# **Course Title: "Practical Data Quality Management"**

### **Course Purpose:**

Information is at the heart of all organizations, akin to blood flowing through its arteries and veins. However, all too often Information is not professionally managed with the rigour and discipline that it demands. Nonetheless the implications of poorly managed information can be catastrophic, from ICO and other regulatory sanctions ultimately to business collapse. Professor Joe Peppard summed it up when he said, "the very existence of an organisation can be threatened by poor data". This course will provide the rationale why Information Management is critical and provide methods and practices for addressing key Information Management challenges. The course also prepares students to sit the Data Quality Management specialist CDMP examination.

## **Course Description:**

This 2-day course address the key aspects of Data Quality management & provides practical take away actions that will enable you to start a Data Quality initiative in your organisation. The course draws upon practical knowledge from dozens of successful DQ implementations internationally and the lessons learned from them. Taught by an industry recognized DAMA DMBoK(2.0) author and CDMP(Fellow) this course provides a solid foundation and shows the context of Data Quality within the complete Information Management spectrum.

# **Course Objectives:**

To give participants a firm grounding in the basics of Data Quality Management and to deep dive into the principles, processes and activities involved in creating a working Data Quality function. This 2-day class explores a framework for Data Quality management and how to get started with a Data Quality initiative, including the key steps for achieving and sustaining Data Quality success

#### Who Should Attend?

This 2-day course is intended for personnel involved in Information Management, Data Governance, Master Data Management and/or Data Quality, initiatives including: Information Managers, Information Quality Practitioners, Executives, Technology Leaders, Business Technology Partners, Business Analysts, Enterprise Architects, Information Architects, and Data Architects.

# **Prerequisites**

A passion to see information managed as a corporate asset.



### What you will learn

This course is intended to provide you with the knowledge, methods and techniques required to analyse, mature and implement Data Quality solutions within your organisation. Learning outcome form this course include:

- Categories of Data Quality issues from real world case studies and their root causes.
- Why does this matter the drivers for Data Quality and how to link data quality to business priorities.
- The difference between "Data Quality" and "" Data Quality Management" and why it matters
- The relationship between Data Quality Management and other core Information Management disciplines particularly Master Data Management, Data Modelling and Data Governance.
- The necessary steps for making this happen through a practical framework
- Who is involved in making Data quality initiatives work.
- The major concepts that are fundamental to data quality management, such as a Framework for Information Quality, information life cycle, data quality dimensions, business impact techniques, root cause analysis techniques, etc.
- Where software tools and automation can play a part in a Data Quality initiative, and the key functional capabilities expected of Data Quality toolsets.

## **Course Topics**

#### **Making the case for Data Quality**

- How can we make the connection between Data Quality and business needs?
- What does "Data Quality" mean in the context of business processes and can we define it?
- What is Data Quality Vs Data Quality Management and why does it matter?
- What happens when it goes wrong? We will examine many examples of Data Quality issues from real world cases and assess their implications and see how these could have been avoided

### **Measuring Data Quality**

- What are the different facets (dimensions) of Data Quality?
- What do each of these dimensions' mean?
- What are the pitfalls of looking at just one Data Quality dimension in isolation?
- How can we evaluate data quality for the data quality dimensions and are these applicable
  to the problems being faced? This is an essential step to provide the input for root cause
  analysis and remediation approaches.
- 4 different styles and approaches to reporting Data Quality will be discussed highlighting the benefit and applicability of each.



#### Assessing the causes & impact of poor Data Quality

- Continuing the Data Quality measurement framework, what is the relationship between Data Quality Dimensions, Data Quality Measures & Data Quality Metrics.
- What is their applicability and how many should we include in our Data Quality assessments?
- What are the techniques to determine the impact of poor-quality data on the business?
- What are the benefits of increasing Data Quality and the business impacts of poor Data Quality?
- Root Cause Analysis: What really caused the problem? An approach for identifying and prioritizing the real causes of the data quality problems?
- Techniques for Root Cause Analysis including "5-whys" & "Fishbone"
- Developing targeted strategies and approaches for addressing the causes.

### A framework for improving Data Quality

- A Data Quality reference model & how to apply it.
- Starting and sustaining a Data Quality initiative: The key steps for achieving Data Quality success, and the activities & structures that are required together with the necessary steps for creating the foundation for Data Quality.
- What are the typical organisation roles, responsibilities, organization structures and principles that should be in place to ensure successful Data Quality?
- How can we put all of this together into a workable framework for establishing and sustaining Data Quality in your organization?
- Now that you've made a start, how do you sustain Data Quality. How can we bake Data Quality (and other Data considerations) into our "Business as Usual" activities to make it stick?

### **Automated support for improving Data Quality**

- What tooling & automated support exists for Data Quality initiatives?
- What are the types and the applicability of software tools to support a Data Quality initiative?
- What is a reference architecture model for Data Quality tools, and the common functions, capabilities, and the differences between them?
- What items should we examine when selecting Data Quality tooling? An evaluation checklist will be discussed covering what to look out for.

#### Fitting Data Quality into an overall Infromation Management Framework

- What is the relationship between Data Quality, Master Data Management, Data Governance & the other Information disciplines?
- What is the crucially important role of data models in a Data Quality initiative?
- How is this governed? The essential part that Data Governance undertakes.
- How do we measure the success of a Data Quality initiative & the pitfalls of tactical Data cleaning where the data is corrected in situ?



#### **CDMP Specialist Exam Preparation**

- Understand the synopsis of the CDMP Data Quality Management specialist exam
- Throughout the course practice by taking sample questions in each section
- Optionally, at the end of the course, sit the live CDMP specialist examination.

## **Tutor Biography**

Christopher Bradley has spent 40 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 and 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, MoD, NAB, National Grid, Riyad Bank, SABB, SAMA, Saudi NIC, Saudi Aramco, Shell, Statoil, and TOTAL.

He is VP of Professional Development for DAMA-International, the inaugural Fellow of DAMA, past president of DAMA UK. He is an author of the DMBoK 2.0 and author and 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 developed an Information Management training program 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 Management, author of several papers and books, and an expert judge on the annual Data Governance best practice awards.

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