

Course 116: Advanced Methods for Analysis (2 days)

Course Description...

There are many forms of analysis a business analyst is called upon to apply to any given business problem, from analysis of the conditions of the problem and the business processes to analysis of the financial justifications for the solution, to the analysis of the business impacts of the solution. This course focuses on various methods of analysis and solution development. The analytical methods introduced in this course provide the business analyst with the tools to evaluate business processes to determine problems and bottlenecks, produce financial analysis of business problem impacts and their proposed solutions, and identify the impacts on the business of solutions to business problems.

Learning Objectives...

- Analyzing requirements to determine what development action must be taken
- Establish a financial basis to justify the solution to a business problem
- To perform an impact analysis on a proposed project to identify the areas of concern
- Analyze and control risk during the definition and implementation of a product

Who should attend...

Business analysts, project managers, and anyone with an interest in a successful software development project.

Prerequisites...

This course is for senior business analysts. Successful completion of course 103F, and either 108F or 109F, is a pre-requisite. The course assumes an understanding of the use case approach and basic UML diagramming techniques. It also assumes knowledge of and experience with business modeling techniques.

See next page for a detailed course outline...



Course Outline...

Introduction and Overview

Course Objectives

Unit 1: Analyzing the Business Problem

Analysis Methods

- Enterprise Analysis
 - Strategic business analysis
 - Evaluating problems
- Problem and vision
 - Problem analysis
 - Six hat analysis
 - Decision analysis
 - Solution analysis
 - Functional decomposition and goals
 - Establishing the target
 - Financial justification
 - Goal alignment
 - How do we know?
 - Connecting the dots
- Domain structures
 - Separating the problem from the solution
 - What goes where
 - Domain appropriate analysis
 - Technical Feasibility analysis
- Analytical diagramming
 - Problem model diagramming
 - Business rules
 - Flow diagrams
 - Business Use case diagramming
 - Solution model diagramming
 - CRUD matrix
 - Prototyping

Financial Analysis

- Return on Investment analysis
 - Computing the ROI
 - The value of the ROI analysis
- Payback analysis
 - Computing the payback
 - Factoring the cost of money
- Cost/benefit analysis
 - Creating the cost/benefit picture
 - Defining the information
- Feasibility analysis
 - Various forms of feasibility
 - Feasibility trade-offs



Environment analysis

- Where does the problem live?
- Where does the solution fit in?
- User constituencies
 - Affected by the problem
 - Impacted by the solution
 - Hidden and detached users
 - Disaffected constituencies
 - Politics

Unit 2: Risk Analysis

Product and Project Risk

- Initial product risk
- Examining overall risk

Quantitative risk analysis

- Statistical analysis
- Decision tree analysis
- Sensitivity analysis
- Assessing probability versus impact
- Determining exposure

Qualitative risk analysis

- Risk probability
- Risk impact
- Product assumption testing
- Ranking risk

Timing of risks

- The Risk window
- Risk triggers

Unit 3: Impact Analysis

Levels of Impact

- Drawing the line
 - Business impact
 - System impact
- The impact matrix

Traceability

- Connecting the dots
- The impact tree
- Evaluating downstream impacts

Uncovering Hidden Impacts

- Impact Analysis Checklist
- Implications of proposed solution
- System impacts of proposed solution
- Impact Analysis Report Template

Assessing the impact of change



Change management

- Assessing change population
- Leveraging change
- Incorporating change in the culture

Unit 4: Integration Analysis

Integration Concepts

- Solution Side impacts
- Definition of integration
- Interface equals impact
- Planning the Integration process
- System Integration Issues

The Order of Integration

- General considerations
- What else is integrated

Production integration

- The working environment
- How do you know?
- Finding more problems
- What do you do now?

Unit 5: Gap Analysis

The Starting Point

- The problem domain
- Complete look

Defining the Gap

- Comparing the domains
- Quantifying the gap

Defining Capabilities

- Filling the gap
- Analyzing capabilities

Extracting requirements

- Turning capabilities into requirements
- Validating by reversing the process

Unit 6: Analyzing requirements

Basic analysis

- Source analysis
- Product scope
 - Product scope factors
 - Consistency analysis
- Good and Valid requirements
- Requirements filters



Using checklists and validations

- Functional requirements
- Non-functional requirements

Determining requirements attributes

- Types of attributes
- Source of information

Unit 7: The Bottom Line

Ideas to use

Where to go for more information

Please contact your ROI representative to discuss course tailoring!!!