

# Live Streaming Public Courses & In-House Training 2021

Presented by the World's Leading Business & IT Management Experts

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# **Enterprise Data & Business Intelligence**

Successful Implementation of a Master Data Management Programme

IRM UK Conferences

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Multiple Course
Discounts Available



# **Working with Business Processes:**

# **Process Change in Agile Timeframes**

**Alec Sharp** 

Via Live Streaming only

# 27-29 October 2021 (3.5 hours x 3 days)

Fee: £995 + VAT

Group Booking & Multiple Seminar Discounts Available

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Advanced Business Process Techniques 1-3 November 2021 (3.5 hours x 3 days)

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Only one discount can be applied at any one time

# Presenter



Alec Sharp's expertise includes business analysis, data modelling, project recovery, facilitation, and, especially, business process change. In addition to his

consulting practice, he conducts top-rated workshops and conference presentations on five continents a year. Alec is the author of "Workflow Modeling, second edition" which is widely used as a consulting guide and university text.

"Excellent. Best seminar ever attended. Outstanding, engaging, knowledgeable, inspiring."

Stella Reynard, Business Analyst, Aveva

"An outstanding, engaging lecturer. Very impressive."

Ian Wells, Business Analyst, European Bank for Reconstruction & Development

"Quite simply the best seminar I have been on. Used techniques I've never seen used before to engage the audience, keep us entertained, help us learn and understand and ... make us laugh. I was expecting great things and it delivered."

Susan Allan, Business Systems Manager, Wood Group PSN

# Overview

Delegates to this course will first learn exactly what a "business process" is, and techniques to effectively convey the concept to others. The key factors to consider when working with processes and how to avoid the most common pitfalls are also introduced. On this foundation, the course then shows how to discover and scope a business process, clarify its context, assess it and establish improvement objectives, apply various approaches for modelling it to an appropriate level of detail, re-assess it in light of findings from modelling, and employ a structured approach to designing a new process. A modular, "feature-based" approach to process design is described that delivers significant change in Agile timeframes, often in as little as a few days. Everything is backed up with real-world examples, repeatable guidelines, workshop exercises, and group discussions.

# **Learning Objectives**

- Identify a "true" business process, and specify its boundaries and goals
- Describe the key factors that differentiate process and functional approaches
- Employ a variety of techniques to keep stakeholders involved, and promote
- "process orientation"
- Establish the scope, issues, and goals for a business process
- Model process workflow at progressive levels of detail using Swimlane Diagrams
- Stop process modeling at the appropriate point, and move on to other
- techniques or phases
- Conduct a structured assessment of a business process
- Transition to the design of a new process while avoiding common (and serious!) pitfalls

# **Course Outline**

# Business Processes – What They are and How to Discover Them

- Variations on what is meant by "process"
  Guidelines for well-formed processes
- Guidelines for well-formed processes and business processes
- Impacts of incorrectly identifying business processes
- Example using this method in identifying "true" business processes
- Summary six rules for business processes

# Working with Business Processes - Frameworks, Difficulties and Methods

- Two perspectives: functional (skills and resources) and business process (results and value)
- Reconciling the two philosophies and methods for helping functions and processes get along
- Impact of business processes for application and process architects
- Introduction to process modeling techniques – decomposition, flow, and other techniques
- Progressive detail working through the scope, concept, and specification levels
- Understanding the six enablers of a business process – a critical framework
- Methodology overview a three-phase approach to completing a processoriented project

# Discovering your Enterprise's Business Processes

- Depicting "process areas" with an "overall process map" or "process landscape"
- Using "off the shelf" frameworks
- Contrasting top-down and bottom-up methods for process discovery
- When to use one-on-one interviews, when to use group sessions
- Beginning your analysis by clarifying terminology – a structured approach
   Process patterns and inter-process
- relationships that will emerge

Case study: hands-on practice with process discovery, team work and group debrief

# Framing the Process - Determining Scope, Issues, and Goals

- Separating the "what" from the "who and how"
- Defining "what" (the essence) and "who and how" (the current implementation)
- Case study defining process scope
- Initial assessment of the "as-is" process and goal-setting for the "to-be" process
- Clarifying strategic direction the process "differentiator"
- Issues and opportunities in applying the differentiator framework to a business process

Case study - process assessment, goals, and differentiator

# Workflow Models - the Essentials

- The philosophy behind workflow models ("swimlane diagrams") – why we really do it
- The three most common errors in workflow modeling, and three keys to success
- Real examples of effective and ineffective process flow models
- Getting started three questions to
- drive your initial swimlane diagram

   The three questions in practice a real
- Knowing when to stop controlling the detail of your models
- Real example what happens when detail gets out of control
- Three levels of workflow model ("handoff," "service," and "task") with examples and guidelines
- A warning sign that you've crossed the line and aren't modeling workflow anymore
- Making the transition to use cases, procedures, work instructions, and other job aids

# Workflow Models - the Finer Points

- Guidelines for actors who or what can or cannot be an actor on a swimlane diagram
- Special cases depicting systems or machines, holding areas, and other processes as actors
- Guidelines for steps naming, multiactor, and sequential, parallel, and collaborative steps

- A translation guide correcting unclear or misleading step names
- Guidelines for flow what that arrow really means, common errors, parallel vs. exclusive flows
- Ensuring clarity with parallel vs. collaborative steps
- Additional symbols, keeping it simple, transition to BPMN

# Techniques for Facilitating an As-Is workflow Modelling Session

- A reminder why we really model the as-is process (to enable a holistic, factbased assessment)
- The basics participants, resources, and tools
- Facilitated session ground rules specifics for "process" sessions
- How to actually finish a flow diagram

   one process, case, scenario, and path
   at a time
- Recap the three questions to drive your initial "handoff level" workflow model

Case study – hands on practice with developing the initial workflow model

 Five more questions to validate and extend the initial model

Case study – hands on practice with refining the initial workflow model

# **Transition to Process Design**

- Three common redesign problems, three techniques to avoid them
- (1) Enabler-based assessment of the asis process – a proven framework and its role in redesign
- A decision point five options for going forward
- (2) Challenging process assumptions
   a practical technique for generating creative improvements
- (3) Uncovering unanticipated consequences – an enabler-based assessment of characteristics
- Finalising to-be process characteristics in a "process requirements document"

Case study – assessing the as-is and characterizing the to-be process

The to-be workflow – from

- The to-be workflow from characteristics to workflow model
- A reminder factors to make the new process sustainable

# **Audience**

 $\textbf{Business Analysts} \ who \ are \ responsible \ for \ requirements \ specification \ or \ are \ involved \ in \ business \ process \ re-design \ or \ improvement.$ 

**Business and Process Architects** responsible for establishing frameworks and direction for enterprise processes **Business Managers and Content Experts** who will participate in process re-design or process-oriented application development efforts.

Prerequisites: There are no prerequisites in this course. However, Business Analysts who expect to do extensive process analysis will find that some understanding of information systems concepts may be helpful in establishing context.



# **Advanced Business Process Techniques**

Aligning Process Work with Strategic, Organisational and Cultural Factors Alec Sharp Via Live Streaming only

# **Overview**

Many organisations radically improve their performance through business process change initiatives, while others fall short. It's easy to blame failure on technical factors, but they are almost never the primary cause. Experience shows three recurring themes in successful

- True end-to-end processes were identified, and the right ones were selected for transformation;
- A holistic approach balanced technical factors with human, organisational, and cultural factors:
- That holistic understanding was reflected in an implementable and sustainable process design.

This intensive workshop provides proven, repeatable methods for successful business process change in Agile timeframes, well beyond what is covered in introductory courses. Throughout, the emphasis is on methods that support shared understanding and engagement, leading to buy-in and support for change. Specific techniques for discovering and assessing individual behavior and organisational culture are a centerpiece of this unique workshop. Participants will be well-prepared for the challenges of successful business process change. In fact, many organisations apply techniques learned in this workshop to all of their organisational change initiatives.

Topics will be covered with a discussion of the issue, a review of techniques, guidelines and examples, a brief workshop exercise, and a support of the issue of techniques and examples and examples are the interest of the issue of the isgroup solution and debriefing. The emphasis is on maximizing the delivery of content while keeping everyone engaged.

Real-life case studies are employed throughout - some participants say the examples of how the techniques are applied in practice is the

# Learning Objectives

- $Understand\ how\ to\ communicate\ business\ process\ concepts\ with\ executives, managers, and\ individual\ contributors\ in\ a\ way\ that$ stimulates interest and builds support for change.
- Learn objective criteria for an end-to-end process, and top-down and bottom-up methods for discovering business processes and rapidly developing a process architecture.
- Learn how to encourage support for business process change at every stage of an initiative, and the critical importance of a "what first, who and how next, only then why?" approach.
- Understand a practical and agile business process change methodology incorporating specific techniques for addressing human, organisational, and cultural factors.
- Be able to apply innovative techniques for rapidly building relevant, accessible process models, especially at the scope (context) and conceptual (understanding) levels.
- Become familiar with the techniques for designing a future-state process, and how they are applied in a proven, step-by-step method.

# **Course Outline**

# Communicating about "Business Process" with Executives, Managers, and Individual Contributors

- Why senior executives (and everyone else) often misunderstand
- Five key points to cover in an executive briefing
- Winning over the masses why people fear "process," how to get them on board
- Business Process within a framework for Business Analysis

## **Discovering Processes and Developing a Process** Architecture

- "Process" fundamentals, components, conventions, and a process architecture taxonomy
- A bottom-up approach to process discovery
- Using standard frameworks and generic models in top-down approaches
- Exercising caution when using "off-the-shelf" process reference frameworks
- Case study a multi-pronged approach to building a process architecture within tight budget and time constraints
- Methods for assessing, prioritizing, and selecting processes for transformation
- Case Study Using the Process Architecture to assess and support a new initiative

# Building Support for Change into Your Business Process Methodology

- Five techniques to avoid
- Seven specific techniques to build support for process change
- The power of "venting"
- What first, who and how later abstraction to the essence How to build a compelling and blame-free Case for Change that answers why?
- Clarify what you need to be great at the process' strategic differentiator
- Understand enablers the levers of change, and the ones that matter most
- Frameworks for assessing culture and beliefs, and their

# impact on business processes

- A modular, feature-based approach to process design
- · The lowly procedure and its impact on organisational culture

# Process Modelling for People - Methods to Maximise Stakeholder Engagement

- Avoiding the common errors in process modelling / process mapping
- "Scope before flow" how and why to build a "Process Scope Model" and a "Process Summary Chart" before modelling process workflow
- The "Augmented Scope Model" and why it's often an effective alternative to flow modelling ("swimlane diagramming")
- When and when not to use BPMN, UML, and other technicallyoriented approaches
- "Flow first, detail later" a fast approach to building a first-cut flow model and then refining it
- Progressive detail in flow models, and the role of scenarios and process instance models
- Conventions for comprehension in process model graphics
- When to stop process mapping and shift to other forms

# **Designing an Implementable and Sustainable Business**

- · Five common difficulties with process design / redesign
- Seven common process problems to look out for
- Using a structured, enabler-based assessment of the as-is process to generate creative ideas for the to-be
- Characterizing the to-be process generating and describing features of the to-be process
- Uncovering unanticipated consequences an enabler-based assessment of features
- Establishing the essence (the "what") of the to-be process before determining "who and how"
- A real-life case study illustrating the methodology
- A checklist for ensuring the process is sustainable

# Audience

Anyone involved in Business Process Change and Business Process Management (BPM), especially: Business Process Analysts and Designers

- **Business Analysts**
- BPM professionals
- Business Architects
- **Process Architects**
- Information Systems Architects

- Organisational Change professionals
- Project / Programme Managers
- Business Managers and other professionals responsible for effecting process change, and needing to learn more about

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.

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2-3 Delegates 4-5 Delegates 10% 6+ Delegates 25% Only one discount can be applied at any one

# Presenter

5th+course



Alec Sharp, a senior consultant with Clariteq Systems Consulting, has deep expertise in a rare combination of fields

25%

- business process analysis and redesign, strategy development, application requirements specification, and data modelling. His 35 years of hands-on consulting experience, practical approaches, and global reputation in model-driven methods have made him a sought-after resource in locations as diverse as Ireland, Illinois, and India. He is also a popular conference speaker, mixing content and insight with irreverence and humor. Among his many top-rated presentations are "The "Modelling Failure," "Getting Traction for 'Process' – What the Experts Forget," and "Mind the Gap! - Integrating Process, Data and Requirements Modeling." Alec literally wrote the book on business process modeling – he is the author of "Workflow Modeling: Tools for Process Improvement and Application Development - second edition." Popular with process improvement professionals, business analysts, and consultants, it is consistently a top-selling title on business process modeling, and is widely used as an MBA textbook. The completely rewritten second edition was published in 2009, and has a "5 star" Amazon.com rating. Alec was also the sole recipient of DAMA's 2010 Professional Achievement Award, a global award for contributions to the Data Management field. Alec's popular workshops on Working With Business Processes, Data Modeling (introductory and advanced,) Requirements Modeling (with Use Cases and Business Services,) and Essentials of Facilitation and are conducted at many of the world's best-known organizations. His classes are practical, energetic, and fun, with a most common participant comment being "best course I've ever taken."

# **Business Architecture Best Practices:**

# Practical Methods to Enable Business Change

**Roger Burlton** 

Via Live Streaming only

### 3-5 November 2021 Live Streaming Fee: £1,295 + VAT Group Booking & Multiple Seminar Discounts Available

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# Presenter



Roger T Burlton is the co-founder of BPTrends Associates, founder of Process Renewal Group and the author of 'Business Process Management: Profiting from Process'. He is

considered an industry leader in the introduction of innovative approaches for organizational change. To date, he has conducted over seven hundred seminars and has presented to over fifty thousand diverse audiences around the globe.

"The course content was incredibly rich and useful and the speaker was engaging and extremely knowledgeable."

> Dave Magson, Business Architect, Department for Work and Pensions

"Brilliant content - took so much away that I will use, very engaging, clear and logical with useful examples. Beyond expectations, the best course I have been on."

> Kay Butterworth, Business Architect, Department for Work and Pensions

"Great real life experiences that brought the subject to life."

> Sheldon Bedwell, Senior Manager Business Architect, Carnival UK Group

# Overview

Quick and effective business change means that Business Architects must know the interconnections among business elements so that as the business model is updated, they can identify what's impacted and design with deliberate integrity and reuse in mind. A solid business architecture that assures the avoidance of redundancy, maximizes the sharing of capabilities and makes best use of supporting resources, is essential. With a sound architectural foundation, business-wide transformation, digitalization and continuous optimization can be accomplished and change efforts can progress smoothly. This is a highly participative workshop and will delve into all aspects of Business Architecture, as defined by the **Business Architecture Guild's BIZBOK** along with other established and new methods, leaving the participant with the skills required to make Business Architecture disciplined, repeatable and yet practical.

# Learning Objectives

- Understand what a straight forward and useful Business Architecture looks like Learn how to implement the concepts and practices of the **BIZBOK**
- Understand what outputs the business produces and how it delivers them to create value for its customers and other stakeholders (Business Model)
- Define how the business is organized and how it operates in the context of broader business ecosystems (Operating Model) Align what investments in resources the business should make (Resources Model)
- Learn to build information, capability and process architecture models and interconnect them through a business performance lens
- Be able to use the architecture to accelerate change projects and deliver breakthrough digital technologies

# Course Outline

### Why Business Architecture?

- Enable Transformation, Disruption and need for Innovation
- Requirement for Business Agility

## **Business Architecture and Related Disciplines**

- Zachman, TOGAF
- **BIZBOK**
- The Business Architecture Landscape

Workshop: What is your Architecture maturity and readiness?

### Architecture Scoping and Value Chain Identification

- Whole company or one Value Chain?
- Intercompany Value Chains?

Workshop: What Value Chains do you have and what's in scope for Business Architecture?

# **Business Strategy Understanding**

- Business Ecosystem Analysis: Uncertainties, Scenarios, Opportunities and Threats
- Stakeholder Context Model: Item exchanges
  Stakeholder Value Proposition:
- Expectations and Experience Assessment, KPIs and Objectives
- Business Motivation Model: Ends before

Workshop: Who are your stakeholders and what is of value to them?

# Framing the Strategy for Business **Architecture Consumption**

- Building your 'North Star': Goals and Objectives
- Establishing Strategic Capabilities and Requirements
- $\dot{\text{Choosing your Architecture scenario and}}$ plan of attack

Workshop: What are the Critical Capabilities and Requirements for the Business Architecture?

## **Business Object/Concept Modeling:** The Basis for Information, Capability and Process Architecture Models

- Business Objects
- Concept Model
- Business Vocabulary
- Deriving the Information Model

Workshop: What is your Business Object/Concept Model?

# **Business Capabilities**

- What is a Business Capability?
- BIZBOK view Capability Modeling
- Assuring unique non-redundant Capabilities
- The Burlton Capability Hexagon

Workshop: What are your Business Capabilities?

## Business Process Architecture: Value Streams: and an End-to-End view

- Value Streams and Business Processes:
- BIZBOK view Stakeholder Journeys and Lifecycle
- The Skeleton Process Architecture Value Streams and Value Stream Stages
- Deriving a value-focussed Process Architecture
- Using Business/Industry Frameworks
- Examples of real company Architectures

Workshop: What are your Value Streams and End-to-End Processes?

### **Alignment to Decisions and Business** Rules

- Policies, Decisions and Business Rules and their architectural alignment
- The Operational Decision Questions Hierarchy

Workshop: Articulating critical Decisions and Business Rules?

# **Business Performance Models**

- · Characteristics of Good Performance Indicators
- The new Balanced Scorecard
- Lagging and Leading Indicators
- Measurement Traceability to Strategic Objectives
- Measuring Operating Processes

Workshop: What is your Performance

### Alignment of Business Architecture with IT Enablement

- Services, Microservices and APIs
- BPMS (process engines) BRMS (rules engines)
- Business Activity Monitoring and Analytics(measurement)

## Alignment with Human Competencies

- Competence
- Motivation, Behavior and Culture
- Structural and Cultural Maturity

# **Prioritization of Change: Heat Maps**

- Evaluating Process, Information and Capability Value and Performance Gaps
- Heat Map Grids
- Pain Gain Analysis for assessment of Capabilities, information and Processes
- The Burlton Capability Framework for Resource Change Planning
- **Defining Change Priorities**

Workshop: What are your Business Process and Capability Priorities?

# Leveraging the Architecture into a Business Change Portfolio Using the Business Architecture Models

- in Business Change
- Cross Mapping Capabilities and Processes: Impact Analysis
- Defining the Portfolio of Process and
- Capability Changes Scoping a Change Project Building the Roadmap

Workshop: Which Processes and Capabilities are in scope for projects.

### Sustaining the Architecture through Governance

- Governance Maturity Checklist
- Architecture Sustainment CoE Support

# Summary

Lessons Learned



This course, Business Architecture, is a course endorsed by the IIBA and registered under BPTrends Associates, an IIBA Endorsed Educational Provider. The course is aligned with the BABOK v2.0. Attendees will earn 24 PDs (Professional Development) hours or 24 CDUs (Continuing Development Units) for attending this course.

# Audience

This course will be of benefit to professionals and managers of all types involved with planning and designing organizational change and building business capability to adapt and innovate continuously.

- **Business Architects**
- **Business Analysts**
- **Process Architects and Analysts**
- **Enterprise Architects**
- Change Agents Strategic Planners
- **Business Managers**
- Anyone preparing for Business Architecture Certification

# **Digital Process Analysis and Design:**

# Optimising the Customer Experience through Digital Innovation

Roger Burlton Via Live Streaming only

# **Overview**

This course will address what degree of process work is required for today's organizations striving to establish digital business capabilities to optimize the end to end customer journey and leverage resources in the most effective manner. It will emphasize the customer aspects of the challenge given that customers are no longer recipients of what we do but are key actors with us in doing it. They are a part of newly conceived business processes in partnership with us. We have to design shared processes with them in mind. This course deals with the development of digitalized processes and services. It does not address digital strategies or digital architecture directly.

# **Learning Objectives**

- Build a customer journey and find moments of truth
- Segment customer types and define personas
- Understand existing customer bottlenecks and constraints and opportunities to remove them
- Identify potentially useful digital technologies
- · Design end to end value stream processes that start and end with the customer process
- Reconceptualise the customer interaction with our processes
- Recognize genuine design constraints from other outside stakeholders
- Deal with behavioral and cultural change
- Define the change program

# **Course Outline**

# The Digital Challenge

- Drivers and Trends of Digitalization
- Digital Strategy
- Digital vs Digitalization
- Some definitions and truths

Examples: Uber, AirBnB and other usual suspects

### **Process Methodology Response**

- Traditional approaches
- Process Analysis and Design for the digital world
- The Concept Model as home base
- The Burlton Capability Hexagon

Case study Workshop: Developing your concept model

# Understand: Stakeholders, Vision and Scope

- Value Chain and the scope of your included processes
- External Stakeholders classification
- Segmentation and PersonalizationThe use of Personas
- Customer needs and value proposition
- Customer experience
- The North Star for your design

Example: Ordering of customized confectionery

Case study Workshop: Analyzing the Stakeholders

Case study Workshop: Defining the North Star

# Analysis: Modelling and Analyzing the Process

- How much current analysis and modeling is needed
- Analysis and Modeling options
- Dealing with the data

Case study Workshop: Analysing the current capability

# Customer Process Experience

- A typical Customer Experience pattern
- Finding Moments of Truth
- The Customer Journey map
- Attributes of a great customer experience

Case study Workshop: Developing the Customer Journey

# **Digital Inspirations**

- Digital Solution Patters and Benchmarks
- Omni-Channel characteristics
- Mobile characteristics
- RPA (Robotic Process Automation) characteristics
- Al and Cognitive characteristics
   Automating Designers and Business
- Automating Decisions and Business Rules
- Additional Technology potential

Example: Mortgage Decisioning Redesign

# **Design the Process and Capabilities**

- Small Change vs Substantive change
- Design principles

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# Implementation Options

monitoring and coaching

- Digital Base Capabilities
- The role of iBPMS, Decision and Rules engines

Creative workshops to leverage the

Designing measurement and feedback

The required capabilities and resources

Example: Justice System peer to peer case

Case study Workshop: Validating with the

Case study Workshop: Designing the

Case study Workshop: Defining the

digitalized process capabilities and

**Culture and Behavioural Change** 

Overcoming internal stakeholder

Sustaining the journey: measuring,

· Developing the competencies: the core

Specifying the group behaviour as a set

Communication: what to say and when

**Example: Board of Directors Digitalization** 

The new digital process

digitalized process workflow

Detailed mapping

inspiration

process scenarios

skills needed

concerns

of requirements

resources

- Standards and Protocols
- Technical Foundation

# **Audience**

- Process Analysts and Designers
- Business Analysts
- Business LeadersAgilists
- Business Architects
- Anyone else concerned with designing and sustaining an agile business

This class will be of benefit to professionals and managers of all types involved with designing and developing digitalized business processes

# **Special Features**

- Modernizes process analysis and design work to optimize digital processes
- Deals with customer-in-command processes and business solutions: Journeys and Experiences
- Minimizes Process Analysis for Digital Process to only enough of what you really need? Brings a wealth of opportunities for Process Innovation
- Features several examples of digitalized processes
- Involves a series of hands on progressive exercises in designing a digital process solution

# **Mastering the Requirements Process:**

**Getting Requirements Right** 

James Robertson and Adrian Reed

**Via Live Streaming Only** 

### 10-12 November 2021

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Mastering the Requirements Process 10-12 November 2021

Pre-Project Problem Analysis 13-14 October 2021

Managing Change in Scaled Agile Delivery 23 November 2021

# **Multiple Booking Discount**

Attend more than one of our public course and you will be entitled to the following discounts:

Will be critica to the re	mowing discount
2nd course	10%
3rd course	15%
4th course	20%
5th+course	25%

**Group Booking Discount** 

10% 6+ Delegates

Only one discount can be applied at any one time



James Robertson is a business analyst, problem solver, author, speaker, instructor, designer, and sought-after consultant. His courses

on business analysis and requirements are popular in several continents. James' latest (seven and counting) book, Business Analysis Agility, sets down how business analysts can work in a more agile way, and synchronise his requirements discovery as part of an agile development team.



Adrian Reed is a true advocate of the analysis profession. He is a Principal Consultant and Director at Blackmetric Business Solutions where

he provides Business Analysis consultancy and training solutions to a range of clients in varying industries. Adrian is Immediate Past President of the UK chapter of the IIBA and he speaks internationally on topics relating to Business Analysis and business change.

"Gave me lots to think about particularly to my company. Good clear speaker, excellent facilitation.

Malcolm Riseley, Rquirements Manager, Sellafield UK

# "Lively, knowledgeable, articulate absolutely excellent"

Steve Coe. Requirements & Testing Manager, Department of Work & Pensions

# "One of the best!"

Helena Bone, Senior Business Analyst, HBOS General Insurance

# **Overview**

Requirements is the most crucial part of development. Requirements today is about uncovering the real needs of the problem space, understanding the needs of the people who use your solution, recognising the environment for the solution, then, in a timely manner, delivering requirements that are concise, clear and testable. This workshop, presented by a real business analyst, gives you a thorough and well-established process for uncovering the real requirements, testing them for correctness, and ensuring that all the requirements have been discovered. The process is used with variations by both agile and traditional projects. It starts with the business, for it is only within the business that you discover the real needs. When you know the real needs, it becomes possible to determine what will best serve those needs, and to write the requirements or stories to build the right solution.

# **Learning Objectives**

- Determine the real needs of your stakeholders
- Understand the role of the business analyst in agile projects Write agile stories that are more effective and accurate
- Write requirements that are complete, traceable, and testable
- Learn diverse elicitation techniques to uncover the real requirements
- Use the Volere Knowledge Model to ensure you have all the needed information, and nothing that is not needed
- Understand the need for, and how to write, functional and
- non-functional requirements.
- Precisely define the scope of the problem
- Discover all the stakeholders and keep them involved
- Uncover the essence of the business
- Use prototypes, sketches and storyboards to discover hidden needs
- Use state of the art requirements techniques
- Get the requirements quickly, and incrementally
- Write the right requirements and stories

# **Course Outline**

## The Requirements Process

- An overview of the process for gathering and verifying requirements
- A discussion on how this process can fit into your organization
- A demonstration of how requirements fit into agile processes

### **Project Blast-Off**

- Scope, Stakeholder, and Goals; the holy trinity of requirements gathering
- How to define a precise scope for the business area to be studied
- How to "Step Back" for a better look at the business
- How to use stakeholder maps to find all the stakeholders
- How to ensure the project's goal is measurable and testable

## Trawling for Requirements

- How to use business events and business use cases to find the right business
- How to use apprenticing, workshops and other elicitation techniques
- Using the Brown Cow model to see the work more clearly
- How to be more innovative with requirements

# **Functional Requirements**

- Use case scenarios, and how they are used to find the right
- Determining the system boundary How to find the requirements, and write them clearly
- How to write requirements, not solutions
- How to handle requirements for agile projects

# **Non-functional Requirements**

- The importance of non-functional requirements
- Usability, look and feel, performance, security and other nonfunctional requirements.
- How to find the non-functional qualities the product must

# Requirements for Agile Projects

- How requirements work with agile techniques
- Role of the business analyst in agile
- Writing better user stories

# **Prototypes and Deviations**

- Using sketches and prototypes to drive out requirements
- Low and high-fidelity prototypes
- Exceptions, alternatives and misuses

# **Writing Requirements**

- Communicating requirements
- Correct formulation of requirements
- How to write fit criteria to make your requirements precise and

# The Quality Gateway

- How to test requirements and ensure that they are fit for purpose
- How to prevent scope creep
- How to avoid gold-plated requirements that add little value to  $\,$ the system
- How to ensure the requirement is a complete statement of

# **Managing Your Requirements**

- Strategies for requirements projects§
- Using the Requirements Knowledge Model to manage your requirements

# **Prioritising requirements**

- Dealing with conflicting requirements
- Automated requirements tools

# **Your Requirements Process**

- Making your own process more effective
- Incorporating your organisation's requirements practices into what you have learned

# Audience

If you want to be involved in delivering the right systems—the ones that get used, then this course is for you. Typical delegates include:

- **Business Analyst**
- Agile Team Members Systems Analyst
- Requirements Manager Requirements Engineer

- Project Leader / Manager Product or Program manager
- Product Owner
- Consultant

# **Special Features**

- Your instructor is not an "announcer". He is a practicing business analyst who also happens to be an excellent instructor.
- The course is written to show real-world situations and provide real-world solutions. You will be able to relate your . own work situation to the course.
- You can discuss your own requirements issues with your You learn that requirements come from understanding the
- business and its internal processes, and how the business interacts with its external customers. The course provides a realistic framework for requirements discovery, not a strict methodology. The framework provides

the freedom and encouragement to adapt to your own

# organizational needs.

- The techniques are applicable regardless of your development
- method agile, traditional or anything else. The Brown Cow model to give you different and beneficial ways to look at the problem.
- The Volere requirements knowledge model which ensures you collect the right information, and the right amount of it.
- You receive the Volere Requirements Specification Template (downloaded over 20,000 times) with advice on how to make this your own template.
- A free copy of Suzanne and James Robertson's best-selling book, Mastering the Requirements Process - 3rd Edition, Getting Requirements Right.

# **Pre-Project Problem Analysis:**

Practical Techniques for Early Business Analysis Engagement

Adrian Reed

Via Live Streaming only

# **Overview**

Increasingly, organisations are operating in fast-moving and often volatile business environments. Project teams need to respond quickly to tricky and often ill-defined problem situations, enabling the organisation to adapt and meet the ongoing demands of its customers and environment. In these contexts the pre-project stage is crucial: For our change initiatives to be successful, we need to truly understand the problem we are trying to solve. By understanding the problem we can ensure that any future project activity is built upon a firm foundation, and is heading towards a set of goals that are concise, precise and have been agreed upon.

This practical, hands-on workshop, focusses on the problem-solving skills that practitioners need in order to collaboratively explore and describe problems, and to co-create potential options for improvement. These skills are extremely valuable preproject and early in the project lifecycle, and this course will be of interest to business analysts and other practitioners who help analyse, assess and solve tricky organisational problems.

# **Learning Objectives**

- Understand what pre-project problem analysis is, and its significance in the analysis and project lifecycle
- Understand the importance of stakeholder identification, categorisation and management
- Be able to use a range of problem analysis techniques to understand problem situations
- Be able to define a problem using a 'problem statement' and understand how successful outcomes can be articulated with Critical Success Factors and Key Performance Indicators
- Understand what a Business Use Case diagram is and understand its value in articulating scope during pre-project problem analysis
- Use a 1 page 'Project Concept Summary' template to bring together a potential project idea onto a page

# **Course Outline**

### Introduction

 What is 'Problem Analysis?': A brief introduction to the course, and a discussion of why it is important that we analyse the problem before assuming or implementing a solution

### **Stakeholders in Problem Analysis**

- Identifying Stakeholders: Tips for identifying likely stakeholders, along with suggestions of potential 'generic' stakeholder types that regularly warrant consideration
- Stakeholder Analysis: Categorisation of stakeholders
- Communication/Engagement Planning: Planning how to liaise with stakeholders in the early stages of problem investigation
- Power & Politics: Discussion of how power & politics can affect problem solving, and how it affects us as practitioners

# **Understanding the Problem Situation**

- Elicitation Techniques: Overview of a range of techniques for eliciting information about a problem situation (Interviews, Workshops, Observation, Document Analysis)
- Categorising Problematic Situations: The difference between a 'difficulty' and a 'mess'
- Problem Analysis Techniques: Practical overview of:
- 5 Whys
- Fishbone Diagram
- Multiple Cause Diagram
- Causal Loops
- External Environment Analysis: Practical overview of STEEPLE technique for analysing the broader business or organisational context
- Perspectives: The importance of understanding that different stakeholders may perceive the problem situation differently
- Defining the Problem: Overview of a typical 'Problem Statement', along with a discussion of pros/cons and when it is most useful
- Defining Success: Critical Success Factors (CSFs), Key

Performance Indicators (KPIs), Balanced Business Scorecard

# **Defining Business Requirement Scope**

- Roles & Goals: Defining the 'roles' that are involved in the problem space and their (business) goals
- Business Use Case Diagram: Introduction to Business
  Use Case diagrams as a way of scoping out the high level
  business requirements on a problem situation/potential
  project concept
- Requirement Types: Brief discussion of other requirement types that may emerge early in the project lifecycle

# **Identifying Areas for Change**

- Gap Analysis: Comparing the output from the techniques in previous sections to identify areas where change is desirable
- Existing Solution Evaluation: Discussion on approaches for benchmarking/measuring existing solutions to determine where improvement may be needed

# **Generating Improvement Ideas**

- Creative Thinking Techniques: Techniques for generating a range of potential ideas for improvement:
- Brainstorming
- Brainstorming Enhancers
- Types of Improvement Approach: Discussion of the breadth of improvement approaches that are generally available, which is often wider than initially anticipated. Discussion on feasibility: What might stop or inhibit an approach being acceptable

# **Bringing It All Together**

- Project Concept Summary: Overview of a one page 'project concept summary' outlining the problem, likely requirement scope, and potential solutions
- Validation: How to ensure the 'project concept summary' is validated by key stakeholders
- Next steps: What next after the 'project concept summary'

## 13-14 October 2021

Live Streaming Fee: £995 + VAT Group Booking & Multiple Seminar Discounts Available

# Business Analysis and Business Change Public Courses via Live Streaming

Working with Business Processes 27-29 October 2021 (3.5 hours x 3 days)

Advanced Business Process Techniques 1-3 November 2021 (3.5 hours x 3 days)

Business Architecture Best Practices 3-5 November 2021

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 4th course
 20%

 5th+course
 25%

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2-3 Delegates 10% 4-5 Delegates 20% 6+ Delegates 25%

Only one discount can be applied at any one time

# Presenter



Adrian Reed is a true advocate of the analysis profession. He is a Principal Consultant and Director at Blackmetric Business

Solutions where he provides Business Analysis consultancy and training solutions to a range of clients in varying industries. Adrian is Immediate Past President of the UK chapter of the IIBA and he speaks internationally on topics relating to Business Analysis and business change.

# **Audience**

This course is well suited for anyone needing to understand how to undertake problem analysis early in the project lifecycle. It will be of particular interest to BA teams that are looking to 'left shift' and seek early engagement. Typical delegates include:

- Business Analysts
- Business Systems Analyst
- Consultants

- Requirements Manager
- Requirements Engineers
- Product Owner

\*Endorsed Education Provider\*

This course, Pre-Project Problem Analysis: Practical Techniques for Early Business Analysis Engagement, is a course endorsed by the IIBA. The course is aligned with the BABOK v3. By attending this course you will earn 14 PDs (Professional Development hours) or 14 CDUs (Continuing Development Units).

# Managing Change in Scaled Agile Delivery



Lynda Girvan and Will Izzard

Via Live Streaming only

## 23 November 2021 Fee: £695 + VAT

Group Booking & Multiple Seminar Discounts

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## Presenters



Lynda has over 25 years' experience in business and systems development and transformational change as a consultant, professional trainer and practitioner in both the

public and private sectors. Lynda has extensive experience of adding value to organisations at a variety of levels including coaching agile development teams through to helping and coaching board level change programmes. Lynda's particular strength is applying her knowledge of change, business analysis and agile to help organisations overcome challenging problems, such as agile transformation and achieving organisational agility. Lynda is Head of Business Analysis at CMC Partnership Consultancy Ltd, a qualified agile practitioner and agile coach with the Scrum alliance; a fellow of the BCS, Chartered Institute for IT and a PROSCI© change practitioner.



A professional coach and facilitator of change Will is Head of Change Management at CMC Partnership Ltd, with over 25 years' experience in projects and business change. He

is an Experienced PROSCI® Practitioner, Chartered Mechanical Engineer and Certified Symbolic Modeller (therapeutic metaphor work). Will is interested in the blend of change facilitation (directing attention on what to do) with interpersonal skills (how to actually do it). Will believes that lasting change is brought about by small interventions that build the confidence and skills of others, so they achieve more and experience a deep level of learning. His latest development area helps clients develop metaphors from personal outcomes to visions to change initiatives, allowing a wealth of easily dismissed, yet valuable information to be exploited. Will thrives on applying novel ideas for an organic and developmental approach to change – building on what works to create something new.

# Overview

In the technology driven digital world, more and more organisations are moving away from traditional programme management approaches in favour of scaled agile methods and frameworks when delivering complex in-house transformational change. Even though scaled agile frameworks are not explicitly limited to delivering just IT, scant mention is made of the full range of activities necessary to deliver the required business impact. The result is that IT gets delivered at scale, but not the business transformation.

In this course, Lyn and Will explore the principles that underpin traditional and agile approaches illuminating the parallels that can be draw between Theory X and Theory Y management thinking. Moving from a traditional approach to an agile approach creates gaps around change management that are exacerbated when you scale your agile approach. Such gaps include constant change resulting in change fatigue, balancing strategy and vision with iterative development and a lack of consideration of the environment and leadership required to achieve the desired change. Neither change management nor scaled agile training will explore this gap.

This course brings together thinking and expertise from both the agile and change communities and equips attendees with the knowledge necessary to make complex change projects succeed. Techniques and solutions will be presented that overcome these challenges so that transformational change programmes, encompassing people, process, policy, information and technology, can be incorporated and the business value can be realised from the investment.

# **Learning Objectives**

- Understand the gaps in moving from traditional agile approaches
- Learn about parallels between Theory X and Theory Y management and traditional and agile approaches
- Understands the different problems that unfold when moving to scaled agile approaches
- Understand the neuroscience behind how habits are formed and its relevance to agile approaches
- Understand the importance of change management techniques in agile delivery
- Learn how to incorporate change into scaled agile approaches
- Learn about the 3 levels of change and how it relates to agile delivery
- Understand the change focus needed to make change succeed within scaled agile approaches.

# **Course Outline**

# **Programme Management Vs Scaled Agile Approaches**

- Exploring the change gap between programme and agile delivery approaches
  - Programme Management 101
    - Benefits
  - Constraints
  - Scaled agile approaches 101
    - Benefits
    - Constraints
- Relevance of Theory X and Theory Y management thinking, including impact on the brain activity.
- The evolving change gap when moving from programme management to scaled agile delivery management

# **Change Challenges**

- Change challenges experienced today
  - Change fatigue from iterative delivery
  - Misalignment between strategy and iterative
  - Lack of focus on the change environment
- Lack of change leadership
- Importance of change design

# Understanding the change environment

- History of change management
- Why change management?
- Importance of understanding culture and behaviours

# People and their relevance in successful change delivery

- People side of change
- How people form habits
- Relevance of habits in managing change
- Importance of change leadership for positivity and learning
- The need for coaching

# Aligning change theory with agile delivery

- Introduce the 3 levels of holistic change
  - Strategic Change
- Incremental Change
- Iterative change
- Balancing change management across all 3 levels of

# How to incorporate change into scaled agile approaches

- Approaches for managing change
- İmplementing a change Kanban
- Iterative and Incremental change management
- Understanding the roles needed within scaled agile to successfully deliver transformational change

# Audience

- **Project managers**
- Programme Managers
- Agile practitioners
- Agile delivery leads
- Change practitioners/managers
- Enterprise/Business architects
- **Business analysts**
- Developers

# Zachman Enterprise Architecture Certification:

Modelling Workshop (11:00 - 17:00)

John Zachman and Cort Coghill

Via Live Streaming only

# **Overview**

Enterprise Architecture is fundamental for enabling an enterprise to assimilate internal and external changes in response to the dynamics and uncertainties of the information age environment. Enterprise architecture not only constitutes a baseline for managing change but also provides the mechanism by which the reality of the enterprise and its systems can be aligned with management intentions. This updated workshop is based on the Zachman Framework V3.0, and incorporates actual modelling practice. The workshop consists of 6-8 hours of guided self-learning through a series of videos and assignments and culminates in a three-day instructor-led workshop. The workshop is based on actual Enterprise experience and is designed to give the participants hands-on experience creating both "Primitive" (architecture) models as well as "Composite" (implementation) models. The workshop prepares delegates for both levels of the Zachman Certified-Enterprise Architect program: Zachman Certified™ - Enterprise Architect Associate (Level1) and Zachman Certified™ - Enterprise Architect Professional (Level 2). The certification fee both Level 1 & Level 2 are included in the registration fee. The "Zachman Certified - Enterprise Architect" examination is a two hour, online examination that upon passing, results in the award of Enterprise Architect Associate (Level 1) Certification. Delegates will then subsequently be awarded the Enterprise Architect Associate (Level 2) Certification upon submitting a case study. If you want to understand the "Complexity & Contradiction" in Enterprise Architecture and are struggling to manage a non-adaptive enterprise and dysfunctional systems, this will be an essential experience! Learn how an ontology allows you to make use of multiple frameworks (e.g. architecture, sales, software development, innovation, etc.) in an enterprise.

# **Learning Objectives**

- · Identify the sense of urgency for aggressively pursuing Enterprise Architecture
- Identify a comprehensive definition (description) of Enterprise Architecture
- Differentiate between Enterprise Architecture from Systems Implementation
- Differentiate an Ontology from Methodology
- Utilizing Enterprise Architecture for operational decision making
- Identify the elements for creating a strategy for reducing "time-

to-market" for systems implementations to virtually zero

- Create a strategy for integration beyond jurisdiction (Interoperability)
- Identify architectural principles for meeting enterprise
- Develop traceability across the artifacts for impact analysis and change management
- Employ primitive problem patterns to address complex issues facing any enterprise.

# 8-11 March 2022 11:00 - 17:00 GMT 13-16 September 2022 11:00 - 17:00 **BST**

### Fee: £1,595 + VAT

This fee includes Level 1 and Level 2 Certification

Group Booking & Multiple Seminar Discounts

### Enterprise Architecture Public Courses via Live Streaming

Certification 8-11 March 2022 13-16 September 2022

Understanding Enterprise Architecture 7-10 December 2021 (4 hours x 4 days)

Great Skills Make Great Architects 1-2 December 2021

### **Multiple Booking Discount**

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# **Course Outline**

# Setting the Context for Enterprise Architecture (EA)

- The contribution of IT People to an Information Age Enterprise
- Global Environment: Escalating Complexity and Escalating
- Applying the Concept of Mass-Customization to the Enterprise

# Introduction to Enterprise Architecture (The Zachman Framework V3.0)

The Zachman Framework is perhaps the most referenced in the industry. This session provides participants with a unique opportunity to learn first-hand about its concept and utility, directly from the man who developed it. Discussions include version 3.0 of the framework and its evolution.

- Definition of Enterprise Architecture
- The Zachman Framework Architecture Is Architecture Is
- Ontologies Versus Methodologies

Workshop: Row 1 Models: Defining enterprise scope and developing the enterprise lexicon

Workshop: Row 2: Defining business concepts and business value

Workshop: Row 3: Developing enterprise logic to support technology and implementation decisions.

# **Enterprise Engineering**

- Models from My Bookshelf 75 years of experience (Implementation, Composite Models)
- The Elegance of Primitives (Their essential contribution)
- Enterprise Entropy Removing Internal Cost of Operations
- Enterprise Engineering Design Objectives
- Alignment, Integration, Reusability, Flexibility, Interoperability
- Reducing Cycle Time from Order to Implementations (Mass-Customization)
- Implementation Practicalities
- "Federated Architecture" (Integrating Beyond Jurisdictional Boundaries)
- Migrating from Legacy to Architecture

Workshop: Using Primitives to create horizontal Integration and **Vertical Transformation** 

Case Study: Application Rationalization Using Primitives

Workshop: Identify Framework Cells for Given Enterprise Problem

Workshop: Using Primitives to solve for enterprise entropy

# **Presenters**



John Zachman is the originator of the "Framework for Enterprise Architecture" which has received broad acceptance around the world as an integrative framework, or "periodic table" of descriptive

representations for Enterprises



Cort Coghill, is a Director of FEAC Education Operations. He is also one of the very few Zachma Certified - Enterprise Architect Educators (Level 3) in the world,

setting Cort apart as one of the foremost experts on the Zachman Framework, in both education and project work.

"He designed the Framework. Nobody can deliver the same quality of lecture as John"

> Kitty Hung, Senior Business Analyst, Metropolitan Police Service

"Finally it all comes together. Great examples and stories. Continue with passion - it's really good.."

Enterprise Architecture, APG Asset Management

Willem van den Brink, Team Manager

"Fun, informative and eyeopening. Very educational, friendly and helpful lecturers"

Shiraz Adam, Application & Intelligence Architect, Next Group PLC

# Audience

- CIOs
- **Enterprise Architects** Chief Architects
- Business Architects
- IT Architects **Process Architects**
- **Application Architects**
- Solution Architects
- Software Architects **Technology Architects**
- Data Architects

- Business Analysts
- System Analysts IT Strategists
- Business Strategists
- Strategic Planners Program Managers
- · Information Systems Management
- Business Process Managers
- Data, Applications, Technology Management
- Consultants

# **Understanding Enterprise Architecture (4 hours x 4 days)**

Michael Rosen

Via Live Streaming only

7-10 December 2021 Fee: £995 + VAT (4 hours x 4 days)

Group Booking & Multiple Seminar Discounts

## **Enterprise Architecture Public Courses via Live Streaming**

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4th course	20%
5th+course	25%

## **Group Booking Discount**

2-3 Delegates	109	%
4-5 Delegates	209	%
6+ Delegates	259	%
Only one discount can be appl	ied	at
any one time		

## Presenter



Mike Rosen is Chief Scientist at Wilton Consulting Group providing advice to CIOs,

IT Leaders, and Architects on creating the new Digital Business Platform, using architecture as a tool for digital transformation and improved decision making. He is also a Founding Member and VP of the Business Architecture Guild. Mr. Rosen has more than 35 years of technical leadership experience architecting, designing, and developing solutions, applications, and products, He was previously CTO at startup AZORA Technologies and chief architect, product architect, technical leader, and developer for commercial middleware products from IONA, BEA and Digital. Mr. Rosen is a well-known international speaker and author of 3 books and hundreds of articles.

# **Overview**

Multiple forces have combined to create a renewed emphasis in enterprise architecture (EA). First, organizations are more dependent on technology, which continues to expand in importance and complexity. This is compounded by the drive for digital transformation and the need for improved consistent customer experience and operational efficiency. Finally, the recent experience with COVID-19 has shown that organizations with a good architectural foundation were much more successful at making the tough decisions and quick changes to business and operating model that the pandemic demanded. But, while organizations now understand that they need EA, most don't understand what it actually is, know what it looks like, know how to create it, and most importantly, know how to use it to deliver value and influence decisions. This course answers those questions for anyone new to EA and introduces a set of skills and techniques for delivering architectural value. We start with an overview of architecture, the motivations and the value proposition. Then we explore the  $question \ \ ^{\text{\'{e}}}What \ is \ architecture \ \ ^{\text{\'{e}}} to \ get \ a \ general \ understanding \ of \ the \ underlying \ principles. \ Next, we go \ through \ an \ extensive \ example$ of an Enterprise Architecture illustrating the requirements, scope, concerns and artifacts from the Business, Information, Application,  $and \ Technology\ domains\ as\ well\ as\ governance,\ portfolio\ management,\ repositories,\ and\ the\ architecture\ program\ itself.\ With\ a\ good\ property and\ prop$ understanding of what architecture looks like, we cover some of the important architectural skills, principles and thinking, and an overview  $of the major \ architectural \ frameworks. \ However, this is not \ a \ course \ on \ EA \ frameworks. \ Instead, it focuses on \ an \ overall \ understanding \ of \ overall \ focus \ overall \ understanding \ of \ overall \$  $the breadth \ and \ depth \ of enterprise \ architecture \ and \ the \ underlying \ skills \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ be \ an \ architecture \ or \ manage \ an \ and \ principles \ that \ you \ need \ to \ principles \ that \ you \ need \ that \ you \ need \ that \ you \ need \ to \ principles \ that \ you \ need \ that \ you \$ architecture program. The course is a combination of lecture, discussion, and group exercises and will leave you with a good overview, new insight, and some techniques that you can apply as soon as you get back to the office.

# **Learning Objectives**

- Why your organization needs architecture. The architecture value proposition.
- An overview of the principles, practices and structure of enterprise architecture
- The concepts, models and vocabularies of different architectural roles and domains
- Issues and techniques of business, information, application and technology architecture
- Architectural principles and skills that can immediately be applied to your current role
- How to organize architecture programs to deliver value

Main Topics that will be covered include:

- What is Enterprise Architecture?
- EA Case Study
- Key architectural domains Business, Information, Application, Technology
- New architectural domains Performance, Service, Security,
- Architecture disciplines and practices Principles, Methods, BizOps, Tools, Frameworks
- Artifacts and deliverables Standards, Reference Architectures, Models, Roadmaps
- Organization EA Programs, Teams, Governance

# **Course Outline**

# **Enterprise Architecture - The Big Picture**

- Introduction
  - Why Enterprise Architecture?
  - Forces driving EA
- What is Architecture?
- Detailed EA Example
  - Scenario, Strategy, Requirements
  - Business, Information, Application, Technology
  - Performance, Service, Integration, Security
  - Governance, Portfolio management, repository

# **Architecture Practices**

- Architectural Skills
  - Critical Thinking
  - Abstraction
  - Contextualization Conceptualization
- Reference Architecture
- Architecture Frameworks and Comparison
  - Zachman, TOGAF, MoDAF
- Creating EA Programs and Roadmaps
  - EA Organization and Governance

# **Architecture Domains I**

- Business Architecture
  - What is Business Architecture?
  - **Business Concepts**
  - Strategy to Execution
  - **Business Architecture Modeling**
  - Business Capability Maps
  - Value Streams
  - **Business Motivation Model**
  - Concept Models
- Information Architecture

- What is Information Architecture?
- DIKW
- Operational, Analytical, Big Data
- Data Models, Enterprise Information Model
- Cognitive platform: Al and Machine Learning
- Data Lakes, Data Warehouses and Data Marts
- Data Flow, Master Data Management and Data Virtualization

# Architecture Domains II

- Application Architecture
  - · What is Application Architecture?
  - Architecture Styles
  - Modern Application Architectures
    - Microservices
  - Data Streaming
  - PaaS
  - Conceptual Architecture
  - Technical Debt
  - Application Rationalization
- Technology Architecture
  - What is Technology Architecture?
  - Interface between Application and Technology
  - Modern Technology Platforms
    - Hvbrid Multi-Cloud
  - Edge computing
  - Integrating Cloud into the Enterprise
- Conclusion
  - Tying it all together
  - Architecture Value Proposition
- Next steps

# **Audience**

- **Enterprise Architects**
- **Business Architects** IT Architects
- **Application Architects**

- Information Architects
- IT Managers
- Architecture Team
- Program Managers

# **Great Skills Make Great Architects**

Michael Rosen

Via Live Streaming only

# **Overview**

Has your organisation embraced business, enterprise or IT architecture? While many organisations have formed architecture teams and given people the job title of 'architect', they don't always have insight or training into specific architectural skills, or the industry best practices associated with being an architect. Luckily, there is help. This course focuses on the principles and skills needed to be an effective architect. Whether you're an enterprise architect, business architect, solution architect, IT architect, or software architect, this course will provide practical principles, skills and techniques for improving your performance and influence. Mike Rosen has combined his 25 years of experience as an Architect, 20 years as an instructor and his passion for learning and architecture to help develop participants into great architects. The course explores the architectural skills involved in supporting strategy and project development from ideation and conception through planning, design and implementation, and the engagement models and interactions with different stakeholders throughout the lifecycle. The course is structured as a mix of presentation, interactive discussion and group-based exercises, with an emphasis on applying the new concepts and skills to example scenarios during the facilitated workshops.

# **Learning Objectives**

- Understand the underlying principles of architecture and how to apply them across different scenarios
- Improve basic architectural skills of modeling, abstraction, conceptualization
- Visual and communicate architectural concepts to non-technical stakeholders
- Enhance advanced architectural skills of critical thinking and system thinking
- Apply industry best practices for standards and patterns
   Learn the secrets of architectural influence
- Ecant the secrets of a chitectaran

# **Course Outline**

### **Architecture Principles and Skills**

- · Architecture principles
- Making principles actionable
- Architecture skills overview
- The architecture of Architecture
- Modeling skills
- Consistency
- Relevance and readability
- Thinking like an architect
  - Breadth versus depth
- Interdisciplinary
- System Thinking
- Intelligent, effective inquiry
  - Challenging assumptions
  - Critical Thinking
- Integrating the big picture view
- Abstraction
- Generalization, partitioning
- Removal of properties, distancing of ideas
- Architectural analysis

# **Visualization and Communications**

- Visualization
  - Contextual, conceptual and formal visualizations
- Contextualization and conceptualization
- Formalization
- Types of models
- Models and metamodels
- Patterns
  - Using patterns

- Creating patterns
- Standards
  - What, where, when?
- Practice what you preach
- Communications
  - Stakeholder management
  - Interaction models
  - Focused work products
- · Architectural review
  - Designing and performing
  - Getting buy-in and delivering value
- Conclusion

# Special Features of this Course:

This course provides a comprehensive overview of the skills required to be an effective architect. It is illustrated with real life examples, full of workshops, and leaves the student with new skills and techniques to help with their current job and future aspirations. After completion of this course students will be able to answer the following questions:

- What are the relevant skills for an architect?
- Which skills are most useful at each point in an architectural or project lifecycle?
- Which skills should I focus on improving for my career goals?
- How can I be an architect that helps, rather than the person who says no?
- How do I interact with different stakeholders?

## 1-2 December 2021 Fee: £995 + VAT

Group Booking & Multiple Seminar Discounts
Available

# Enterprise Architecture Public Courses via Live Streaming

Zachman Enterprise Architecture Certification 8-11 March 2022

8-11 March 2022 13-16 September 2022

Understanding Enterprise Architecture 7-10 December 2021 (4 hours x 4 days)

Great Skills Make Great Architects 1-2 December 2021

# **Multiple Booking Discount**

Attend more than one of our public course and you will be entitled to the following discounts:

10%
15%
20%
25%

# Group Booking Discount 2-3 Delegates 10% 4-5 Delegates 20% 6+ Delegates 25%

Only one discount can be applied at any one time

### Presenter



Mike Rosen is Chief Scientist at Wilton Consulting Group providing advice to CIOs,

IT Leaders, and Architects on creating the new Digital Business Platform, using architecture as a tool for digital transformation and improved decision making, and aligning architecture with Agile practices. He is also a Founding Member and VP of the Business Architecture Guild, a Certified Business Architect, certified enterprise architect, and Certified Scaled Agilist. Mr. Rosen has more than 35 years of technical leadership experience architecting, designing, and developing solutions, applications, and products, He was previously CTO at startup AZORA Technologies and chief architect, product architect, technical leader, and developer for commercial middleware products from IONA, BEA and Digital. Mr. Rosen is a well-known international speaker and author of 3 books and hundreds of articles.

# **Audience**

Existing Architects who want to improve their skills, including:

- Business Architects
- Enterprise Architects
- IT Architects
- Solution Architects
- Application Architects
- Information Architects
   Software Architects
- Security Architects
- Architecture Managers

Anyone who aspires to become an Architect.

# **Unified Data Delivery - From Data Lake to Enterprise Data Marketplace**

Mike Ferguson Via Live Streaming only

### 11-12 October 2021

Live Streaming Fee: £995 + VAT Group Booking & Multiple Seminar Discounts

### Enterprise Data Courses via Live Streaming

Unified Data Delivery: From Data Lake to Enterprise Data Marketplace 11-12 October 2021

Information Management Funndamentals

Practical Steps for Developing a Business Aligned Data Strategy 7-8 October 2021

Data Modelling Essentials 21-22 October 2021

Mastering Data Modelling Techniques 10-11 November 2021

Data Governance: a Practical Guide 29-30 November 2021

Ten Steps to Quality Data 1-3 December 2021

Practical Metadata Management 2 December 2021

Master & Reference Data Management

3 December 2021 **Business-Oriented Data Modelling** 

Masterclass 6-10 December 2021 (3.5 hoursx 5 days)

**Practical Guidelines for Designing** Modern Data Architectures 24 November 2021

sentials of Data Warehouses, Lakes and BI in Digital Business 1-2 November 2021

From Analytics to AI: Transforming Decision Making in Digital Business 29 November 2021

Successful Implementation of a Master Data Management Programme 8-9 November 2021

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# **Group Booking Discount**

2-3 Delegates 4-5 Delegates 6+ Delegates 10% Only one discount can be applied at any one

# Presenter



An analyst and consultant, Mike Ferguson specialises in business intelligence/analytics, data management, big data and enterprise architecture. With

over 35 years of IT experience, Mike has consulted for dozens of companies on business intelligence strategy, technology selection, enterprise architecture, and data management. He has spoken at events all over the world and written numerous articles.

# Audience

- Chief Data Officers
- Data Architects
- Master Data Management Professionals
- Big Data Professionals
- Data Integration Developers Business Data Analysts doing self-
- service data integration
- Content Management Professionals
- Database Administrators

# Overview

This course looks at the challenges faced by companies trying to deal with an exploding number of data sources, collecting data in multiple data stores (cloud and on-premises), multiple analytical systems and at the requirements to be able to define, govern, manage, unify and share trusted high-quality data products in a distributed and hybrid computing environment. It also explores a new approach to organising your data in a logical data lake and how IT data architects, business users and IT developers can work together to build readymade trusted data products that can be published in a data marketplace available to others to consume and use to drive value. This new DataOps approach to unifying data includes data ingestion, automated data discovery, data profiling, tagging and publishing data in an information catalog. It also involves refining raw data to produce trusted 'data products' available as a service that can be published in a data marketplace (catalog) available for consumption across your company.

# **Learning Objectives**

- How to define a strategy for producing trusted data as-a-service in a distributed environment of multiple data stores and data sources
- How to organise data in a centralised or distributed data environment to overcome complexity and chaos
- How to design, build, manage and operate a logical or centralised data lake within their organisation
- The critical importance of an information
- catalog in understanding what data is available as a service
- How data standardisation and business glossaries can help make sure data is understood
- An operating model for effective distributed information governance
- What technologies and implementation methodologies they need to get their data under control and produce ready made trusted data products
- Collaborative curation of trusted, readymade data products and publishing them in a data marketplace for people to shop for data
- How to apply methodologies to get master and reference data, big data, data warehouse data and unstructured data under control irrespective of whether it be on-premises or in the cloud.
- Fuelling rapid 'last mile' analytical development to reduce time to value

# **Course Outline**

# Establishing a Data Strategy for Rapid Unification of Trusted Data Assets The ever-increasing distributed data

- landscape
  The siloed approach to managing and
- governing data IT data integration, self-service data preparation or both? - data governance or data chaos?
- Key requirements for data management
- Dealing with new data sources cloud data, sensor data, social media data, smart products (the internet of things)
- Understanding scope of your data lake Building a business case for distributed data management
- Defining an enterprise data strategy
- A new collaborative approach to governing, managing and curating data
- Introducing the data lake and data refinery
  Data lake configurations what are the
- options?
- Establishing a multi-purpose data lake and Information Supply Chain to produce data products for the enterprise
- DataOps a component-based approach to curating trusted data products
- The rising importance of an Information catalog and its role as a data marketplace
- Key technology components in a data lake and information supply chain including data fabric software Using Cloud storage or Hadoop as a data
- staging area and why it is not enough Implementation run-time options –
- the need to curate data in multiple environments
- Integrating a data lake into your enterprise analytical architecture

### Information Production Methodologies Information production and information consumption

- A best practice step-by-step methodology structured data governance Why the methodology has to change for
- semi-structured and unstructured data
- Methodologies for structured Vs multi structured data

# Data Standardisation, the Business Glossary and the Information Catalog • Semantic data standardisation using a

- shared business vocabulary within an information catalog
- The role of a common vocabulary in MDM. RDM, SOA, DW and data virtualisation
- Why is a common vocabulary relevant in a data lake, data marketplace and a Logical Data Warehouse? Approaches to creating a common vocabulary
- Business glossary products storing common
- business data names Alteryx Connect Glossary ASG Collibra
- Informatica, IBM Information Governance Catalog, Microsoft Azure Data Catalog Business Glossary, SAP Information Steward Metapedia, SAS Business Data

- Network and more Planning for a business glossary
- Organising data definitions in a business glossary Key roles and responsibilities – getting the
- operating model right to create and manage an SBV
- Formalising governance of business data
- names, e.g. the dispute resolution process Business involvement in SBV creation
- Beyond structured data from business glossary to information catalog
- What is an Information Catalog?
  Why are information catalogs becoming critical to data management?
  Information catalog technologies
- Information catalog capabilities

- Organising and Operating the Data Lake

  Organising data in a centralised or logical
- Creating zones to manage data New requirements for managing data in
- centralised and logical data lakes Creating collaborative data lake projects
- Hadoop or cloud storage as a staging area for enterprise data cleansing and integration Core processes in data lake operations
- The data ingestion process
- Tools and techniques for data ingestion Implementing automated disparate data and data relationship discovery using Information catalog software
- Using domains and machine learning to automate and speed up data discovery and
- Al in the catalog Alation, IBM Watso
- Knowledge Catalog, Informatica CLAIRE, Silwood, Waterline Data Smart Data Catalog Automated profiling, PII detection, tagging and cataloguing of data
- Automated data mapping and lineage discovery
  The data governance classification and policy definition processes Manual and automated data governance
- classification to enable governance Using tag-based policies to govern data

# The Data Refinery Process

- What is a data refinery?
  Key requirements for refining data
- The need for multiple execution engines to run in multiple environments
- Options for refining data ETL versus selfservice data preparation
- Key approaches to scalable ETL data
- integration using Apache Spark Self-service data preparation tools for Spark and Hadoop, e.g. Alteryx Designer, Informatica Intelligent Data Lake, IBM Data Refinery, Paxata, Tableau Prep, Tamr, Talend, Trifacta
- Automated data profiling using analytics in data preparation tools
- Executing data refinery jobs in a logical data lake using Apache Beam to run anywhere Approaches to integrating IT ETL and selfservice data preparation tools
- ODPi Egeria for metadata sharing Joined up analytical processing from ETL to

- analytical pipelines Publishing data and data integration jobs to
- Mapping produced data integration jobs to the information catalog
  Mapping produced data products into your business vocabulary
  Data provisioning publishing trusted, ready-made data products into an
  Enterprise Data Marketplace
- The Enterprise Data Marketplace enabling information consumers to shop for data
- Provisioning trusted data using data virtualisation, a logical data warehouse and
- on-demand information services Consistent data management across cloud and on-premise systems

# Unifying Big Data, Master Data and Data

- Warehouse Data to Drive Business Value

  A walk through of end-to-end data lake
- operation to create a Single Customer View Types of big data & small data needed for single customer view and the challenge of bringing it together
- Connecting to Big Data sources, e.g. web logs, clickstream, sensor data, unstructured and semi-structured content Ingesting and analysing clickstream data
- The challenge of capturing external customer data from social networks
- Dealing with unstructured data quality in a Big Data environment
- Using graph analysis to identify new relationships The need to combine big data, master data and data in your data warehouse
- Matching big data with customer master data at scale Governing data in a Data Science

### environment Information Audit & Protection - Governing Data Across a Distributed Data Landscape

- What is Data Audit and Security and what is involved in managing it?
- Status check Where are we in data audit, access security and protection today? What are the requirements for enterprise data audit, access security and protection?
- What needs to be considered when dealing with the data audit and security challenge?
- Automatic data discovery and the information catalog a huge help in identifying sensitive data
- What about privileged users?
- Using a data management platform and information catalog to govern data across multiple data stores Securing and protecting data using tag-
- based policies in an information catalog What technologies are available to
- protect data and govern it? Apache Knox, Cloudera Sentry, Dataguise, IBM, Informatica Secure@Source, Imperva, Micro Focus, Privitar
- Can these technologies help in GDPR? How do they integrate with Data
- Governance programs?
  How to get started in securing, auditing and
- protecting your data



# Information Management Fundamentals

(with optional CDMP Professional Certification)

**Chris Bradley** 

Via Live Streaming only

# Overview

This course provides a solid foundation of the different information 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 they are applied. Additionally, this course highlights the key curriculum items for students wishing to take the Industry professional certification the DAMA Certified Data Management Professional (CDMP). At the end of day 3 of the course, students will optionally have the opportunity to take the CDMP examination. Full details of the CDMP examinations, levels and costs are available at https://cdmp.info/.

# **Learning Objectives**

**Course Outline** 

Introduction to Data Management, DMBoK & overview of the CDMP

and issues if it goes wrong.

Management in the DMBoK

one level to the next.

What is Data Governance.

Data Governance

Governance.

Level set understanding & terminology:

- Learn about the need for and the application of Information Management disciplines for different categories of
- 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

What is Data Management, the drivers

What is the DMBoK, its intended

purpose and audience of the DMBoK What are the disciplines of Data

Overview of the DAMA CDMP professional certification, what are the

levels and how can you progress from

Why Data Governance is at the heart of

Data Governance roles & responsibilities.

The role of the Data Governance Office

(DGO) & its relationship with the PMO.

successful Information Management.

A typical Data Governance reference

Organisation structures & type of

Principles for Data Governance

How to get started with Data

Operating models to support Data

appreciate why they are important

Understand the difference between Master Data Management and Data Governance and how to effectively apply

### Pragmatic Learning:

different cases.

they used.

Kimball)

Modelling

Data Modelling

need them.

interrelate

and Dimensional.

Database design

Management.

- 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

architectures & their suitability in

Management implementation

Reference Data Management

and Data Governance

The essential relationship between

Data Warehousing & BI Management

• What is a Data Warehouse & why are

Provision of Business Intelligence

(BI) to the enterprise and the way data consumed by BI solutions and

the resulting reports are managed.

Particularly important if the data is replicated into a Data Warehouse.

Introduction to Dimensional Data

What are Data Models & why do we

What are the different types of Data

The development, and exploitation of data models, ranging from Enterprise, through Conceptual to Logical, Physical

Data modelling & Big Data - why data modelling is NOT just about Relational

models, their use and how they

The use of data models in Data

Governance, and Data Quality

Metadata Management
• What is (and isn't) Metadata

and why they are required

The major DW architectures (Inmon &

Overview of slowly changing dimensions

The different genres of Master Data

Management solutions & pitfalls to avoid Different approaches for Master Data

Master Data Management, Data Quality,

The under looked but critical aspect of

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

• Metadata & Business Glossaries. What's

Data integration & Data interoperability

What are the business (and technology)

The different styles of Data Integration

The approaches, plans, considerations

and guidelines for provision of Data

Consideration of Data integration &

interoperability approaches including: P2P, ETL, ELT, CDC, Hub & Spoke,

Services Orientated Architecture (SOA),

& Interoperability, their applicability and

issues that Data Integration is seeking

Data Integration & Interoperability

What's the difference?

Integration and access.

the connection?

to address?

implications.

Management

### 4-6 October 2021

Live Streaming Fee: £1,295 + VAT Group Booking & Multiple Seminar Discounts

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2-3 Delegates 4-5 Delegates 20% 25% 6+ Delegates 25%
Only one discount can be applied at any one

## Data Virtualization, and an assessment of their suitability in different cases. Data Architecture & Data Lifecycle

- Types of Enterprise 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
- Differences between Data Life cycle & a Systems Development LifeCycle (SDLC).

# Data Risk Management, Security, Privacy & Regulatory compliance 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.

# **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

# **Data Quality Management**

- The different facets of Data Quality, and why "Validity" is often confused with 'Quality'
- The different Dimensions of Data 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. Data Quality measures - guidelines for their creation & monitoring.
- Master & Reference Data Management
- The differences between Reference & Master Data.
- Identification and management of Master Data across the enterprise.
- 4 generic Master Data Management

user access and glossaries from these. Different types of Metadata & their uses Where is metadata found - the different

and the means of providing business

The provision of metadata repositories

- sources of metadata
- What metadata do we need to manage

# Audience

- Business Intelligence & Data Warehouse Developers & Architects
- Data Architects / Analysts
- Data Governance Managers
- Data Quality Managers
- Information Quality Practitioners
- Enterprise / Solution / Application / Information Architects
- Business AnalystsData Modellers

Developers

- Project / Programme Managers
- IT Consultants



Chris Bradley has spent 37 years in the forefront of the Information Management field, working for

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 Director of the E&P standards committee "DMBoard", an author of several books including "Data Modelling for The Business" and "DMBoK 2.0", a member of the Meta Data Professionals Organisation (MPO) a Fellow of BCS and DAMA CDMP, recipient of the DAMA Lifetime Achievement Award for Data Management Excellence, and author of significant parts of Excellence, and author of significant parts of professional certifications. Chris is an acknowledged thought leader in Data Modelling and Data Governance, author of several papers and books including "Data Modelling for the Business".

"Great breath and depth! Great breath of knowledge and experience. Will recommend to my colleagues. The course has exceeded my expectations."

> Nadia Batool, Data Governance Consultant, Royal London Group

# Practical Steps for Developing a Business Aligned **Data Strategy**

**Chris Bradley** Via Live Streaming only

7-8 October 2021

Live Streaming Fee: £995 + VAT
Group Booking & Multiple Seminar Discounts Available

# **Enterprise Data Courses via Live** Streaming

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29 November 2021

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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 and a recognised thought leader. He advises 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, 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 CDMP, past president of DAMA UK. He is an author of the DMBoK 2 and author and examiner for professional certifications. In 2016 Chris received the lifetime achievement award from DAMA International for lifetime achievement award from DAMA International for exceptional services to furthering Data Management education & to the International Data Management community. 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.

### Overview

With data being at the forefront of ALL business, the need for organisations to produce a wide-ranging Data Strategy is greater than ever, with both the increase in data regulations and the focus on data driven business outcomes. Yet, creating an enterprise wide data strategy and the governance to support it can be a formidable task. Often, it is difficult to know where to begin, and how best to prioritise efforts due to the large number of stakeholders and many competing initiatives. Data is at the heart of all organizations, almost like 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 legal and other regulatory sanctions ultimately to business collapse. Professor Joe Peppard (European School of Management, Cranfield) summed it up when he said: "The very existence of an organisation can be threatened by poor data". This 2-day course will provide concrete practical approaches to get you started on your Data Strategy, the typical contents of a Data Strategy, and the ways in which your supporting Data Governance framework can be organised.

# **Learning Objectives**

Level set understanding & terminology:

- Understand the key components that comprise a Data Strategy.
- Learn how to create a case for obtaining business buy-in for a data strategy.
- Understand the different types of Data Strategy and how to set the
- Learn how to create metrics for tracking the progress of your data strategy.
- Learn about the need for and the application of Data Asset management and Governance for

different categories of challenges

- Understand why a Business focused Data Governance framework must be aligned with your emerging data strategy.
- Appreciate the critical role that Data Governance plays in the core Information disciplines including Master Data Management and Data Quality management, and why this should be recognised in you Data Strategy.

Pragmatic Learning:
• Discover the different types of data strategies and which is most

- appropriate and practical for you. Learn the different motivations for Data Asset management and Governance and how best to implement DG approaches
- 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
- Learn how to create an actionable road map to implement your data strategy.
- Understand how to identify the additional activities that are necessary to support the data strategy.

# **Course Outline**

- Components of a Data Strategy

   Where do I Start & What is the Scope of the Data Strategy?
- Building Blocks of a Data Strategy & Architecture

# Establishing Goals & Gaining Buy-In

- Motivation and Drivers Internal Factors

# **Data Management Maturity**

- Assessment

  Data Management Maturity Assessment
- of the Disciplines of Data Management. Maturity for Organisational Enablers of Information Management
  - People
  - Executive Sponsorship/Policy Technology

  - Compliance Measurement
  - Data Management Processes / Practice

# Data Governance: Managing people, Organisation & Process • Steering and Governance • The organisation structure for data

- - governance Charters or terms of reference for steering group(s) and the recommended constitution of each
- Sponsorship.
- Roles & Responsibilities & People Capabilities The essential Data Governance roles
  - Capabilities for core Data
- Management roles may be covered in a strategy.
  Data Management Process
- A Data strategy should tie in the Change Management Process, and

Solutions Development Process with data touch points during the Systems Delivery Life Cycle (SDLC).

## **Prioritising Business Critical Data and** Capabilities

- Capabilities & Critical Data Defining & managing the businesscritical data and the people
  - capabilities required for their management.
- Architecture Building the appropriate technical architecture for the known and anticipated data needs, incorporating the need for flexibility and emerging
- Recommending the overall Technical Data Architecture for actioning the
- priority needs of the data strategy.
  Principles & Minimum Standards for
  - The principles for data management
     implications minimum with rationale, implications minimum standards and metrics.

# Defining an Actionable Roadmap

- Success Metrics
   From the Principles and Minimum standards, quantifiable success metrics can be developed. Examples will be used to illustrate this.
  Priorities & Quick Wins
- Business initiatives and priorities that are used in the formulation of the roadmap and transition steps. In particular, the transition steps will be
- aligned with business initiatives. Roadmap, Dependencies and Transition
  - Steps

    Roadmap of the recommended

    To you the data initia activities to move the data initiative forward.
  - The overall roadmap must make it clear that there will be dependencies

- with some activities, for example to undertake XYZ Master Data Management, a minimum viable Data Governance process and responsibilities must be established for area XYZ.
- The overall "Roadmap" is made up of Transition steps which can be bundled into Transition projects. The key consideration here is that the most successful transitions are where they are aligned with business initiatives and are not simply "data projects".
- Culture, Communication, Sustainability & Education
  - Development of a communication plan regarding the data strategy. The communication plan needs to have at least: Audience, Message, Method,
  - Frequency.

    Development of an education plan to raise Data Management competencies across the organisation & ensure the sustainability of the strategy.
- Funding Model
  - Recommendations on funding approach for Data initiatives.

# Additional Activities to Support the Strategy

- Identify Candidates for Roles
- Determine Data Owners & Stewards Assess Current Roles and Skills, Perform
- Identify Training Required to Address
- Gaps Brief and Mentor Data Owners
- Define Data Subject Areas & Develop Conceptual Data Model
- Determine & Prioritise Business Area

for Data Governance Rollout

# Audience

- Data Strategists
- Data Governance Managers
- Data Quality Managers
- Data Analysts Data Architects
- MDM Managers
- Information Architects
- Business Intelligence & Data Warehouse Developers & Architects
- **Enterprise Architects**
- Solution Architects
- Application Architects
- **Business Analysts**
- Project / Programme Managers
- IT Consultants
- Information Quality Practitioners

# **Data Modelling Essentials**

**Chris Bradley** 

Via Live Streaming only

21-22 October 2021

Streaming

11-12 October 2021

Aligned Data Strategy

**Data Modelling Essentials** 

4-6 October 2021

Live Streaming Fee: £995 + VAT Group Booking & Multiple Seminar Discounts

**Enterprise Data Courses via Live** 

Unified Data Delivery: From Data Lake to Enterprise Data Marketplace

Information Management Funndamentals

Practical Steps for Developing a Business

# **Overview**

This 2-day course addresses the core data management topic of data modelling. Often misunderstood and relegated to just the technical aspect of "database design", data modelling is one of the most important disciplines of data management. The course introduces delegates to data modelling, its purpose, the different types of models, how to construct and read a data model, and the wider use of data models beyond the traditional area of database design. It contains a wide-ranging clarification of data modelling concepts and terminology, together with techniques for producing usable data models. This course is suitable for preparation for the DAMA CDMP specialist Data Modelling exam.

# **Learning Objectives**

This course explains the essential data modelling building blocks. It will help students to understand the differences between relational and dimensional models, and between the different levels of Conceptual, Logical and Physical models. On completion they will be able to:

- Describe the purpose of, Conceptual, Logical, and Physical data models
- Create a Conceptual and a Logical Data model
- Read and interpret a data model
- Understand different approaches for fact finding and how to apply normalisation techniques
- Understand how to validate a data model.

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

### Level Set Understanding & Terminology:

Learn about the need for and application of Data Models

- See the areas where Data modelling adds value to Data Management activities
- Understand the critical role of Data models in Master Data Management and Data Governance.

# Pragmatic Learning:

- Understand the difference between, Conceptual, Logical, Physical and Dimensional Data models
- Learn the best practices for developing Data models that can be read by humans
- Through practical examples, learn how to apply techniques in Data modelling

# 21-22 October 2021

Mastering Data Modelling Techniques 10-11 November 2021

Data Governance: a Practical Guide 29-30 November 2021

Ten Steps to Quality Data

1-3 December 2021

Practical Metadata Management 2 December 2021

Master & Reference Data Management 3 December 2021

Business-Oriented Data Modelling Masterclass 6-10 December 2021 (3.5 hoursx 5 days)

Practical Guidelines for Designing Modern Data

24 November 2021 Essentials of Data Warehouses, Lakes and BI in

**Digital Business** 1-2 November 2021 From Analytics to AI: Transforming Decision

Making in Digital Business 29 November 2021

Successful Implementation of a Master Data Management Programme 8-9 November 2021

# **Multiple Booking Discount**

Attend more than one of our public course and you will be entitled to the following discounts: 2nd course 10% 3rd course 4th course 15% 20% 5th+course 25%

# **Group Booking Discount**

10%

Only one discount can be applied at any one time

# **Course Outline**

- What is Data Modelling and why does it matter
- What is the relationship between a data model and other types of models in the Enterprise Architecture What is a Conceptual Data model, why it's important and
- the pivotal role it plays in all architecture disciplines The major differences between Enterprise, Conceptual,
- Logical, Physical and Dimensional data models
- Data vs MetaData; what's the difference and why does it matter

- Data Model Components

  Data Modelling Basics; Entities, Attributes, Relationships
- How to identify Entities and Subtypes
- What are the differences between exclusive and nonexclusive subtypes?
- How do different data modelling notations represent subtypes?
- Basic standards that you can use right away
- Relationships: Cardinality & Optionality, Identifying, Nonidentifying, recursive, and many-to-many
- How does cardinality and referential integrity lead to better
- Rules for handling Super types, subtypes, many to many and recursive relationships Keys: Primary, Natural, Surrogate, Alternate, Inverted,
- What are the alleged and actual benefits of surrogate keys?
- Attribute properties & attribute domains

# **Creating Data Models**

- How to get started with data models
- What core information is needed to create a data model, how this can be easily communicated to business people, and what visual constructs to use to get their attention
- Templates and guidelines for a step-by-step approach to implementing a high-level data model in your organization
- How to capture requirements for data models

Approaches for creating a data model (Top Down, Bottom Up, Middle out) and when to use them.

### **Using Data Models**

- How to use high-level data models to communicate with business people to get the core information you require to build robust applications.
- The critical role played by Data Models in all disciplines of Information Management.
- Why Data Models are required for software package implementation
- Data models are not just for DBMS design, the other areas where models are critical.
- Maturity assessment to consider the way in which models are utilized in the enterprise and their integration in the System Development Life Cycle (SDLC).

# **Dimensional Data Modelling Basics**

- Facts and Dimensions, the basics of Dimensional models
- The key differences between Dimensional & Relational models
- The use of Dimensional data models in Business Intelligence & Data Warehousing
- Inmon vs Kimball Data Warehouse approaches
- How to cater for change in Dimensional models; the different types of slowly changing dimensions
- Aggregation and Summarisation what you really need to know
- Columnar Database & Data warehouse a forgotten

# Improving your Data Models

- Data Modelling Notations and tooling
- Normalisation: 1st, 2nd and 3rd normal form and a brief overview of other normal forms
- Ten steps for checking the quality of your data models
- Layout, presenting, and communicating a data model to non-modellers

# Audience

Practitioners who will need to read, consume or create data models to gain a better understanding of data during Information Management initiatives including:

- Business Intelligence & Data Warehouse Developers & Architects
- Data Modellers
- **Data Architects**
- Data Analysts
- Enterprise Architects
- Solution Architects
- Application Architects Information Architects

- Developers
- Database Administrators
- IT Consultants
- **Business Analysts**
- Project / Programme Managers
- Data Governance Managers Data Quality Managers
- Information Quality Practitioners

# Presenter



Chris Bradley has spent 37 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. He advises clients including National Grid, EDP, BP, Enterprise Oil, Saudi Aramco, Shell, Statoil, TOTAL, Qatar Gas, Alba Leasing, Alinma Bank, American Express, ANZ, Bank of England, Celgene, Cigna Insurance Emirates NBD, GSK, HSBC, NAB, SABB and Riyad Bank. Chris is Director of the E&P standards committee "DMBoard", an author of several books including "Data Modelling for The Business" and "DMBoK 2.0", a member of the Meta Data Professionals Organisation (MPO) a Fellow of BCS and DAMA CDMP, recipient of the DAMA Lifetime Achievement Award for Data Management Excellence, and author of significant parts of professional certifications. Chris is an acknowledged thought leader in Data Modelling and Data Governance, author of several papers and books including "Data Modelling for the

# **Mastering Data Modelling Techniques**

**Chris Bradley** Via Live Streaming only

# 10-11 November 2021 Live Streaming Fee: £995 + VAT Group Booking & Multiple Seminar Discounts

# **Enterprise Data Courses via Live** Streaming

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6-10 December 2021 (3.5 hoursx 5 days)

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5th+course

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# Presenter



Chris Bradley has spent 37 years in the forefront of the Information Management field, working for International organisations in Information Management

25%

Information Assurance, Master Data
Management, Metadata Management, Data Warehouse and Business Intelligence. He advises clients including National Grid, EDP, BP, Enterprise Oil, Saudi Aramco, Shell, Statoil, TOTAL, Qatar Gas, Alba Leasing, Alinma Bank, American Express, ANZ, Bank of England, Celgene, Cigna Insurance, Emirates NBD, GSK, HSBC, NAB, SABB and Riyad Bank. Chris is Director of the E&P standards committee Director of the EAP standards committee
"DMBoard", an author of several books
including "Data Modelling for The Business"
and "DMBoK 2.0", a member of the Meta Data
Professionals Organisation (MPO) a Fellow of BCS and DAMA CDMP, recipient of the DAMA Lifetime Achievement Award for Data Management Excellence, and author of significant parts of professional certifications. Chris is an acknowledged thought leader in Data Modelling and Data Governance, author of several papers and books including "Data Modelling for the Business".

# Overview

This course explores the more advanced techniques for Data Modelling. In addition, techniques will be taught on how (and when) to create Data Models for non-relational solutions including Big Data together and the uses for data models beyond Relational DBMS

# **Learning Objectives**

### Practical Application:

- Build conceptual and logical data models, and know about compromises for physical design
- How to discover requirements for robust data models
- Understand where abstraction is valuable (and where it is risky)
- Where industry data models can provide
- How (and where) to apply standard solutions to well-known data modelling business scenarios.

# Level Set Understanding & Terminology:

- · Learn about the need for and application of Data Models in Big Data and NoSQL environments
- See the areas where Data modelling adds value to Data Management activities beyond Relational Database design
- Understand the critical role of Data models in other Data Management disciplines particularly Master Data Management and Data Governance

# **Pragmatic Learning:**

- Learn the best practices for developing Data models for Big Data and NoSQL environment
- Understand how to create data models that can be easily read by humans
- Recognise the difference between Enterprise, Conceptual, Logical, Physical and Dimensional Data models
- Through practical examples, learn how to apply different Data modelling techniques

# **Course Outline**

# **Data Modelling Recap**

- Data modelling basics
- maior constructs
- identifying entities
- Data model types, and the linkage between them

### Levels of Models

- Enterprise, Conceptual, Logical & Physical Physical
- What is the purpose of each, do we need all of these in a Big Data world
- Where does Dimensional modelling fit in?

# Data Modelling - Back to the Future?

- Data Modelling didn't start with relational! This may be a surprise to many people, but the first uses of data models were well before Relational data bases became the norm. The techniques are applicable to many of the modern non-relational formats we see today.
- Modelling in the pre-relational days. We didn't have RDBMS's. We had Flat files, Sequential, VSAM, Hierarchical DBMS's, Network DBMS's, Inverted Architecture DBMS's
- The techniques that were developed for these are directly appropriate to the NoSQL and Big Data world of today.

# Data Modelling for Big Data & NoSQL

- What has to change when we are developing data models for a Hadoop or other Big Data environment? Do modelling tools support Big Data
- technologies, what are the restrictions and considerations? What data modelling techniques are
- applicable when targeting a Big Data platform? Does normalisation still have a place in
- the Big Data world? Where's our metadata in the model
- In the age of big data, popular data modeling tools (eg ER/Studio, ERWin,

PowerDesigner) continue to help us analyze and understand our data architectures by applying hybrid data modelling concepts. Instead of creating pure a relational data model, we now can embed NoSQL submodels within a relational data model. In general, data size and performance bottlenecks are the factors that help us decide which data goes to the NoSQL system.

- Key Value Pairs: A common misconception is that using data structures like JavaScript Object Notation (JSON) prevents us from needing a data model; THIS IS WRONG. We'll show several examples & conclude that a set of JSON files can be just as complicated as a 100 table 3rd Normal Form data model.
- NoSQL & Hadoop: How the 4 types of NoSQL databases still need data models, and how the ACID vs BASE paradigm affects this.

# Modelling for Hierarchic Systems & XML

What must change when developing data models for XML & Hierarchic

# Services Oriented Architecture (SOA)

Why data models are essential for success.

# **Massively Denormalised Files**

- Is modelling needed?
- How do we create data models for Data lakes?

# **Dimensional Data Models**

- How do we create a dimensional model?
- Converting an ER model to Dimensional.
- Slowly changing dimensions, what types and when are they applicable. Beyond the basics with conformed
- dimensions, bridges, junk dimensions & fact less facts.

# **Application Packages & Data Models**

Do we need to develop data models when implementing a COTS package? Uses and benefits.

## Using Data Models for Data Integration & Lineage

How to exploit data models for design of data integration approaches and in data lineage.

# Top Down Requirements Capture

- When is it appropriate
- What are the limitations.

# **Bottom Up Requirements Synthesis**

- When this works, where is it appropriate.
- How do we cope with existing DBMS's and systems.

# How to Capture Requirements for Both **Data and Process Needs**

- What comes first Data or Process we'll show the answer.
- The critical importance of understanding processes to get your data models right (and vice versa).
- Interaction between process and data models.
- Approaches for capturing Process AND Data Requirements.

### Checking the Data vs the MetaData; Why Does it Matter?

## Use of Standard Data Model Constructs and Pattern Models

- Understanding the Bill of materials (BOM) construct. Where can it be applied, why it's one of the most powerful modelling constructs. Party; Role; Relationship: Why
- mastering this construct can provide phenomenal flexibility.
- Mastering Hierarchies: Different approaches for modelling hierarchies.

# Different Data Modelling Notations & a Comparison Between Them

# Normalisation

Progressing beyond 3NF. 4NF, 5NF Boyce-Codd, and why, and when to use

# Audience

- Business Intelligence & Data Warehouse
- Developers & Architects Data Modellers Developers
- Data Architects Data Analyst

- **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

# **Data Governance: A Practical Guide**

**Nigel Turner** 

Via Live Streaming only

Streaming

29-30 November 2021

Enterprise Data Marketplace 11-12 October 2021

Aligned Data Strategy 7-8 October 2021

Data Modelling Essentials 21-22 October 2021

Ten Steps to Quality Data

1-3 December 2021

2 December 2021

3 December 2021

Masterclass

Live Streaming Fee: £995 + VAT
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Data Management Programme 8-9 November 2021

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**Group Booking Discount** 2-3 Delegates

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25%

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Modern Data Architectures 24 November 2021

BI in Digital Business 1-2 November 2021

Master & Reference Data Management

6-10 December 2021 (3.5 hoursx 5 days)

Essentials of Data Warehouses, Lakes and

# Overview

or programme.

Data Governance is rapidly becoming a 'must have' for any organisation wanting to manage its data, improve its quality, and control its security, access and uses. An average organisation's data is doubling every 15 months. Propelled by Big Data, Cloud Computing and other innovations, this rapid increase in volumes is compounded by the increasing speed and complexity with which data is created and stored. Organisations are also under increasing customer, regulatory and legal pressures to get data right. Data Governance is seen as a keystone in any solution to address these challenges. Many organisations have already recognised the potential value of Data Governance and have started governance initiatives. Though some have succeeded, many are faltering or have failed. Attending this 2-day seminar & workshop will ensure that you set off on the right path to successful and sustainable Data Governance. Key Topics include:

- What is Data Governance?
- Why is it increasingly a 'must have' for organisations
- Building the internal case for Data
- How and where do you start to
- introduce Data Governance
- What are the main components of a successful Data Governance initiative
- How can you revitalise or recover a faltering Data Governance programme
- · Creating the Data Governance roadmap
- · What benefits can you expect and how you measure them Real life Data Governance success
- stories
- Your role in Data Governance how to prepare yourself to win

Note that course will help you whether you are new to Data Governance or already working as part of an existing Data Governance team

# **Learning Objectives**

- Understand what Data Governance is, and what it isn't
- Assess the readiness of your organisation for Data Governance
- Be able to align a Data Governance proposal and initiative with your key organisational and / or departmental
- Make the internal business case for investment in Data Governance
- Be able to identify and apply the six necessary components of a Data Governance framework
- Create a realistic plan of action for Data Governance
- Apply these practices to a fictional, but

highly realistic organisation via a hands on case study

Learn from best practices in other organisations who are already implementing Data Governance

# **Course Outline**

# **Scene Setting & Introductions**

- Scope & objectives of the course Course agenda & participant

# **Data Governance Context & Drivers**

- The impact of good and bad data The Chamber of Data Horrors
- The overall impact of poor data Data and the digital business
- Drivers for change
- Why poor quality data persists

### Data Governance - An Industry Assessment

- The need for Data Governance
- The DAMA DMBOK wheel: the centrality of Data Governance
- Data Governance: definitions and focus
- Key principles of Data Governance
- The Data Governance paradox Why Data Governance can fail
- Key components of success: breaking down the barriers
- Assessing Data Governance maturity &
- Introduction to the case study
  Case study exercise 1: Context and
- maturity assessment

# The Components of Successful Data Governance

- Tackling Data Governance barriers
- The Data Governance Framework overview
- Vision & Strategy
- Organisation & People
- Processes & Workflows
- Data Management & Measures
  Culture & Communications
- Tools & Technology

# **Building the Data Governance** Strategy & Framework Vision & Strategy Creating a clear Data Governance

- Understanding business drivers
- Identifying key data challenges Producing a Motivation Model
- Building a business case & strategy for Data Governance
- Case study exercise 2: Creating a
- Motivation Model
  Organisation & People
- Organising for Data Governance
  Data Ownership & Stewardship
  Data Governance: getting organised
- The five basic models of Data Governance
- The pros & cons of each model
- Deciding on the right model for any
- specific organisation Processes & Workflows
  - Designing Data Governance
  - processes & workflows Data Governance processes & workflows explained
- Data Management & Measures
  How to identify key data

  - The importance of measurement in Data Governance Defining 'fit for purpose' data
  - Establishing baselines and
- improvement targets

  Culture & Communications
- - The importance of selling Data Governance
    Culture change & Data Governance

  - Key lessons for effective culture
- Communications strategies and plans
- Tools & Technology

- Data Governance toolset
- The role of IT

### Applying the Data Governance Framework

- Using the Data Governance Framework: maturity assessment & creating the vision
- Case study exercise 3: Maturity assessment
- Setting Data Governance goals and
- The benefits of the Data Governance Framework
- Potential Data Governance Framework deliverables & activities

## **Creating the Data Governance** Roadmap & Data Improvement Plans

- Bringing it all together the Data Governance Roadmap
- Hints & tips for developing Roadmaps
- Data Improvement Plans
- Issue logging Setting Data Improvement Plan priorities
- Case study exercise 4: Issue Logging, Data Improvement Plans, Roadmap

- Data Governance in PracticeA summary of real life Data Governance success stories:
  - Telecommunications Social Services

  - Utilities
  - **Professional Certification** Organisation
  - Manufacturing

# **Summary & Conclusions**

- Recap of course objectives
- Review of participant objectives
- Call to action

2nd course

3rd course

4th course

5th+course

4-5 Delegates

6+ Delegates



Nigel Turner is Principal Information Management Consultant for EMEA at Global Data Strategy Ltd. and Vice-Chair of the Data

Management Association of the UK. Nigel has worked in Information Management for over 25 years, both as an in-house implementer of Information Management solutions at British Telecommunications plc and subsequently as an external consultant to more than 150 clients, including the Environment Agency, British Gas, HSBC, Intel US and others.

# **Audience**

Individuals and teams who are playing, or would like to play, an active role in the implementation of a Data Governance initiative. It will also be of interest to anyone working in a relevant business or IT role who wants to know more about Data Governance concepts and practices. Typical roles who will benefit from this tutorial / workshop include:

- Heads of Data Governance & their
- Chief Data Officers & their teams
- Data Stewards
- Data Owners
- Information Strategists & Architects
- **Business Analysts**
- Data Quality Specialists
- Master Data Management Practitioners

# **Ten Steps to Quality Data**

# Danette McGilvray

# Via Live Streaming only

## 1-3 December 2021 Fee: £1,295 + VAT

Group Booking & Multiple Seminar Discounts Available

## Enterprise Data Courses via Live Streaming

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Information Management 4-6 October 2021

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**Business-Oriented Data Modelling** Masterclass

6-10 December 2021 (3.5 hoursx 5

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5th+course	25%
Group Booking Discount	
2-3 Delegates	10%

4-5 Delegates 6+ Delegates 20% 25% Only one discount can be applied at any one time

# Presenter



Danette McGilvray is an experienced trainer, consultant and author of Executing Data Quality Projects: Ten Steps to **Ouality Data and Trusted** 

Information™. An internationally respected expert, her Ten Steps™ approach to information quality has been embraced as a proven method for creating, improving, and managing the quality of all types of data for any kind of organization. Her book is used as a textbook in university graduate programs.

"Danette McGilvray was brilliant. I would definitely recommend this course to colleagues."

> Graham Wall, Data Management Analyst, PageGroup

# "Danette McGilvray is very

Radhia Ghanem, Data Quality Analyst, NHS PS, UK

# Overview

This course is based on recently-released second edition of Executing Data Quality Projects: Ten Steps to Quality Data and Trusted Information $^{ exttt{ iny}}$ . Simply put, information quality is providing the correct set of accurate information, at the correct time and place, to the correct people. However, ensuring quality information is far from simple. Whether you are just starting a project or are already in production, it is not unusual to find that data quality issues prevent organizations from realizing the full benefit of their investments in business processes and systems. The Ten Steps to Quality quality issues prevent organizations from realizing the full benefit of their investments in business processes and systems. The Ten Steps to Quality Data course teaches a practical approach to creating, improving, sustaining, and managing the quality of information critical to providing products and services, satisfying customers, and achieving goals for any type of organization. If you are working on business issues where data is a component or data quality-related issues that need real results, this is the course for you. What is learned applies to all kinds of data and every type of organization – for-profit businesses of all sizes, education, government, healthcare, and nonprofit – because all depend on trusted information to succeed. Both concepts and practical application are included. Concepts provide a foundation for understanding data quality. Concepts are put into action through the Ten Steps<sup>™</sup> process. Both are needed to apply the methodology appropriately to the many data quality related situations that attendees will face within their organizations. In addition to discussion and exercises (individual and as a group), attendees will practice what is learned by applying the steps and techniques to a course project of their choice. Come with your particular needs in mind, be ready to participate, practice applying what is learned to your situations and leave with realistic methods for managing data quality. situation and leave with realistic methods for managing data quality.

# Learning Objectives

- Have the background needed to conduct their own data quality project using the Ten Steps methodology a proven approach for creating, improving, sustaining, and managing data and information quality within any organization
- Understand how the Ten Steps methodology applies to three ways that data quality work gets done in most organizations (through programs, projects, and operational processes)
- Turn data quality challenges into actionable projects with clear
- Connect data quality issues with business priorities
- Use business impact techniques to show the value and impact of data
- Use data quality dimensions to assess the data that supports business

- needs and project objectives
- Use root cause analysis techniques to address the true causes of data
- Select the appropriate steps, activities, and techniques from the  $\mbox{\it Ten}$ Steps™ process to address business needs
- Incorporate data management topics such as data governance, data modeling, metadata, business rules, master data, reference data, and data standards into the process for ensuring high quality data
- Apply concepts such as the Framework for Information Quality and the information life cycle to data quality management
- Apply templates and examples to address their own data quality

# **Course Outline**

# The Data and Information Quality Challenge

- Information and data quality defined Why we care about data quality Data quality in action through programs, projects, and operational
- processes
  The Ten Steps™ methodology key concepts plus the Ten Steps™

# Key Concepts - A Necessary Foundation for Addressing Information

- Framework for Information Quality (FIQ) Components that impact information quality
- Business needs (customers, products, services, strategies, goals, issues, opportunities)
- issues, opportunities)
  Information life cycle (POSMAD Plan, Obtain, Store and Share,
  Maintain, Apply, Dispose)
  Key components that affect information quality (data, processes,
- people/organizations, technology) Interaction between the information life cycle and the key components
- components

  Location (where) and time (when and how long)

  Broad-impact components (RRISCCE Requirements and constraints, Responsibility, Improvement and prevention, Structure and meaning, Communication, Change, Ethics)

  The relationship between Data Governance, Stewardship, and Data

- Step-by-Step: The Ten Steps™ Process

   Each of the Ten Steps is covered in the seminar with instructions, techniques, examples, templates and best practices

   Data quality tools will be discussed in the applicable steps

   Exercises and working on a course project with small teams give attendees the opportunity to practice what is learned

# Step 1 Determine Business Needs and Approach

- Identify and agree on business needs and data quality issues within scope of the project Reference them to guide work and keep at the forefront of all activities
- reference their diduction and reference their official of a throughout the project.

  Determine project type and approach:

  Focused data quality improvement project

  Data quality activities in another project

  Ad hoc use of data quality steps, activities, or techniques

# Step 2 Analyze Information Environment

- Learn about the information environment surrounding the business
- needs and data quality issues within scope
  Determine what is within scope of the project and the appropriate level of detail for each element of the information environment: requirements and constraints
  - data and data specifications

- processes
- people and organizations technology the information life cycle

- This ensures that relevant data will be assessed for quality and provides input to future steps, such as when identifying root causes

- Step 3 Assess Data Quality

  Overview of various data quality dimensions, which are used to define, measure, improve, and manage the quality of data and information Learn what is needed to:
- arn what is needed to:
  Select the data quality dimensions applicable to the business needs
  and data quality issues within scope
  Design a suitable data capture and assessment plan
  Make use of data quality assessment results: analyze individual
  assessments and synthesize with other results; make initial
  recommendations, document, and take action when the time is right

- Step 4 Assess Business Impact

  Determine the impact of poor-quality data on the business using a variety of qualitative and quantitative techniques

  This step provides input to establish the business case for improvements, to gain support for information quality, and to determine appropriate investments in your information resource

# Step 5 Identify Root Causes

- Identify and prioritize the true causes of the data quality problems Develop specific recommendations for addressing the problems

- Step 6 Develop Improvement Plans

  Finalize specific recommendations for action
  Develop improvement plans based on the recommendations
- $Establish\ ownership\ for\ implementation$

Step 7 Prevent Future Data Errors
• Implement solutions that address the root causes of the data quality problems and will avoid data errors from reoccurring

- Step 8 Correct Current Data Errors

   Make appropriate data corrections

   Ensure data corrections do not introduce new errors

# Step 9 Monitor Controls

- Monitor and verify the improvements that were implemented Maintain improved results by standardizing, documenting, and monitoring appropriate improvements

- Step 10 Communicate, Manage, and Engage People Throughout

  Communication, engaging with people, and managing the project throughout are essential to the success of any data quality project

  These are so important that they should be included as part of every

# Audience

**Individual contributors and team members** responsible for or interested in the quality of data in their business processes, systems or databases. This includes roles such as:

- Data Analysts
- Data Quality Analysts
- **Business Analysts**

- Data Stewards
  - **Business Process Modellers**
  - Application Developers
  - Any data professional impacting the quality of data upon which their business depends





# **Practical Metadata Management**

**Chris Bradley** Via Live Streaming only

# **Overview**

A 1-day class covering the considerations, benefits and approaches for the successful capture, storage, management and exploitation of metadata. This course will show the different types, sources and uses of Metadata and illustrate why the old definition of "data about data" masks the truth.

# **Learning Objectives**

- What is MetaData & why the old definition "Data about data" hides the full story
- Distinguish the different types of Metadata (e.g. Business, Data, Technical, Governance and Process)
- Appreciate the business benefit of Metadata and discusses various uses and methods for exploiting metadata
- Discover how to capture, distribute and exploit Metadata and the various methods for storing metadata.
- Gain an awareness of the different sources of metadata and the issues for integrating them
- Understand the key industry standards for Metadata and understand how (and why) to exchange metadata between different components of your architecture
- Discover the difference between a Business Glossary, Data Dictionary and Metadata repository and the other "library" uses of Metadata
- Big Data technologies and Metadata: the uncomfortable truth about what's missing.

# **Course Outline**

# Metadata Overview

- What is Metadata & why it's collection and management are vital
- The Business Value of Metadata
- Sources of metadata and methods of collecting and storing it
- The different types of metadata including:
  - Technical Metadata
  - Business metadata
  - Process
  - Governance & ownership metadata
  - Operational metadata

# Benefits & uses of metadata

- Metadata Strategy
  - Business Prioritization
  - Stakeholder Analysis
  - Technical Infrastructure & Analysis
- Metamodels
- How to provide metadata repositories and the means of providing business user access and glossaries from these including:
  - Business Glossary,
  - Data Dictionary
  - Process & Data Models
  - Data Lineage and
  - other "library" uses of Metadata
- Metadata standards and tools
- The role and exploitation of data models, and their key place in a metadata strategy

# The role of Metadata in Data Governance

- Overview of a framework for Data Governance
- Explain how Metadata and a CDM provides the central 'anchor' in the framework, relating it to important principles and standards
- Examine the different 'flavours' and types of Metadata & its role in Data Governance
- Real-world examples of the use of Metadata in Data Governance

# Metadata Implementation

- Metadata Architecture
- Metadata Implementation & Rollout
- A maturity assessment to consider the way in which metadata is utilized in the enterprise and its integration in the System Development Life Cycle (SDLC).
- A framework for Metadata Governance

# Big Data & Metadata

- Pitfalls of the metadata gap in big data technologies
- How to tag data for retrieval

2 December 2021

Live Streaming Fee: £695 + VAT Group Booking & Multiple Seminar Discounts

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**Business-Oriented Data Modelling** 

6-10 December 2021 (3.5 hoursx 5 days)

Practical Guidelines for Designing Modern Data Architectures

Essentials of Data Warehouses, Lakes and BI 1-2 November 2021

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Only one discount can be applied at any one time

# Presenter



Chris Bradley has spent 37 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. He advises clients including National Grid, EDP, BP, Enterprise Oil, Saudi Aramco, Shell, Statoil, TOTAL, Oatar Gas, Alba Leasing, Alinma Bank, American Express, ANZ, Bank of England, Celgene, Cigna Insurance Emirates NBD, GSK, HSBC, NAB, SABB and Rivad Bank. Chris is Director of the E&P standards committee "DMBoard", an author of several books including "Data Modelling for The Business" and "DMBoK 2.0", a member of the Meta Data Professionals Organisation (MPO) a Fellow of BCS and DAMA CDMP, recipient of the DAMA Lifetime Achievement Award for Data Management Excellence, and author of significant parts of professional certifications. Chris is an acknowledged thought leader in Data Modelling and Data Governance, author of several papers and books including "Data Modelling for the Business".

# Master & Reference Data Management

Chris Bradley Via Live Streaming only

# 3 December 2021 Live Streaming Fee: £695 + VAT

Group Booking & Multiple Seminar Discounts Available

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10%

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# **Overview**

A one day practical class covering the different MDM architectures, genres, applications and activities involved in running a successful Master Data Management initiative. This course explores how to get started with Reference & Master Data Management and outlines a successful framework for achieving MDM and RDM success. Additionally, this course addresses the key points covered in the Master and Reference Data Management specialised exam for the DAMA-I Certified Data Management Professional qualification (CDMP).

# **Learning Objectives**

This course provides you with the knowledge, methods and techniques required to analyse, mature and implement Master & Reference Data management solutions within your organisation. At the end of the course, delegates would have gained the following:

# Level Set Understanding & Terminology:

- Understand the differences between Reference & Master Data
- Learn about the need for and the application of Master Management approaches for different categories of challenges
- Understand the different business drivers for Master & Refence Data Management
- Understand the linkage between Master Data Management with Data Modelling, Data Quality and Data Governance.

# Pragmatic Learning:

- Learn how to identify what should be Mastered in across the enterprise.
- Discover 4 generic Master Data Management architectures & their suitability in different cases.
- Understand how to undertake a Master Data Management maturity assessment to consider business procedures for
- Master Data Management and the provision and appropriateness of Master Data Management solutions per major data subject area.
- Discover approaches to incrementally implement Master Data Management to align with business priorities.

# **Course Outline**

- What is Master Data Management, and what are the differences between Master and Reference Data & why it matters.
- The essential relationship between Master Data Management, Data Quality and Data Governance
- What are the different types of MDM Architectures, from a full central hub, through hybrid to virtualised with many flavours and variants along the way.
- The applicability of different MDM architectural styles to differing business problems and why identifying the correct architecture for your type and usage of Master Data is crucial.
- architecture for your type and usage of Master Data is crucial.
  A Reference Architecture Model for Master and Reference Data Management and exploration of the typical components and functions in the Reference Architecture.
- How to identify & select the right tooling for your environment and Master Data business needs.
- Genres of Master Data Management solutions and the common pitfalls if you select the wrong type
- Architecture considerations: Single domain and Multi domain MDM solutions, the advantages & disadvantages of each and how to determine what's most appropriate for you.
   Different approaches for Master Data Management implementation and why you must be careful in the approach selected.
- Different approaches for Master Data Management implementation and why you must be careful in the approach selected.
  This includes Operational vs Analytical MDM. The issues and implications associated with the different approaches and why
  getting these right impacts future MDM success.
- How to build the case for a Master Data initiative showing a proven approach for identifying the Data Subject Areas aligned to Business initiatives to start on your MDM program.
- How to create an incremental MDM implementation plan that won't break the bank.
- The under looked but critical aspect of Reference Data Management.

# **Audience**

Practitioners who seek to gain an understanding of the different considerations in Master and Reference data Management. These include:

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

# **Business-Oriented Data Modelling Masterclass**

(3.5 hours x 5 days)

Alec Sharp

via Live Streaming only

This workshop, suitable for both new and experienced modellers, will explore unique techniques for rapidly developing high-quality models while maintaining the involvement of business professionals. It then provides hands-on practice with skills in more challenging topics such as generalisation, recursion, subtyping, modelling time and history, presenting models to non-technical groups, the connection between E-R modelling and dimensional modelling, and many more.

# **Learning Objectives**

- Apply techniques that engage business professionals in developing a concept model / conceptual data model;
  Use entity-relationship modelling to depict entities, facts, and rules at three levels of modelling contextual, conceptual and logical models;
  Utilise the three "learning modes" in developing and presenting a model Visual, Auditory, and Kinesthetic;
- Apply event analysis and other techniques to discover and meet additional requirements;
- Use subtyping, recursion, multi-way associations, and other structures to model difficult rules;
- Model change, correction, and time-dependent business rules with "temporal data models";
- Rapidly develop a first-cut dimensional model from a well-structured ER model;
- Prepare and deliver a data model review presentation to a non-technical audience

# **Course Outline**

# Essentials of Data Modelling

- What really is a data model or concept
- Essential components entities, relationships, attributes, and rules
- Hands-on case study how data modelling resolved business issues and supported other business analysis techniques
- Guidelines for comprehension how to lay out Entity-Relationship Diagrams
- The narrative parts of a data model definitions and assertions
- Group exercise getting started on a
- data model, then refining it Common misconceptions about data models and data modelling
- The real purpose of a data model
- Contextual, Conceptual, and Logical Data Models – purpose, audience, definition, and examples
- Overview of a three-phase methodology for developing a data model

## **Establishing the Initial Conceptual** Data Model

- Top down vs. bottom up approaches to beginning a data model - when is each appropriate?
- A bottom-up approach focusing on collecting and analyzing terminology
- A structure for sorting terms and discovering entities
- Exercise developing an initial
- conceptual data model Entities what they are and are not
- Guidelines for naming and defining
- Three questions to help you quickly develop clear, useful entity definitions
- Exercise identifying flawed entities Six criteria that entities must satisfy.
- and four common errors in identifying entities
- Identifying relationships
- Fundamental vs. irrelevant or transitive relationships
- Good and bad relationship names
- Multiplicity or cardinality 1:1, 1:M, and M:M relationships, and useful facts about each
- Common errors and special cases recursive, multiple, and supertypesubtype relationships
- Attributes guidelines and types
- Attributes in conceptual models vs. logical models

### **Developing the Initial Logical Data** Model by Adding Rigor, Structure and Detail

- Transition to the logical model shifting the focus from entities to attributes
- Multi-valued, redundant, and constrained attributes, with simple patterns for dealing with each
- An understandable guide to normalisation - first, second, and third normal forms
- Higher order (fourth and fifth) and Boyce-Codd normal forms
- Exercise developing the initial logical data model
- Four types of entities kernel, characteristic, associative, and reference
- Guidelines and patterns for dealing with each type of entity
- How to draw your E-R Diagram for maximum readability and correctness
- Optional and mandatory relationships Considering time and history when
- looking at relationships Typical attribute documentation
- A common source of confusion and disagreement - primary keys
- What primary keys are, what they're really for, and three essential criteria
- The four Ds of data modelling definition, dependency, detail, and demonstration
- E-R Diagramming symbol sets and their problems, rules for readability and comprehension

# **Correctly Handling Attributes**

- Granularity dealing with non-atomic and semantically overloaded attributes Dealing with reference data and the
- types vs. instances" problem
- Three attributes that always need a
- Vector modelling entity or attribute?

## Interesting Structures Generalisation, Recursion and the Two Together

- Generalisation (subtyping) when to use it, and when not to
- Generalisation with and without specification
- Guidelines for using recursive relationships
- Generalisation and recursion working hand-in-hand as a cure for literalism
- Recognizing lists, trees, and networks, and modelling them with recursive relationships
- Modelling difficult rules by combining

generalisation (subtyping) and recursion Staying clear on generalisation vs. roles,

# states, and aggregation Modelling Time, History and Time-Dependent Business Rules

- Historical vs. audit data, and when to show them on a data model
- Thanks, Sarbanes-Oxley! Why we need "as-of reporting" and how to model data corrections
- "Do you need history?" how to tell when your client is misleading you Modelling time special considerations
- for recording past, present, and future values
- Four variations on capturing history in a data model
- Seven questions you should always ask when a date range appears

## Modelling Rules on Relationships and Associations

- Using multi-way associations to handle complex rules
- "Use your words" how assertions, scenarios, and other techniques will improve your modelling
- Associative entities circular relationships, shared parentage, and other issues
- Alternatives for modelling constraints across relationships
- Advanced normal forms how to quickly recognize potential 4NF and 5NF issues
- A simpler view why the five normal forms could be reduced to three

# Preparing and Delivering a Data **Model Review Presentation**

- Context your audience, and why the model matters to them
- It's a story, not a data model! Building a storyboard
- Five key techniques for presenting data models or other technical subjects
- The mechanics of the data model review presentation
- A demonstration

# Bridging the "E-R vs. Dimensional" Divide – the World's Shortest Course on Dimensional Modelling

- The perils of dimensional modelling without understanding the underlying E-R model
- Spotting facts and dimensions the relationship between dimensional models and E-R models
- Saving time building a first-cut dimensional model from an ER model

# BI (Business Intelligence) professionals, DW (Data Warehouse) professionals, big data specialists,

# 6-10 December 2021 Fee £1,295 + VAT (3.5 hours x 5 days)

Group Booking & Multiple Seminar Discounts

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4th course 10% 15% 20% 4th course 25% 5th+course

# **Group Booking Discount**

2-3 Delegates 4-5 Delegates 6+ Delegates 20% 25% Only one discount can be applied at any one time

# Presenter



Alec Sharp has deep expertise in a rare combination of fields-process modelling, analysis, and redesign; business analysis and

10%

requirements specification; and business-oriented data modelling. Increasingly, his work involves facilitation and organisational change. He is a popular conference speaker and wrote the book on business process modelling, "Workflow Modelling: Tools for Process Improvement and Application Development." Popular with process improvement specialists, business analysts, consultants, and business professionals, it is consistently a top-selling title on business process modelling, analysis, and design, and is widely used as an MBA textbook. He was awarded DAMA's Professional Achievement Award, a global award given to one professional a year for contributions to the Data Management profession.

# **Audience**

- Specialist data modellers, data architects, data analysts, and DBAs who wish to hone their skills.
- Business analysts, business architects, enterprise architects, and application architects
- Application / solution developers
- (especially on Agile teams) Business professionals, Subject Matter Experts, and Project / Programme Managers involved in the analysis, design, and development (or selection and configuration) of a
- data scientists, analytics specialists, and data lake implementers

# **Practical Guidelines for Designing Modern Data Architectures**

Rick van der Lans

Via Live Streaming only

# 24 November 2021 Live Streaming Fee: £695 + VAT Group Booking & Multiple Seminar Discounts

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4-5 Delegates	20%
6+ Delegates	25%
Only one discount can be applied	at any

# Presenter



Rick van der Lans is a highly respected independent analyst. consultant, author, and internationally acclaimed lecturer

specialising in data architectures, data warehousing, business intelligence, big data, and database technology. In 2018 he was selected the sixth most influential BI analyst worldwide by onalytica.com. He has presented countless seminars, webinars, and keynotes at industry-leading conferences. For many years, he served as the chairman of the annual European Enterprise Data and Business Intelligence Conference in London and the annual Data Warehousing and Business Intelligence Summit in The Netherlands. Rick helps clients worldwide to design their data warehouse, big data, and business intelligence architectures and solutions and assists them with selecting the right products. He has been influential in introducing the new logical data warehouse architecture worldwide, which helps organisations to develop more agile business intelligence systems.

## Overview

So many organisations are designing a new architecture for data processing. The introduction of new technology, the change of data usage, and the new regulations for data privacy have convinced organisations they need a new data architecture. Examples of new forms of data usage are data science, real-time data analytics, embedded BI, and customer-driven BI, Examples of new technologies are Hadoop, NoSQL, analytical SQ, Spark, and Kafka. Sometimes a new data architecture is needed to fulfil the digital transformation dream or to become a more data driven organisation. Both terms imply that the organisation wants to exploit their data investment more intensely. A new data architecture may also be required because the old data warehouse architecture cannot be extended anymore. It has reached its expiration data. And implementing a data lake isn't always the right solution. Therefore, numerous organisations need to design a new data architecture. But how? Where do you start? This tutorial explains all the aspects involved in designing a modern data architecture. What should be included in such an architecture? Is one high-level PowerPoint slide showing all the databases and data streams sufficient? What constitutes a good data architecture? Guidelines are given on the topics that should be included, including data streams and data stores, data quality, data security and privacy, governance, and metadata specifications. The tutorial is based on years of experiences with designing modern and evaluating existing data architectures for all kinds of organisations, from small to large, and from non-commercial to commercial. Good and bad examples from real life situations are

discussed as examples. Topics include:

- Introduction what is a Data Architecture?
- Overview of New Technologies for Data Storage, Data Processing, and Data Analytics
- Design Aspects for Data Architectures
- Innovative New Data Architectures
- Action Plan for Developing a Complete and Correct Data Architecture

# earning Objectives

- What are the steps to take to come up with the perfect data architecture? From requirement analysis via proof of concepts to a data architecture.
- What is the importance of a holistic approach to analyzing technology, organization, and architecture in
- What are real life examples of new data architectures?
- How can the new technology use optimally within a new data architecture?
- How do you develop a data architecture?
- Which components make up a data architecture?
- What are the use cases, pros and cons

of new technologies and how do they influence data architectures?

- What is the value of well-known reference architectures, such as the Lambda architecture, the logical data warehouse architecture and the data lake?
- What are the right criteria for a data

# Course Outline

- Introduction what is a Data Architecture?

  Why a new data architecture?

  Examples of real life data architectures

  What are the key elements of a data architecture?
- What are the differences between a data architecture and a solutions-architecture? From batch via Lambda to the Kappa
- architecture
  Benefits, drawbacks, and shortcomings of
  well-known reference architectures, such as the classic data warehouse architecture, the data lake, and transactional systems
- From vision to implementation plan

# Overview of New Technologies for Data Storage, Data Processing, and Data Analytics • Benefits, drawbacks, features, and use

- cases of each technology
  Data storage: analytical SQL, NoSQL Hadoop, cubes
- Data integration: ETL, data virtualization, data replication, data warehouse automation, enterprise service bus, API
- Data cleansing: home-made, professional Data streaming: messaging, Kafka, streaming SQL
- streaming SQL Data documentation: data glossary, data catalog, metadata management Reporting tools: self-service BI, dashboards, embedded BI Data science tools: programming languages, such as R and Python, machine learning automation tools data science learning automation tools, data science
- Data security: anonymization, authorization

- Design Aspects for Data Architectures
   First the technology or first the data architecture?
- architecture:
  The importance of reusable transformation specifications for e.g. integration, filtering, correcting, and aggregation of data Influence of specialized technology on data architecture.

- Why migration to the cloud: unburdening, high performance, scalability, available software?
- Are all software products suitable for the cloud?
- Design principles for dealing with data history and data cleansing Modernization of a classic data warehouse
- architecture
  Generating a data warehouse architecture
- with data warehouse automation tools New requirements for transactional systems, such as storing historic data and
- continuous logging
  The influence of GDPR: deleting customer
- Responsibility of data quality Innovative New Data Architectures

- The logical data warehouse architecture as an agile alternative
- Design rules, do's and don'ts for a logical data warehouse architecture
  From a single-purpose to a multi-purpose
- Requirements for implementing data science models, such as transparency, immutability, and version control
- The changing role of the data lake: from data delivery system for data scientists to a platform for storing all the enterprise and
- external data
  A data streaming architecture; when every microsecond counts
- Technical challenges: performance, inconsistent data streams, storing massive amounts of messages for analytics afterwards
- Operationalization of data science models
- Merging data architectures to one unified data delivery platform
  Differences between data hub and data warehouse
- The data marketplace: from taylor-made to

# Action Plan for Developing a Complete and what is the business motivation for a

- new data architecture: ICT cost reduction. competitive improvement, new business model, new laws and regulations, improving reaction speed to business demands, or a more efficient exploitation of available data?
- The importance of a business strategy and data strategy and the relationship with the data architecture
  Who are the stakeholders and what is the

- Who are the stakeholders and what is the C-level support?
  Maturity level of the ICT organization Description of the current data architecture; data flow, data storage, quantities, and technologies in use Stock-taking of current bottlenecks; business and ICT, performance, functionality, costs, ICT organization and the immediate environment Constraining rules, such as laws and
- the immediate environment
  Constraining rules, such as laws and
  regulations, budget restrictions, software
  limitations, and legacy systems.
  Requirements and needs of the new data
  architecture; financial, available expertise,
  software, quantities, uptime, speed of data
  delivery, and level of unburdening.
  Architecture and design principles
- delivery, and level of unburdening.
  Architecture and design principles
  Current and future forms of data usage:
  standard reports, self-service BI, data
  science, customer-driven, mobile apps
  Forms of data usage; batch, manual
  internally, manual extern ally, and sensors
  Data bree in use including statutured.
- Data types in use, including structured, unstructured, audio, video, text, and geo/
- gis.
  Setting up the data architecture project;
  which choices must be made, which steps
  to take, is a PoC or Pilot required, what are
  key questions in a Rfl, and convincing the

# Audience

- **Business Intelligence Specialists**
- Data Analysts
- Data Warehouse Designers
- Business Analysts **Data Scientists**
- **Technology Planners**
- Technical Architects
- Enterprise Architects
- IT Consultants IT Strategists
- Systems Analysts
- Database Developers **Database Administrators**
- Solutions Architects

Data Architects

organization

IT Managers

# Essentials of Data Warehouses, Lakes and BI in Digital Business

Dr. Barry Devlin

Via Live Streaming only

# **Overview**

Business Intelligence (BI) has made data the foundation of decision making since the 1990s. Today, digital business is fundamentally reinventing decision making, by putting information from every person and data from every sensor at decision makers' fingertips. It challenges them to use it to address every aspect of business, to create anew every existing process, and to reinvent, not just decision making, but the entire enterprise.

Call it BI or analytics, serve it from a warehouse or a lake, it doesn't matter. The implications span the entire business and IT environments across the full breadth of the organisation.

Modern architectures, technologies, and methods in data management and analytics incorporate all today's technological advances in databases, NoSQL stores, and data preparation, as well as SOA, metadata, distributed access, collaboration, etc. And they directly address current issues, such as operational BI and analytics, strategic decision  $making, analytics, information\ discovery, and\ enterprise-wide\ decision\ management.$ 

Expanding from his comprehensive and respected "Business unIntelligence" architecture to emerging topics such as the Internet of Things, algorithms, and artificial intelligence, Dr. Barry Devlin charts the essentials of data warehouses and data lakes, BI and analytics to build a digital business from the existing data warehouse and BI systems running

# **Learning Objectives**

- The meaning and implications of digital business
- Drivers, structure and components of decision-making support architectures
- Data and Information—for data warehouses, marts and lakes
- Possibilities and challenges of new database and data management technologies
- Formal and Informal processes—getting from information to action
- Data virtualization and preparation tools for integration across warehouses and lakes
- Positioning and using algorithms and analytics in support of decision making
- People—action-oriented decision making
- The importance of business context and user roles in decision processes
- Planning and implementation—practical steps for building modern warehouses, lakes and BI

# **Course Outline**

# Digital Business—History and **Emergence**

- · A brief history of decision-making support
- Origins and meaning of digital business

# An Architecture Combining Data Warehouses and Data Lakes

- The emergence and impact of big data, the Internet of Things and artificial intelligence
- A new layering approach-Information, Process, and People
- The pillars of a new architecture that supports multiple storage technologies

## The Information Resource-the **Foundation for Everything**

- Information/data classes-humansourced, machine-generated and process-mediated
- Big data—hype and reality, sources and types, implications for business and IT
- Key considerations—timeliness/ consistency, structure/context, and reliance/usage
- Metadata as information—sources

- and stores, tools and techniques
- Relational database evolutionstructures, software and hardware
- NoSQL data stores, Hadoop-based databases, XML, JSON-based and other data stores

# The Business Processes—Getting from Decisions to Actions

- Data Preparation, ETL, Data Warehouse Automation, Wrangling, and Data Virtualisation
- The new role of users in "application development"
- Understanding adaptive, closedloop business processes
- Service Oriented Architecture and Microservices
- A model for decision making and action taking—the adaptive decision loop

# The People—Understanding Needs and Engaging Innovation

- Motivation and the workings of the human mind in business systems
- Classes of BI-information-centric, process-centric and collaborative
- BL analytic and other decision support tools

- Decision-making and actiontaking in a closed-loop, real-time environment
- Augmenting and/or Automating decision making and action taking
- The emergence and importance of artificial intelligence

# **Planning and Implementation**

- Evolution—not revolution
- The Staged Implementation Roadmap
- Organisational considerations; changes in IT culture and responsibilities
- Selected possible first migration

# 1-2 November 2021 Live Streaming Fee: £995 + VAT

Group Booking & Multiple Seminar Discounts **Available** 

# Enterprise Data Courses via Live

Unified Data Delivery: From Data Lake to Enterprise Data Marketplace 11-12 October 2021

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Only one discount can be applied at any one time

# Presenter

4th course



Dr. Barry Devlin is among the foremost authorities on business insight and one of the founders of data warehousing, having

20%

published the first architectural paper in 1988. With over 30 years of IT experience, including 20 years with IBM as a Distinguished Engineer, he is a widely respected analyst, consultant, lecturer and author of the seminal book, "Data Warehouse—from Architecture to Implementation" and numerous White Papers. His 2013 book, "Business unIntelligence—Insight and Innovation beyond Analytics and Big Data" is available in both hardcopy and e-book formats. Barry provides strategic consulting and thought-leadership to buyers and vendors of BI solutions. He is continuously developing new architectural models for all aspects of decision-making and action-taking

# **Audience**

- Enterprise, systems, solutions and data warehouse architects
- Systems, strategy and BI/analytics managers
- Data warehouse/lake and systems designers and developers
- Data and database administrators
- Tech-savvv business analysts

# From Analytics to AI: Transforming Decision Making in Digital Business

Dr. Barry Devlin

Via Live Streaming only

# 29 November 2021 Live Streaming Fee: £695 + VAT Group Booking & Multiple Seminar Discounts

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5th+course	25%	
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2-3 Delegates	10%	
4-5 Delegates	20%	
6+ Delegates		

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# Overview

With the enormous growth of big data, especially from Internet of Things (IoT) devices, now is the time to start planning for and building skills and infrastructure in artificial intelligence (AI) to transform BI and analytics in support of decision making in your business.

Al has had a long, chequered history. Multiple periods of over-optimism have been followed by "Al Winters" since the 1950s. Today, Al has come of age and is being embedded in mainstream technology from cars to call centres, and smartphones to analytic systems. With the IoT instrumenting the physical world and social media doing the same for society, a massive deluge of data is driving extensive uptake of Al. It all suggests that this "Al Summer" is not going to fade

Under a range of names—deep learning, autonomous vehicles, cognitive computing, robotics, algorithms and more—AI, combined with big data, IoT and automation, offer both the threat and the promise of revolutionising all aspects of IT, business and, indeed, society. What do you need to know about them? How should you prepare for and react to their growing importance in your business and IT environments, especially in their likely transformation of decision-making support?

In this one-day workshop, Dr Barry Devlin builds upon his two-day "Delivering the Digital Business: Starting from BI" course to enable you to take full advantage of emerging AI technology. Starting from familiar computing paradigms such as programming, operational systems, databases, analytics and business intelligence, we explore the relationship between big data and many types of deep learning. We position traditional and emerging BI tools and techniques in the practical application of AI in the business world. Extrapolating from the rapid growth of AI and IoT in the consumer world, we see where and how it will drive business and likely impact IT. Based on new models of decision making at the organisational and personal levels, we examine where to apply augmentation and automation in the roll-out of AI. Finally, we address the ethical, economic and social implications of widespread adoption of artificial intelligence.

# **Learning Objectives**

- What is AI? A brief history and explanation of its evolution, key concepts, and terminology
- Understanding how IoT and social media enable AI as the new driver of business value
- A comprehensive architecture and framework spanning from traditional BI to AI and beyond
- · Approaches to applying AI to decision making—augmentation vs. automation
- Implications of AI, social media, and IoT for the IT department
- New technology solutions needed to build out business applications of AI and IoT
- Evolving from today's BI to future AI-based solutions
- Ethical, economic, and social considerations for your business and beyond

# **Course Outline**

# 1. Artificial Intelligence—History and Foundations

- A brief history of AI
- Terminology—conflicting and overlapping
- Artificial neural networks and other techniques
- Advances and directions in AI

# 2. Decision Making for Social Media and IoT

- From traditional BI to operational analytics
- Centralisation vs distributed processing
- Model management

 Positioning AI, Data Lake and Data Warehouse

# 3. Applying AI to Decision Making

- Al in information preparation and governance
- From BI to analytics to AI
- Operational, tactical and strategic decision-making considerations
- Automation vs. augmentation

# 4. Building the Digital Future with AI—Key Considerations

- Ethical considerations for analytics and AI in business
- Wider ethical concerns for society

- The impact of AI on the economy and employment
- Avoiding societal breakdown

# **Audience**

- Enterprise, systems, solutions and data architects in data warehouse, BI and big data
- Systems, strategy and business intelligence managers
- Data warehouse and systems designers and developers
- Tech-savvy business analysts

# Successful Implementation of a Master Data **Management Programme**

Malcolm Chisholm

Via Live Streaming only

# Overview

This workshop is intended to provide delegates with a comprehensive understanding of what is needed to run a successful Master Data Management (MDM) Programme. The workshop focuses on business and technical aspects of MDM and emphasises how the business and IT can work together to attain the full benefits of MDM. The workshop begins by level setting on the concepts of Master Data, how MDM has evolved as a discipline, and what business benefits MDM offers. Following this, details are presented of the components of an MDM Programme and how to set them up successfully. In particular, the need for governance within an MDM Programme, particularly for decision-making, is explained. The technical aspects of MDM are dealt with in a top-down manner, beginning with how MDM fits into an enterprise-level architecture, and drilling down to the architecture within an MDM hub, and finally to the data design and standardisation level. The technical aspects go beyond technological considerations and also include semantics and reference data, which are both of critical importance for success of an MDM Programme. Specialised needs of MDM are also considered. Data integration within an MDM hub is a primary consideration, as is how it is linked to the ways in which Master Data can be produced by knowledge workers in the enterprise. Data quality is also an extremely critical success factor for MDM, and techniques for it are presented. The whole concept of how Data Privacy, in its widest sense, is applied to MDM is also examined. This includes not only Personal Information, but also data purchased from Data Vendors with contractual restrictions. The way in which MDM drives analytics is also explained, along with considerations that need to be implemented in any MDM Programme.

# **Learning Objectives**

At the end of this workshop, delegates will understand the following:
The end-to-end structure of an MDM
What the major

- Programme
- How to align business and IT to ensure success in an MDM Programme How to drive adoption of MDM to gain
- business value
- What the governance needs of an MDM Programme are and how to address them
- What the major technical options are for
- MDM Hubs and their pro's and con's How MDM architectures can be fitted into overall enterprise architectures
- Why data integration is so important in MDM and how it is done
- How to analyze MDM tools and what is needed to successfully implement these

- How to deal with Personal Information. confidential information, and data sourced from data vendors in MDM
- How to ensure Master Data is of adequate
- How to approach knowledge management for MDM

# **Course Outline**

### Introduction to MDM

- What Master Data is, and what Master
- Data Management (MDM) is The benefits MDM provides for the
- How MDM evolved and where it is
- The common types of Master Data Entities and how MDM is specialized for them

# The Components of an MDM Programme

- The benefits of a coordinated MDM Programme vs. standalone projects The typical sequence of an MDM project
- Who does what in an MDM Programme and MDM project
- eople and organizational structures in MDM Programmes

# Getting Ready for MDM - Governance, Decision Making and Accountabilities

- Why decision making needs to be formalized in an MDM Programme
- Example of accountabilities needed in an MDM Programme
- The importance of Master Data Entity domain knowledge vs technical
- knowledge
- Governance requirements and organization for an MDM Programme

# Aligning Business with the MDM Programme

- Fitting MDM into the business value chain Fitting Business Processes and MDM
- Together How to gain adoption for MDM
- Measuring business value of MDM

# MDM Technical Architecture

- Understanding MDM Hub Patterns How to fit MDM into an enterprise-
- wide Data Architecture
- Understanding production vs. distribution of Master Data
- Understanding the layered architecture

### of an MDM Hub

# Data Models and Designs for MDM • How to manage the semantics needed

- for MDM Programmes
- Understanding Adaptive vs. Fixed Data
- Need for Logical Data Models in an MDM Programme Role of Reference Data in MDM
- **Programmes**

# Data Integration in MDM

- Description of data integration Trust and Survivorship in MDM
- Capturing and governing Trust and Survivorship business rules
- Understanding merge and unmerge processes in MDM

# Selection of MDM Tools

- Multi-domain vs. single domain MDM tools
- vendors vs. Best of Breed in MDM
- Approach to an MDM tool selection
- Thoughts on MDM tool implementation and post-implementation support

# **Data Privacy and MDM**

- Brief overview of the scope of Data Privacy and relevance to MDM
- How to Protect Personal Information in an MDM Programme How to Protect Purchased Data in an
- MDM Programme How to implement processes for
- Permitted Use of Master Data

# Data Acquisition and MDM

- Brief overview of the scope of Data
- Acquisition and relevance to MDM Workflow for Data Acquisition into an MDM Hub
- Data Acquisition outside of the MDM

Data Vendor Management for Master

## Data Quality and MDM

- The role of Data Quality in an MDM Programme
- Implementation of Continuous Production Data Quality Management
- Implementation of Data Issue . Management for MDM
- How to Govern Data Quality Business Rules for MDM

# Analytics and MDM

- The role of an MDM Hub as a Conformed Dimension server
- Knowledge Management of MDM for Analytics
- Extending the MDM Hub to include
- Analytics outputs Governance implications of using Master Data in development and production phases of Analytics

# 8-9 November 2021 Live Streaming Fee: £995 + VAT

Group Booking & Multiple Seminar Discounts

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10% 4-5 Delegates 20%

Only one discount can be applied at any one time

# Presenter



Malcolm Chisholm has over 25 years experience in data management, and has worked in a variety of sectors, including finance, insurance, manufacturing,

government, defense and intelligence, pharmaceuticals, and retail. He is a consultant specialising in data governance, master/ reference data management, metadata engineering, business rules management/ execution, data architecture and design, and the organisation of Enterprise Information Management, Malcolm is a well-known presenter at conferences in the US and Europe, writes columns in trade journals, and has authored the books: Managing Reference Data in Enterprise Databases: How to Build a Business Rules Engine; and Definitions in Information Management. In 2011, Malcolm was presented with the prestigious DAMA International Professional Achievement Award for contributions to Master Data Management. He holds an M.A. from the University of Oxford and a Ph.D. from the University of Bristol, and can be contacted at mchisholm@ datamillennium.com.

# **Audience**

This workshop is intended for the following roles: Data-centric Business Operations Staff

- Enterprise Knowledge Workers
- Information Managers Information Architects
- Data Architects
- **Enterprise Architects**
- MDM Managers Data Governance Managers
- Business Analysts Executives
- **Business Technology Partners**

"I learnt so much from the event; networked and met some fantastic people."

Louise Tharnthong, Head of Transformational Change, 02



& Transformation Conference

17-20 May 2021

"Great networking opportunities with people at the top of their game!"

Emmanuelle Sangster, Business Change Manager, AWF Plo

"Really enjoyed it - I leave having learned loads and full of ideas on how to apply at Lloyds. Thank you"

> Marta Korus, Lead Business Analyst, Lloyds Banking Group



# IRM UK

Business Analysis Conference

20-23 September 2021

"I have absolutely loved the conference. Great people, great presentations, great venue."

> Thamer Miles, Lead Analyst, Data & BI, Whitbread

"There's a reason why people keep coming back year after year – great conference (as always)."

> Terje Bremnes, Enterprise Architect, Helse Vest, Norway



# IRM UK

Enterprise Architecture & Business Process Management Conference

11-14 October 2021

"Possibly the best conference I've ever attended for the insights and ideas it has provided."

> Philip Ainsworth, Business Architect, Student Loans Company

"It is a 'must attend' MDM & DG event for any practitioners and the program gets better every year."

> Mary Drabble, Principal Data Governance Analyst, Aberdeen Standard Investments



# IRM UK

Data Governance Conference & Master Data Management Summit

15-17 November 2021

"High quality event with top speakers and topics. A perfect mix between MDM and Data Governance status and trends."

> Galand Vincent, Senior Business Analyst, ING Belgium

"Great conference, the best event in Data Management! Excellent speakers and very interesting content."

> Ana Teresa Szmoes, Caixa Geral de Depósitos



IRM UK

Enterprise Data & Business Intelligence Analytics Conference

15-17 November 2021

"This event never fails to enable me to connect with people who I can learn from and who can reenergise me in Data Management."

> Andy Moore, Process Specialist, Information, Rolls-Royce

# **Registration Information**



IRM UK is a leading provider of strategic Business and IT Training for Business and IT Management. We provide courses and conferences on Enterprise Architecture, Business Change, Business Analysis and Enterprise Data Management. We have a wide range of speakers, many of whom are leading figures in their fields. Our events are condensed and rigorous combining technical explanations with management advice and discussions of future directions.

# **Registration Information:**

Full payment or a purchase order is due prior to the event. Payment may be made in Sterling (£) or Euros (€). If paying in Euros the prevailing exchange rate of the country of the delegate or delegates' company is to be used. The total Euros remitted should be the amount required to purchase the sterling pound cost of the event on the day of payment. All delegates must add VAT (20%) to their total event fees. VAT may be reclaimed by delegates from the tax authorities after the event.

The registration fee includes the lectures and documentations.

# Live Streaming Fees:\*

1 day	£695 + VAT (£139)	£834
2 days	£995 + VAT (£199)	£1,194
3 days	£1,295 + VAT (£259)	£1,554

<sup>\*</sup> with the exception of Zachman Enterprise Architecture Certification

# **Cancellation Policy:**

Cancellations must be received in writing at least two weeks before the commencement of the course and will be subject to a 10% administration fee. It is regretted that cancellations received within two weeks of the course date will be liable for the full fee. Substitutions can be made at any time.

# **Cancellation Liability:**

In the unlikely event of cancellation of the course for any reason, IRM UK's liability is limited to the return of the registration fee only. It may be necessary, for reasons beyond the control of IRM UK, to change the content, timings, speakers and dates of the course.

# **Group Booking Discounts:**

2-3 delegates 10% • 4-5 delegates 20% • 6+ delegates 25%

# **Multiple Seminar Discounts:**

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2nd course 10%

3rd course 15%

4th course 20%

5th course 25%

Only one discount can be applied at any one time.

# How to Register

e-mail: customerservice@irmuk.co.uk

Website: www.irmuk.co.uk Phone: +44 (0)20 8866 8366

# **Booking Reference:** Please quote this bookin

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# **IRM UK**

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