



Enterprise Data Governance & Master Data Management

- Creating A Trusted Core & Customer Data Platform for the Data Driven Enterprise

Instructor: Mike Ferguson
Duration: 2 Days





OVERVIEW

Many businesses today are operating in a distributed computing environment with data and processes running across the data centre, multiple clouds and the edge. In this environment, with so much going on, master data, the most widely used data in any business, is becoming harder to find, manage and keep synchronised. This two-day in-depth seminar looks at this problem and shows how to successfully implement master data management to create a 360 degree view of customers, products, suppliers and other core entities. It is intended for chief data officers, enterprise architects, data architects, master data management professionals, business professionals, database administrators, data integration developers, and compliance managers who are responsible for management of specific master data like customer data, product data and supplier data as well as the governance of enterprise data.

The seminar takes a detailed look at the business problems caused by poorly managed master data and how inconsistent identifiers and data names, poor data quality, lack of master data integration and synchronisation can seriously impact business operations, cause unplanned operational costs and destroy confidence in trust of business intelligence. It also defines the requirements that need to be met for a company to confidently define, manage and share reference and master data across operational applications and processes and analytical systems on-premises and in the cloud.

Having understood the requirements, you will learn what should be in a master data management strategy and what you need in terms of people, processes, methodologies, and technologies to bring your master data under control. In addition, we will look at

how to manage leverage make use of a business glossary data modelling, data relationship discovery, data profiling, data cleaning, data integration, to provision master data and reference data as a service (DaaS). We also look at how Customer Master Data is being combined with Data Warehouses and Big Data to create new Customer Data Platforms (CDP)

During the seminar 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: WHY IS MANAGEMENT OF CORE DATA SO IMPORTANT?

This session looks at the increasingly complex distributed data landscape, the problems it brings and why companies need to invest in provisioning trusted, commonly understood, high quality data services across the enterprise to guarantee consistency. It also looks at why data

integration and data management should now be a core competency for any organisation.

- The ever-increasing distributed data landscape
- The impact of unmanaged data on business profitability and ability to respond to competitive pressure
- Is your data out of control?
- Key requirements for Enterprise Data Governance (EDG)
 - Governing the capture, protection, use, maintenance and decommissioning of data
 - The need to monitor, assess and act to uphold policies
- What is Master Data Management?
- Reference Data vs. Master Data
- Why is MDM needed? - benefits
- Establishing a framework for governing your core data
- Getting the organisation and operating model right
- Key roles and responsibilities - data owners and data stewards
- Core processes needed to establish and govern commonly understood data
- Types of policies and rules needed to govern:
 - Data ingestion
 - Data integrity
 - Data validation
 - Data cleansing
 - Data maintenance
 - Data privacy
 - Data access security
 - Data lifecycle management

MODULE 2: A METHODOLOGY & TECHNOLOGIES TO GET DATA UNDER CONTROL

Having understood why we trusted data is so critical, this session looks at data governance framework and methodology for getting you core data under control. It also looks at the technologies needed to help govern your data to bring it under control. It also looks at how data fabric software provides the foundation in your enterprise architecture to manage information across the enterprise

- A best practice methodology for producing trusted data
- Data Fabric – the new platform for discovering, profiling, cataloguing, mapping, cleaning, integrating and provisioning trusted data
- The role of Data Fabric in your enterprise architecture
- The Enterprise Data Marketplace
- Data governance and data management implementation options
 - Centralised, distributed or federated
- The impact of ungoverned self-service data preparation – the need for collaboration in our business units
- Data management on-premise and on the cloud

MODULE 3: DATA STANDARDISATION & THE BUSINESS GLOSSARY

This session looks at the first step in getting data under control – the need for data standardisation. The key to making this happen is to create common data names and definitions for your data to establish a common business vocabulary in the business glossary of a data catalog.

- Data standardisation using a shared business vocabulary
- The role of a common vocabulary in Master Data Management, Reference Data Management, SOA, DW and data virtualisation
- Approaches to creating a common vocabulary
- Business glossary- now a capability of a data catalog software
 - Alation, ASG, Amazon Glue, Collibra, Global IDs, Informatica Axon & Enterprise Data Catalog, IBM Watson Knowledge Catalog, Talend Business Glossary and Data Catalog, SAS Business Data Network
- Planning for a business glossary
- Organising data definitions in a business glossary
- Glossary roles and responsibilities
- Glossary term ratings, approval and dispute resolution processes

- Utilising a common vocabulary in Data Modelling, ETL, BI, ESB, APIs, & MDM

MODULE 4: AUTO DATA DISCOVERY, DATA QUALITY PROFILING, CLEANSING & INTEGRATION

Having defined your data, this session looks at the next steps in a methodology, to get data under control is discovering where your data is and how to get it under control

- Using a data lake to stage area for data cleansing and integration
- Automated data relationship discovery and profiling using a Data Catalog
- Automated data mapping
- Automated data quality profiling
- Approaches to integrating data
- Generating data cleansing and integration services using common metadata
- Data provisioning – provisioning consistent data services in a data marketplace for use in MDM and other systems
- Provisioning consistent data on-demand across cloud and on-premise systems using data virtualisation
- Monitoring data quality and policies across a distributed data landscape

MODULE 5: MASTER DATA MANAGEMENT DESIGN AND IMPLEMENTATION

This session looks at the components of a master data management (MDM) and RDM system and the styles of implementation.

- What does MDM 360 mean for master data entities, e.g. Customer 360, Supplier 360, Product 360...
- Components of an MDM solution
- MDM implementation styles and options
 - Real-time master data synchronisation
 - Virtual MDM (Index / Registry)
 - Single Entity Hub vs. Enterprise Multi-Domain MDM
- How does MDM fit into an SOA?
- Identifying candidate entities
- Defining a common vocabulary for master data entities
- Master data modelling
- Master Data Hierarchy Management

- Master Data discovery – identifying where your disparate master data is located using a data catalog
- Mapping your disparate master data
- Profiling disparate master data to understand data quality
- Master data matching – survivorship rules
- Creating trusted master data entities using data cleaning, matching and data integration
- Implementing outbound master data synchronisation
- Identifying and re-designing master data business processes
- Governing maintenance of master data
- The MDM solution marketplace
 - Ataccama, IBM, Informatica, Magnitude, Microsoft, Oracle, Reltio, Riversand, SAP, SAS, Semarchy, Stibo, Talend, TIBCO and more
- Evaluating MDM products
- Integration of MDM solutions with data fabric platforms
- Implementing MDM matching at scale, e.g. IBM InfoSphere Big Match for Hadoop and MDM Server
- NoSQL Graph DBMSs and MDM
- MDM in the Cloud – what's the advantage?
- Sharing access to master data via master data services in a Service Oriented Architecture (SOA)
- Leveraging SOA for data synchronisation
- Integrating MDM with operational applications and process workflows
- Using master data to tag unstructured content

MODULE 6: TRANSITIONING TO ENTERPRISE MDM – THE CHANGE MANAGEMENT PROCESS

This session looks at the most difficult job of all – the change management process 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 an 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 7: FROM MDM TO CUSTOMER DATA PLATFORMS

This last session looks at the emergence of Customer Data Platforms (CDP) that combine Customer MDM, Big Data and Data Warehouses to create a Customer Data Platform to support Marketing, Sales and Customer Service in the digital enterprise.

- What is a Customer Data Platform?
- Customer MDM Vs a CDP
- Components of a CDP
- The CDP Marketplace and what to look for
- Integrating CDPs with digital and traditional marketing, sales and service applications
- Creating a CDP in your enterprise



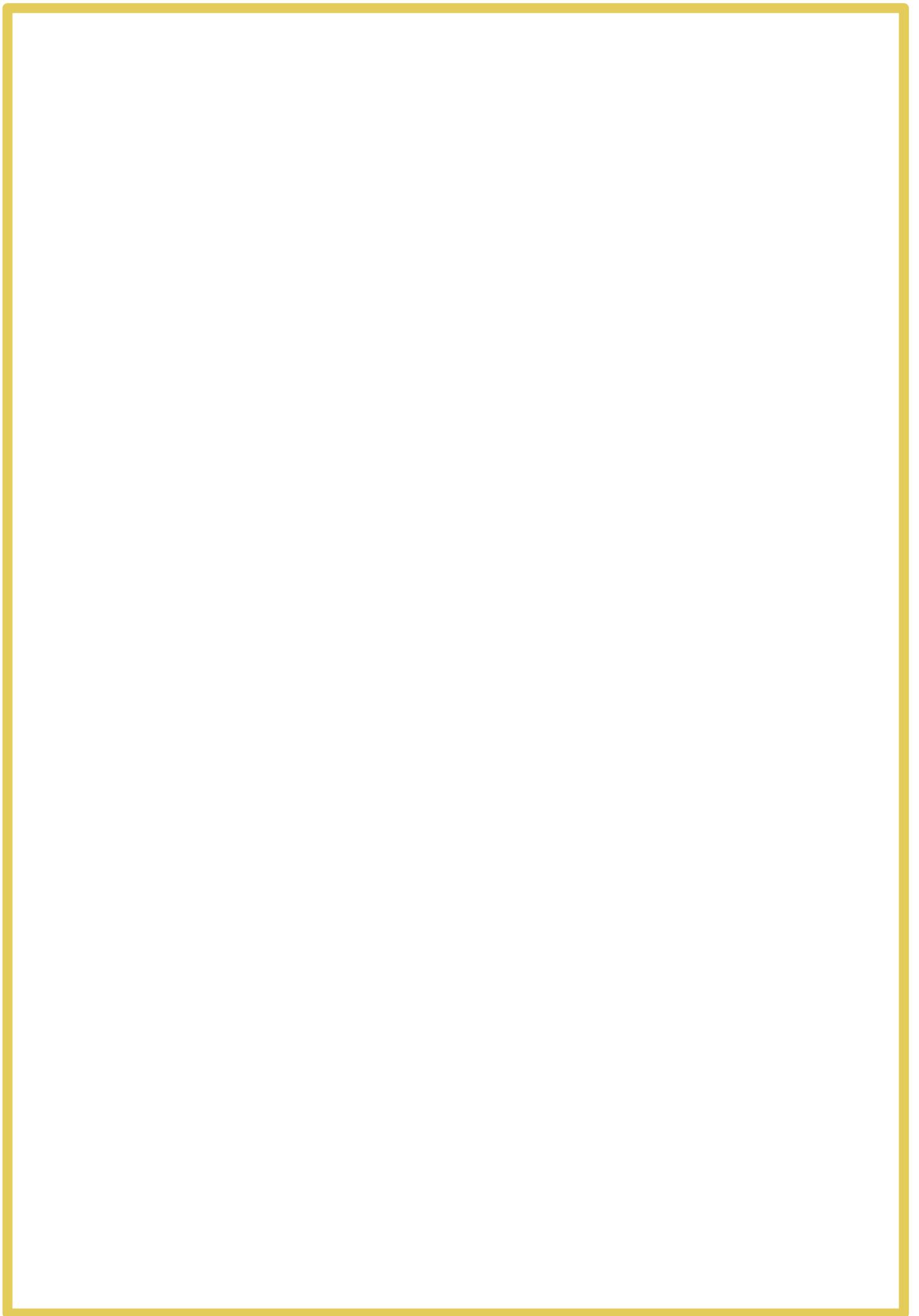
PRESENTER



Mike Ferguson is Managing Director of Intelligent Business Strategies Limited. As an independent analyst and consultant, he specialises in data management and analytics. With over 38 years of IT experience, Mike has consulted for dozens of companies. He has spoken at events all over the world and written numerous articles. Mike is Chairman of Big Data LDN – the fastest growing Big Data conference in Europe, and chairman of the CDO Exchange. Formerly he was a principal and co-founder of Codd and Date Europe Limited – the inventors of the Relational Model, a Chief Architect at Teradata on the Teradata DBMS and European Managing Director of Database Associates. He teaches popular master classes in Analytics, Big Data, Data Governance & MDM, Data Warehouse Modernisation and Data Lake operations.

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