



# IRM UK

## Strategic Business & IT Training

### Public Courses, Conferences & In-House Training 2017, London

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

#### Architecture & Strategy

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#### IRM UK Conferences

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Business Analysis Conference Europe, 25-27 September 2017, London

Enterprise Architecture and BPM Conference Europe, 16-19 October 2017, London

Enterprise Data and Business Intelligence & Analytics Conference Europe,  
20-23 November 2017, London

#### Discounts



Group Booking &  
Multiple Course  
Discounts Available

# Zachman Enterprise Architecture Certification: Modelling Workshop

John Zachman and Cort Coghill

19-22 September 2017  
27 February - 2 March 2018  
London

Fee: £1,995 + VAT

This fee includes Level 1 and Level 2 Certification  
Group Booking & Multiple Seminar Discounts Available

## Architecture & Strategy Public Courses, London

### Zachman Enterprise Architecture Certification

19-22 September 2017

### Leadership Strategies for Enterprise Architects

30 November-1 December 2017

### Strategic Enterprise Design

28-29 November 2017

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Only one discount can be applied at any one time

## 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 Zachman 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.

*"The enthusiasm, energy and breadth of experience remain, as ever, infectious and mesmerising. This week has been money very well spent."*

Rob Austen, Managing Director,  
Austen Consultancy Services

*"Excellent first hand explanation. Very powerful."*

Marco van Leeuwen, Process Architect,  
Van Lanschot Bankiers

*"Lots of energy and enthusiasm. Passionate."*

Simon Bathie, Group IS Programme  
Plan Manager, MBDA UK

## Overview

Enterprise Architecture is fundamental for enabling an enterprise to assimilate internal changes in response to the external dynamics and uncertainties of the information age environment. It 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 four day seminar and workshop, based on the Zachman Framework V3.0, incorporates actual modelling experience. The modelling 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 course will prepare the participants for both levels of the Zachman Certified- Enterprise Architect program: Zachman Certified™ - Enterprise Architect Associate (Level 1) and Zachman Certified™ - Enterprise Architect Professional (Level 2).

The certification fee (both Level 1 & Level 2) is included in the registration fee. The "Zachman Certified - Enterprise Architect" examination, is a two hour, on-line examination that upon passing, results in the award of Enterprise Architect Associate (Level 1) Certification. This examination can be taken any time after the course. Delegates will then subsequently be awarded the Enterprise Architect Associate (Level 2) Certification upon submitting a case study.

This is a very exclusive certification program. 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 important experience!

## Learning Objectives

- A sense of urgency for aggressively pursuing Enterprise Architecture
- A comprehensive definition (description) of Enterprise Architecture
- Differentiation of Enterprise Architecture from Systems Implementation
- Creating Enterprise Strategy Models which form the basis for Enterprise Architecture
- Differentiation of Ontology from Methodology
- Utilizing Enterprise Architecture for operational decision making
- A strategy for reducing "time-to-market" for systems implementations to virtually zero
- Strategy for integration beyond jurisdiction (Interoperability)
- Architectural Principles for meeting enterprise requirements
- Ensuring traceability across the artifacts for impact analysis and change management
- BPM, SOA, BI, MDA, ITIL, etc. in the context of the Zachman Framework

## Course Outline

### Setting the Context for Enterprise Architecture (EA)

- Contribution of IT People to an Information Age Enterprise
- Global Environment: Escalating Complexity and Escalating Change
- 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. The just released V3.0 will be discussed.

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

**Workshop: What's Wrong with My Architecture?**

**Workshop: Creating Enterprise Strategy Models Using Row 1 Primitives**

**Case Study: Creating Composite Strategy Models Using Business Motivation (BMM) and Balanced Scorecard**

### Enterprise Engineering

- Models from My Bookshelf - 75 years of experience (Implementation, Composite Models)
- The Elegance of Primitives (Their essential contribution)

## Audience

The seminar is designed for enterprise professionals of every discipline including non-information disciplines as well as information disciplines.

- Chief Information Officers
- Information Systems Management
- Data, Applications, Technology Management
- Enterprise Architects
- Data, Applications, Technology Architects
- Business Architects
- Business, Systems Analysts
- Consultants
- Strategic Planners

- 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)

**Workshop: Deconstruct Business Process Model (BPMN) using Framework Principles**

**Case Study: Creating Multiple Target Models**

**Case Study: Component Modeling Using UML 2.0 for Business Domain**

### 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: Creating Metrics and the Necessary Enterprise Models for Meeting Enterprise Goals**

**Workshop: Identify Framework Cells for Given Enterprise Problem Definitions**

### Strategies for Constraining the Modeling to Fit the Time Constraints

**Mock Test: Preparation for the On-Line Certification Examination**

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

# Leadership Strategies for Enterprise Architects: Maximising EA's impact on Business Performance

Chris Potts

## Overview

Enterprise Architects are valued for their impact on business results. EA frameworks, methods and tools provide some essential foundations for achieving that impact. Success depends on an EA leadership strategy that is tuned to the organizational culture, integrated with the investment process, and driving architectural investments.

This intensive two-day course explores successful leadership strategies for EA. It includes EA's value proposition and scope, how to measure an enterprise's architectural performance, diagnosing where EA fits in the organizational culture, validating EA's role in the investment process, and how to position architectural investments in the projects portfolio. Using a fascinating and challenging case study, the course demonstrates how to formulate, communicate and execute a winning EA strategy.

Entirely based on first-hand experiences of EA in practice, the course will help you to:

- Benchmark your EA leadership strategy
- Supplement your EA frameworks, methods and tools with strategic, political and investment skills
- Determine how best to maximise EA's impact across your organization
- Build the reputation of Enterprise Architecture as a strategic capability

## Learning Objectives

The course is driven by these learning outcomes:

- Maximize EA's impact on business performance
- Tune EA to the organizational culture
- Validate EA's role in the investment process
- Drive the enterprise's architectural investments
- Grow EA's influence through a 'quid-pro-quo' network

## Course Outline

### Successful Leadership Strategies for Enterprise Architects

- Why some EA strategies work, and some don't
- Identifying, validating and navigating strategy constraints

### Establishing the Strategy's Scope

- Enterprise Architecture's value proposition
- What Enterprise Architects do, might do, and never do

### Measuring the Enterprise's Architectural Performance

- Creating architectural metrics from operational business results
- Using EA 'guiding ratios' to choose the strategic priorities for EA

### Diagnosing the Enterprise Culture for Investing in Change

- Using tangible evidence to map the enterprise investment culture
- Interpreting the impact of the culture on EA's probability of success

### Validating the Design of the Enterprise Investment Process

- Ensuring the process is designed to value EA
- Positioning EA in the process to maximise contribution and influence

### Integrating EA with Strategies and Investments

- Tuning-in to people's preferences for exploring and enacting strategy
- Using scenario planning to drive EA-related innovations and investments

### Making 'Play-or-Pass' Decisions to Maximise EA's Impact

- Concluding the best EA leadership strategy, given the organizational context
- Setting, applying and reviewing the EA 'play-or-pass' criteria

### Building the Influence Network for EA Success

- Focusing on the key relationships
- Developing a win-win basis for each relationship

## Audience

This training is for everyone who has an interest in the business impact of Enterprise Architecture. With its focus on EA leadership, rather than frameworks, tools and methods, the course is relevant and valuable to a wider audience than technical EA training:

- Chief Enterprise Architect
- Enterprise Architect, Business Architect, Information Architect, Technologies Architect
- Corporate Strategist, Business Strategist
- Business Process Management (BPM) Specialist
- Programme Management Office (PMO) Leader
- Business Analyst
- Consultant

## Special Features

- Entirely founded on Chris's work with enterprises around the world
- Case study based on real life situations and experiences
- Compatible with any EA-related method, framework or tool
- Interactive and participative, workshop format
- Chris's training regularly receives 10/10 for content and delivery

**In-House Training:** This course is available on-site. E-mail [customerservice@irmuk.co.uk](mailto:customerservice@irmuk.co.uk) with your enquiries.

30 November - 1 December 2017

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### Presenter



Chris works with people around the world as a hands-on practitioner and mentor, with over 25 years' experience in strategy,

Enterprise Architecture, and investing in change. He is a popular and inspirational speaker, chairing EA conferences, leading seminars, and delivering conference keynotes worldwide. He has also been a guest lecturer at New York University, City University London, and the IT University of Copenhagen. Chris is the author of a trilogy of business novels: "FruITion", "RecrEAtion" and "DefrICTion".

# Strategic Enterprise Design

Milan Guenther & Benjamin Falke

28-29 November 2017

London

Fee: £1,245 + VAT

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Zachman Enterprise Architecture Certification

19-22 September 2017, London

Leadership Strategies for Enterprise Architects

30 November-1 December 2017, London

Strategic Enterprise Design

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Presenters



Milan Guenther is a Managing Partner at eda.c, a strategic design consultancy with offices in Paris and Düsseldorf. He is the author of INTERSECTION, a book

introducing the Enterprise Design approach for holistic design in complex enterprises. Milan works with Google, SAP, Boeing, Toyota and the UN, as well as smaller organisations and start-up companies. He has been a designer and architect for over 12 years. Before co-founding eda.c, he worked as a freelance UX strategist and created a social software start-up. Milan co-leads the Paris chapter of the Interaction Design Association. Follow Milan on Twitter: @eda\_c.



Benjamin Falke is a co-founder and managing director of eda.c, a strategic design consultancy based in Paris and Düsseldorf. Benjamin has worked on strategic

design initiatives for organizations of all sizes from different industries for several years. He focuses on aligning perspectives of people, business, and technology to create impactful strategies and concepts. Benjamin is a contributor to the Enterprise Design Framework, a set of tools to help organizations realize and use the power of design. He is part of the organising team behind the INTERSECTION Conference series

## Overview

Enterprise/Business Architects and other change agents in the enterprise are challenged to deliver increased impact and value. This intense two day course prepares delegates to go beyond mapping current complexity and taking incremental steps ahead. The Enterprise Design Framework allows bridging strategic intent with tangible results, and making strategic design thinking and practice work with the complexity and ambiguity of enterprise environments.

## Learning Objectives

- Understanding the extraordinary value proposition of design and architecture for enterprise stakeholders and their challenges
- Shaping an Enterprise Design approach suited to individual organizational cultures
- Learning how to use Enterprise Design tools and methodologies in response to strategic challenges and topics
- Fluency in key enterprise aspects and modelling techniques adapted to stakeholder groups and their concerns
- Developing strategies to support radical shifts and continuous value delivery in dynamic post-digital environments

## Course Outline

### Working with the Enterprise as a Playing Field

- Understanding enterprises as ambitious endeavours in a context of complexity
- A strategic design approach to shift enterprises and maximize value
- Understanding Enterprise Awkwardness and the crisis of trust
- Framing strategic challenges and engaging key stakeholders to reshape enterprise-people relationships
- Applying the Enterprise Design Framework in daily work

### Stack: Establishing the Scope for Strategic Enterprise Design

- Collaboratively exploring potential futures in a volatile environment
- Identifying, understanding and prioritizing key aspects to consider
- Casting competent cross-disciplinary teams ready for enterprise ambiguity
- Navigating the diversity of concerns and intermingled aspects
- Stack Breakout session: developing and framing your Enterprise Design challenge

### Sprint: Enabling Processes of Innovation and Transformation

- Establishing rapid design thinking and practice in the enterprise
- Shaping a design/architecture process model suited to your environment
- Integrating creative, lean and agile approaches with project management
- Embracing innovation through unexpected turns while keeping touch with reality

## Audience

The seminar is designed for enterprise professionals of every discipline including non-information disciplines as well as information disciplines.

- Enterprise Architects
- Business Architects
- Business Analysts
- Consultants
- Strategic Planners
- Systems Analysts
- Chief Information Officers
- Information Systems Management
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# Delivering Benefits from Implementing Change

## Practical Tools that Deliver Results

Ashley Braganza

### Overview

Many organisations make significant investments to bring about improvement that meet competitive, customer, regulatory or technological challenges. No matter what the driver of change, the subject itself can be split into broadly two areas: planning the changes and implementing the changes.

Of the two, planning is by far the easier. Change implementation involves politics, perceived winners and losers, uncertainty about the future, loss of motivation and morale and a drop in employee engagement.

People leading change projects face huge pressures: on the one hand, the imperative to deliver tangible benefits and results and on the other, resistance to change in a variety of guises – from hostile and aggressive to passive and dismissive.

The only fixed variables are time and budgets. Board members, sponsors and senior responsible officers expect projects to deliver the promised benefits on time and within the agreed budgets. Providing them with long lists of reasons for delays in delivering benefits are messages that they often don't want to hear.

The biggest challenges leaders face when implementing change are peoples' behaviours, internal politics and power and communications. This workshop provides you with 'tried and tested' tools and techniques that will enable you to monitor the implementation health of your change projects.

### Learning Objectives

- Whose behaviours are impeding and supporting the change? What can I do about those who are slowing down the change?
- How do I deliver benefits when people with power are blocking the change?
- Who are the most important stakeholders? What do they expect and how can I use those expectations to my advantage?
- How do I encourage a loss of employee engagement with the past and an increase in engagement with the future?
- What's the most effective ways of communicating to key stakeholders?

### Course Outline

#### Change Management

- Rethinking change
- Getting rid of false gods
- It's your mindset!

#### Strategy and Objectives

- Focus on what matters
- Whose objectives anyway?
- When numbers can tie you up in knots

#### Behaviours

- Ban the use of the word 'culture'
- Plan to change behaviours
- Budget for the changes

#### Power and Politics

- It doesn't have to be down and dirty
- Focus on the positives
- Make use of your network

### Audience

- Change Directors
- IS/IT Directors
- CIOs
- Enterprise Architects
- Information Architects
- Business Analysts
- IT Consultants / Advisors
- Strategic Planners
- Programme Managers
- Infrastructure Managers
- Project Leaders

#### Communications

- Avoiding miscommunication
- Develop your communication plan
- Get the messages right

#### Process Changes

- Implementing changes at strategic and operational level
- Understanding information systems and enterprise architecture
- Focusing on information

28-29 November 2017, London  
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#### Business Analysis Public Courses London

##### Business Architecture: The Foundation for Enterprise Transformation

27-29 November 2017

Working with Business Processes  
30 November-1 December 2017

Mastering the Requirements Process  
14-16 November 2017

Delivering Benefits from Implementing Change  
28-29 November 2017

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#### Presenter



Ashley Braganza is Professor of Organizational Transformation at Brunel University, London. He is Head of Department of Economics and Finance. Prior to becoming Head, Ashley held a number of senior positions in Brunel Business School, UK, which recently won the coveted Times Higher Education's Business School of the Year Award. His research and consultancy expertise covers the development and implementation of change management. He has direct experience in creating and implementing strategic processes and enterprise-wide architectures. Some examples include his work with organizations such as DFID (UK), Astra Zeneca, The National Audit Office, McDonalds, British Telecom, ABN Amro Bank, Brunel Business School and IFAD (Rome).

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

# Business Architecture: The Foundation for Enterprise Transformation

Roger Burlton

27-29 November 2017

11-13 June 2018

London

Fee £1,595 + VAT

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London

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**Presenters**



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 professionals. His seminars have been translated for diverse audiences around the globe.

**IIBA** Endorsed Education Provider

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.

## Overview

Many Senior Business Analysts and Enterprise Architects are striving to change how the business operates as the world changes around us in order to deliver better customer value and achieve better operational outcomes. Many are focused on defining improved digital capability and on enabling greater flexibility based on emerging customer journeys. We believe that Business Architecture is essential in this world. But, it must start by first addressing the performance of business operations end-to-end for customers and other stakeholders before it attempts to establish new capabilities. For Business Analysts and Architects this business-first approach provides incredible opportunity to become trusted change agents in their enterprises making a strategic difference. It requires them to learn new competencies and influencing skills. This session will help enable these agents of change by providing a repeatable methodology and common structural framework to tackle enterprise analysis and design as well as business process management and capability renewal. It will bring the business view to enterprise architecture. Real life illustrations will be provided that show how it works. In working sessions, it will give delegates the practice in key methods and techniques to develop the right Business Architecture deliverables. This highly participative workshop will delve into all aspects of Business Architecture, Business Processes and Business Capabilities as well as other key architectural concepts.

## Learning Objectives

- Understand what a useful Business Architecture looks like
- Be able to apply enterprise-wide architecture models and techniques that are aligned and traceable
- Learn how to sell the Business Architecture value proposition and gain cross-organization acceptance
- Be able to develop a measurable architecture for planning, budgeting, organization design, compliance, human change management, and the introduction of breakthrough technologies
- Be able to use the architecture to accelerate capability change projects
- Discover how to address cultural barriers during architecture, business design and implementation

## Course Outline

### Why Business Architecture?

- Response to Disruption and Innovation
- Requirement for Business Agility

### Business Architecture and Related Disciplines

- Business Model canvas
- Enterprise Architecture (EA)
- Business Process Management (BPM)
- Service Oriented Architecture (SOA)
- Business Architecture Frameworks

### Business Architecture Methodology

- Process Renewal Group Business Design method
  - Business Architecture Meta Model and Artifacts
  - Business Architecture Maturity
- Workshop: What is your Architectural maturity?*

### Value Chain Identification and Architecture Scoping

- Whole company vs internal group scope?
  - All value chains or one?
  - Cross company Value chains
  - Internal shared services
  - The Value Chain's Value Proposition?
- Workshop: What Value Chains do you have and what is your Value Proposition?*

### External Environment Assessment

- External Pressures, opportunities and Threats
  - Business Scenario Models
- Workshop: What are the External Pressures on your business?*

### External Stakeholder Analysis

- Stakeholder Classification
  - Stakeholder Context Diagram and Health Assessment
  - Stakeholder Needs, Expectations, Outcomes and Experiences
  - Measuring Stakeholder Relationships: Goals, KPIs and Objectives
  - Consolidating your North Star Outcomes
- Workshop: Who are your stakeholders and what must we be able to deliver for them?*

### Business Strategy Development

- Business Motivation Model: Ends and Means
- Strategy Maps

## Audience

- Business Architects
- Enterprise Architects
- Business Process Architects
- Process Improvement Analysts
- Business Analysts
- Strategic Planners
- IT Architects
- Change Managers
- IT Consultants
- Programme Managers
- Business Operations Managers
- IT Executives

**In-House Training:** This course is available on-site. E-mail [customerservice@irmuk.co.uk](mailto:customerservice@irmuk.co.uk) with your enquiries.

# Working with Business Processes: Discovery, Assessment, Mapping, Analysis & Design

Alec Sharp

## Overview

Business processes matter, because business processes are how value is delivered. Understanding how to work with business processes is now a core skill for business analysts, process and application architects, functional area managers, and even corporate executives. But too often, material on the topic either floats around in generalities and familiar case studies, or descends rapidly into technical details and incomprehensible models. This workshop is different – in a practical way, it shows how to discover and scope a business process, clarify its context, model its workflow with progressive detail, assess it, and transition to the design of a new process by determining, verifying, and documenting its essential characteristics. Everything is backed up with real-world examples, and clear, repeatable guidelines.

## 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 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 process-oriented 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 example
- 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, multi-actor, and sequential, parallel, and collaborative steps

and direction for enterprise processes

**Business Managers and Content Experts** who will participate in process re-design or process-oriented application development efforts.

**Prerequisites:**

- 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, fact-based 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 as-is 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 characteristics to workflow model
- A reminder – factors to make the new process sustainable

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.

30 November - 1 December 2017  
14-15 June 2018

London

Fee: £1,245 + VAT

Group Booking & Multiple Seminar Discounts Available

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**Business Architecture: The Foundation for Enterprise Transformation**

27-29 November 2017

**Working with Business Processes**

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**Mastering the Requirements Process**

14-16 November 2017

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3rd course	15%
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5th+course	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



Alec Sharp's expertise includes facilitation, strategy development, data management, business analysis & business process improvement. He is the author of the 2nd edition of “Workflow Modeling”, widely used as a university text and is a best-seller in the field.

*“Alec made the learning fun with a great blend of humour, involvement and time for reflection. The seminar was well structured and it flowed end to end. I had heard that Alec was a great presenter and I was not disappointed”*

Malcolm Priestner, Senior Business Analyst, Met Office

*“Excellent. Best seminar ever attended. Outstanding, engaging, knowledgeable, inspiring.”*

Stella Reynard, Business Analyst, Aveva

*“Quite simply the best seminar/training 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

## Audience

**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

**In-House Training:** This course is available on-site. E-mail [customerservice@irmuk.co.uk](mailto:customerservice@irmuk.co.uk) with your enquiries.

# Mastering the Requirements Process: Getting Requirements Right

James Archer

14-16 November 2017

17-19 April 2018

London

Fee £1,595 + VAT

Group Booking & Multiple Seminar Discounts Available

Business Analysis Public Courses  
London

**Business Architecture: The Foundation for Enterprise Transformation**

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6+ Delegates	25%

Only one discount can be applied at any one time

Presenter



James Archer is a business analyst, consultant, teacher, writer and innovator. He is co-editor and contributing author of Business Analysis and Leadership. He identifies the key to great business analysis as an inclusive leadership style, thinking innovatively, working collaboratively, acting strategically and helping people discover their real requirements. James is one of the founders and organisers of the Business Analysis European Conference. He is also an associate of the Atlantic Systems Guild and has contributed to the development of and taught the Volere approach to requirements and business analysis for the last 8 years.

*"Inspirational. Able to provide lots of examples to demonstrate theories and practices."*

Zoey Moore, Business Project Manager, Aegon UK Services

*"James Archer was excellent, knowledgeable and approachable. One hundred per cent of the content was relevant. The seminar exceeded my expectations."*

Kieran Neeson, Business Analyst, Waters

*"Lively, knowledgeable, articulate - absolutely excellent."*

Steve Coe, Requirements & Testing Manager, Department for Work & Pensions

## 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 apprenticeship, 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 product to build
- 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 non-functional requirements.
- How to find the non-functional qualities the product must have

## 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 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 accurate

### 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 need

### 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

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

## Special Features

- Instructor has real-world experience.
- Brings requirements into the agile world
- Learn industry-proven requirements techniques.
- Discuss your own requirements issues.
- This course introduces the concepts of business use cases and product use cases as the most convenient way to manage your requirements
- Learn how to use fit criterion to bring precision to your requirements
- Teaching chapters are reinforced with hands-on workshops.
- In the final session, through discussions, interaction and demonstrations, you ensure that you have the requirements process that is most suitable for your organization.
- You receive the Volere Requirements Specification Template with advice on how to make this your own template.
- Receive a copy of Suzanne and James Robertson's book Mastering the Requirements Process Getting Requirements Right - Third Edition

## IIBA® Accreditation

The Mastering the Requirements Process is a course endorsed by The International Institute of Business Analysis (IIBA®). As such, this course has been approved as being aligned to the Business Analysis Body of Knowledge (BABOK) and hence are recommended training for business analysts who wish to sit the exam to become Certified Business Analysis Professionals (CBAP). By attending this course, you will earn 21 PDs (Professional Development hours) or 21 CDUs (Continuing Development Units). For further information on how to register for the CBAP examination please refer to certification at [www.theiiba.org](http://www.theiiba.org). The IIBAs endorsement is registered by the Atlantic Systems Guild.

**In-House Training: This course is available on-site. E-mail [customerservice@irmuk.co.uk](mailto:customerservice@irmuk.co.uk) with your enquiries.**



# Designing, Operating and Managing an Enterprise Data Lake

Mike Ferguson

## Overview

This 2-day 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 and share trusted high quality information in a distributed and hybrid computing environment. It also explores a new approach of how IT data architects, business users and IT developers can collaborate together in building and managing an enterprise data lake to get control of your data. This includes data ingestion, data discovery, data profiling and tagging and publishing data in an information catalog. It also involves refining raw data to produce enterprise data services that can be published in a catalog available for consumption across your company. We also introduce multiple data lake configurations including a centralised data lake and a 'logical' distributed data lake as well as execution and governance across multiple data stores. It emphasises the need for a common collaborative process and common approach to governing and managing data of all types.

## 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 distributed or centralised data lake within their organisation
- The critical importance of an information catalog for delivering data-as-a-service
- How data standardisation and business glossaries can help define the data to make sure it is understood
- An operating model for effective distributed information governance
- What technologies they need and implementation methodologies to get their data under control.
- 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.

## Course Outline

### Strategy & Planning

- The ever increasing distributed data landscape
- The siloed approach to managing and governing data
- IT data integration, self-service data wrangling 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 data management
- Defining an enterprise data strategy
- A new inclusive approach to governing & managing data
- Introducing the data reservoir and data refinery
- Data lake configurations - what are the options
- The rising importance of an Information catalog
- Key roles and responsibilities - getting the model right
- Types policy to govern data
- Formalising governance processes
- Integrating a data lake into your enterprise analytical architecture

### Methodology & Technologies

- A best practice step-by-step methodology structured data governance
- Why the methodology has to change for semi-structured and unstructured data
- Technology components in the new world of distributed data
- Hadoop as a data staging area
- Why Hadoop is not enough
- Data management technology platforms
- Self-service data wrangling tools
- Self-service data integration in BI tools
- Implementation options

### Data Standardisation & the Business Glossary

- Semantic data standardisation using a shared business vocabulary within an information catalog
- SBV vs. taxonomy vs. ontology
- The role of a SBV in MDM, RDM, SOA, DW and data virtualisation
- How does an SBV apply to data in a Hadoop data lake?
- Approaches to creating an SBV
- Business glossary products
- Planning for a business glossary
- Organising data definitions in a business glossary
- Business involvement in SBV creation

- Using governance processes in data standardisation

### Organising the Data Lake

- Organising data in a centralised or distributed data lake
- Zoning the data lake
- New requirements for managing data in a centralised and distributed data lakes
- Creating collaborative data lake projects
- Hadoop as a staging area for enterprise data cleansing and integration
- Beyond structured data - from business glossary to information catalog
- Information catalog technologies
- The power of a graph database for storing metadata – dynamic tracking of data and data relationships in real-time
- The data ingestion process
- Tools and techniques for data ingestion
- Using domains and machine learning to speed up auto tagging

### The Data Refinery Process

- Implementing systematic disparate data and data relationship discovery
- Data discovery tools Global IDs, IBM Watson Data Platform, Informatica, Silwood, Waterline Data Smart Data Catalog
- Automated profiling and tagging of data
- Automated data classification and cataloguing to enable governance
- Automated data mapping
- Automated data profiling using analytics in data wrangling tools
- Generating data cleansing and integration jobs using common metadata
- Key approaches to scalable data integration using Apache Spark
- Self-service data Wrangling tools for Spark and Hadoop
- Executing data refinery jobs in a distributed data lake using Apache Beam to run anywhere
- Approaches to integrating IT ETL and self-service data wrangling
- Joined up analytical processing from ETL to analytical workflows
- Publishing data and data integration jobs to the information catalog
- Mapping discovered data of value into your DW and business vocabulary
- Data provisioning – provisioning consistent information into data warehouses, MDM systems, NoSQL DBMSs and transaction systems
- Achieving consistent data provisioning through re-usable data services
- Provisioning consistent refined data using data virtualisation and on-demand

- Governing the provisioning process using rules-based metadata
- Consistent data management across cloud and on-premise systems

### Refining Big Data & Data for Data Warehouses

- 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 – The Forgotten Side of Data Governance

- 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?
- Securing and protecting Big data using tag based policies
- How can you use it for GDPR?
- What technologies are available to tackle this problem? – Apache Knox, Cloudera Sentry, Dataguise, Hortonworks Ranger, HP Enterprise, IBM Optim & Guardium, Imperva, Privitar
- How do they integrate with Data Governance programs?
- How to get started in securing, auditing and protecting your data

5-6 October 2017

6-7 March 2018

London

Fee: £1,245 + VAT

Group Booking & Multiple Seminar Discounts Available

## Enterprise Data Courses, London

### Managing Your Information Asset

20-22 September 2017

### Information Management Fundamentals

3-5 October 2017

### Designing, Operating and Managing an Enterprise Data Lake

5-6 October 2017

### Business Oriented Data Modelling

9-10 October 2017

### Advanced Data Modelling

11-13 October 2017

### Incorporating Big Data, Hadoop, and NoSQL in BI Systems and DW

31 October-1 November 2017

### The Logical Data Warehouse: Design, Architecture and Technology

2-3 November 2017

### Ten Steps to Data Quality

2-3 November 2017

### Multiple Booking Discount

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6+ Delegates	25%

Only one discount can be applied at any one time

### 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

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

# Managing Your Information Asset:

Three One-Day Workshops on Information Strategy, Information Governance and Master and Reference Data Management  
Jan Henderyckx

20-22 September 2017

27 February - 1 March 2018

London

Delegates can register to attend 1, 2 or 3 days of the workshop.

Fee:

3 days: £1,595 + VAT

2 days: £1,245 + VAT

1 day: £795 + VAT

Group Booking & Multiple Seminar Discounts Available

## Enterprise Data Courses, London

Managing Your Information Asset

20-22 September 2017

Information Management Fundamentals

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Only one discount can be applied at any one time

## Presenter



Jan Henderyckx is a highly rated consultant, speaker and author. Jan's experiences have enabled him to help many organisations to optimise the business value of their information assets. He has published articles in many leading industry journals, and has been elected to the IDUG Speakers Hall of Fame, based upon numerous Best Speaker awards.

*"Excellent delivery, well read, experienced and a pleasure to listen to."*

Dr Adrianos Evangelidis, Information Management Group Manager, The Scottish Government

*"This seminar was an eye opener and a beginning of a discovery."*

Juriy Skopels, Data Architect, Control Risks

*"Jan has excellent knowledge of the topic. He has helped to bring the subject matter to life – much more so than any methodology type texts."*

Stuart Nicol, Head of Applications, Scottish Parliament

## Overview

Can your organisation turn its data into revenue and can it sustain the required accuracy and trust levels to maintain compliance and get effective operations? Most companies are emerging from the age of automation and face the non-trivial task of creating a data driven mind-set that favours fact based decision making and that uses information centricity to break the organisational silo's. This course will teach you how you can turn your organisation around and make it information centric delivering on the promise of accurate and trusted business information that supports compliance and boosts innovation.

## Learning Objectives

- Adapt the organisation to make it information centric
- Engage your business and have them take the lead and recognise the value of information.
- Establish an information governance organisation
- Manage speech communities and business vocabularies
- Align your IT with your information strategy
- Get more value out of your MDM projects
- Redefine your Business Intelligence architecture
- Get the benefits of Big Data
- Select the proper Enterprise Information platform to support your information strategy
- Deal with external- and industry standards
- Describe your information and it's lineage
- Define a metadata strategy
- Establish a sustained data quality
- Select the right MDM/RDM tool
- Pick the right architectural pattern
- Improve the benefits of Big Data

## Course Outline

### Day 1 – Establishing a Sustainable (BIG) Information Strategy

#### Information Strategy

- Information Governance Mission and Vision
- Information and data policies
- Types of information and how to deal with them
- Defining your information risks
- Determining the business value of information
- Creating an information strategy roadmap

#### Information Management

##### Methodology

- Introduction to existing frameworks: DMBOK, Mike 2.0
- Integrating your information management with other frameworks such as TOGAF and COBIT

#### Becoming Information Centric:

##### Establishing the Information Capabilities

- Data Lab, Data Reservoir and Data Lake: advantages and challenges
- Data Refining and Discovery
- Insight in Database architectural options and their relevance for your business model
- Positioning the information management patterns
- Managing the information life cycle
- Maintaining Privacy and audit compliance

#### Getting Insight Out of Your HOV (aka BIG) Data

- Providing Self Service Insight
- Positioning the Data Engineer
- Supporting Business Analytics and Data Science
- Integrating the BICC into the delivery model

#### Complying with Regulations

- Data Privacy
- Data Protection
- Ownership and traceability

#### Executing the Information Strategy

- Making the business case
- Implementing an 'Information centric'-organisation
- Challenges for the implementation of an 'information strategy'

### Day 2: Information Governance: From Definition to Execution

#### Information Definition

- Managing business semantics through correct definitions and information criteria
- Establishing 'speech communities' and vocabulary management
- Defining data and information includes semantic, syntactic and lexical rules so we can make sure names are consistent.
- Build your own common shared vocabulary based on your business information model.
- Definition versus Discovery
- Dealing with "closed systems" including ERP
- Building or buying a vocabulary or business semantics
- Integrating industry standards into your organisation
- Publishing definitions and quality rules

#### Information Governance

- Structural Compliance
- Content Compliance

#### Framework for Information centric roles

- The activities that are needed to define and sustain the information in your organisation
- Establishing the Information Governance Roles
- Data Governance for enabling efficiency and compliance
- Competency management and requirements for executing the roles
- Dealing with incremental insight and agile methods
- Linking Information Governance to Enterprise Architecture

#### Metadata Strategy

- Achieving lineage with a metadata repository
- Requirements for metadata management
- Standards and their applicability

#### The Information – and Data Governance Solution Landscape

- Glossary Management
- Data Quality solutions
- Information life-cycle management

#### Challenges for the Implementation of an 'Information Governance'-program

- Information in a 'process centric' organisation
- Handling semantics using Agile methods
- Defining the correct scope
- Understanding and translating business priorities

### Day 3: Master and Reference Data Management

#### Designing an MDM/RDM -system

- Establishing the scope
- Architectural-options:
- Hierarchy management solutions
- Master Identity Management. Global Id's en global foreign keys
- Defining principles and policies for governing MDM and RDM solutions

#### Architecting the Master Data Management

- Elements that need to be considered:
- Defining the logical evolution of the target architecture
- Deciding on external versus internal identification and validation

#### Building and Implementing an MDM-system

- Defining which MDM-pattern suits you best
- Identifying 'systems of entry' and mapping data flows
- Using Data profiling effectively
- Establishing transformation- and mapping-rules

#### Buying an MDM-System

- MDM-market overview
- External Master and Reference Data providers

- Templates for writing the RFI and RFP

#### Blueprints for Common Use Cases

- Product Information and Life Cycle Management (PIM/PLM)
- Party Management
- The capability approach

#### Integrating an MDM-System in your Existing Application and Data Landscape

- Combining and MDM-solution with your existing 'Enterprise Information Management'-portfolio
- The need for a MDM 'change program'
- Implementing Information-centric 'shared services'
- Consolidating 'systems of entry'
- Working in the extended enterprise
- Project management and data migration planning
- Properly planning for the launch of the solution

## Audience

- Chief Data Officer
- IT Managers
- IT Consultants
- Information/Enterprise/Data Architects
- MDM Project Leaders
- Business Intelligence Specialists
- Business Analysts
- IT Strategists
- Information Stewards

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

# Information Management Fundamentals

Chris Bradley

## Overview

This course address all the Information Management disciplines as defined in the DAMA body of knowledge (DMBoK). Taught by an industry recognized DAMA DMBoK(2.0) author and CDMP(Master) this course provides a solid foundation across all of the disciplines across the complete Information Management spectrum. By attending the course, delegates will get a firm grounding in all of the core Information Management concepts and illustrate their practical application throughout with real examples of how Information Architecture is applied. Additionally this course provides a solid foundation for students wishing to consider proceeding to take the Industry professional DAMA CDMP certification.

## Learning Objectives

This course is intended to provide you with the knowledge, methods and techniques required to analyse, mature and implement information management solutions within your organisation. At the end of the course, delegates would have gained the following:

### Level set understanding & terminology:

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

framework and understand how it aligns with other architecture frameworks

- Explore concepts such as lifecycle management, normalisation, dimensional modelling and data virtualisation and why they are important
- Understand the critical roles of Master Data Management and Data Governance and how to effectively apply them

### Pragmatic Learning

- Learn the different MDM architectures, their suitability for different needs and how best to implement Master Data Management approaches
- Develop a set of usable techniques that can be applied to a range of information management challenges
- Learn the best practices for managing Enterprise Information needs
- Through practical examples, learn how to apply techniques in information architecture planning

## Course Outline

### Introduction to the DMBoK

- What is the DMBoK, its intended purpose and audience.
- Changes due in DMBoK 2.0, and the relationship of the DMBoK with other frameworks (TOGAF / COBIT etc.).
- DAMA CDMP professional certification overview & CDMP exam coverage by DMBoK section.

### Data Governance

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

### Data Quality Management

- The Dimensions of Data Quality, policies, procedures, metrics, technology and resources for ensuring Data Quality is measured and ultimately continually improved.
- A DQ reference model & how to apply it.
- Capabilities & functionality of tools to support Data Quality management.

### Master & Reference Data Management

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

MDM to align with business priorities.

### Data Warehousing & BI Management

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

### Data Modelling & Metadata Management

- Provision of metadata repositories and the means of providing business user access and glossaries from these.
- The development, use and exploitation of data models, ranging from Enterprise, through Conceptual to Logical, Physical and Dimensional.
- Maturity assessment to consider the way in which models are utilized in the enterprise and their integration in the Software Development Life Cycle (SDLC).

### Data Integration & Architecture Management

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

### Data Lifecycle Management

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

### Data Risk Management, Security & Privacy

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

### Regulatory Compliance

- The polices and assurance processes that the enterprise is required to meet.
- Adapting to the changing legal and regulatory requirements related to information and data.
- Assessing the approach to regulatory compliance & understanding the sanctions of non-compliance.

### Data Management Tools & Repository

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

3-5 October 2017

21-23 March 2018

London

Fee: £1,595 + VAT

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### Presenters



Christopher Bradley has spent 35 years in the forefront of the Information Management field, working for International

organisations in Information Management Strategy, Data Governance, Data Quality, Information Assurance, Master Data Management, Metadata Management, Data Warehouse and Business Intelligence. Chris is an independent information strategist & recognised thought leader. He advises clients including, Alinma Bank, American Express, ANZ, Bank of England, BP, Celgene, Cigna Insurance, Enterprise Oil, Emirates NBD, GSK, HSBC, NAB, Riyad Bank, Saudi Aramco, Shell, Statoil, and TOTAL. Most recently he has delivered a comprehensive appraisal of Information Management practices at an Oil & Gas super major, Data Governance strategy for a Life Sciences Company, and Information Management training for a Government Organisation.



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## Audience

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

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

**In-House Training:** This course is available on-site. E-mail [customerservice@irmuk.co.uk](mailto:customerservice@irmuk.co.uk) with your enquiries.

# Business-Oriented Data Modelling:

## A Business-Oriented Approach to Entity-Relationship Modelling

Alec Sharp

9-10 October 2017  
London  
Fee: £1,245 + VAT

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**Presenter**



With over 30 years of consulting experience, Alec Sharp has provided hands-on data modelling expertise throughout North America, Asia, and Europe – this workshop is based on real-world experience, not textbook theory. Alec has also delivered hundreds of Data Modelling and Advanced Data Modelling workshops, and top-rated presentations at international conferences. Alec is the principal author of “Workflow Modelling, 2nd Edition” which is a consistent best-seller in the field, and is widely used as an MBA text and consulting guide.

### Overview

Data modelling is critical to the design of quality databases, but is also essential to other requirements specification techniques such as workflow modelling, use cases, and service definition because it ensures a common understanding of the things – the entities – that processes and applications deal with. This workshop introduces entity-relationship modelling from a non-technical perspective, and explores contextual, conceptual, and detailed modelling techniques that maximise user involvement.

### Learning Objectives

- Apply a variety of techniques that support the active participation and engagement of business professionals and subject matter experts
- Use entity-relationship modelling to depict facts and rules about business entities at different levels of detail, including conceptual (overview) and logical (detailed) models
- Use top-down and bottom-up approaches to initiating development of a data model
- Recognise the four basic patterns in data modelling, and when to use them
- Effectively use definitions and assertions (“rules”) as part of data modelling
- Use an intuitive approach to data normalisation within an entity-relationship model
- Apply various techniques for discovering and meeting additional requirements
- Read a data model, and communicate with specialists using the appropriate terminology

### Course Outline

#### Essentials of Data Modelling

- What really is a data model?
- Essential components – entities, relationships, and attributes
- Hands-on case study – how data modelling resolved business issues, and supported other business analysis techniques
- The basics of diagramming – Entity-Relationship Diagrams (“ERDs”)
- The narrative parts of a data model – definitions and assertions
- Common misconceptions about data models and data modelling
- The real purpose of a data model
- Three types of data models – different levels of details for different purposes
- Contextual, Conceptual, and Logical Data Models – purpose, audience, definition, and examples
- How data models help in process improvement, requirements definition, and reporting
- Forward- and reverse-engineering uses of data modelling
- Overview of a three-phase methodology for developing a data model

#### Establish the Initial Conceptual Data Model

- Top down vs. bottom up approaches to beginning a data model – when is each appropriate?
- Advantages of a bottom-up approach
- A bottom-up approach focusing on collecting and analysing terminology
- A structure for sorting terms and discovering entities
- Entities – what they are and are not
- Guidelines for naming and defining entities
- Three questions to help you quickly develop clear, useful entity definitions
- Five 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 supertype-subtype relationships
- Attributes – guidelines and types
- Attributes in conceptual models vs. logical models

#### Develop the Initial Logical Data Model By Adding Rigour, Structure and Detail

- What’s involved in developing a 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
- Guidelines for a smooth progression from conceptual to logical
- 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
- Six questions to ask whenever a data range appears in a data model
- Identifying and dealing with transitive relationships – clues and proof

#### Refine and Extend the Logical Data Model By Discovering and Meeting New Requirements

- Attribute granularity – definitions of non-atomic and semantically overloaded attributes
- Guidelines for making non-atomic attributes atomic
- The perils of semantic overload, and what to do about it
- Dealing with derived attributes, and when to show them on the model
- A classword-based approach to attribute naming
- 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
- Alternate and foreign keys
- Why meaningless primary keys are used, and guidelines for creating them
- Guidelines for reference data
- Using event analysis to discover additional requirements
- How data modelling relates to process modelling, use cases, and services
- A layered framework for business analysts
- How other techniques (e.g., workflow modelling) support data modelling
- A three-step procedure for meeting new requirements
- Advice on extending the model in an orderly fashion
- Recap – contextual, conceptual, and logical data models
- Different skills and participants for conceptual vs. logical modelling
- How the modeler’s/analyst’s role changes as a project progresses
- A little philosophy for effective data modelling
- The four Ds of data modelling – definition, dependency, detail, and demonstration

### Audience

**Data Modellers, Data Analysts, and DBAs** will benefit from the workshop’s practical methods and guidelines. The workshop is also very popular with **Business Analysts** and **Application Designers/Developers** needing to understand data modelling and how it

supports requirements definition or process analysis. **Business Professionals and Managers** who need to understand how this technique can uncover and resolve inconsistency in business terminology, policy, and rules.

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# Advanced Data Modelling: Communication, Consistency, and Complexity

Alec Sharp

## Overview

There are experienced data modellers who somehow develop accurate and stable models that are actually used, often in non-typical or high-pressure situations. Others modellers might have great technical skills, but fare poorly, maintaining tense relationships with content experts and developers who "just don't get it," and watching in dismay as their models are continually undone by "new" requirements. What accounts for the difference? It's having a concrete set of frameworks, methods, techniques, scripts, heuristics, and other tools that they draw on to keep the process moving, with everyone engaged, even when complex, difficult situations are encountered. In this workshop, you will learn specific, repeatable techniques that you can use to drive your data modelling skills to the next level.

## Learning Objectives

- Understand "the four Ds of data modelling" – definition, dependency, demonstration, and detail
- Be able to implement lists, trees, and networks with recursive relationships
- Know how and when to use supertypes/subtypes (generalisation/specialisation) vs. roles vs. both
- Combine subtyping and recursion, as appropriate, to model difficult rules
- Recognise the "category vs. types vs. instances" problem, and model reference data properly
- Model "vectors" (attributes that repeat a fixed number of times) properly – entity or attribute?
- Use multi-way associations, associations of associations, and relationship constraints to handle complex rules
- Handle circular relationships and cyclic dependencies properly with advanced normal forms
- Model history, corrections, and time-dependent business rules with "temporal data models"
- Understand the connection between analytic data structures (star schema or dimensional models) and ER models
- Rapidly develop a first-cut dimensional model from a well-structured ER model
- Prepare and deliver a data model review presentation

## Course Outline

### A quick recap – level-setting on terms, concepts, conventions, and structures

- Conventions for the essential components: entities, relationships, attributes, and identifiers
- Effective naming and definition
- E-R Diagramming – symbol sets and their problems, rules for readability and comprehension
- Types of data models – contextual, conceptual, logical, and physical
- Three types of data models before the physical database – contextual, conceptual, and logical
- The four Ds of data modelling – definition, dependency, detail, and demonstration

### Working with higher-level models

- Contextual, conceptual, logical models – what they are, who they're for, when we need them
- Definitions for each type of model, and common sources of confusion
- How the different kinds of data models relate to process, use case, and service models
- Avoiding the "deep dive into detail" – a three-phase method for data modelling
- How to start a large project with a contextual data model
- Guidelines for staying at the conceptual level, and how to tell when you've gone too far

### Modelling time, history, and time-dependent business rules

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

### Correctly handling attributes

- The basic patterns – handling multi-valued, redundant, and constrained attributes
- Granularity – dealing with non-atomic and semantically overloaded attributes
- Dealing with reference data and the "classification vs. specification vs. instances" problem
- Three attributes that always need a qualifier
- Vector modelling – entity or attribute?

### 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

### 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

### 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

### Better models through using data modelling in conjunction with other techniques

- Things, events, services, use cases, and processes – how they fit together and synergize
- The Weasel's Guide to doing data modelling without anyone knowing it
- Event analysis as a rapid way to gather requirements
- Use Cases and Service Specifications, and their role in data modelling
- Process Modelling, and the vital role data models play

### Interesting approaches and uses

- Developing a first-cut data model from business artifacts (forms, reports, screens, etc.)
- Living with legacy – the role of reverse-engineering and data profiling
- "Shock and dismay" – showing the business their current data model, and what it's doing to them
- Where and how data modelling fits into selecting and implementing packaged applications
- The role of generic data models

### Effectiveness skills for data modellers – communication, facilitation, presentation and consistency

- Preparing and delivering a data model review presentation
- Facilitation techniques specifically for the data modeller
- "The Magical Number Seven" and what it has to do with modelling
- Repeatable methods for discovering, assessing, and meeting new requirements
- A consistent approach – "scripts" to use while building a data model
- "Challenges" to use when validating a data model
- "Future-proofing" – what you can do to improve the lifespan of your model
- Seven techniques for "humanizing" data modelling and making data models more accessible

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Audience

Specialist Data Modellers, Data Architects, and DBAs who wish to hone their skills. Also Business Analysts, Application Developers, and anyone else with substantial data modelling experience who needs additional skills.

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

# Incorporating Big Data, Hadoop and NoSQL in BI Systems and Data Warehouses

Rick van der Lans

31 October-1 November 2017

5-6 June 2018

London

Fee: £1,245 + VAT

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## Presenter



Rick F. van der Lans is an independent analyst, consultant, author and lecturer specialising in data warehousing, business intelligence, big data, and database technology. He has helped many large companies worldwide in defining their business intelligence and big data architectures. Mr. van der Lans is an internationally acclaimed lecturer. His popular IT books have been translated into many languages and have sold over 100,000 copies. His latest book is entitled "Data Virtualization for Business Intelligence Systems". Rick writes blogs for well-known websites, such as TechTarget.com and BeyeNetwork.com, and he has written numerous successful whitepapers.

*"Hugely engaging."*

Gary Connolly, Head of Business Intelligence, Ascenden

*"Rick was well informed and managed the group very well. The examples were great. I will recommend this to other architects on my team. This was a great course. Well paced and Rick kept it interesting."*

Deepti Chidambaram, Information Architect, Transport for London

## Overview

Big data, Hadoop, in-memory analytics, Spark, Kafka, self-service BI, fast data, data warehouse automation, analytical database servers, data virtualization, data vault, operational intelligence, predictive analytics, and NoSQL are just a few of the new technologies and techniques that have become available for developing BI systems. Most of them are very powerful and allow for development of more flexible and scalable BI systems. But which ones do you pick? Due to this waterfall of new developments, it's becoming harder and harder for organizations to select the right tools. Which technologies are relevant? Are they mature? What are their use cases? These are all valid but difficult to answer questions. This course gives a clear, extensive, and critical overview of all the new developments and their inter-relationships. Technologies and techniques are explained, market overviews are presented, strengths and weaknesses are discussed, and guidelines and best practices are given. The biggest revolution in BI is evidently big data. Therefore, considerable time in the seminar is reserved for this intriguing topic. Hadoop, Spark, MapReduce, Kafka, Hive, NoSQL, SQL-on-Hadoop are all explained. In addition, the relation with analytics is discussed extensively. This course gives you a unique opportunity to see and learn about all the new BI developments. It's the perfect update for those interested in knowing how to make BI systems ready for the coming ten years.

## Learning Objectives

- Trends and technological developments in business intelligence, analytics, data warehousing, streaming analytics and big data.
- Discover the value of big data and analytics for organizations
- Learn which products and technologies are winners and which ones are losers.
- Understand how new and existing technologies, such as Hadoop, NoSQL and NewSQL, will help you create new opportunities in your organization.
- Discover how more agile data business intelligence systems can be designed.
- Learn how to embed big data and analytics in existing business intelligence architectures.

## Course Outline

### The Changing World of Business Intelligence

- Big Data: Hype or reality?
- Operational intelligence: does it require online data warehouses?
- Fast data is the next frontier of big data
- Data warehouses in the cloud
- Self-service BI
- The business value of analytics

### Hadoop Explained

- The relationship between big data and analytics
- The Hadoop software stack explained, including HDFS, MapReduce, YARN, Hive, Storm, Sqoop, Flume, and HBase
- The balancing act: productivity versus scalability
- Making big data available to a larger audience with SQL-on-Hadoop engines, such as Apache Drill, Apache Hive, Apache Phoenix, Cloudera Impala, HP Vertica, IBM BigSQL, JethroData, MemSQL, SparkSQL, and Splice Machine

### Spark Explained

- Spark is about in-memory analytical processing
- The interfaces: SQL, R, Scala, Python
- Does Spark need Hadoop?
- The relationship between Spark and data science
- Examples of use cases of Spark

### NoSQL Explained

- Classification of NoSQL database servers: key-value stores, document stores, column-family stores and graph data stores
- Market overview: CouchDB, Cassandra, Cloudera, MongoDB, and Neo4j
- Strong consistency or eventual consistency?
- Why an aggregate data model?
- Use case of NoSQL products
- How to analyze data stored in NoSQL databases

### Overview of Analytical SQL Database Servers

- Are classic SQL database servers more suitable for data warehousing?
- Important performance improving features: column-oriented storage, in-database analytics
- Market overview of analytical SQL database servers: Apache Greenplum, Exasol, HP Vertica, IBM PureData Systems for Analytics, InfoBright, JustOneDB, Kognitio WX2, Microsoft PDW, Oracle In-Memory, SAP HANA and Sybase IQ, SnowflakeDB, Teradata Appliance, and Teradata Aster Database

### Technologies for Fast Data and Streaming Analytics

- The key use case for fast data: the Internet of Things (IoT)
- IoT implies streaming data and fast analysis of data - analytics at the speed of business
- IoT devices: Smartphones (watches), RFID sensors, machines,

## Audience

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

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# The Logical Data Warehouse: Design, Architecture and Technology

Rick van der Lans

## Overview

Classic data warehouse architectures are made up of a chain of databases. This chain consists of numerous databases, such as the staging area, the central data warehouse and several datamarts, and countless ETL programs needed to pump data through the chain. This architecture has served many organizations well. But is it still adequate for all the new user requirements and can new technology be used optimally for data analysis and storage? Integrating self-service BI products with this architecture is not easy and certainly not if users want to access the source systems. Delivering 100% up-to-date data to support operational BI is difficult to implement. And how do we embed new storage technologies, such as Hadoop and NoSQL, into the architecture? It is time to migrate gradually to a more flexible architecture in which new data sources can be hooked up to the data warehouse more quickly, in which self-service BI can be supported correctly, in which OBI is easy to implement, in which the adoption of new technology, such as Hadoop and NoSQL, is easy, and in which the processing of big data is not a technological revolution, but an evolution. The architecture that fulfills all these needs is called the logical data warehouse architecture. This architecture, introduced by Gartner, is based on a decoupling of reporting and analyses on the one hand, and data sources on the other hand. The technology to create a logical data warehouse is available, and many organizations have already successfully completed the migration; a migration that is based on a step-by-step process and not on full rip-and-replace approach. In this practical course, the architecture is explained and products will be discussed. It discusses how organizations can migrate their existing architecture to this new one. Tips and design guidelines are given to help make this migration as efficient as possible.

## Learning Objectives

- What are the practical benefits of the logical data warehouse architecture and what are the differences with the classical architecture.
- How can organizations successfully migrate to this flexible logical data warehouse architecture, step-by-step?
- Understand the possibilities and limitations of the various available products.
- How do data virtualization products work?
- Discover how big data can be added transparently to the existing BI environment?
- Understand how self-service BI can be integrated with the classical forms of BI?
- Learn how users can be granted access to 100% up-to-date data without disrupting the operational systems?
- What are the real-life experiences of organizations that have already implemented a logical data warehouse?

## Course Outline

### Challenges for the Classic Data Warehouse

- Integrating big data with existing data and making it available for reporting and analytics
- Supporting self-service BI and self-service data preparation
- Faster time-to-market for reports
- Polyglot persistency – processing data stored in Hadoop and NoSQL systems
- Operational Business Intelligence, or analyzing of 100% up-to-date data

### The Logical Data Warehouse

- The essence : decoupling of reporting and data sources
- From batch-integration to on-demand integration of data
- The impact on flexibility and productivity – an improved time-to-market for reports
- Examples of organizations operating a logical data warehouse
- Can a logical data warehouse really work without a physical data warehouse?

### Implementing a Logical Data Warehouse with Data Virtualization Servers

- Why data virtualization?
- Market overview: AtScale, Cirro Data Hub, Cisco Information Server, Data Virtuality UltraWrap, Denodo Platform, RedHat JBoss Data Virtualization, Rocket DV, and Stone Bond Enterprise Enabler
- Importing non-relational data, such as XML and JSON documents, web services, NoSQL, and Hadoop data
- The importance of an integrated business glossary and centralization of metadata specifications

### Improving the Query Performance of Data Virtualization Servers

- How does caching really work
- Which virtual tables should be cached?
- Query optimization techniques and the explain feature
- Smart drivers/connectors can help improve query performance
- How can SQL-on-Hadoop engines speed up query performance?
- Working with multiple data virtualization servers in a distributed environment to minimize network traffic

### Migrating to a Logical Data Warehouse

- An A to Z roadmap
- Guidelines for the development of a logical data warehouse
- Three different methods for modelling: outside-in, inside-out, and middle-out
- The value of a canonical data model
- Considerations for security aspects
- Step by step dismantling of the existing architecture
- The focus on sharing of metadata specifications for integration, transformation, and cleansing

## Audience

- Business Intelligence Specialists
- Data Warehouse Designers
- Business Analysts
- Technology Planners
- Technical Architects
- Enterprise / Solution / Data Architects
- IT Managers
- IT Consultants
- IT Strategists
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# Ten Steps to Data Quality

Danette McGilvray

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## Presenter



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

*"Very easy to follow and apply to the work/challenges that I am going to face. Danette was great at using every day experiences and relating them to data quality. A great presenter who is open to new ideas irrespective of being in Data Quality for over 20 years."*

Naomi Thomas, Data Quality Analyst,  
Gocompare.com

*"The course has helped me put into perspective and break down the areas of data quality that should fall under investigation in any project - the steps methodology ensures you have captured all the areas that affect data quality completely."*

Eirini Basta, Local Data Steward,  
Business Systems, HEINEKEN UK

## Overview

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 investment in new business processes and systems. Join us to learn the Ten Steps to Quality Data and Trusted Information™ – a practical approach to creating, improving, and managing the quality of information critical to running your business, satisfying customers, and achieving company goals. If you working on real data quality-related projects that need real results, this is the seminar for you. What you learn here 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. Key topics include:

- The Ten Steps™ process
- The Framework for Information Quality
- The Information Life Cycle
- Analyzing the information environment
- Assessing data quality and business impact
- Conducting root cause analysis and implementing controls
- Essential communication to meet information quality needs
- Real-life application of the framework and methodology

## Learning Objectives

- Turn data quality challenges into actionable projects with clear objectives.
- Connect data quality issues to business priorities.
- Understand concepts that are fundamental to data quality management, such as the Framework for Information Quality, information life cycle, data quality dimensions, business impact techniques, root cause analysis techniques, etc.
- Choose the appropriate steps/activities from the Ten Steps process to address business needs.
- Apply many of the steps and techniques to a course project during the seminar.
- Obtain templates and examples to use in the attendees' own situations.

## Course Outline

### The Data and Information Quality Challenge

- Information and data quality defined
- Approaches to data quality in projects
- Your data quality challenges

### Key Concepts – A Necessary Foundation for Understanding Information Quality

- Framework for Information Quality (FIQ) – Components that impact information quality:
  - Business Goals/Strategy/Issues/Opportunities
  - Information Life Cycle (POSIMAD – 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
  - Location (Where) and Time (When and How Long)
  - Broad-Impact Components (RRISC – Requirements and Constraints, Responsibility, Improvement and Prevention, Structure and Meaning, Communication, Change)
- Information and Data Quality Improvement Cycle (Assess, Analyze, Action)
- Data Governance, Stewardship, and Data Quality
- The Ten Steps™ methodology – key concepts plus the Ten Steps™ process

### 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. The Ten Steps are the concepts in action.
- Data quality tools will also be discussed in the applicable steps.
- Exercises and working on a course project with a team give attendees the opportunity to practice what is learned.

#### Step 1 Determine Business Need and Approach

- "Connecting-the-dots" between the data quality issue and business needs
- Define and agree on the issue, the opportunity, or the goal to guide all work done throughout the project. (Refer to this step throughout the other steps in order to keep the goal at the forefront of all activities.)

#### Step 2 Analyze Information Environment

- Gather, compile, and analyze information about the current situation and the information environment.
- Document and verify the information life cycle, which provides

a basis for future steps, ensures that relevant data are being assessed, and helps discover root causes

- Design the data capture and assessment plan

#### Step 3 Assess Data Quality

- Evaluate data quality for the data quality dimensions applicable to the issue
- The assessment results provide a basis for future steps, such as identifying root causes and needed improvements and data corrections.

#### Step 4 Assess Business Impact

- Using a variety of techniques, determine the impact of poor-quality data on the business.
- This step provides input to establish the business case for improvement, 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.

#### Step 8 Correct Current Data Errors

- Implement steps to make appropriate data corrections.

#### Step 9 Implement Controls

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

#### Step 10 Communicate Actions and Results

- Document and communicate the outcome of quality tests, improvements made, and results of those improvements.
- Communication is the first step to the many human factors that impact data quality success and are vital to address. Communication is so important that it is part of every step.

## Audience

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

- Data Analysts
- Data Quality Analysts
- Business Analysts
- Data Designers/Modellers / Architects
- Data Stewards (Business and Technical)
- Application Developers

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





## IRM UK In-House Training

IRM UK is a leading provider of strategic Business and IT Training for Business and IT Management. We provide in-house training, public courses and conferences in the areas of:



### Enterprise Architecture and Strategy



### Business Analysis



### Enterprise Data

Running a course in-house gives you the following benefits:

- Tailor the course to your organisation's specific needs
- Case studies and problem solving will be about your organisation - the course presenter is, in fact, your consultant for the day
- Train a large group of people without having to pay for their travel and living expenses
- You can decide when you need and want the course to be presented
- You can receive vital training without having to leave your office
- Cost savings for multiple delegates, compared to using public courses

*"The training was absolutely what we needed! I can't remember when was the last time when I heard such a good feedback. The course was practical and really useful, our analysts have already many ideas that they want to put into practice straight away (and for me that's the best outcome a course could have)."*

Jaanika Lill  
Training Specialist Eesti Energia AS

*"The information that Jan (Henderyckx) provided us with will be invaluable in moving forward. Jan's level of expertise is very impressive."*

David McDowell Enterprise Architect, IT and Transformation, Corporate Governance, Aberdeen City Council

#### Previous In-House clients include:

- Aberdeen County Council
- Aberdeenshire Council
- Aerosystems International
- Alliance & Leicester
- APG
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- Biogen
- Capgemini
- Centrica
- Coca Cola
- Credit Suisse
- Deloitte
- Department for Work & Pensions
- Dutch Tax Office
- DVLA
- Eircom
- European Medicines Agency
- Ernst & Young
- Eurojust
- European Central Bank
- GCHQ
- GE Life
- GlaxoSmithKline
- IKEA
- Jaguar Cars
- JPMorgan
- Land Registry
- Layer Health Care
- Lloyds Register
- Lloyds TSB
- M&G
- Maersk
- Marconi
- Morse
- Nationwide
- Norwegian Computer Society
- npower
- One Tel
- Orange FT
- Ordnance Survey
- Partner RE
- Philip Morris
- Prudential
- Qatar Fertiliser Company (QAFCO)
- QinetiQ
- Riyadh Bank
- Royal Mail
- Saudi Telecom Company
- Scottish & Newcastle
- Seagate
- Societe Generale Corporate and Investment Banking
- Sony
- South Yorkshire Police
- Standard Bank
- Statistics Netherlands
- SWIFT
- Foreign & Commonwealth Office
- Unilever
- Vertex
- Virgin
- Virgin Money
- Vodafone
- Waters
- Xansa



# Business Analysis Conference

25-27 September 2017, London

## Benefits of Attending:

- **Learn From Your Peers.** The conference provides an interactive forum where Business Analysts can meet, discuss and debate how best to rise to the challenges faced by their organisations today and in the future. In 2016, conference attendees had the opportunity to network with and learn from over 415 fellow Business Analysis Practitioners.
- **Twelve Pre-Conference Workshops.** Choose from a comprehensive range of workshops on specific topics to get you quickly up-to-speed or fine tune your performance. Choose from introductory to advanced levels.
- **BCS Certification:** Two full day pre-conference workshops covering the BCS Foundation Certificate in Business Change and the BCS Foundation Certificate in Business Analysis; both include the certification examination.
- **Five Conference Tracks with More Than 40 Sessions Focusing on Company Case Studies.** Learn from other BAs past success and challenges through a wide range of case studies. Broaden your knowledge and gain insights from internationally renowned experts. The tracks for this year are:
  - How to do Business Analysis (Building Your Business Analysis Core Skillset)
  - Pushing the Boundaries of Business Analysis (Building On Your BA Core Skillset)
  - The Evolving Business Analyst (Expanding Your BA Toolkit)
  - Stakeholder Engagement (Developing Your Behavioural Skills)
  - Fresh Perspectives (Expanding Your BA Mindset)
- **Case Studies and Contributors Include:** AssistKD, Aviva Health, Bank of England, B&CE, British Standards, Capgemini, Cardiff University, Department for Work and Pensions (DWP), Dunelm, easyJet, European Chemicals Agency, Harrods, John Lewis, Leeds University, Lloyd's of London, National Grid, Nationwide, NHS Digital, Old Mutual Wealth, Sheffield Hallam University, Sky, TSB, Zurich Insurance

*"Excellent event - Best BA Conference. Look forward to next year!"*

Jonathan Bryant, Business Analyst,  
NFU Mutual

*"Probably the most relevant and effective conference I've ever been to."*

Stephen Haarer, Business Analyst,  
Lloyds Banking Group

*"One of the key highlights of my BA career to date!"*

Stuart Peek, Business Analyst,  
Specsavers



# IRM UK

## Enterprise Architecture & Business Process Management Conference

16-19 October 2017, London

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

Philip Ainsworth, Business Architect,  
Student Loans Company

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

Terje Bremnes, Enterprise Architect,  
Helse Vest, Norway

*"IRM EAC is turning into a must attend EA event for the calendar. Excellent value for time and money invested!"*

Amitabh Apte, CTO, Fujitsu

*"Power Boost for the BPM-brain"*

Jasper-Pieter Boon, Aegon  
Netherlands



# IRM UK

## Enterprise Data & Business Intelligence Analytics Conference

20-23 November 2017, London

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

Andy Moore, Process Specialist,  
Information, Rolls-Royce

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

Ana Teresa Szmoes, Caixa Geral de  
Depósitos

*"Excellent event that had great resonance to my role and have learnt concepts that I can use to drive BI&ED projects. Keynotes were very good."*

Neil Lamb, BI Solution Architect, BAE  
Systems

*"Great opportunity to validate my views and to learn from others."*

Garry Manser, Head of Data  
Governance, Visa Europe



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 and Strategy, 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, documentation, refreshment breaks and lunch on each day of the event. The cost of hotel accommodation is not included in the event fee.

2 days	£1,245 + VAT (£249)	£1,494
3 days	£1,595 + VAT (£319)	£1,914
4 days	£1,995 + VAT (£399)	£2,394

### Group Booking Discounts:

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

### Multiple Seminar Discounts:

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

2nd course 10% • 3rd course 15%

4th course 20% • 5th+course 25%

### Public Sector Discounts:

Public Sector Discounts of 15% now available.

Only one discount can be applied at any one time.

## How to Register

e-mail: [customerservice@irmuk.co.uk](mailto:customerservice@irmuk.co.uk)

Website: [www.irmuk.co.uk](http://www.irmuk.co.uk)

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### Booking Reference:

Please quote this booking code when registering:

**WBD**

### 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. IRM UK will not reimburse delegates for any travel or hotel cancellation fees or penalties. It may be necessary, for reasons beyond the control of IRM UK, to change the content, timings, speakers, date and venue of the course.

### Course Timetable:

08.30 – 09.00 Registration

(first day only)

09.00 – 12.30 Course

12.30– 13.30 Lunch

13.30 – 17.00 Course

### Course Venue

Please visit the IRM UK website for venue details. Courses will either be held at:

etc.venues Marble Arch  
Garfield House,  
86 Edgware Rd,  
London W2 2EA

or

etc. venues Farringdon – The Hatton  
51-53 Hatton Garden  
London EC1N 8HN

### Hotel Accommodation Details:

IRM UK in association with JP Events have arranged special discounted hotel rates at hotels nearby. Contact JP Events:

Info@jpetem.com  
Tel: +44 (0)84 5680 1138  
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