



## PROGRAM OVERVIEW

### Generic Programs:

- Agile High-Speed Testing
- High-Yield Systematic Software Testing
- Agile Development Fundamentals – 1 Day Orientation Program
- Introduction to Agility
- Problem Solving & Root Cause Analysis (RCA)
- Test Automation Workshop
- Web Testing Fundamentals

### Outsource Specific Programs

(b) Buyer / (s) Supplier

- Agile Outsource Engineering (s)
- Communications for Outsourcing Technicians (s)
- Managing Outsourced/Offshore Projects (s/b) – COOPM Certification
- Outsource Buyers Boot camp (b)
  - Part 1 – Vendor Selection
  - Part 2 – Vendor Relationship Management (VRM)
- Outsource Quality Management (s)
- English Communications for IT Leaders (s)

## Agile & High-Speed Software Testing Techniques

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Transitioning sound traditional test practices into a Agile Development Environment. Just enough, just in time, with responsive high level quality.

### Learn how to:

- Understanding the key difference between traditional and Agile Testing practices
- Develop a transition plan to move traditional test practices to an Agile Development Framework
- Construct a Lean Testing Framework that can be effectively used to expedient Agile delivery
- Operate in a time constrained develop cycle without loosing testable value
- Develop Iteration 0 Test Plans that guide test design development
- Utilize Risk Knowledge as a foundation for organizing test delivery
- Use of High Speed test methods to supplement and support story based testing practices (Exploratory, Pairwise, Pareto techniques)
- Measure test value through efficient calibration
- Adapt tests to minimize size, effort and cost for suite maintenance
- Capitalize on Test Development through Use & Reuse Management
- Integrate Team Testing into Agile Projects
- Build Lean Test Artifacts for Regression Testware
- Function within Agile development teams, while taking cues from agility to test more quickly and effectively
- Explore the value contribution of collaborative technologies to support Agile Testing
- Engage stakeholders in quality trade-off decision-making and understand the impacts of their schedule and time-based decisions
- Coaching story card contributors in test case construction
- Gain exposure to automation support opportunities with minimum time/effort investment and substantial benefits

A step-by-step approach to transition your traditional test practices to an agile testing approach (and to accelerate what remains 'traditional'). Utilizing the goals of Agile, the program will help to transition, implement and monitor testing in the High Speed Agile Testing environment.

With the ever increasing demands on quality delivery at supersonic speeds tests are constantly challenged to meet these demands. The central focus is speed and nimbleness. Using the framework of Agile methods we will take a critical look at the way we test and how we can improve testing services while doing so in a lean and light weight fashion.

### **Software Testing has long been a discipline that has matched to slippage in project delivery schedules.**

Building on traditional risk based test practice we are now being challenged by incremental delivery. To address, and not inhibit, we examine the concept of pair testing. Strengthening relationships, in a team setting, helps to build a sense of common purpose. Working in parallel eliminates hand-offs, late stage testing, and an opportunity for incremental confirmed component delivery. The program builds on what we know, and adapt to what we have... Agile delivery. Traditional methods become a barrier under new development methods and place further pressure on the test team to feel a sense of value

compromise. The new found, high speed test delivery, opens new areas of opportunity to build strength in product quality, process improvement and test confidence

**Despite changes in methods and approaches we continual slide back into old test habits.** A key factor in this occurrence is that we leave behind methods, rather than transition from them. We throw everything away and do a wholesale replacement without putting to bed the reasons for change. Most testing works but only within the development context that it was framed. The program will reflect tradition against Agile testing, what changes we must make and the role that we will play. Testing is not a service but an integrated part of the development team.

**Have you been here before, “do 1 month of testing in 1 week”, with the same level of delivery expectation?** The 2-day program will introduce you to high speed methods, and explore their use so that you can immediately step from the classroom into the office with new found confidence. We will discuss transition, roles, methods and technologies that can be relied upon to deliver Speed and optimum flexibility. You will start to feel a new sense of flexibility, confidence and enthusiasm (maybe the first time in your entire development career).

#### **Leading-edge tools, techniques, and ideas**

This workshop is based on methodology from some of the leading principles in the ongoing evolution of Software Testing. Explore concepts from:

- Lessons Learned in Software Testing
  - Kaner, Bach & Pettichord
  
- A Practitioners Guide to Software Test Design
  - Copeland
  
- Extreme Programming
  - Beck
  
- Exploratory Testing
  - Bach
  
- Lean Software Development
  - Poppendieck
  
- Test Automation Workshop
  - Durant
  
- Managing the Testing Process
  - Black

## Immediate Benefits of Participating - in this Workshop

1. Understand how to transition your traditional testing methods to a Agile High Speed Test approach.
2. Understanding the level of adaptation of traditional test methods based on a changing development context.
3. Learning how to stimulating high speed intellectual development of test ideas.
4. Address risk as a foundation for project delivery and use to focus testing resources rapidly.
5. Understand how much and where to thin your test process for speed without loss of certainty (Lean Testing).
6. How Lean principles apply a Just-in-Time and Late-as-Possible techniques for creating efficient workflow.
7. Developing the skills and the team to effectively conduct Exploratory testing.
8. How to utilized defect and delivery knowledge as a means of rapid Pareto based (80:20) that can be relied upon by testers, development team and management.
9. Learn how to estimate test effort, not as a separate project component, but as an integrated part of the Agile project estimates.
10. Acquire an appreciate for the role of automation as an expedient support tool.
11. Understand the concept of Pairwise testing and how a subset of our test suite, when pragmatically developed, can return a higher confidence yield.
12. Exposure to a proper understanding of the Agile team role and how it places a challenge on traditional, end-stage service delivery.
13. Low cost and highly effective tools for the tracking and managing of testing resources across the entire development team.
14. Exposure to collaborative development vehicle to facilitate test resource coordination and minimizing excess artifact creation (SharePoint,Wiki, Agile project tools...)
15. Embracing UserStories and how these micro requirement documents bear significant contributory value for the testers and the team/
16. How to utilize skeletal design to form a framework for test suite development, management and use for regression testing.
17. Gain insight into the power of testing and Entrance / Release criteria as an effective tool for workflow efficiency.
18. Lean about test calibration as a thinning, management and delivery mechanism for efficient testing.
19. Develop an approach that will ensure regression test capabilities arising from the Agile testing enterprise.
20. Understand the value of 'chunks' as a way of managing work delivery and facilitate result summation.
21. Open and commercial tools that should/could be used to support our work, and provide freedom for constructive thinking.
22. Become aware of the shift in roles in the development-test-business owner community and how collaborative delivery makes sense.
23. Learn how to improve the requisite skill sets you and your team will need to become truly adaptable and agile.
24. How to recover defect costs through knowledge utilization. Knowing where to farm for errors or the absence of errors.
25. Building speed and flexibility in a wide array of project development scenarios, not just Agile projects.

# Agile Development Fundamentals – 1 Day Orientation Program

## Overview

Agile methods have provided strong opportunities for delivery in an expeditious and reliable fashion. However there have also been cases where companies have failed. How can something so successful as have the potential be a significant disappointment?

This one day course will present the core principals of Agile development, how companies can transition from traditional methods and avoid pitfalls that often lead to failures.

Participants Will Learn:

- How to transition from traditional development methods to Agile development
- Things to avoid in the deployment of Agile
- Agile method variations
- Principals of result driven delivery
- Solutions to overcome common development shortcomings
- How to develop realistic and attainable delivery estimates
- What factors help to engage the right people to produce project success

## Outline

### Chapter 1 – Agile Foundations

- The Agile Manifesto
- Lean Principals Applied to Agility
- Most Common Agile Method Traits
- Participant Roles
- Transitioning Elements

### Chapter 2 – Agile Requirement Delivery

- Chartering & Scope Management
- High Velocity Story Card Development
- Story Card Types
- Test Driven Design (TDD)
- Skeletal Design Constructs

### Chapter 3 – Agile Estimating

- Estimation Poker and Delivery Channeling
- Business Value Establishment
- Risk Assessment
- Balancing the “3” Aspects

## Agile Development Fundamentals

### Outline - Continued

#### Chapter 4 – Agile Planning

- Overall Planning

- Scaling

- Sprint Planning and Backlog Management

#### Chapter 5 – Sprint Management

- Daily Activities

- Role as Scrum Master

- Progress Tracking

#### Chapter 6 – Sprint Wrap-up

- Sprint Demo

- Retrospective

- Sprint Planning Adjustments - Future

#### Chapter 7 – Wrap-up

# Introduction to Agility

## 1. Introduction to Agile Testing

The introduction serves as the starting point for understanding how to improve our testing. Artifacts, roles and activities will be examined and compared against agile methods. The focal point for stimulating stakeholder and development team discussions centers around the 'XP Story Card' and the many facets that it contains (requirements, test, estimate of effort and value, with a profound understanding for risk) and how these must be balanced.

- a. Modern SDLC compression time
- b. Traditional to Agility Shift – Challenge Facing Testing
- c. Balancing risk with test intensity
- d. Effective stakeholder communications

## 2. The Agile Test Team

In traditional teams people had roles and assigned to these roles were tasks. These duties often relied upon a carefully orchestrated dance with delivery. Any slippage resulted in numerous problems and many hard feelings. While a person may have a role, it is one that cares with its responsibilities and not necessarily specific obligations. The dynamics of the team will determine whether we will succeed as a team, or whether we fail as individuals. The role as test specialist carries with it guidance, oversight, coaching, direction and support. The business owners is called upon to intense project involvement and providing a breath of exposure to the priorities that the project carries in support of the business. The development team is allowed to ploy its technical delivery knowledge and to stay focused on the matter at hand and not on arbitration of needs from multiple stakeholders.

- a. Participants
- b. Roles & Expertise
- c. Operational Dynamics

## 3. Thinning (Lean) Test for Rapid Agility

To accept change requires us to transition our present state to that of our new found surroundings. A critical examination of tasks, documents and interaction with the project team need to be looked at in depth. We will seek out ways to exploit the seven foundation points of lean as our first step towards increasing service delivery speed. Our success hinges on surgical precision and removing only what is excess, without sacrificing value.

- a. Lean Principals
- b. Test Candidate Elements
- c. Trade-Off Considerations

## 4. Iteration 0 – Agile Test Planning

While the project is going through a focused and abbreviated planning period so is testing. Utilizing core justification and chartering events we proactively interact with the team in providing a planning

component within the overall project vision. Unlike past test plans it is lean, rapid, and collaboratively developed. Tearing down the walls from testing as a service to testing as a team event is the order of the day. Time, business value and risk are important aspects that are presented in relies on team participation and not the wisdom of one individual.

- a. Where to start
- b. What to use
- c. What is involved

## **5. Using Automation Support**

Automation is viewed as the means to an end. In order to be able to carryout our duties in a deliberate, coordinated and expedient fashion we must look to automation as a support solution. Time saved, and precision gain will allow all members of the test team to focus on intellectually based tests.

- a. Early consideration
- b. Agile Test Automation Support
- c. Purpose and Goals
- d. Utilization and Oversight

## **6. Designing Agile Tests**

The hardest thing about testing is designing tests. Knowing what to test, how much to test (or not test), requires experience, knowledge and trust in ones self. While there are numerous methods there are a few that are particularly adept to Agility (Exploratory, Pairwise, and Pareto (80:20)). The development of tests in concert with requirement stories is also a highly effect means to maintaining a tight connection between these two elements. However, there is also an opportunity to further amplify the conservative nature our test suite through low cost calibration. Calibration controls bloat and provides a means to effectively assist us with adapting our tests to a wide array of circumstances and conditions.

- a. Method(s) Selection
- b. Establish Balance
- c. Calibration
- d. Adapting

## **7. Measuring Test Results**

Report came out of a need for communicating status. As projects took longer to deliver the need for reporting became an essential part of the project management process. With the advent of Agile methods the need to provide low cost, light weight test reporting became important. The focus shifts from a summation of errors discovered to testing as an instrumental part of delivery. The roots of test reporting resides in daily standup meetings, bi-product reports, delivery demonstration and the sprint/iteration retrospective.

- a. Light Weighting Reporting

- b. Status Reporting
- c. Progress Reporting
- d. Demonstration

e. Sprint/Iteration Retrospective

### **8. Managing Agile Test Efforts**

Testing isn't just a job, it's a specialist role. Everyone has a test role; developer, business owner and even other specialists. In order to make this shift the tester has to employ coaching skills that may have never been utilized before. Getting people to do things that are outside of their normally expected role, and are hardened with years of surrogate custom is not easy (but is doable). The transition may be counted in terms of sprints and for some it may take several projects to make the change. "Managing" is not something that is often discussed in Agile circles, but the need to provide watchful and compassionate oversight is essential for testing that is meaningful. The pervasive nature of testing does not allow us to use a hands-off role as one might expect from other narrowly focused disciplines.

- a. Test Specialist Role
- b. Test Coaching in the Team
- c. What is Agile "Managing"?

### **9. Planning for Repetition and Reuse**

Let us not forget that beyond the sprint/iteration is a life of testware existence. This needs to be thought about from the onset and not as an after thought. After thoughts are expensive, time consuming and often create a significant degree of test suite unreliability. Repetition and reuse starts within the sprint/iteration and is carried forward through the development project period and into future (post-delivery cycles). We must carry with it essential artifacts and details for that purpose to be realized.

- a. Testing in the Small
- b. Build-Up to 24/7
- c. Regression Testing – Forward Sprints

## High Yield Lean Testing

“Reaching beyond the basics *to make Testing a Profitable Venture*”

**Keywords:** *Software, Testing, Systematic, Lean, Planning, Testable Requirements, Calibrated, Risk-Driven, Adaptive, Levels, Deliverables, Development Methods, Testware, Budgeting, Resourcing, Test Results, Test Standards*

- Reaffirming testing foundations
- Utilizing high yielding methods
- Adopting a Lean Test Approach
- Estimating and balance work effort to contributory yield
- Using risk to establish scope
- Developing reusable testware
- Establishing calibrated testing
- Stopping based on yield, not by running out of time
- Approaching testing as a business value contributor
- Supporting testing through recognized industry standards
- Increasing defect discovery with less effort
- Advancing your test methods (without wholesale replacement)
- Addressing traditional, incremental and agile development productively
- Promoting leadership and value contribution on projects
- Forming approaches to address complex testing situations

### **Companies Cannot Afford to Expend**

#### **Time and Effort on Tradition**

The current global economic crisis is placing pressure on companies to do more with less. Coming under added pressure are functions that are considered as support (like testing). Despite a clear and definitive understanding about its purpose and value software testing is being asked to do more, but with less. Are your methods streamlined and versatile enough to meet this challenge in a productive way? Or will you simply choose to reduce scope and hope that major issues are avoided? The course is specifically designed to meet the challenges facing business and to advance you to new level of responsible test behavior.

### **Improving Value without a Loss in Efficiency**

Almost anytime you change, streamline or recast the way you do something there will be a loss of efficiency. Due in large part to a loss of confidence caused by newfound unfamiliarity the course provide participant with ways to bridge this loss. How is this done?

- Utilizing a Series of Focused Skill Building Exercises
- Providing Real-Life Examples
- Showing a Clear and Realistic Transitioning Roadmap

- Maintaining Value Based Practicality

### **What You Get in Two Days**

The intense two day interactive program takes participants from test foundations, understanding and promoting present practices, to addressing the wide variety of testing situations that are common in today's business climate. These include,

- Testing in Non-Traditional Development Environments (e.g. Iterative, Agile, Prototyping),
- Addressing Advanced Testing Areas (e.g. Performance, Capacity, Security...), and
- Managed testing for Maintenance, Purchased Software Solutions, and Outsourced Test Engagements.

### ***Participants will Gain Immediate Value and Mastery***

Information contained in the value-rich program goes beyond introduction. Participants will practice, explore and challenge each topic establishing a base of ownership. Use of this approach puts testers make decision, defend and adapt methods to fit each specific company situation.

### ***You will be able to:***

- Understand and adopt test foundations
- Synchronize present practices with test principals
- Optimize testing while maintaining (or advancing) service value
- Better understand value contribution and utilize this principal to 'right size' testing projects
- Accurately and appropriately estimate test efforts
- Be flexible and ready to address changing test demands
- Discern perpetual from facilitatory documentation and an appropriate level of formality required
- Manage and actively used testware
- Employ appropriate high-yield methods
- Facilitate productive decision making using Delphi-driven risk assessment
- Understand and use results based test curtailment
- Increase defect discovery with less effort
- Implement calibrated testing principals to all development scenarios
- Strengthen project contribution value
- Address complex testing situations, regardless of technical expertise
- Formulate accurate test effort estimations
- Have improved understanding of defect effects and predictions about latency
- Accommodate complex testing using non-technical staff
- Increase test productivity by properly utilizing automation support technology

### ***In-Class Workshops and Group Exercises***

This class includes a stimulating set of exercises including in-depth discussions, case studies, group exercises and personal self-assessments. Practical real-life exercises are presented to emphasize and support key concepts while establishing the foundation for individual ownership.

- Constructing a Personal Status Scorecard and Process Development Roadmap
- Write a Test Plan using Project Planning Documents
- Using a Requirement Specification to Develop Test Cases
- Maintain Traceability of Test Case to Source Documents
- Communicating Test Events – A Reflection on Style, Approach and Breaking News
- Establishing Technical Test Objectives Without Being Technical
- Getting the ‘Right’ Kind of Attention from Stakeholders and the Project Team
- Addressing Real World Test Situations
- Adapting to Unanticipated Changes
- Contending with Really Difficult Project Challenges
- Seeking Lean Opportunities While Bolstering Value Contribution
- Testing in Hybrid Development Environments
- Developing a *World Class* Test Function (with minimal investment) Exploring *Testing Center of Excellence* Principals

### ***Immediate Benefits of Attending This Class***

1. Strategic Plan to promote YOUR testing process forward.
2. Flexible and fluid approach to testing under varying situations.
3. Initiated skills ready for immediate use (based on Day 2 Practum).
4. Developed Confidence in concepts, practice and adaptation to address challenging test situations.
5. Discerning what MUST be carried out, and what can be overlooked without a loss in test confidence.
6. Appreciate and understand the business value behind a Testing Center of Excellence strategy.
7. Reliably advocate for an appropriate level of testing, predict software quality results, and form a professional platform for Release 2 testing.
8. Acknowledge the value of testing and professionally accept the balance with business services.
9. Gain confidence and provide subject matter leadership on the project/business team.
10. Develop a compelling reason for stakeholders to WANT to be engaged in the project.

## High-Yield Lean Testing

### OUTLINE

#### I. Software Testing Foundations & Conventional Thinking

Every organization has some form of testing. From this basic assumption, a foundational framework is presented for each participant to formulate a personal scorecard and process improvement plan. Utilizing a combination of industry accepted standards and best of practice techniques a strong base is built from which all future testing can occur.

- a. Test Framework
  - i. Orientation in Terms of Development Method
  - ii. Test Phases: Planning/Acquisition/Measurement
  - iii. Levels of Testing
  - iv. Candidates for Standardization
- b. Test Deliverables
  - i. IEEE 829 Test Documentation Collective
  - ii. Automated Supported Resources and Application
  - iii. Forming Testing Benchmark Standards
- c. Test Planning
  - i. Sources
  - ii. Master and Level Specific Test Planning
  - iii. Purpose and Effective Formatting
  - iv. Elements
- d. Test Case Design
  - i. Establishing Objectives
  - ii. Facilitating Requirement Quality Improvements
  - iii. Maintaining Traceability (Calibration)
  - iv. Designing Effective Tests
- e. Communicating Test Results
  - i. Progress Reporting
  - ii. Adapting to Project Changes
  - iii. Relating Meaningful Status

#### *Practice Session(s)*

Each participant, guided by the instructor, will prepare a scorecard reflecting present practices. The scorecard will be used to form a uniform baseline for added discussion throughout the course and provide an action list for further in company deployment.

To reaffirm and establish a basis for implementation (or enhancement) a series of practices exercises will be conducted for;

- Test Planning
- Test Case Construction based on Sample Requirements, and
- Practicing the principals of test case calibration and traceability.

These three areas will be based upon a single project scenario leading to a single unified solution set that can be used as a illustrative example.

## II. Test Planning Development Considerations

Software planning is challenged by many of the same conditions that project face. Never enough time and the unexpected places testing work at risk. Miscalculations and improper decisions (lacking sound knowledge) will place efforts at risk and low the value of the work performed.

- a. Key Planning Considerations
  - i. Resourcing
  - ii. Scope Definition
  - iii. Formalities
- b. Test Budgeting Methods
  - i. Percentage Based Method
  - ii. Task Driven Approach
  - iii. Critical Chain Buffering (CCB)
- c. Budget Adjustments
  - i. Delivery Driven Projects
  - ii. Synchronizing with Development Delivery Segments
  - iii. Functioning in Aggressive/Iterative Projects (as a Test Participant)

### *Practice Session*

An electronic test planning and budgeting tool will be provided. In groups, they will develop a familiarization with the tool and arrive at a set of conditions that must be taken into consideration once the initial test budget gets formed. Additional discussions will center on the influences of existing testware and overall project team expertise.

## III. Systematic Software Testing Practices

While applications are seldom used in a systematic way testing relies heavily on a tactically based approach. The operating premise is that a baseline is necessary in order to as the foundation for all other testing, at present as well as into the future.

- a. High-Yield and Beneficial Methods
  - i. Harvesting & Qualifying Test Objectives
  - ii. Calibration Value (even in Agile environments)

- iii. Leveraging Risk
- iv. Test Methods & Practices
- b. Effective Regression Testing
  - i. Managing Effective Testware Repositories
  - ii. Full & Partial Regression Testing
  - iii. Utilizing Exploratory and Ad Hoc Testware

*Practice Session*

In groups, a software specification will be examined, test objectives formulated, and test developed. This will be carried out using calibration techniques. A final step will be to look for ways to reduce the test set by employing a critical examination of the test calibration matrix.

IV. What is Testing Trying to Say?

Exceptional testing is lost if our communications is misdirected, ineffective, or not understandable. Bring new life to the meaning of test communication and excite all stakeholders from management to those in the trenches.

- a. Effecting Positive Test Communication
  - i. Low Cost/High Yield Test Reporting Radiators
  - ii. Valuable & Useful Testing Metrics
  - iii. Using Test Information Effectively – Shaping Engineering & Test Practices
  - iv. Drawing Interest Through Participation
- b. Balancing Content with Form in Test Radiators
  - i. Overall Visible Reporting Forms
  - ii. Understanding the Test Audience
  - iii. Removing Misguided Assumptions for Testing Services

*Practice Session*

The class will be broken up into teams, comprised of at least two groups. One group representing testers who will present test results. The other group being comprised of stakeholders and project team members who are anxiously awaiting this information (but may pose some interest confrontational issues that will be guided through the instructor).

V. Testing Challenges

Projects are constantly under attack and the effects reverberate throughout the entire term, including testing. The ability of a testing group to adapt to a wide variety of situation will prepare them to respond in an appropriate and efficient fashion.

- a. Testing Situation Challenges
  - i. Routine Maintenance

- ii. Emergency Repair
- iii. Commercial Off The Shelf (COTS) Solutions
- iv. Hybrids
- b. Managing Challenges that Jeopardize Committed Test Projects
  - i. Test Urgency Management
  - ii. Test Resource Deployment/Redeployment
  - iii. Minimizing Negative Test Cadence

*Practice Session*

Utilizing a list of test artifacts and tasks, each group will determine under what situations will these items be used. In cases where they are not applicable the group will determine what suitable alternative measures are considered appropriate.

VI. Right-Fitting Testing to Various Development Approaches

With more than one way to reach a goal, testing needs to be 'right-fit' for the situation. A single approach, while easy to implement, will create erratic demands and missed opportunities for low cost early detection of goodness and of errors.

- a. Understanding Why One-Size Doesn't Fit All
- b. Method Specific Test Adaptions
  - i. UML
  - ii. Rapid Development Models
  - iii. Iterative Development
  - iv. Outsourced Projects
  - v. Agile Engineering
- c. Addressing Multi-Discipline Projects

*Practice Session*

Open class discussion surrounding the use of various development methods, appropriate use (and misuse), how testing can serve as a sounding board/catalyst for 'right' application, and the means of adapting test practices to each development method. This includes projects that utilize multiple development methods.

VII. Business Cultural Pressures and Conditions

The longer the project the more change we can expect. Even though we may try and hold change to a minimum the realities of today's dynamic business climate require change. Some of these adjustments can be postponed while others require midflight adjustments. Sound test management is challenged to remain responsible while being responsive.

- a. Understanding HOW BIG Change Is

- b. The CONE of Uncertainty
- c. Resourcing
  - i. Flexible Staffing
  - ii. Adaptive Test Design
  - iii. Employing Testware Assets
- d. Delivery Variations & Test Adjustments

*Practice Session*

Utilizing a real-life test plan, test design and a sample of test cases each group will be introduced to a change in project direction. Given limited time, each group will formulate a plan of attack to address this change of direction, and present quantifiable measures for the impact.

VIII. Business Dynamics and Control Effects in Testing

Change is a business reality and projects that fail to plan for this dynamic place create unnecessary risk. Often this has a trickledown effect on testing and the results that occur. Positioning testing to adapt and overcome these dynamics will produce positive results for the project, team and stakeholders.

- a. Business Value and Delivery Importance
  - i. Proper Placement of Test Energy
- b. Utilizing and Adapting to Changing Baselines
- c. Engaging Stakeholders: Accessibility & Engagement

*Practice Session*

The class will discuss ways to engage project stakeholders and isolate what critical aspects will make this pursuit a reality. Using this information the groups will develop various solutions that will be suitable for use in their companies (... something more than words!).

IX. Special Niche Testing Areas

A recent International Testing survey revealed that leading companies were marginally testing the basic functions of their software systems. This left a large gap of opportunity for errors in both the foundation elements of the applications but also in the numerous areas that went totally unattended. In this segment participants will gain an awareness of these application aspects, some of the leading reasons why they need to be examined (at least minimally) and how they may already be giving up information as a part of basic foundation tests.

- a. Sequencing
- b. Beyond Functional Validation Confirmation
- c. Testing Targets
  - i. Security

- ii. Capacity
- iii. Performance
- iv. Load
- v. Stress/Volume
- vi. Internationalization
- vii. Compliance
- viii. Usability
- ix. Security
- x. Safety
- xi. Recoverability
- xii. Adaptability/Maintainability
- xiii. Configurability
- xiv. Technical (Code) Coverage
- xv. Interfaces
- xvi. Storage
- xvii. Network Navigation
- xviii. Component

#### *Practice Session*

Of the 18 possible test targets (beyond functional validation) each group will order these in order of attack. Areas where parallel attention can be given these will be broken out. The final step will be to determine the resourcing required in order to carry out testing in these areas.

#### X. Supporting World-Class Test Success

Effective test service delivery can be further improved through appropriate use of support technologies. In this segment an examination will be made of ways to improve precision, leverage engagement and increase efficiency without additional overhead burdens.

- a. (Test) Resource Development & Utilization
- b. Tools and Related Current Practice Technologies (e.g. Wiki's, Collaborative Facilities...)
- c. Testing Methods and Established Techniques
- d. Dealing with Real-World Test Challenges

#### *Practice Session*

As a wrap-up capstone exercise an example test scenario will be presented. The class will formulate a complete plan of attack including a budget, resource requirements, approach, task and deliverable execution, and an alternative (Plan B) to deal with potential situations that might be encountered.

#### **Who Should Attend?**

- Software Engineers

- Testers of all types and levels
- Quality Assurance
- Business Analysts
- Project Managers
- IT Specialists (Security, Capacity Management, Networking...)
- Business Stakeholders
- Agilities
- Outsourcer Staff (Buyers & Suppliers)

***Exclusive Course Materials***

In addition to a comprehensive student noteset additional electronic documents will be provided for your reference library. This will include a test estimation calculator (distributed to over 9,000 worldwide), reference articles, tool lists, and working illustrations from real life organizations.

## INTRODUCTION TO AGILE DEVELOPMENT

If you were able to deliver project results quicker, with a high degree of quality and containing practical deliverables would you be interested in employing a new approach? Does this sound too good to be true? Is this just another feeble attempt to repackage development practices that we have already tried and were unsuccessful at?

Since the signing of the Agile Manifesto in February 2001 hundreds of companies and thousands of projects have benefited from Agile development methods. Agile is more than just a new twist on old methods, it's a total rethinking of how we engineer applications, elimination of work that is unnecessary, and deliver aggressively.

The Introduction to Agile Development workshop provides participants with an,

- Understanding of Lean Process in Agile Development
- Agile Development Methods Overview & Comparison
  - Scrum
  - Extreme Programming (XP)
  - Crystal
- Features of Agile Development
- Transitioning Waterfall Methods to the Agile Framework
- Resources and Role Building for Success in Agility

# **Fundamentals of Problem Solving And Root Cause Analysis (RCA)**

## Overview

If there is one certainty in life and that is problems exist, occur and repeat themselves. Each time the cost of these rob us of valuable resources. In today's competitive world we can not afford to have this happen.

The focus of the one day course is to help participants better understand the problems that they encounter and to proactively examine how to resolve at the source and not simply correct the resulting occurrence.

Participants Will Learn:

- How to define and recognize problems (and pre-occurrences)
- Methods to surgically dissect the chain-of-events leading up to the problem
- What cost elements exist and how to balance this with problem remediation measures
- How to Apply Problem Profiling to monitor and measure
- What proactive steps can be taken to create a problem control environment

## Outline

### Chapter 1 – Introduction

Program Scope  
Understanding the Difference  
Problem Dynamics

### Chapter 2 – Why “Problem” is a “Dirty Word”

Social Views  
Shifting Attitudes

### Chapter 3 – Are you looking for Trouble?

Solicited Problem Occurrences  
Unsolicited Occurrences and Indicators  
Methods for Trouble Making (Problem Discovery)

### Chapter 4 – Approach to Problem Solving

Understand the Issue  
Measure Problem Impact  
Conducting Root Cause Analysis (RCA)  
Problem Resolution

## Chapter 5 – Using Problems as Value Contributors

- Gleaning Value from Problems

- Understand Return-on-Investment (ROI) Potential

- Destructive Behavior

## Chapter 6 – Problems & Methods Relating to Information Technology

- Problem Enclaves

- Propagation

- Mitigating Problems

- Utilizing Repair Set Rules

## Chapter 7 – Wrap-up

# TEST AUTOMATION WORKSHOP

Course:

The test automation workshop is an interactive and solution based program that takes the participant from conceptualization to implementation. The two day program presents a detailed examination of commercial and open source solutions and how they can be applied to both traditional application and specialized testing initiatives.

Participants will learn how to properly evaluate, implement and gain sustainable utilization, whether they are doing this as their primary job or only on a part time basis. Individual who participate in this workshop based program will develop documents that will provide a quick start when returning to their businesses.

## I. Introduction

Establishing a basis of understanding about the tool universe, the real-world pursuits that companies are engage with and the framework within which these endeavors are engaged. One should view this as the contextual foundation from which the program will be built upon.

- Objectives and What to Expect
- Historical Perspective
- Automation Support Universe

## II. Master Strategy

Even for simply enterprises a point of reference is need in order to add perspective to what we are doing and the value contribution that an investment is taking. Tools, in and of themselves are devices to enable efficient testing (and V&V) behavior. Without perspective and a fundamental framework for use automation will not reach optimal levels of effectiveness.

- Recognizing Fundamental Mistakes for Tool Pursuits
- Test Automation Strategic & Tactical Framework
- Synchronizing Technologies with Processes
- Scope Limitation & Baseline Requirements (eg. Commercial/Open-Source)
- Broad yet Focused Behavior
- Connection and Dependencies

## III. Criteria

Planned and focus attention given to evaluation and implementation elements helps to facilitate successful test automation engagement. In this chapter participants will be oriented in automation requirement definition, laying the groundwork for broad based participant support and how to effectively work within the corporate procurement framework.

- Determining Need
- ROI Goal Setting
- Stumping for Stakeholders
- Building Environmental, Functional and Operational Requirements
- Working with Contract, Procurement and Legal Functions
- Presenting a Plan
- Approval and Funding

#### IV. Evaluation

Scrutiny of companies, candidate solutions, and specific attributes is presented in a pragmatic organized fashion. The value of breaking past practices (demo & selection) are explored and a new paradigm put forth where blind definition unfolds to form solid highly effective solution selection.

- Candidate Sources
- Pre-Evaluation Criteria
- Scoring
- Illustration and Illumination (demo & test)
- Courtship Period

#### V. Selection

“If it’s not in the contract then it doesn’t exist” is a phrase that has been a resounding theme behind failures arising out of expectations not becoming reality. Selection is more than a ‘liking’, it’s the embodiment of full and complete connection of the test enterprise to the technology and the culture from which it comes.

- Prenuptial
- Negotiation
- Solidify/Formalize

#### VI. Implementation

Just when you thought the hard work was over now you face the reality of making the choice(s) institutional. Participants will be lead through the key factors to successful implementation and common pitfalls to be avoided.

- Preparation
  - Processes
  - Environment
  - Culture
- Vendor's Role in implementation (and beyond)
- Timing
- Initiative Selection
- 'High Touch' Attention & Oversight
- Tweaking or Accepting the Differences
- In-Depth Examination of the Tenants of Good Practice for...
  - Data Acquisition Tools
    - Generators
    - Extractors
    - Manipulators
    - Profilers
    - Comparators
    - Regression Devices
  - Static Analyzer Tools
    - Code Metrics & Characteristics
    - Design Extractors
    - Documentors
  - Dynamic Analyzer Tools
    - Code & Design Coverage
    - Performance Analyzers
  - Simulators
    - Hardware
    - Software (Stub/Driver Generators)
    - Network
    - Neuro Simulators
  - Test Management Tools
    - Repositories
    - Documentation Facilities
    - Project, Change & Configuration Management
    - Incident Tracking
    - Defect Profilers
  - Multi-Dimensional Tools
  - Other (occasionally) Tools
- Disconnection and Connectivity Between Tool Solutions (Black/White/Grey/Clear-Box Support)
- A Detailed Look at Regression Test Tools
  - 10 Deadly Sins
  - Script Acquisition
  - Script Manipulation
  - Core Base/Reusable Base Scripts
  - Clear Scripting
  - Connection & Decoupling
  - Maintenance

## VII. Utilization

A large majority of tools are severely under-utilized. Under utilization not only puts at risk overall test process effectiveness but significantly jeopardizes future acquisitions.

How can we make tools a part of the culture, and how do we control over use? Does over use lead to erroneous assumptions being made or more fundamental do we even know how much utilization is occurring?

- Metrics
- Stay-alive Measures
- Misuse Indicators (over use, the 'wandering' syndrome)

## VIII. Continuance

Tools are not self-perpetuating they require feeding and care. Participants will explore not only base care activities but also the value in staying attune to present day use opportunities. Also presented are ways to step beyond the tried and true methods of product life support in the 'Let's Get Excited' segment.

- Proactive Attention
- Product vs. Environment Care
- Framework for "Excitement"

## IX. Replacement

All good things must come to an end. Sometimes this occurs naturally through a series of unavoidable support suspensions or changes in technology. On other occasions it may be precipitated by wrong tool selection, limited use scenarios, or alternative support approaches. Order transitioning provides continued high level test service support which paves the way for replacement success.

- Removal from Life Support
- Recognizing the Mourning Period
- Passing the Torch
- Always Remembered

## X. Conclusion

- What have learned?
- Where is more work required?
- How can we advance our efforts?
- Working with limited or no tooling specialists
- Can non-technician enjoy tool services?

## 20 Course Benefits

1. Establish a connection between tool technologies and the testing processes being supported
2. Develop a design for the tools and how they will interact and be applied
3. Avoid common mistakes in the tool evaluation process
4. Learn how to acquire tools that stay in place and are utilized
5. Determine when to make changes in your toolset
6. Formulating a cost/benefit justification for tool acquisition (and when to keep it simple)
7. How to bridge the gap between manual tasks and automation use
8. Develop an appreciation for foundations in regression scripting
9. How to address specializations (ERP, Web, Global Testing)
10. Acquiring terminology understanding through tool support
11. Avoiding unproductive automation
12. Capitalizing on automation opportunities (known and hidden)
13. Understanding reliable sources for tool solutions
14. Maintaining a tool framework on a part-time basis
15. Developing an ability to successfully implement tools within a corporate culture
16. Building and sustaining a test automation strategy
17. Sharing tools with other organizations and playing successfully
18. Transitioning technologies at all levels (manual/automation or automation/automation)
19. Learn to protect yourself against false-positives in automation use
20. Suppressing technology and elevating work results

# FUNDAMENTALS OF WEB TESTING

- I. Web Testing Overview
  - a. Framework
  - b. Testing & Quality Issues
  - c. Testing Approach
  - d. Web Application Testing Checklist
  - e. Web Page Test Script Checklist
- II. Basic Web Site Testing Techniques
  - a. Testing Features & Content
  - b. Testing Process Flows, Navigation & Links
  - c. Positive/Negative & Boundary Value Testing
  - d. Risk-Based Testing
  - e. Exploratory Testing
  - f. Common Error Sources
- III. Testing in an Iterative Rapid-Application Development World
  - a. Stability and Change Management
  - b. Component Re-use and Integration Testing
  - c. Change/Regression Testing
- IV. Establishing & Managing the Web-Based Test Lab
  - a. Equipment and Facilities
  - b. Test (Process and Support) Tools
  - c. Test Case Libraries
  - d. Change Control (Software/Tools/Facilities)
- V. Compatibility Testing
  - a. Browser, Operating Systems & Database Compatibility
  - b. Hardware and Network Compatibility
  - c. Checking Compliance with Standards
  - d. Consideration for Open Source, Public Domain Components
- VI. Performance, Load and Stress Testing
  - a. Determining What to Measure (and How)
  - b. Developing and Maintaining Benchmarks
  - c. Load & Stress Testing
  - d. Scalability Testing
  - e. Duration & Endurance Testing
  - f. Performance Test Checklist
- VII. Robust Testing
  - a. 24/7/(365/366) Availability
  - b. Identifying Hazards & Threats
  - c. Error Detection & Recovery Testing
  - d. Simulation Threats Scenarios

- e. Degraded Mode Testing
  - f. Rainy Day Checklist for Robust Testing
  - g. Effects of Scope Limitation on Globally Exposed Web Solutions
- VIII. Usability and Interaction Testing
  - a. Visitor Population Demographic Effects
  - b. What Makes a Web Site Usable?
  - c. Testing for Usability
  - d. System Usability Scale (Criteria)
  - e. Design Suggestions for Usability (Style Guide)
  - f. International and Nationalization Issues
- IX. Maintainability
  - a. Maintainability Criteria
  - b. Reviewing & Evaluating Maintainability
  - c. Making Changes/Doing No Further Harm
  - d. Engineering with Sustainability
- X. Integration Testing
  - a. System Interfaces
  - b. Database Interaction & Integration
  - c. Legacy System Integration
- XI. Infrastructure Testing
  - a. Test Approach
  - b. Integrity Testing
  - c. Infrastructure Test Script Checklist
  - d. Backup & Recover Testing
  - e. Web Supported Connections...
    - i. VoIP
    - ii. Connection Interplay
    - iii. Webcasting
    - iv. Web-Simulated Remote Invocation
    - v. Surveillance
    - vi. Others...???
- XII. Security Controls Testing
  - a. Sources & Security Threat Types
  - b. Security Controls – Review and Evaluation
  - c. Security & Control Testing Checklist
  - d. Testing Code Security
  - e. Virus Controls
- XIII. Automated Tools for Web-Based Testing
  - a. Tool Types & Purpose
  - b. Why Automate?
  - c. Automation Readiness
  - d. The Tool Disadvantage

- e. Automation Impact on Resources
- f. Hypertext Link Checkers
- g. Load/Stress Testing Tools
- h. Compatibility Checking Tools
- i. Network Monitoring Tools & Services

XIV. Monitoring Service Levels in Live Operations

- a. Measuring Response Time, Throughput and Availability
- b. Monitoring Resource Utilization
- c. Evaluating User Satisfaction



## Introduction to Agile Outsource Engineering

- I. Agile Foundation
  - a. Challenges
  - b. Goals & Principals
  - c. Comparison to Traditional & Iterative Methods
- II. Scrum Principals
  - a. Participants & Fundamental Rules
  - b. Process Overview
  - c. Adaption for Outsource Delivered Agility (1-6)
  - d. Rapid Solution Delivery
  - e. Agile Scaling and Interaction
  - f. Transitioning Challenges
  - g. Time Box Guidelines
  - h. Terminology
- III. Outsource scrum infrastructure preparation
  - a. Role Formation
  - b. Communication Channels
  - c. Electronic Mechanisms
- IV. Scrum Techniques
  - a. Story Card Workshop
    - i. Extraction
    - ii. Creation
    - iii. Management
  - b. Planning (Estimation) Poker
    - i. Resolving Conflict
  - c. Overall Effort Estimation
    - i. Buffering vs. Padding Effort Estimates
  - d. Business Value Estimation
  - e. Risk Assessment
- V. Guiding the Agile Project
  - a. Daily Status
  - b. Sprint Status
  - c. Project Status
  - d. Delivery
- VI. Summary

## Outsource Technician Communications

- I. Chapter 1 – Role in the Project Communication Framework
  - a. Within the Outsource Community
  - b. Within the Outsource Organization
  - c. Artisan/Technologist
  - d. As an Individual
  
- II. Chapter 2 - Technology Synchronization “A Level Playing Field”
  - a. Outsource – Client Communication Model Reconciliation
  - b. Operational Reconciliation
  - c. Deliverable Component Reconciliation
  - d. Effects of Un-Reconciled Communications
  
- III. Chapter 3 – Process & Delivery Communications
  - a. Daily Communications
  - b. Picking Appropriate Methods
  - c. Pre-Establishing Components, Content and Qualification Method Delivery
  
- IV. Chapter 4 – Mode-Means-Method for Technical Conveyance
  - a. Client Component – Artifacts & Qualification
  - b. Outsource Component – Artifacts & Qualification
  - c. Conveying Background Supporting Delivery
  - d. Using the Write-Once-Read-Many Principal (as Receiver & Conveyor)
  
- V. Chapter 5 – Use of Pre-Qualified Communication Delivery
  - a. Pre-Qualification Requires Engineering & Communications
  - b. Lead or Following – Never Assume
  - c. Understanding Level Playing Ground
  
- VI. Chapter 6 – Learning to Talk Business Not Technology
  - a. Cultural Motivations
  - b. Why are you a ‘Client Solution’?
  - c. Value Contribution vs. Component Delivery
  - d. Bridging Gaps in Understanding through Communications
  
- VII. Chapter 7 – Understanding the ‘BIG’ Project Picture
  - a. Position in Client-side Development Portfolio
  - b. One-time Project
  - c. Ongoing Delivery and Servicing
  - d. ‘What’ vs. ‘How’ Principal

- VIII. Chapter 8 – Without Proper Communications... “You Have NO Project”
  - a. Time GAP Effects
  - b. Pitfalls in Assumptions
  - c. Wrong Methods Lead to Bad Results
  
- IX. Day 2 – Outsourcing English Skill Workshop
  
- X. Chapter 9 – Summary/Recap

## MANAGING OUTSOURCED/OFFSHORE PROJECTS

Course:

One would think that managing a project, whether done locally or offshore, would follow a common framework. Unfortunately, when we turn over construction to others we give up control and taken on a different roll. All is not lost however since it offers an opportunity to shift attention to critical guidance, components assessment and outcome control. Still we must be prepared (and trained) in thinking differently about projects and how they demand a shift in thinking. This course orients participants in this change in focus and how true value contribution and control can be sustained, with successful outcomes.

### *Will My Project Paradigm Work Offshore?*

We might want to ask whether everything is working smoothly here? Projects fail in much the same fashion as a person's health; bad diet, inattention to proper care, and late stage resolution attempts. These characteristics manifest early and are major contributors to poor health in outsourced projects.

### *Savings is Key!*

Outsourcing is pursued by the lure for immediate reductions in costs. With this comes a new way of doing things and this introduces risk, which often reduces the savings that were anticipated. The pursuit requires an appreciation for the phasing in of savings, and how you as the project manager have allot to do with seeing that this happens.

### *What Next?*

Keenly focused on the task at hand we set off on a course into the unknown. With pencils sharpened, and attention ready on the project at hand we fail to think about the next steps after the project has been completed (successful hopefully). Will we inherit the results of the work completed by the outsourcers or are we expecting them (or others) to carryout on support and maintenance?

### *The Narrow View on Outsourced Opportunities*

The vast majority projects are new development, full scope events. There are however opportunities for outsourcing to provide legacy application re-engineering, ongoing maintenance, prototyping and even limited element construction. Have we sent to much of the project offshore, when a smaller portion might have been okay? Should we initially use outsourcing as a way learn about project dynamics and opportunity possibilities?

## I. Project Component Ownership

Ownership is a broad term that can describe responsibility to construct or the as contributor. In the end all parties share in the presentation and content of the artifact. This chapter provides a base for understanding what needs to be done, by who and under what level of oversight.

- a. Client Side Components
- b. Outsourcer Provide Components
- c. Joint Components
  - i. Collaboratively Constructed & Owned

## II. Project Synchronization – Establishing Balance

Projects are a dance, and will there is the potential for it to reflect an art form they often are clumsy episodes. Early decisive actions can significantly reduce wasted effort and the resulting effects of the lack of coordination. This section explores the need for having a stable project management model and how this will be melded with the framework of the outsource service provider.

- a. Client Project Management
- b. Merging Your PM with Outsource PM
- c. Synchronization of Time & Delivery
- d. Defining Delivery

## III. Project Metrics

Metrics run the gambit from a simple question/response to elaborate long term accumulations of trend related data. Neither end of this spectrum fits well with the new method of delivering projects. Why is it that a project isn't a project, regardless of where or how it's built? Outsource projects introduce the concept of one framework with duality (or more) participation. Thus the metric's purpose shifts importance from outcome to quality/status measurement. In this chapter you will be introduced to establishing personal and joint goals and how these measures can be applied in a responsible, expeditious fashion.

- a. Establishing Goals
- b. Agreeing Upon Measurement Sources
- c. Measurement Reconciliation and Reporting
- d. Using Metrics to Support PM

#### IV. Project Communications - Construction/V&V/Delivery Periods

Successful Communications is the key to project life. You may have already experienced communications disconnects that have led to misunderstanding, confusion, and conflict. Now add to this the dynamics of culture, distance and operational variations and we now have a significant challenge to overcome. In this section we will discuss how to overcome these difficulties, how not to rely solely on technology vehicles to mediate these issues, and why solid outsourcer communications can lead to rich long term rewards beyond the project engagement.

- a. Understanding the Client Role
- b. Define & Convey Expectations (w/Detail)
- c. Ask for What You Want
- d. Focus on “What” not “How” (but be inquisitive)
- e. Jointly Engineered Communication Model
- f. Mistakes in Communications

#### V. Pre- and Post-Delivery Outsourcer Tasks

We have expectations about delivery components and timeframes that the outsourcer is expected to comply with. Often issues arise in content, form, quality, and timing that results in excessive attention cycles. Each time more time is consumed that has not been planned for. In this chapter we will examine how process, timing, style and understanding play a major role in successful project delivery.

- a. Project Management
- b. Artifact & Component Construction/Qualification/Delivery
- c. Application of Professional Expertise
- d. Insure Client Input Adequacy

#### VI. Pre- and Post-Delivery Client Tasks

It isn't just about the outsourcer, it's also about us and how well we live up to delivery obligations. What didn't work at home, is amplified once we go outside the walls of our company and rely on a servicer to pick up where we left off. In this section we will look at the things that are expected to do, how they need to be done, and how this changes when others outside our company is involved.

- a. Qualified Specifications
- b. Inquiry & Dialog Availability
- c. Qualification of Received Artifacts & Components
- d. Timely and Complete Feedback

## VII. Harmony through Touchbacks

How long do you allow someone to do work without checking-in? Are you the type that checks in too often? Striking a balance will encourage harmony and provide ample opportunities for both the outsourcer and company to be successful. In this chapter we will examine how a mutual balance of progress checking is important. Much the same as in Agile/Scrum the concept of Sprint period delivery is a model worth examining.

- a. Communication Framework Value
- b. Healthy Boundaries
- c. Coordination of Effort
- d. Real-time Visibility vs. Status Reporting
- e. Asking the Question...

## VIII. Recognizing Cultural & Work Differences

What makes the world a fascinating place is diversity. In the context of a project the concept of diversity is met with resistance because project models demand everyone to in synchronization. How can we take this know condition (cultural diversity) and employ it without creating the potential for project chaos? In this section we will look at how difference require understanding and how to bond processes in such a way as to become one (while still retaining our heritage).

- a. Paradigm Variances
- b. How Much Do You Mandate
- c. Impact on End Results
- d. Utilizing Differences to Enjoy the Project Experience

## IX. Managing for Success

Taking an active stand will increase the potential for project success. Leaving things to their own is apt to result in the demise of the initiative. Successful management involves compassion, understanding, and sensitivity to a fluid project culture. Everyone needs to feel a sense of purpose and accomplishment. In this final chapter we examine how to make a cohesive process that allows everyone to share in the result of solid engineering, pragmatic behavior and responsible decision making.

- a. Meeting Client (your) Obligations
- b. Measuring Progress
- c. Maintaining Healthy Communications
- d. Managing Delivery & Implementation

#### 10 Basic Questions:

1. How will my internal processes impact outsourced projects?
2. Will my methods be important in securing outsourced project success?
3. Can onsite outsourcers help or hinder product delivery?
4. Is culture the main contributor to failures in outsourced projects?
5. Will we have successful projects if we purchase services from dominant suppliers?
6. How can I reduce the barriers created by time, distance, and behavior?
7. Am I forced to use a particular project paradigm in order to deliver usable components (e.g. waterfall, v-model, iterative, Agile...)?
8. Are significant savings without additional onshore costs?
9. Is there a way of beating the odds and being successful in our outsourced/offshore project pursuits?
10. What role can others play in supporting our dive into outsourced engagements?

#### 20 Course Benefits:

1. Understanding the mechanics of cross-cultural teamwork.
2. Appreciating successful outcomes do not involve micro-management.
3. Understanding your weaknesses that you compensated for that now have to be addressed when projects are outsourced.
4. Learning that successful outsourcing is not driven by contractual stipulations (these are remedial measures).
5. Recognizing that successful outsource projects require know that subsequent events will occur.
6. Effective use of communication mediums and knowing that you need to plan at least 3 trips.
7. Onshore contractors from outsource providers does not deliver better results.
8. Project management involve the embody of 3 plans, each intertwined with the other (outsourcer-client-collaborative plans).
9. Appreciating that outsourcing requires onshore investment in details that would have been compensated for through local understanding.
10. Understanding that a 'word' does not necessarily mean 'the word'.
11. Failure propensity in outsourcing is directly attributable to mutual misunderstanding and lack of knowledge in this arena.
12. Establishing realistic expectations beyond monetary savings.
13. Determining what portion to outsource and what might make sense to retain domestically.
14. Learning the caution signs of things going wrong and building confidence in raising up the issue.
15. Sharing talent and mutual mentorship.
16. Owning offshore may or may not be the answer to success.
17. Picking the right project and working for success.
18. Forming measures that monitor outsource projects.
19. Learning to become an effective Outsource/Offshore Project Manager.
20. Appreciating that Outsource/Offshore Project Management might be a team event.

Group Work Exercise:

#1 Teams and Project Management

The exercise develops an understanding of project methods, deliverables and the work effort required in order to produce a suitable result. A consolidated solution set is produced as a bi-product and can be used as a starting point back in your organization.

#2 Communications

Using a real scenario, groups will discuss how they will respond to a situation involving a missed deliverable deadline (on the part of the client) and how they will help the outsourcer to overcome the impact that it will have on the project schedule.

#3 Managing Remotely

Groups will discuss and establish a structure around remote communications, balance leadership and methods that can be employed to carryout project management, in a global theater.

#4 Cultural Differences

Using your colleagues the groups will discuss how their difference effect their attitudes, approach and expectations. This information will then be compared to how it influences professional roles and final interaction with people from other cultures.

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**As an added bonus those attending the Managing Outsourced/Offshore Project program will receive recognition as Certified Outsource/Offshore Project Managers (COOPM). This designation is sanctioned by the International Institute for Outsource Management and recognizes your proficiency in this critically important, highly specialized topic area.**

# Outsource Buyer's Bootcamp

## Part 1 - Vendor Selection

### Introduction

Outsourcing affords rich and realistic business opportunities but without proper care the future promises become a quagmire for failure. Careful and deliberate attention to selection is fundamental in reducing outsource purchase risks. Why is service purchasing difficult in the context of outsourcing? Factors of distance, culture, service delivery norms, and the degree of commitment heavily influence outcomes. The Outsource Buyer's Bootcamp is centered on helping prospective buyers to establish a program (or fine tune an existing one) that addresses risk and prepares the organization to undertake the relationship in a smooth and expedient fashion.

### Program

#### Day 1:

- Establishing and Understanding C-Level Business Objectives
- Forming the Funded Project/Service Vision
  - Scope
  - Goals
  - Oversight & Control
  - The Team
    - Management, Legal, Procurement, Finance, PMO, Information Technology/Delivery, and Ancillary Specialists
- Risk Mitigation Strategy
  - Oversight
  - Critical Control Factors (How Far Should I go?)
  - Use of Expert Counsel
- Outsourcing Alternatives
  - Outsourcing as a Service
  - Augmentation & Resource Pools
  - Self-Invoked Offshoring
- Developing the State of Work (SOW)
  - Selection and Solicitation Process
  - Assessment Steps
- Searching for Candidates - Region-by-Region Examination
  - Monetary Trends
  - Delivery Histories
  - Resource and Talent Pools
  - Domestic/Near/Far Shore
- Outsourcer Examination and Scoring (Assessment Criteria)
  - Using Independent Consistent Assessment Vehicles
    - Viability - Global Star Certification (GSC)<sup>™</sup>
    - Delivery - Capability Maturity Model Integrated (CMMi)<sup>™</sup>
    - Specialized - Verification & Validation Maturity Model eXtended (V&VMMx)<sup>™</sup>, Test Maturity Model (TMM)<sup>™</sup>, International Standards Organization (ISO)<sup>™</sup>....
  - Using Company Established Criteria
    - Cost & Delivery
    - Service Delivery & Service Level Agreements (SLAs)
    - Intellectual Property Rights
    - Dedicated Staffing

- Quality Criteria

Day 2:

- Request-for-Proposal(RFP)/Request-for-Bids (RFB) Package
  - Preparation Elements
  - Interim Information Interchange
  - Control
- Grading RFP/RFB Responses
  - 1<sup>st</sup> Stage Examination Audits
  - Scoring
  - Independent Confirmation
  - How Unique is Your Candidate? Is the Outsourcer a Leader (or Follower)?
  - Rejection Handling
  - Maintaining Objectivity
- Conducting a Proof-of-Concept
- Final Round Process
  - Site Visitation(s)
  - Negotiation Points
  - Final Selection and Award
- Developing the Outsourcing Contract
  - Terms
  - Scope
  - Change Conduit
  - Communication Channel Formation
  - Arbitration
  - Delivery & Performance Points
  - Contingency Factors
  - Audit & Oversight Provisions
- Getting Ready for Project/Service Engagement

## **Buyer BOOT CAMP Series – Part 2**

### **Vendor Relationship Management (VRM)**

Objective(s):

- Introduce and Understand Key Shift from Self-Governed to Service Governed Operations
  - Form Tasks to Successfully Realign Culture
  - Understand Key Success Factors
  - Develop a Cultural Infrastructure Capable of Sustain New Governance Success
  - To establish an understand of what executive management must provide in order to have operational excellence.
  - Form a basis for things that need to be considered, development, delineated, and managed for effective relationship management.
  - Understanding New/Changing Roles and Responsibilities
- A. Understanding the Dynamics of Cultural Shift
  - B. What is the Difference Between Self-Government and Relationship Governance
    - a. Forming Lines of Communication
    - b. New Lines of Communication
  - C. Executive Management Obligations to Operational Management
    - a. Establishing Key Success Factors
    - b. Operational Mandates
    - c. Defining Thresholds
    - d. Coaching and Guiding in Difficult Times
  - D. Addressing New Initiative Mandates
  - E. Managing Service Level Agreements (forming formal and informal benchmarks level sets)
    - a. Setting the Bar
    - b. Visible Time Reflect Metrics
    - c. Oversight of KPIs
    - d. Responding to KPI variations and taking action (positive & negative variants)
  - F. Damage Control and Anticipating Possible Outcomes
  - G. Setting the Standard – Success vs. Initiative Sabotage
  - H. Building a REAL Team Atmosphere
  - I. Effective Interaction with your Service Provider
    - a. Processing In and Out-of-Scope Service Requests
  - J. Keeping Stakeholders in the Loop (Internal Customer Relationship Management-CRM)

# OUTSOURCE QUALITY MANAGEMENT

- I. Introduction to Outsource Quality Management
  - a. Quality Defined
  - b. Quality Assurance and Quality Control
  - c. Quality Pioneers
  - d. Products and Process
  - e. Quality Concepts
  
- II. Quality Roles & Responsibilities
  - a. Quality Roles
  - b. Quality Culture
  - c. Quality Responsibilities
  
- III. Developing the Quality Management & Support Materials
  - a. Core Elements
    - i. Development Processes
    - ii. Quality Points
    - iii. Utilization & Departure
    - iv. Development
      - 1. S/W Acquisition
      - 2. Staffing
      - 3. PM
      - 4. Estimations & Commitments
    - v. Quality Initiative
    - vi. Quality Roadblocks
    - vii. Internal Control
  
- IV. Tailoring Processes to Fit Outsource Projects
  - a. Process Origins
  - b. Requirements – Spec vs. Functional Decomposition
  - c. Design vs. Skeletal Design
  - d. New vs. Maintenance Quality
    - i. Issues – Systemic Inheritance
    - ii. Latency Factor (new)
  - e. Types of Issues – Beizer Study
  - f. Tailoring vs. Adaptive Framework
  - g.
  
- V. Coaching Outsourced Project Teams
  - a. Good Coaching Attributes
    - i. Coach as....      Role Model

- ii. Coach as.... Sounding Board
- iii. Coach as.... Observer and Guide
- iv. Coach as.... Teacher
- v. Coach as.... Cheer Leader
- vi. Coach as.... Solomon
- vii. Coach as.... Champion
- viii. Coach as.... Team Builder

VI. Industry Trends in Outsource Quality Management

- a. Setting Outsource Priorities
- b. Industry Models
- c. Global Star Certification (GSC)
- d. Capability Maturity Model Integrated (CMMi)
- e. International Standards Organization (ISO)
- f. Others

VII. Quantitatively Defining Customer Satisfaction

- a. Service Level Agreements
- b. Minimizing Business Risk
- c. Step 1 – Manage by Results
- d. Step 2 – Manage to Facilitate Success
- e. Step 3 – Manage to Process
- f. Step 4 – Manage to Fact
- g. Step 5 – Manage to Improve Probability of Future Success

# ENGLISH COMMUNICATION FOR LEADERS IN IT OUTSOURCING

## PROGRAM OVERVIEW

### Course Objectives

IT outsourcing is blooming in China. With advanced technological skills and experienced personnel, outsourcing providers are looking forward to expanding their business and penetrating the global market. In working with their foreign clients, however, many have found English communication skills a major obstacle to secure new business from potential customers or maintain a smooth cooperative relationship with current clients.

With majority of your clients from overseas and speaking English, one can never underestimate how important mastering excellent English communication skills is to the development of IT outsourcing companies. The following are the challenges Chinese IT outsourcing providers often face when interacting with foreign clients.

1. The difficulty in English communication is often a reflection of insufficient understanding of the difference between one's own culture and that of our overseas clients, in areas including value system, political system, religion, etc. How can we communicate to ensure a mutual understanding and minimize confusions?
2. To nurture a healthy business relationship, it is not enough to communicate only on business. In many situations, we may need to communicate with the client on non-work related topics, which provides great opportunities to build bonding with the client. How can we communicate to build personal connections?
3. Communication is key to build trust in a potential customer. The first impression received from initial contacts often plays a huge role on the client's decision on selecting the outsourcing provider. How can we communicate to make a potential customer interested in our service?
4. Often business negotiations are conducted in English. Good English skills not only help you to secure more advantages but also protect you from an unfair contract. How can we communicate to negotiate for our maximal gains?
5. Nowadays offshore outsourcing has evolved into high level integration and synergy, requiring a tremendous amount of detailed management and communication between the client and supplier side. How can we communicate to ensure a smooth cooperation with our clients?

If you have experienced difficulties or are thinking about perfecting yourself in some of the above realms, this program is designed to help you to have pleasant, pertinent, and successful communications with your clients.

## COURSE BENEFITS

- Improve your English communication skills, so that you can engage in a pleasant and effective conversation with your client;
- Avoid common mistakes in communication and minimize confusion;
- Enhance your capability to promote your company and sell your services to foreign customers, and earn more outsourcing business;
- Enhance your capability to seize business opportunities during business exhibitions and conferences;
- Enhance your negotiation skills, so as to maximize your business gains while still maintaining a good relationship with the client;
- Be more efficient in communicating with clients on the progress and problems of the project;
- Understand the Western culture, so as to better understand your client;
- Interact with your client with proper etiquette;
- Be more efficient in building up a valuable network in the global market;
- Be more efficient in establish a trustful personal connection between you and your client.

## Course Schedule and Descriptions:

The course is delivered in 10 days.

Day 1: Cultural difference

Often ineffective communication is caused by the difference in culture rather than in language. There exists a significant difference between China and western countries, such as value system, political system, etc. Taking into consideration such cultural difference ensures an effective communication based on mutual understanding.

- a) Value system
- b) Political system
- c) Economic system
- d) Religion
- e) Life style

Literature review: Value->Thinking->Language & Behavior

Cross-Cultural communication

Case studies: 1) example about cultural difference

2) case of individualism Vs Collectivism

3) cultural diversity workshop

Group games: life style match-up games

Value system match-up games

Analysis, discussion and sharing

## Day 2: International business etiquette

To be embraced by the world, one must first blend into the world. Learning international business etiquette is crucial for all global business executives, managers, and employees, to make a favorable presentation to foreign clients of themselves and the company they represent.

- a) Common mistakes by Chinese businessmen
  - Appearance
  - Behavior
  - Conversations
  
- b) Strategies
  - When in Rome do as Romans do
  - Curiosity killed the cat
  - Flattery will get you nowhere
  - Variety is the spice of life
  - Always respect other culture

Role-playing: business etiquette for dining and conference.

Case studies: 1) examples of mistakes

- 2) some basic business etiquette
- 3) get the name right at the right time
- 4) writing a proper business e-mail
- 5) The etiquette of business dining

## Day 3: Building personal Connection I: Receiving or visiting the guest

Outsourcing companies will often have visitors from the clients. Receiving foreign guests is a good opportunity to build personal connection with these visitors, which makes a good addition to the business. However, it is also easy to make a mistake when hosting the clients, which unintentionally lead to negative outcomes. This is also true when you visit your clients overseas.

- a) Common mistakes by Chinese businessmen
  - Conversations that may make the client uncomfortable
  - Food and entertainment that may make the client uncomfortable
  - Too much hospitality
  
- b) Strategies
  - Better safe than sorry
  - Respect privacy
  - Hosting clients is not the ultimate goal.

Case studies: 1) over-hospitality

2) stages of relationship

- Role-playing: 1) Receive the guest at the airport  
2) Take the guest to dinner  
3) Choose the appropriate topics

Day 4: Build personal Connection II: Reception, Conferences, etc.

Outsourcing companies sometimes need to conduct receptions, conferences, etc. to meet potential clients and present solutions of problems, etc. Leaving the client a positive impression during the these events is important to build trust and long-term relationship

- a) Common mistakes by Chinese businessmen
- Too talky
  - Ignorant
  - Treating people with different gender, age, rank, or ethnicity.
- b) Strategies
- Be professional
  - Show interest
  - Be open-minded and appreciate the different culture and lifestyle

- Case studies: 1) Talky and ignorant  
2) Drunker networker  
3) Park and dump  
4) An interview about business relationships  
5) Some insights of business networking

- Group games: 1) Prepare the gifts for foreign clients  
2) Favorite sport topics

Day 5: Communicating with Potential Customers I: Initial contact via phone, letter, or e-mail

With most potential customers located overseas, initiating communication via phone, letter, or email is a cost-saving way to quest new business for outsourcing providers. A good impression created through such contacts often paves a way for future collaboration. Despite its importance, however, outsourcing providers are often appalled by the idea of communicating in English without the aid of facial expression or body language.

- a) General Guidelines
- Do homework
  - Propriety and appropriateness
  - Use short sentence
  - Practice, practice, practice
- b) How-to tools
- How to choose the proper way of communication
  - How to choose the right person to contact

- How to start phone calls/e-mails with a proper topic
- How to deal with awkward situations

Case studies: 1) Professional phone etiquette  
2) How to practise e-mail etiquette

Group games: 1) Take a phone call from overseas  
2) Make a phone call to foreign clients  
3) Write an email to introduce company offerings  
4) Write routine emails to foreign clients  
5) Write thank-you e-mail to foreign clients

Day 6: Communicating with clients: Follow up, closing and Exhibition etc.

Business exhibitions, conferences, and seminars are good ways to obtain your IT outsourcing business. Not only do they present business opportunities, but they are also networking occasions for IT outsourcing companies to build up their international credibility. It is important for outsourcing companies to seize the opportunities provided by business exhibitions.

- a) General Guidelines
  - No harm in trying
  - Clothes make the man
  - Passion, vision, and action
- b) How-to tools
  - How to make your booth attractive to international customers
  - How to communicate in the opening party
  - How to raise the interest of the visitors to your booth
  - How to follow up potential clients

Case studies: 1) two important words in sales  
2) Selling skills Vs buying motives  
3) Beginning the engagement  
4) The real reason clients stall  
5) Reassure clients  
6) The sales bible

Role-playing: dress rehearsal for business exhibitions

Day 7: Business Negotiation-Part 1

As every businessperson would agree, business negotiation is of significant importance. Successful negotiation will secure the company the benefits to a maximal degree and lay a foundation for a pleasant collaboration with your client. Important as it is, outsourcing

companies find negotiation in English a challenging task. How to strive for one's own benefits without damaging the relationship with the client?

- a) General Guidelines
  - Business is business
  - Honesty is the best policy
  - Have a clear knowledge about your own strength and weakness
  - Focus on win-win strategy
  - Find the common ground
  - Tolerate small difference in negotiations

Case studies: 1) Negotiating price  
2) You get what you negotiate  
3) Negotiation skills  
4) Secrets of negotiation

Group games: dress rehearsal for business negotiation

## Day 8: Business Negotiation-Part 2

- a) General strategies:
  - Right mind sets
  - Positive body language
  - Terms and phrases often needed in business negotiation
- b) How-to tools
  - How to clarify a demand/offer from the client
  - How to decline a demand/offer from the client
  - How to negotiate for a better price
  - How to negotiate on terms other than price

Case studies: 1) Sales Vs Negotiations  
2) An example of B to B negotiation  
3) Effective business negotiation

Role-playing: negotiation preparation/implementation/evaluation

## Day 9: English in the cooperation I: Routine communication

Once collaboration starts, outsourcing companies need to keep the clients updated on the project progress. Smooth communication lays foundations for a smooth collaboration.

- a) The type of routine communications
- b) Principles on routine communications

- c) Strategies of routine communications

Case studies: 1) Office etiquette

- 2) Office phone
- 3) Office talk

Group games: routine communication practice

Day 10: English in the cooperation II: Communicating about problems

Outsourcing companies often find communicating about problems with clients a great challenge. Good communication on problems helps to solve the issues promptly and avoid unnecessary conflicts

- a) technical problems
- b) Solution problems
- c) Payment problems
- d) Service problems
- e) Delivery problems

Case studies: 1) Office party

- 2) IT related English
- 3) Complaining
- 4) Customer service tips

Role-playing: 1) Solve problems

- 2) Evaluate results
- 3) Build up problem solving knowledge pool