

Data Modeling and Business Information Analysis - Simply Put!

Techniques for Creating and Presenting Business Data Models that Facilitate Data Visualization

Instructor-Led, Onsite or Online Duration 2 Days

Overview

A Business Information Model Is Essential for Data Visualization

Business information is the heart and soul of information systems. It forms the basis upon which everything else depends. If you get the business information structure right, the rest will follow. Get it wrong and the application may never recover. In order to get the majority of the business information right, it is essential to have a picture of the data in form of a business data model. As the old proverb states, a picture is worth a thousand words.

There are two complimentary methods for modeling business data: top-down and bottom-up. To gain a complete picture of your organization's information landscape, you need to understand and apply both. The good news is that this is not rocket science.

Using the business information model helps you identify potential business problems caused by missing or improperly defined business data resource.

This business analyst training workshop teaches you how to draw and use business information models based on entity/relationship diagrams. It includes a time-proven set of business analysis techniques, methods, and tricks to help you analyze an existing business information model, create a new business information model, and extract informational requirements essential to the success of your information technology projects.

Target Audience

Anyone involved in managing, understanding and/or improving the structure of business information in an IT project, including (but not limited to):

Business Analysts	Subject Matter Experts
Agile Product Owners	Project Leaders and Managers
Line Managers	Systems Analysts
Software Testers	Solution Architects

AND anyone wearing the business analysis hat

Learning Objectives

Upon completion of this training, successful attendees will:

- Compare the pros and cons of using Business Information Models as tools of communication
- Create and present business-focused entity relationship diagrams
- Analyze a business data model to discover business and stakeholder requirements
- Elicit and analyze business data attributes from all project stakeholders
- Morph an existing Information Model into a future data model
- Extract business data attributes and entities from business user views
- Allocate business data to the appropriate business entity
- Plan to incorporate selected techniques to improve your performance on the job



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1 Overview of Business Information Modeling

What is a Business Information Model

- The Data Foundation
- The Business Perspective
- Data, Information and Knowledge
- Business Information Models
- Types of Data
- The Value of Models

2 Modeling Business Information

Top-Down Business Information Modeling

- Identifying Entities
- Relationships and Cardinality
- Rules for a Business Information Model
- Exercise: BIM for Project Resources
- For Your Business Information Model
- Rules for a Logical Business Information Model
- Exercise: Creating the Structural BIM
- For Your Logical BIM
- Rules for a Physical Data Model
- Physical Data Model for Project Resources
- Review of Diagramming Conventions
- Comparing Levels of BIMs

Bottom-Up Business Information Modeling

- Business Information Modeling - Two Approaches
- Starting with a Simple Form (aka User View)
- Purchase Order Form
- Defining Derivable Data
- Recap Steps 1 – 6 Eliminating Internal Redundancies
- Eliminating Redundancies across Instances
- The Bottom-Up Logical BIM
- Identifying Non-Redundant Sets of Data Elements
- Exercise: Identifying Shipping Ticket Data

- Solution: Shipping Ticket Logical BIM
- On Merging BIMs
- Exercise: Merging Logical BIMs
- Solution: Merging Logical BIMs
- Exercise: Analyzing the Invoice Form
- Solution: Invoice Logical Information Model
- Exercise: Logical BIM for Order Processing
- Solution: Complete Invoicing System BIM

Defining Entities and Attributes

- Defining Entities
- Exercise: Education Department Brochure
- Worksheet: Education Department Brochure
- Exercise: Education Department Conceptual BIM
- Solution: Education Department Conceptual BIM
- Exercise: From Business to Logical BIM
- Worksheet: Education Department Logical BIM

3 BIM Requirements Visualization

Modifying Business Information Models

- Creating a New System Data Model
- Data Stability
- Exercise: Modifying the Project Resources BIM
- Previous Data Model for Project Resources
- Modifying Diagrams and Forms
- Exercise: Modifying a BIM and Forms System
- As-Is Forms for the Invoicing System
- Solution: Modified Business Information Model

5 From Showtime to Go Time!

Personal Improvement Plan

- Understanding the Learning Curve
- Exercise: My Techniques
- My Personal Implementation Plan