

INTELLIGENT BUSINESS STRATEGIES PRESENTS



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**ENTERPRISE DATA GOVERNANCE &  
MASTER DATA MANAGEMENT**

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## OVERVIEW

This new two-day seminar is intended for compliance managers, data architects, database administrators, data integration developers and master data management professionals, who are responsible for management and governance of enterprise data.

The seminar takes an in-depth look at the business problems caused by poorly managed data, and defines the requirements that need to be met for a company to confidently define, manage and share master, transactional, analytic and unstructured data across operational and analytic applications and processes.

In order to achieve enterprise data governance, a company needs to invest in people, processes and a suite of technologies that support end-to-end data governance activities. These include

- Enterprise metadata management
- Data modelling
- Data profiling
- Data cleaning
- Data integration (Batch, on-demand and event-driven)
- Data synchronisation
- Master data management
- Enterprise content management

During the two days we take an in-depth look at the technologies needed in each of these areas as well as best practice methodologies and processes for data governance and master data management.

## AUDIENCE

This seminar is intended for business and IT professionals responsible for enterprise data governance including metadata management, data integration, data quality, master data management and enterprise content management. It assumes that you have an understanding of basic data management principles as well as at least a high level of understanding of the concepts of data migration, data replication, metadata, data warehousing, data modelling, data cleansing etc.

## LEARNING OBJECTIVES

Attendees will learn how to set up an enterprise data governance program and to determine what technologies they need for enterprise data governance, data integration and master data management (MDM). In addition they will learn when to use certain technologies over others and methodologies to use for metadata management, data integration, and designing and implementing data governance and MDM solutions.

## MODULE 1: AN INTRODUCTION TO ENTERPRISE DATA GOVERNANCE

This session introduces enterprise data governance and looks at the reasons why companies now need to invest in data integration and data management.

- An introduction to enterprise data governance

- The impact of unmanaged data on business performance
- Is your data out of control?
- Key requirements for Enterprise Data Governance (EDG)
- Establishing a data architecture and competency centre for the enterprise
- Establishing a strategy for data governance
- Getting the organisation right – data stewards and data owners
- Formalising EDG processes
- The emergence of EDG platforms

## MODULE 2: ENTERPRISE METADATA MANAGEMENT

This session looks in detail at the need for enterprise metadata management as the foundation for any data governance project. Metadata management includes the need for data stewards, data owners, common data definitions, discovery of existing disparate data definitions and data relationships, and the mapping of disparate definitions to a common shared data vocabulary.

- What is enterprise metadata management?
- Component technologies for enterprise metadata management
- Common metadata - data standardisation using a shared business vocabulary
- Shared business vocabulary Vs taxonomy
- IBM WebSphere Business Glossary Vs Microsoft Business Data Catalog
- Disparate metadata discovery, metadata mapping and metadata integration
- Metadata discovery tools – SAP/Business Objects, DataFlux, IBM Rational Data Architect, Informatica, Sypherlink
- Generating data integration services from common metadata
- Integration of common metadata with data modelling and data integration tools

## MODULE 3: ENTERPRISE DATA QUALITY

This session looks at a number of emerging business problems that require increased use data quality and data profiling software and why these new problems have transitioned data quality management from 'nice to have' software into an essential part of enterprise data management infrastructure. It looks at what has changed in these tools that has made them so desirable today

- Enterprise compliance – mandating the need for rock solid data
- Processes required for enterprise data quality
- The enterprise data quality problem
  - Data quality at the keyboard
  - Data quality on inbound and outbound messaging
  - Data quality integration with data warehousing
  - Data quality and Master Data Management
- Metadata quality – why this also matters
- What's new in data quality tools

- Integrating data quality into the enterprise – On-demand Data Quality Services
- Creating an enterprise data quality firewall
- Monitoring data quality using dashboards

## MODULE 4: ENTERPRISE DATA INTEGRATION

This session looks at the key approaches to data integration and provides an in-depth guide to each main type of integration technology. It includes coverage of structured and unstructured data integration

- Key approaches to data integration – data federation, data consolidation and data synchronisation
- Enterprise data integration - EII, ETL, ESB data synchronisation and data replication
- The data integration technology marketplace –Composite, DataFlux, Denodo, IBM, Informatica, Information Builders, Ipedo, Microsoft, Oracle, RedHat, SAP (Business Objects)
- An in-depth guide to data federation using Enterprise Information Integration (EII)
- ETL technologies and uses – data warehousing, data migration, data integration services
- Unstructured data integration and enterprise content management
- Using data integration technologies for event-driven and on-demand data integration, data migration, data consolidation, data synchronisation and master data management

## MODULE 5: AN INTRODUCTION TO MASTER DATA MANAGEMENT

This session introduces master data management and looks at why businesses are serious about introducing it. It also looks at the components of an MDM system and how to assess what components you need and the right implementation option for your business.

- What is Master Data Management (MDM)?
- Business benefits – Why is MDM needed?
- Components of a MDM solution
- How does MDM fit into an Enterprise Service Oriented Architecture?
- MDM architecture – Does MDM mean yet another data store?
- MDM examples – Customer Data Integration, Product Information Management, Financial Data Management
- Assessing your need for an MDM system
- Implementation options – deciding on Build Vs Buy

## MODULE 6: DESIGNING A MDM SYSTEM

This session looks at what is involved in designing an MDM system. It looks at the system scope, identifying candidate business entities, design approaches, identity management, master data integration and business process re-design.

- Deciding the scope of an MDM system
  - Master data, master metadata vocabulary, master data access services, master data business processes
  - Data considerations - Operational data Vs business intelligence Vs unstructured content
- MDM Architecture options
- Master Data Management approaches and their differences – Virtual Approach vs. Master Data Synchronisation vs. Master Data Integration vs. Enterprise MDM
- Identifying candidate business entities for MDM processing - Product Data, Customer Data, Employee Data, Financial Data
- Master data identity management – the need for Global IDs and Global Foreign keys
- Introducing a shared business vocabulary and master data integrity rules
- The importance of Hierarchy Management
- Approaches to integrating master data – the pros and cons of data federation, data consolidation or data synchronisation
- Understanding maintenance of master data – Data Entry Systems vs. Systems of Record
- Identifying and re-designing business processes associated with master data

## MODULE 7: MDM - THE BUILD OPTION

This session looks at how you build a MDM system. It includes what you have to do to define master data, source master data in data entry systems and how to map disparate source data to the master data entities. It also looks at what you need to do to integrate master data to create a Master Data Hub and how to synchronise data across existing systems.

- Defining master data attributes using common metadata
- Data entry system identification and data relationship discovery
- Mapping source data to the master data vocabulary
- Data profiling and rule creation for cleanup and matching
- Create a master hub using data integration
- Implementing master data synchronisation

## MODULE 8: MDM - THE BUY OPTION

This session looks at the buy option for MDM by exploring the MDM technology marketplace. It looks at the different technologies available and the pros and cons of each type of solution. It also looks at the scope of each product in terms of entities supported, and whether or not you can integrate them with existing technologies in your enterprise.

- The MDM technology marketplace – D&B Purisma, DataFlux, I2, IBM, Initiate, Kalido, Microsoft, ObjectRiver, Oracle, SAP, Siperian, Teradata
- Rule-based synchronisation products

- Virtual master data products
- Single and multiple entity hub products
- Enterprise MDM products
- Data quality and data integration products for MDM
- External master data providers
- Pros and Cons of each type of solution – what can they do, what can't they do?
- Evaluating and combining MDM products
- Integration of MDM solutions with existing data integration technologies
- Implementing a purchased MDM solution
- Development work that is still needed

## MODULE 9: TRANSITIONING TO ENTERPRISE MDM – THE CHANGE MANAGEMENT PROCESS

This session looks at the most difficult job of all – the change management process that is needed to get to enterprise master data management. It looks at the difficulties involved, what really needs to happen and the process of making it happen.

- Starting a MDM change management program
- Changing data entry system data stores
- Changing application logic to use shared MDM services
- Changing user interfaces
- Leveraging portal technology for user interface re-design
- Leveraging a service oriented architecture to access MDM shared services
- Changing ETL jobs to leverage master data
- Hierarchy change management in MDM and BI systems
- Transitioning from multiple data entry systems to one data entry system
- Transitioning change to existing business processes to take advantage of MDM
- Planning for incremental change management

## MODULE 10: INTEGRATING MDM INTO THE ENTERPRISE

- Integrating MDM with enterprise portals
- Integrating MDM into a Service Oriented Architecture (SOA)
  - Sharing access to master data via master data services
- Leveraging master data integration services in a SOA
- Leveraging SOA for data synchronisation
- Integrating MDM with operational applications and process workflows
  - How do you integrate an MDM system with batch applications
  - How do you integrate an MDM system with green screen applications
  - How do you integrate an MDM system with client server applications
- Integrating MDM with Business Intelligence
  - Why is MDM different from data warehousing systems?
  - How do you integrate an MDM system with BI systems
  - The impact of MDM on ETL processing
  - Version control on dimensional data

- Hierarchy change management across multiple data marts
- Integrating MDM with Enterprise Content Management Systems

## PRESENTER

Mike Ferguson is Managing Director of Intelligent Business Strategies Limited. As an analyst and consultant he specialises in business intelligence and enterprise business integration. With over 26 years of IT experience, Mike has consulted for dozens of companies on business intelligence strategy, technology selection, enterprise architecture, enterprise portals, business process integration, SOA and data integration. He has spoken at events all over the world and written numerous articles. Mike is a resident expert on the Business Intelligence Network, providing articles, blogs and his insights on the industry. Formerly he was a principal and co-founder of Codd and Date Europe Limited – the inventors of the Relational Model, a Chief Architect at NCR on the Teradata DBMS and European Managing Director of Database Associates. He teaches popular Enterprise 2.0 master classes in Operational Business Intelligence and Performance Management, Master Data Management, Service Oriented Architecture and Enterprise Portals.



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