Advanced Master Data Management and Integration Training Course

14 - 18 Dec 2026

Boston

7500 € (Per Person)

Ref: #DM7448_89952

Course Introduction / Overview:

This course provides a comprehensive exploration of Master Data Management (MDM) and data integration, two critical disciplines for modern enterprises aiming to achieve a single source of truth. In an era of data-driven decision-making, the ability to manage and integrate core business data—such as customer, product, and supplier information—is paramount for operational efficiency, regulatory compliance, and strategic advantage. As detailed by the renowned author David Loshin in his seminal work "Master Data Management", a successful MDM initiative is not merely a technology project but a business transformation program. This training course, offered by BIG BEN Training Center, is meticulously designed to bridge the gap between theory and practice. Participants will delve into the core principles of data governance, data quality, and data stewardship, learning how to design and implement robust MDM architectures. We will explore various data integration patterns, from traditional ETL processes to modern real-time data synchronization, ensuring that master data is consistently and accurately propagated across all enterprise systems. This program equips professionals with the strategic insights and practical skills needed to lead successful MDM and data integration projects, ultimately transforming raw data into a reliable and valuable corporate asset.

Target Audience / This training course is suitable for:

- Data Architects and Senior Data Analysts.
- IT Managers and Directors.
- Business Intelligence (BI) and Data Warehousing Professionals.
- Data Governance Managers and Data Stewards.
- Database Administrators and Developers.
- Enterprise Architects.
- Business Analysts and Systems Analysts.
- Compliance and Risk Management Officers.
- Project Managers overseeing data-related initiatives.

Target Sectors and Industries:

- Financial Services and Banking.
- Healthcare and Pharmaceuticals.
- Retail and E-commerce.
- Manufacturing and Supply Chain Management.
- Telecommunications and Media.
- Energy and Utilities.
- Government Agencies and Public Sector Organizations.
- Technology and Software Development.

Target Organizations Departments:

- Information Technology (IT) and Data Management.
- Business Intelligence and Analytics.
- Finance and Accounting.
- Operations and Supply Chain.
- Marketing and Customer Relationship Management (CRM).
- Compliance and Legal.
- Product Management and Development.
- Human Resources.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a strategic roadmap for an enterprise-wide Master Data Management initiative.
- Design and implement robust data governance frameworks to ensure data integrity and compliance.
- Master various data integration patterns and technologies for seamless data flow.
- Establish and manage effective data stewardship programs within the organization.
- Implement comprehensive data quality management processes, including profiling, cleansing, and monitoring.
- Evaluate and select the appropriate MDM architectural models and tools for specific business needs.
- Align MDM strategies with key business objectives to drive tangible value and ROI.
- Lead data integration projects that support a single, authoritative view of master data.
- Address challenges related to data security, privacy, and lifecycle management in an MDM context.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, engaging, and practical, ensuring that participants gain both theoretical knowledge and hands-on skills. This course moves beyond traditional lectures by incorporating a blended learning approach. Sessions will feature expert-led presentations on core concepts, followed by intensive group discussions and collaborative workshops where participants can analyze real-world challenges. A significant portion of the training is dedicated to case study analysis, allowing attendees to dissect successful and unsuccessful MDM implementations to draw actionable insights. Interactive exercises and simulations will be used to practice data modeling, defining governance rules, and mapping integration workflows. Participants will work in teams on a capstone project that involves designing a complete MDM solution for a hypothetical organization, from strategy to implementation planning. Continuous feedback is a cornerstone of our approach, with regular Q&A sessions and peer-to-peer reviews to foster a dynamic and supportive learning environment. This immersive methodology ensures that participants leave the course confident in their ability to apply their new skills directly to their professional roles.

Course Agenda (Course Units):

Unit One: Foundations of Master Data Management and Governance

- Introduction to Master Data Management (MDM).
- The business case for MDM and calculating ROI.
- Identifying and defining master data domains (Customer, Product, Supplier, etc.).
- Core principles of data governance and its role in MDM.
- Establishing a data governance framework and council.
- The roles and responsibilities of data stewards and data owners.
- Understanding the data lifecycle and its management.

Unit Two: MDM Architecture, Models, and Technology

- Exploring MDM implementation styles (Registry, Centralized, Coexistence, Consolidation).
- Architectural components of an MDM solution.
- Data modeling for master data entities and hierarchies.
- Evaluating and selecting MDM tools and platforms.
- Understanding the role of a data hub in enterprise architecture.
- Cloud-based MDM vs. on-premise solutions.
- Integrating MDM with existing enterprise systems.

Unit Three: Advanced Data Integration and Synchronization

- Fundamentals of data integration for MDM.
- ETL (Extract, Transform, Load) vs. ELT (Extract, Load, Transform) processes.
- Real-time data integration patterns and technologies (APIs, Message Queues).
- Data synchronization strategies for maintaining a single source of truth.
- Change Data Capture (CDC) techniques.
- Data virtualization and its application in MDM.
- Managing data integration workflows and error handling.

Unit Four: Data Quality and Stewardship in Practice

- Defining data quality dimensions (Accuracy, Completeness, Consistency, Timeliness).
- Techniques for data profiling and assessment.
- Data cleansing, standardization, and enrichment strategies.
- Implementing data quality monitoring and reporting dashboards.
- The operational role of a data steward in maintaining data quality.
- Developing business rules for data validation.
- Root cause analysis for data quality issues.

Unit Five: MDM Strategy, Execution, and Future Trends

- Developing a phased MDM implementation roadmap.
- Change management and communication strategies for MDM projects.
- Measuring the success of an MDM program with KPIs.
- Multi-domain and multi-vector MDM concepts.
- The intersection of MDM with AI, machine learning, and big data.
- Introduction to the data fabric concept.
- Capstone project: Designing an end-to-end MDM strategy for a case study organization.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

As data ecosystems become increasingly decentralized with cloud and edge computing, how must traditional centralized MDM strategies evolve to maintain a single version of the truth without creating new data silos?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by adopting a holistic, strategy-first approach to Master Data Management and integration, moving beyond a narrow focus on specific software tools. While many programs concentrate on the technical implementation of a single platform, our curriculum emphasizes the foundational pillars of a successful data program: robust governance, strategic architectural design, and effective change management. We focus on building transferable skills that are tool-agnostic, enabling participants to design and lead MDM initiatives in any technological environment. The curriculum, curated by industry experts, integrates advanced concepts like data fabric and the role of MDM in AI-driven enterprises, ensuring the content is forward-looking. A key differentiator is our emphasis on the synergy between MDM and data integration, treating them not as separate disciplines but as two sides of the same coin required to achieve a true single source of truth. The course's reliance on complex case studies and a capstone project provides a practical, real-world context that solidifies learning and prepares participants to tackle complex data challenges and drive tangible business value within their organizations.