Data Architecture Fundamentals

Overview

This course describes the role and components of Data Architecture, and vitally how it relates to process architecture. The different aspects and components of data architecture are described, and industry frameworks examined.

Taught by an industry recognized DAMA DMBoK(2.0) author and CDMP$_{(Fellow)}$ this course provides a solid understanding of the topic of Data Architecture. By attending this 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 the DAMA Certified Data Management Professional (CDMP).

The course is designed and taught by the VP of Professional Development for DAMA International, author of "Data Modelling for the Business" an industry recognized DAMA DMBoK(2.0) author, DAMA CDMP$_{(Fellow)}$, Past President of DAMA UK, author & examiner of the professional CDMP certification and recipient of the DAMA Lifetime Achievement Award for Data Management Excellence.

Learning Objectives

Information is at the heart of all architecture disciplines and Data modelling is critical to the design not simply of quality databases but is also essential to other requirements techniques. These include workflow modelling and requirements modelling. This is because Data Modelling ensures a common understanding of the things – the entities – that processes and applications deal with. This component of the workshop introduces entity-relationship modelling from a non-technical perspective, provides tips and guidelines for the analyst, and explores contextual, conceptual, and detailed modelling techniques that maximize user involvement.

Understanding Business processes is critical as it's the business processes where value is delivered. Appreciating how to work with business processes is now a core skill for business analysts, process and application architects, functional area managers, and even corporate executives. Additionally, Information Architects need to understand Business Processes since information is acted on by the processes. This workshop shows in a practical way how to discover and scope a business process, clarify its context, model its workflow with progressive detail, and assess it, and link with Data requirements.

Areas covered include:

- What is Data Architecture
- Components of a Data Architecture
- A brief introduction to the role of Data Governance, Data Quality Management and Master Data Management
- The essential role of Data modelling
- Processes and Data
- Data Lifecycle Management
- Architecture Frameworks

Course Topics

Data Architecture & Data Lifecycle Management

- Different types of domain Architectures
- Proactive planning for the management of Data across its entire lifecycle from inception through, acquisition, provisioning, exploitation eventually to destruction.
- Considerations for Data across the value chain.
- Differences between Data Life cycle & a Systems Development LifeCycle (SDLC).
- Business Drivers: The goal of Data Architecture is to be a bridge between business strategy and technology execution
- Data Architecture Outcomes and Practices: The Primary Data Architecture outcomes include:
    - Data storage and processing requirements
    - Designs of structures and plans that meet the current and long-term data requirements of the enterprise
- Essential Concepts & Enterprise Architecture Domains: Data Architecture operates in context of other architecture domains, including business, application, and technical architecture. We will describe and compare these domains.
- The essential role of Data and Process models: Architects from different domains must address development directions and requirements collaboratively, as each domain influences and put constraints on the other domains.
- Enterprise Architecture Frameworks: An architecture framework is a foundational structure used to develop a broad range of related architectures. Architectural frameworks provide ways of thinking about and understanding architecture. They represent an overall ‘architecture for architecture.’
- Enterprise Data Architecture: This defines standard terms and designs for the elements that are important to the organization. The design of an Enterprise Data Architecture includes depiction of the business data as such, including the collection, storage, integration, movement, and distribution of data.

Audience

Practitioners who seek to gain an overview of the different aspects of Data Architecture and those seeking Professional recognition and certification for Information Management including:

- Business Intelligence & Data Warehouse developers & architects
- Data Modellers
- Developers
- Data Architects
- Data Analysts
- Enterprise Architects
- Solution Architects
- Application Architects
- Information Architects
- Business Analysts
- Database Administrators
- Project / Programme Managers
- IT Consultants
- Data Governance Managers
- Data Quality Managers
- Information Quality Practitioners

Tutor Biography

Christopher Bradley has spent 39 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 Information Strategist & a recognised thought leader. He advises clients including, Alinma Bank, American Express, ANZ, British Gas, Bank of England, BP, Celgene, Cigna Insurance, EDP, Emirates NBD, Enterprise Oil, ExxonMobil, GSK, HSBC, NAB, National Grid, Riyad Bank, SABB, SAMA, Saudi NIC, Saudi Aramco, Shell, Statoil (Equinor), and TOTAL.

He is VP of Professional Development for DAMA-International, the inaugural ***Fellow*** of DAMA CDMP, past president of DAMA UK. He is an author of the 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 an Energy Utility, 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”, sits on several International Data Standards committees, teaches at several Master’s Degree University classes Internationally. He authored “Data Modelling for the Business”, is a primary author of DMBoK 2.0, a member of the Meta Data Professionals Organisation (MPO) and a holder at “Fellow” level of CDMP and examiner for several 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

Blog: *http://infomanagementlifeandpetrol.blogspot.com/*

Tel: +44 (0)1225 923000

Twitter @Inforacer