Business Analysis Course
Data & Process Modeling Training for BAs

2 - 3 Days

Brief Description:

The course focuses on the concepts of process and data modeling skills and how to conduct effective modeling workshops using these techniques. The workshop is designed to provide each participant with practical exercises for creating and interpreting process models and logical data models used for project scoping, requirements gathering, analysis and design specifically focusing on structured analysis, information engineering and gap analysis methods. The workshop provides the collaborative workshop agendas, scripts and templates for eliciting these modeling techniques.

Description:

The Business Analysis Course: Process and Data Modeling Skills focuses on how to build business models, define requirements and perform analysis for IT projects. The course provides business analysis modeling and techniques needed for capturing the artifacts for Process Modeling: Context Diagram, Process Decomposition, Process Dependency, Process Matrix and Action Diagram. In addition, the course provides modeling skills and techniques for capturing the artifacts for Logical Data Modeling: Entity Relationship Diagram, Business Rules, and Data Normalization. The course is broken into three parts: process modeling skills, logical data modeling skills and how to conduct facilitated sessions with supporting workshop agendas, scripts and templates. The course provides practical experience and case studies for building and interpreting these business analysis models.

Objectives:

The objectives of the course are to:

- Provide an understanding of the process modeling and data modeling techniques, principles, terminology and concepts
- Provide practical group exercises for building models and interpreting the Information Engineering and Structured Analysis process and data modeling techniques
- Supply sample agendas, scripts and templates describing how to capture the deliverables throughout the Discovery Phase
- Simulate the modeling process by giving each course participant the opportunity to build the different business models and be critiqued by the instructor

Course Content:

Day 1
Introduction

Overview of Business Analysis

Project Management & Communication Techniques
Overview of Data Modeling

Reading a Data Model
- Entity types, attribute types, relationships and business rules
- Entity type key migration
- Critical features of a fully refined logical data model
- Case study exercise

Building a Logical Data Model
- Stage 1 - Project Initiation
- Stage 2 - Entity Type Definition
  - Identifying and defining entity types
  - Case study exercise
- Stage 3 - Relationship Type Definition
  - Identifying and defining relationships
  - Relationship matrices
  - Entity-level diagrams
  - Case study exercise
- Stage 4 - Key Attribute Type Definition
  - Defining key attributes
  - Refining relationships
  - Identifying key attributes
  - Case study exercise
- Stage 5 - Non-Key Attribute Type Definition
  - Identifying and defining non-key attributes
  - Producing a fully refined normalized logical data model
  - Case study exercise

Facilitating for Logical Data Modeling
- Approaches for data requirements gathering techniques
- Agendas, scripts, templates and facilitation techniques for requirements workshops and focus groups

Introduction to Process Modeling
- Objectives and modeling definitions
- Process modeling techniques

Building Context Diagrams
- Identifying functions, external objects and information views
- Agendas, scripts, templates and facilitation techniques
- Case study exercise for building context diagrams

Building Process Decomposition Diagrams
- Objectives and definitions
- Rules of decomposition to the elementary process
- Agendas, scripts, templates and facilitation techniques
- Case study exercise for building process decomposition diagrams
Day 2
Building Process Flows and Data Flow Diagrams
- Objectives, definitions and types of dependencies
- Identifying external objects, data stores and information views
- Agendas, scripts, templates and facilitation techniques
- Case study exercise building the process flow and data flow diagrams using the context and decomposition diagrams

Interactive Analysis
- Building Matrices
  - Reading the process to entity type matrix
  - Agendas, scripts, templates and facilitation techniques
  - Case study exercise building a process to entity type matrix

- Building Action Diagrams
  - Objectives, definitions and terminology used
  - Writing Structured English Action Diagrams
  - Agendas, scripts, templates and facilitation techniques
  - Case study exercise building the action diagram for a process

Business Process Improvement Techniques
- IDEF- Integrated Definition Modeling
- Process Mapping- Gap Analysis

Day 3
Optional Lab with the Instructor

Wrap-up

Materials:
Each participant receives a Kit with agendas, scripts and templates for building the models and conducting workshops and focus groups, a Case Study and a Course Handbook.

Who Should Attend:
Those who will find this of value are: Business Analysts, Data Analysts, Database Administrators, Systems Analysts, Technical Leads, Requirements Architects, Subject Matter Experts, Quality Assurance, System Architects and Developers.