding of all parties.
- Highlight the benefit they currently derive from testing.

Introducing Testing (again)

- Suggest where other gains may be forthcoming.
 - A business case may be needed to quantify ROI or avoided cost
- Simple tools at first.
 - Maybe all that is needed.
 - Tools are assists, not the ultimate solution.
- Less is more.
 - Small steps with success rather than another potential failure with a big bang
- Build incrementally on what they already do.
- Suggest ways for improvement as the relationship grows.
- People are the key. Only people can value (test) something.

Closing

- Thank you
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- Questions, Queries, Posers...