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Accelerated Data Mart Development Training

The quickest (and best) way to get started developing valuable business intelligence applications is to focus on a single business process and to put together the information required to help employees make that process work better. This can be done by developing a data mart for that process. This training program follows the process of developing data marts that integrate well into enterprise data warehouses.

As the students progress through the class, they build up a course project. In this way, they can apply the specific strategies, project plans, techniques, and technologies to their own organizations' data mart projects.

Prerequisites:

Knowledge of at least one business process and the type of data associated with it is recommended. If the student can bring in sample reports or data extracts from existing systems, they may be used as examples in the class and as a basis for the class project.

Who Should Attend?

People from aerospace/defense, manufacturing, telecommunications, health care, insurance, financial services, professional services, travel, government, and e-commerce, who will be involved in the key roles of developing a data mart or data warehouse including:

- Project managers and business analysts
- Data modelers and database administrators
- Extract, transform, and load experts and analytic application developers

You Will Learn:

- Advantages and disadvantages of different data mart designs
- Requirements analysis and project management best practices
- Dimensional modeling for easiest OLAP data access
- Methods for loading data from existing (operational) data sources
- Data access tools and technologies including reporting, analysis, and data mining

The class will be valuable to both students who have not yet developed a data mart or data warehouse and students who have been involved in one or two data marts and are not certain if they are employing the best available practices in the science of data warehousing.

Class Modules

Data Mart Architecture and Project Management

This module provides the background to allow you to make intelligent data mart design decisions. Apply architectural theory to the course certificate project. Learn best practices and examine templates for data mart requirements analysis and project planning. Topics Include:

- Data mart components
- Use of commercial and open source technologies
- Shared metadata
- Tool selection
- Applicable standards
- Current technology trends and issues
- Business requirements analysis
- Defining business drivers and key performance indicators
- Estimating data mart sizes
- Example deliverables

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- Example project plans
- Resource requirements

Data Mart Dimensional Modeling

This module explores dimensional modeling-the most widely accepted technique for creating the database schemas for data marts. Apply these techniques to the course project. Topics Include:

- Operational systems versus analytic systems
- Designing dimensional models
- Fact tables
- Dimension tables
- Dimension role-playing
- Slowly changing dimensions
- Conforming dimensions
- Example dimensional models
- Physical design

Data Mart Extraction, Transform, and Load (ETL) Processes

This module covers the heart of a data mart effort-extracting data from operational systems, transforming data into clean, reliable, usable formats, and loading data into a dimensional model. Topics Include:

- Survey of typical data sources
- Tool selection and technology survey
- Metadata repositories
- Loading dimension tables
- Loading fact tables
- Data cleansing and de-duping
- Parallel processing
- Pre-computed aggregates
- ETL operations management
- Survey of products and emerging technologies

Data Mart Reporting, Analysis, and Data Mining

Once operational data has been loaded into a dimensional model, there are a variety of reporting, analysis, visualization, and statistical exploration technologies that can provide the information needed to monitor and improve a business. This module explores the relevant technologies. Topics Include:

- Presentation models-OLAP, ROLAP, MOLAP
- Report development tools
- Metadata replication
- Aggregate-aware front ends
- Data mining algorithms
- Web-based deployment
- Commercial analytic applications
- Survey of products and emerging technologies

Ordering Information:

P/N--RBI 7061
Price--$995 per student (minimum 5)
Deliverable--Five-day training class covering:

- Data Mart Architecture and Project Management
- Data Mart Dimensional Modeling
- Data Mart Extraction, Transform, and Load (ETL) Processes
- Data Mart Reporting, Analysis, and Data Mining

Please contact us for further details:

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