

Real World Requirements Analysis

Course description

Introduction

This interactive training course will enable attendees to model, analyse and improve processes.

The course is complete in itself but can be supported with additional coaching and mentoring, as desired.

Prerequisites

There are no specific prerequisites.

Duration

3 days

Price

Our courses are run for organisations who typically require training for at least 5 delegates. Price is dependent on the number of delegates. We do not currently offer a public schedule of courses.

For further information or to request a quote, please see our web site at <https://capiro.co.uk/course-enquiry/>

Course Outline

The following gives an outline of the standard course. Our business model is based on developing customised solutions for clients.

Session 1. Introduction to business cases

Session Objectives

- Understand how a business case is a basis for defining requirements for a product or service
- Know how to create a business case

Session Contents

- Business plans
- The business case: a business basis for requirements:
 - Stakeholders involved in creating a business case.
 - Problem or opportunity?
 - Root cause analysis
 - Link to strategic business objectives
 - Benefits driven requirements
 - Costs
 - Risks
 - Assumptions
 - Governance: balancing benefits, costs and risks
 - The financial case: an overview
 - Breakeven
 - Discounted cash flow
 - Internal rate of return
- Iterative development of the business case
 - How much detail is required?

Session 2. Introduction to Requirements

Session Objectives

- Introduce some basic concepts of requirements discovery and management
- Introduce a generic requirements process

Session Content

- What is a requirement?
- Features and requirements
- Requirements and design
- Requirements hierarchies
- Types of requirements
 - Functional
 - Non functional (Quality)
 - Constraints
 - Management (Project) requirements
 - Business rules
 - Constraints on the solution space
- Rationale
- Acceptance criteria
- Requirements and the project approach
 - Waterfall
 - V model
 - Iterative and incremental
 - Agile approaches: Scrum, Kanban and Crystal
- Who does it? The requirements 'team'
- Establishing a 'contract' of responsibilities for IT and the business
- The four major phases of requirements discovery and communication

Session 3. Requirements Elicitation (Discovery)

Session Objectives

- Describe how to discover requirements
- Know approaches to elicitation
- Know techniques for elicitation

Session Content:

- Requirements in context: Business processes, business rules and data
- Who does it? Stakeholders in the requirements discovery process
- Elicitation techniques:
 1. Interviews
 2. Facilitated workshops
 3. Questionnaires
 4. Observation
 5. "Creativity" techniques
- Discovering non functional requirements
- Just enough detail

Session 4. Documenting Requirements

Session Objectives

- Be aware of different approaches to documenting requirements
- Be able to select appropriate documentation techniques in specific circumstances

Session Content

- Initial documentation
- Requirements and risk (One size does not suit all)
- How much detail and formality?
- A 'perfect' requirements specification?
- Uses and challenges of natural language
- Requirements templates
- Task descriptions as requirements

- Classic approach to specifying requirements
- Use cases
- User stories
- Documenting the detail
 - Scenarios with use cases
 - Acceptance criteria with user stories
 - Decision tables
 - Prototypes
- Data and class models
- State models
- Documenting non functional requirements

Session 5. Requirements Analysis, Validation and Verification

Session Objectives

- Be able to analyse requirements for:
 - User and business acceptance
 - Testability
 - Technical feasibility
 - Economic feasibility
 - Cultural feasibility

Session Content

- Typical specification problems
 - Clarity
 - Simplicity
 - Ambiguity
 - Duplication
 - Omissions
- Issues with non functional requirements
- Quality reviews of requirements
- Analysis and validation with scenarios, models and prototypes
- Verification: Acceptance testing
- Managing the business case: benefits reviews and realisation

Session 6. Requirements Management

Session Objectives

- Be able to manage requirements specifications
- Know about requirements re-use

Session Content

- What is requirements management?
- Version control and baselines
- A change control process
- Change control in an agile environment
- Traceability
- Release management
- Requirements re-use

Session 7. Automated support

Session Objectives

- Know about software tools to support requirements development
- Know about integration of the tool sets

Session Content

- Life cycle management tools
- Requirements management support
- Modelling tools
- Prototyping tools
- Support for quality reviews (Static testing)
- Support for acceptance testing
- Integrating the tools

Exercises

The course is supported with a comprehensive case study and exercises.

The usual approach in a customised course is to complement standard exercises by having the course delegates work through the modelling, analysis and improvement of real process from within the client organisation.