

# Information Management Fundamentals

## Overview

This 5-day course addresses ALL the Information Management disciplines as defined in the DAMA body of knowledge (DMBoK) & introduces the “new” discipline of “Data Integration” introduced in DMBoK 2.0. Taught by an industry recognized DAMA DMBoK(2.0) author and CDMP(Fellow) this course provides a solid foundation across all of the disciplines across the complete Information Management spectrum. By attending the course, delegates will get a firm grounding of the core Information Management concepts and illustrate their practical application with real examples of how Information Architecture is applied. Additionally, this course provides a solid foundation for any students wishing to take the Industry professional certification CDMP.

## Learning Objectives

This course is intended to provide you with the knowledge, methods and techniques required to analyse, mature and implement information management solutions within your organisation. Areas covered include:

- Data Governance
- Data Quality Management
- Master and Reference Data Management
- Business Intelligence & Data Warehousing
- The essential role of Data modelling
- Data Lifecycle Management
- Metadata Management
- Risk, Security & Regulatory compliance
- Data Operations
- Content & Records management
- Data Integration & Interoperability

At the end of the course, delegates would have gained the following:

### **Level set understanding & terminology:**

- Learn about the need for and the application of Information Management disciplines for different categories of challenges
- Explore an Information Management framework and understand how it aligns with other architecture frameworks
- Explore concepts such as lifecycle management, normalisation, dimensional modelling and data virtualisation and appreciate why they are important
- Understand the critical roles of Master Data Management and Data Governance and how to effectively apply them

### **Pragmatic Learning**

- Learn the different MDM architectures, their suitability for different needs and how best to implement Master Data Management approaches;

- Understand the different facets (dimensions) of Data Quality and explore a workable Data Quality framework;
- Discover the major considerations for successful Data Governance and how it can be introduced in bite-sized pieces;
- Develop a set of usable techniques that can be applied to a range of information management challenges
- Learn the best practices for managing Enterprise Information needs
- Through practical examples, learn how to apply techniques in information architecture planning

## Course Outline:

### Introduction to Data Management

- What is Data Management, the drivers and issues if it goes wrong.
- What are the disciplines of Data Management (e.g. in the DMBoK).
- Changes in DMBoK 2.0, and the relationship of the DMBoK with other frameworks (TOGAF / COBIT etc.).
- Overview of available professional certifications.

### Data Governance

- Why Data Governance is at the heart of successful Information Management.
- A typical Data Governance reference model
- Data Governance roles & responsibilities,
- The role of the Data Governance Office (DGO) & its relationship with the Project Management Office (PMO).
- How to get started with Data Governance.

### Data Quality Management

- The different facets (dimensions) of Data Quality, and why Validity is often confused with Quality
- The policies, procedures, metrics, technology and resources for ensuring Data Quality is measured and ultimately *continually* improved.
- A Data Quality reference model & how to apply it.
- Root cause analysis & 5-whys
- Capabilities & functionality of tools to support Data Quality management.

### Master & Reference Data Management

- The differences between Reference & Master Data.
- Identification and management of Master Data across the enterprise.
- 4 generic MDM architectures & their suitability in different cases.
- MDM maturity assessment to consider business procedures for MDM and the provision and appropriateness of MDM solutions per major data subject area.
- How to incrementally implement MDM to align with business priorities.

## Data Warehousing & BI Management

- Provision of Business Intelligence (BI) to the enterprise and the manner in which data consumed by BI solutions and the resulting reports are managed. Particularly important if the data is replicated into a Data Warehouse.
- The major DW architectures (Inmon & Kimball)
- Introduction to Dimensional data modelling
- Types of BI, DW and Analytics.

## Data Modelling

- The essential role of Data Models & why they are NOT just for RDBMS design.
- Core components of data models
- How to develop, use and exploit data models.
- Levels & applicability of data models, from Enterprise, through Conceptual to Logical, Physical and Dimensional.
- Maturity assessment to consider the way in which models are utilized in the enterprise and their integration in the System Development Life Cycle (SDLC).

## Metadata Management

- What is Metadata & why “Data about data” is insufficient.
- Sources of Metadata
- Uses and exploitation of Metadata
- Metadata standards & the problem with them
- Provision of metadata repositories and the means of providing business user access and glossaries from these.

## Data Integration & Interoperability

- What are the business (and technology) issues that Data Integration is seeking to address, the different styles of Data Integration, their applicability and implications.
- The approaches, plans, considerations and guidelines for provision of Data Integration and access.
- Consideration of P2P, ETL, CDC, Hub & Spoke, Service-orientated Architecture (SOA), Data Virtualization and assessment of their suitability for the particular use cases.

## Data Architecture & Lifecycle Management

- Proactive planning for the management of Data across its entire lifecycle from inception through, acquisition, provisioning, exploitation eventually to destruction.
- This IM discipline and its maturity assessment determine how well this is planned for and accomplished.
- Data Architecture & Enterprise Architecture

## Data Risk Management, Security & Privacy

- Identification of threats and the adoption of defences to prevent unauthorized access, use or loss of data and particularly abuse of personal data.
- Exploration of threat categories, defence mechanisms & approaches, and implications of security & privacy breaches.
- Identification of risks (not just security) to data and its use, together with risk mitigation, controls and reporting.

## Regulatory Compliance

- The policies and assurance processes that the enterprise is required to meet.
- Adapting to the changing legal and regulatory requirements related to information and data.
- Assessing the approach to regulatory compliance & understanding the sanctions of non-compliance.
- Data Management consideration for different regulations, highlighting GDPR.

## Data Management Tools & Repository

- Examination of the categories of tools supporting the IM disciplines.
- How to select the appropriate toolset.
- Discussion of an example policy for use of specific technology to ensure consistency and interoperability across the enterprise.

## Data Operations Management

- Core roles & considerations for data operations
- Obstacles to performance
- Good Data Operations practices

## Records & Content Management

- Why document & records management is important
- The records management lifecycle
- Audit and records control

## Audience

Practitioners involved in Information Management, Data Governance, Master Data Management and Data Quality initiatives including:

- Information Managers
- Information Architects
- Data Architects
- Enterprise Architects

- MDM Managers
- Data Governance Managers
- Data Quality Managers
- Information Quality Practitioners
- Business Analysts
- Executives
- Technology Leaders
- Business Technology Partners

## Speaker Biography

Christopher Bradley has spent 38 years in the forefront of the Information Management field, working for International organisations in Information Management Strategy, Data Governance, Data Quality, Information Assurance, Master Data Management, Metadata Management, Data Warehouse and Business Intelligence.

Chris is an independent information strategist & recognised thought leader. He advises clients including, British Gas, Alinma Bank, American Express, ANZ, Bank of England, BP, Celgene, Cigna Insurance, Enterprise Oil, Emirates NBD, GSK, HSBC, NAB, National Grid, Riyadh Bank, SABB, Saudi Aramco, Shell, Statoil, and TOTAL.

He is the inaugural Fellow of DAMA CDMP, Vice President of Professional Development for DAMA International, member of several standards committees, an author of DMBOK 2 and author & examiner for professional certifications.

In 2016 Chris received the lifetime achievement award from DAMA International for exceptional services to furthering Data Management education & to the International Data Management community.

Recently he has delivered a comprehensive appraisal of Information Management practices at an Oil & Gas super major, Data Governance strategy for a Life Sciences Company, and Information Management training for a Government Organisation.

Chris guides Global organizations on Information Strategy, Data Governance, Information Management best practice and how organisations can genuinely manage Information as a critical corporate asset. Frequently he is engaged to evangelise the Information Management and Data Governance message to Executive management, introduce data governance and new business processes for Information Management and to deliver training and mentoring.

Chris is Director of the E&P standards committee “DMBoard”, is an officer of DAMA International, an author of DMBOK 2.0, a member of the Meta Data Professionals Organisation (MPO) and a holder at “Fellow” level and examiner for the various professional certifications.

Chris is an acknowledged thought leader in Data Governance, author of several papers and books, and an expert judge on the annual Data Governance best practice awards.

Email: [Chris.Bradley@dmadvisors.co.uk](mailto:Chris.Bradley@dmadvisors.co.uk)

Blog: <http://infomanagementlifeandpetrol.blogspot.com/>

Twitter @Inforacer