

## Requirements Definition Techniques for Subject Matter Experts

*Instructor-Led, On-Site Duration 1 day*

### Overview

Subject matter experts (SMEs) are smack in the middle of the critical path on any information technology project. Their decisions and input become the business and stakeholder requirements for the project. Solution and transition requirements are derived directly from their contributions. Without good SME input, your projects can easily get off track or ultimately fail. Yet, this group is all too often totally ignored when it comes to training in how they can improve their contributions.

This 1-day course introduces SMEs to the process of requirements gathering in which they will be heavily involved. It defines their role as well as the role of the business analyst and others in the process. The course presents a set of rules for writing more effective business requirements to improve the communication between the business community and the information technology experts. There are no prerequisites and anyone who contributes requirements to the project will benefit.

### Target Audience

Subject Matter Experts

Representatives of Special Interest Groups  
(Security, Audit, etc.)

Business Managers

Anyone who contributes requirements to an  
Information Technology (IT) project

Project Managers

*Developed and presented by:*



Requirements Solutions Group, LLC  
3837 Northdale Blvd, Ste. 361  
Tampa, FL 33624  
*We Build Business Analysts™*

Telephone: **(813) 319-5851**  
Fax: (813) 864-0131  
E-mail: [training@requirementsolutions.com](mailto:training@requirementsolutions.com)  
Web: [www.requirementsolutions.com/](http://www.requirementsolutions.com/)

**Learning Objectives**

*Upon completion of this seminar, you will . . .*

- Manage questions and open items lists
- Identify the value of good requirements
- Evaluate a management vision statement
- Write business requirements that solve business problems
- Use 10 critical requirements questions to guide the requirements capture process
- Apply the five rules of a “good” requirement sentence
- Translate business needs into well-structured business requirement statements
- Write business requirements that express the what and avoid the how
- Discuss the problem with language based requirements
- Verify the “testability” of a requirement
- Decompose requirements into the major types of requirements and their subtypes
- Further clarify business rules, performance and constraining requirements
- Use a standard readability index to improve understanding
- Choose risk reduction alternatives for high-risk requirements
- Evaluate the completeness of requirements
- Categorize requirements based on focus
- Create a requirement/problem matrix to confirm requirements completeness
- Confirm (determine relative importance and feasibility) of requirements
- Apply the four rules for managing a group of requirements

## 1 Requirements Elicitation Defined

### Who Needs Requirements, Anyway?

- The Fate Chart
- A Question File
- Exercise: A Problem with Language
- Exercise: Initial Requirement Statements

## 2 Understanding the Requirements Process

### Who Do You Talk to about What?

- Identifying Stakeholders
- Using an Org chart
- Exercise: Stakeholder Identification

### Document Analysis

- System Vision
- WasteTheWaist "Vision Statement" from CEO
- Exercise: From Vision to Requirement Statements
- Vision Statement Evaluation
- Exercise: Structured Vision Statement

### Problem Definition

- Defining the Real Problem
  - Exercise: Problem Identification
  - Aristotelian Problem/Symptom Reduction
  - Rewriting a Problem Statement
- Getting Written Problem Statements
  - Exercise: Aristotelian Problem Symptom Reduction
- Exercise (cont.): Problem Statements
- From Problems to Requirements
  - Exercise: Getting Requirements from Problems

### Requirements Elicitation Critical Questions

- Critical Questions
- Applying the 10 Critical Questions

## 3 Writing Effective Requirements

### Writing Effective Business Requirements

- The Problem with Natural Language Requirements

### Creating Requirement Statements

- Business System Requirements
- Rules for a "Good" Requirement Sentence
  - Reducing Complexity Increases Comprehension
  - A Complete Sentence Forces a Complete Thought
  - Structured Requirement Statements
  - Example: Creating Complete Sentence Requirements
- Rules for a "Good" Requirement Sentence
  - Think "What", Not "How"
  - Example: Finding the What versus the How
- Rules Review
- Exercise: Applying the Rules

### Removing Requirements Ambiguity

- Rules for an "Understandable" Requirement Sentence
  - Relevance Increases Comprehension
  - Ambiguity Ruins Requirements

- Increasing Understandability
- Rules for a "Good" Requirement Sentence
- Peer Reviews Clarify Requirements
  - Clarifying Mutual Understanding
- Revise, Define and Clarify Your Requirements
  - Exercise: Desk-Checking
  - Verifying Understandability

- Rules Review
- Clarifying Requirements

### Writing Measurable Requirement Statements

- Rules for a "Testable" Requirement Sentence
  - To Test or Not to Test is NOT the Question
  - Requirements Testability
  - Effective Requirements are Verifiable or Testable

### Decomposing Requirements

- Components of Requirements
  - Exercise: Requirements Types
- Requirement Subtypes vs the 10 Critical Questions
- Testing Requirement Components
- Finding Functional Requirements
  - Testing Functional Components
  - Exercise: Testing the Functional Components
- Finding Rules and Constraining Requirements
  - Testing Rule and Constraint Components
  - Exercise: Testing Rule and Constraint Components
- Finding Performance Requirements
  - Exercise: Resolving Subjective Components
  - Exercise: Decomposing a Requirement
- Purpose of Requirements Decomposition

### Confirming Business Requirements

- Rules for "Effective" Sets of Requirements
- Confirming Feasibilities
- Identifying High Risk Requirements
- PASS = Project Audit Support Services
- Exercise: Verifying Requirements Completeness

## 4 Finishing the Job

### Clarifying Business Requirements

- Exercise: Grouping Requirements
  - Combining Requirements
- Detailed Clarification
- Rules for "Effective" Sets of Requirements
  - Identifying Inconsistent Requirements
  - Exercise: Identifying Inconsistent Requirements
- Rules for "Effective" Sets of Requirements
  - Of Rules and Requirements
  - Business Rules Are
- Rules vs. Requirements
  - Rules Relationships
- The Rules Challenge
  - Exercise: Testing Rules