

Defining and Managing User Requirements

Course Summary

Description

Understanding and articulating business requirements for projects always has been the weakest link in systems development. Up to 67 percent of maintenance and 40 percent of development is wasted rework and creep attributable to inadequately defined business requirements. Too often projects proceed based on something other than what the business people really need; and development methodologies commonly focus mainly on the format for representing requirements. This interactive workshop also emphasizes how to discover content, why to build it and what it must do to produce value for the customer/user. Using a real case, participants practice discovering, understanding, and documenting clear and complete business requirements that can speed project delivery, reduce maintenance, and delight customers.

Objectives

At the end of this course, students will be able to:

- Define the role and importance of business requirements accurately and completely.
- Make distinctions between the user's (business) requirements and the system's (design) requirements.
- Gather data, spot the important things, and interpret them meaningfully.
- Use the Problem Pyramid tool to clearly define problems, causes, and real requirements.
- Format, analyze document, and communicate business requirements.
- Manage techniques and automated tools for requirements changes and traceability

Topics

- Requirements Role and Importance
- Discovering "Real" Requirements
- Data Gathering and Analysis
- Documentation Formats
- Getting More Clear and Complete
- Managing the Requirements

Audience

This course has been designed for systems and business managers, project leaders, analysts, programmer analysts, quality/testing professionals, auditors, and others responsible for assuring business requirements are defined adequately.

Prerequisites

There are no prerequisites required for this course

Duration

Two days

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Course Outline

- I. Requirements Role and Importance**
 - A. Sources and economics of system errors
 - B. How requirements produce value
 - C. Business vs. system requirements
 - D. Survey on improving requirements quality
 - E. Software packages and outsourcing
 - F. How we do it now vs. what we should do
- II. Discovering "Real" Requirements**
 - A. Do users really not know what they want?
 - B. How the "real" requirements may differ
 - C. Aligning strategy, management, operations
 - D. Technology requirements vs. design
 - E. Problem Pyramid™ tool to get on track
 - F. Understanding the business needs/purposes
 - G. Horizontal processes and vertical silos
 - H. Customer-focused business processes
 - I. Who should do it: business or systems?
 - J. Joint Application Development (JAD) limits
 - K. Management/supervisor vs. worker views
- III. Data Gathering and Analysis**
 - A. Surveys and questionnaires
 - B. Research and existing documentation
 - C. Observing/participating in operations
 - D. Prototyping and proofs of concept
 - E. Planning an effective interview
 - F. Controlling with suitable questions
- IV. Documentation Formats**
 - A. Formats to aid understanding of the data
 - B. Business rules, structured English
 - C. E-R, data flow, flow, organization diagrams
 - D. Data models, process maps
 - E. Performance, volume, frequency statistics
 - F. Sample forms, reports, screens, menus
 - G. Formats for communicating requirements
 - H. IEEE standard for software requirements
 - I. Use cases, strengths and warnings
 - J. 7 guidelines for documenting requirements
 - K. Requirements vs. implementation scope
 - L. Iterating to avoid analysis paralysis
 - M. Conceptual system design solutions
 - N. Detailing for clarity, clarifying quality
- V. Getting More Clear and Complete**
 - A. Stakeholders and Quality Dimensions
 - B. Addressing relevant quality factor levels
 - C. Standards, guidelines, and conventions
 - D. Detailing Engineered Deliverable Quality™
 - E. Simulation and prototyping
 - F. Defining acceptance criteria
- VI. Managing the Requirements**
 - A. Supporting, controlling, tracing changes
 - B. Automated requirements management tools
 - C. Measuring the "proof of the pudding"