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

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### Architecture and Business Change

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IRM UK 2020 Conferences
Booking Form
Business Architecture Best Practices: Practical Methods to Enable Business Change
Roger Burlton

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

Learning Objectives
- Understand what a straightforward and useful Business Architecture looks like
- Learn how to implement the concepts and practices of the BIZBOK
- Define how the business is organized and how it operates in the context of broader business ecosystems (Operating Model)
- Align what investments in resources the business should make (Resources Model)
- Learn to build information, capability and process architecture models and interconnect them through a business performance lens
- Be able to use the architecture to accelerate change projects and deliver breakthrough digital technologies

Course Outline

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

Business Architecture and Related Disciplines
- Zachman, TOGAF
- BIZBOK
- The Business Architecture Landscape

Workshop: What is your Architecture maturity and readiness?

Architecture Scoping and Value Chain Identification
- What company or one Value Chain?
- Intercompany Value Chains?

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

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

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

Framing the Strategy for Business Architecture Consumption
- Building your ‘North Star’; Goals and Objectives
- Establishing Strategic Capabilities and Requirements
- Choosing your Architecture scenario and plan of attack

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

Business Object/Concept Modeling: The Basis for Information, Capability and Process Architecture Models
- Business Objects
- Concept Model
- Business Vocabulary
- Deriving the Information Model

Workshop: What is your Business Object/Concept Model?

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

Workshop: What are your Business Capabilities?

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

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

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

Workshop: Articulating critical Decisions and Business Rules?

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

Workshop: What is your Performance Scorecard?

Alignment of Business Architecture with IT Enablement
- Services, Microservices and APIs
- BPMs (process engines)
- BRMS (rules engines)
- Business Activity Monitoring and Analytics(measurement)
- ERP

Workshop: What is your Enterprise Architecture?

Course Information
- 4-5 Delegates 20%
- 2-3 Delegates 10%
- Group Booking Discount
- 2nd course 10%
- 15-16 October 2020
- 10-12 November 2020
- 22-24 April 2020
- 23-25 March 2020
- 10-12 November 2020
- 15-16 October 2020
- Presenters
  - Roger Burlton, Business Architect, Department for Work and Pensions

Presenters
Roger Burlton is the co-founder of BP Trends 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.

"Great real life experiences that brought the subject to life."
Sheldon Bedwell, Senior Manager
Business Architect, Carnival UK Group

"Brilliant content – took so much away that I will use, very engaging, clear and logical with useful examples. Beyond expectations, the best course I have been on."
Kay Butterworth, Business Architect, Department for Work and Pensions

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Group Booking & Multiple Seminar Discounts Available

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Digital Process Analysis and Design 19-20 March 2020
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4th course 20%
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

Alignment with Human Competencies
- Competence
- Methods, Behavior and Culture
- Structural and Cultural Maturity

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

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

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

Sustaining the Architecture through Governance
- Governance Maturity Checklist
- Architecture Sustainment – CoE Support

Summary
- Lessons Learned

IBA Endorsed Educational 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 PDUs (Professional Development hours) or 24 CDUs (Continuing Development Units) for attending this course.

RM UK
irmuk.co.uk
Digital Process Analysis and Design:
Optimising the Customer Experience through Digital Innovation

Roger Burlton

Overview

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

Learning Objectives

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

Course Outline

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

Examples: Uber, AirBnB and other usual suspects

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

Case study Workshop: Developing your concept model

Understand: Stakeholders, Vision and Scope
- Value Chain and the scope of your included processes
- External Stakeholders classification
- Segmentation and Personalization
- The use of Personas
- Customer needs and value proposition
- Customer experience
- The North Star for your design

Example: Ordering of customized confectionery

Case study Workshop: Analyzing the Stakeholders

Case study Workshop: Defining the North Star

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

Case study Workshop: Analysing the current capability

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

Case study Workshop: Developing the Customer Journey

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

Case study Workshop: Developing the Customer Journey

Digital Inspirations
- Digital Solution Patterns and Benchmarks
- Omni-Channel characteristics
- Mobile characteristics
- RPA (Robotic Process Automation) characteristics
- AI and Cognitive characteristics
- Automating Decisions and Business Rules
- Additional Technology potential

Example: Mortgage Decisioning Redesign

Design the Process and Capabilities
- Small Change vs Substantive change
- Design principles
- Creative workshops to leverage the inspiration
- The new digital process
- Designing measurement and feedback
- Detailed mapping
- The required capabilities and resources

Example: Justice System peer to peer case resolution

Case study Workshop: Developing the digitalized process capabilities and resources

Culture and Behavioural Change
- Developing the competencies: the core skills needed
- Specifying the group behaviour as a set of requirements
- Overcoming internal stakeholder concerns
- Communication: what to say and when
- Sustaining the journey: measuring, monitoring and coaching

Example: Board of Directors Digitalization

Implementation Options
- Digital Base Capabilities
- The role of iPMS, Decision and Rules engines
- Standards and Protocols
- Technical Foundation

Audience

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

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

Special Features

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

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
### Working with Business Processes: Process Change in Agile Timeframes

**Alec Sharp**

### Overview

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

### Learning Objectives

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

### 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

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

- Separating the "what" from the "who, when, where, 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"

### 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

### Workflow Models – the Finer Points

- Guidelines for actors – who or what can and 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
- 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

### 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 creating generative 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

### Business Analysis & Multiple Seminar Discounts

- Advanced Business Process Techniques
  - 20-21 May 2020
- Mastering the Requirements Process
  - 22-24 April 2020
- 10-12 November 2020
- Business Analysis Agility
  - 19-20 May 2020
- Pre-Project Problem Analysis
  - 5-6 March 2020
- 15-16 October 2020

### Presentation

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

Stella Reynard, Business Analyst, Aveva

"An outstanding, engaging lecturer. Very impressive.”

Ian Wells, Business Analyst

"Quite simply the best seminar I have been on. Used techniques I have 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

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**Fee:** £1,295 + VAT

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

**Presenter:** Alec Sharp’s expertise includes business analysis, data modelling, project recovery, facilitation, and, especially, business process change. In addition to his consulting practice, he conducts top-rated workshops and conference presentations on five continents a year. Alec is the author of “Workflow Modelling, second edition” which is widely used as a consulting guide and university textbook.

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**Business Analysts who are responsible for requirements specification or are involved in business process re-design or improvement. Business and Process Architects responsible for establishing frameworks and direction for enterprise processes**

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

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

[irmuk.co.uk](http://irmuk.co.uk)
**Advanced Business Process Techniques**

**Aligning Process Work with Strategic, Organisational and Cultural Factors**

Alec Sharp

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**Overview**

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

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

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

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

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

**Learning Objectives**

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

**Course Outline**

**Communicating about “Business Process” with Executives, Managers, and Individual Contributors**

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

**Discovering Processes and Developing a Process Architecture**

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

**Building Support for Change into Your Business Process Methodology**

- Five techniques to avoid
- Seven specific techniques to build support for process change
- The power of “venting”
- What first, who and how later – abstraction to the essence
- How to build a compelling and blame-free Case for Change that answers why?
- Clarify what you need to be great at – the process’ strategic differentiator
- Understand enablers – the levers of change, and the ones that matter most
- Frameworks for assessing culture and beliefs, and their impact on business processes
- A checklist for ensuring the process is sustainable
- An emerging, feature-based approach to process design
- The lowly procedure and its impact on organisational culture

**Process Modelling for People – Methods to Maximise Stakeholder Engagement**

- Avoiding the common errors in process modelling / process mapping
- “Scope first, detail later” – a fast approach to building a first-cut flow model and then refining it
- Progressive detail in flow models, and the role of scenarios and process instance models
- Conventions for comprehension in process model graphics
- When to stop process mapping and shift to other forms

**Designing an Implementable and Sustainable Business Process**

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

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**Audience**

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

- Business Process Analysts and Designers
- Business Analysts
- BPM professionals
- Business Architects
- Process Architects
- Information Systems Architects

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- 6+ Delegates: 25%

Only one discount can be applied at any one time

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**Fee:** £1,295 + VAT

Group Booking & Multiple Seminar Discounts Available

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**Presenter**

Alec Sharp, a senior consultant with Clariteq Systems Consulting, has deep expertise in a rare combination of fields – business process analysis and redesign, strategy development, application requirements specification, and data modelling. His 35 years of hands-on consulting experience, practical approaches and global reputation in model-driven methods have made him a sought-after resource in locations as diverse as Ireland, Illinois, and India. He is also a popular conference speaker, mixing content and insight with irreverence and humor. Among his many top-rated presentations are "The Lost Art of Conceptual Modelling," "Modelling Failure," "Getting Traction for ‘Process’ – What the Experts Forget," and "Mind the Gap! – Integrating Process, Data, and Requirements Modeling." Alec literally wrote the book on business process improvement, "Process: The Ultimate Guide to Achieving Your Business Improvement Goals" (Wiley). He is also the author of "Workflow Modeling: Tools for Process Improvement and Application Development – second edition." Popular with process improvement professionals, business analysts, and consultants, it is consistently a top-selling title on business process modelling, and is widely used as an MBA textbook. The completely rewritten second edition was published in 2008, and has a "5 star" Amazon.com rating. Alec was also the sole recipient of DAMA's 2010 Professional Achievement Award, a global award for contributions to the Data Management field. Alec’s popular workshops on Working With Business Processes, Data Modelling (Introductory and Advanced) Requirements Modelling (with Use Cases and Business Services), and Essentials of Facilitation and are conducted at many of the world’s best-known organizations. His classes are practical, energetic, and fun, with a most common participant comment being “best course I’ve ever taken.”
Mastering the Requirements Process: Getting Requirements Right
Adrian Reed

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 elicitaton 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 apprenticeships and other elicitation techniques
• Use 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

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
• Exit criteria, 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

Prioritisation of 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 already

Audience
If you want to be involved in delivering the right systems—the ones that get used, then this course is for you. Typical delegates include:
• Business Analyst
• Agile Team Members
• Systems Analyst
• Requirements Manager
• Requirements Engineer
• Project Leader / Manager
• Product or Program manager
• Product Owner
• Consultant

Special Features
• Your instructor is not an “announcer”. He or she is a practicing business analyst who also happens to be an excellent instructor.
• The course is written to show real-world situations and provide real-world solutions. You will be able to relate your own work situation to the course.
• You can discuss your own requirements issues with your instructor.
• You learn that requirements come from understanding the business and its internal processes, and how the business interacts with its external customers.
• The course provides a realistic framework for requirements discovery, not a strict methodology. The framework provides the freedom and encouragement to adapt to your own organizational needs.
• The techniques are applicable regardless of your development method – agile, traditional or anything else.
• The Brown Cow model to give you different and beneficial ways to look at the problem.
• The Volere requirements knowledge model which ensures you collect the right information, and the right amount of it.
• You receive the Volere Requirements Specification Template (downloaded over 20,000 times) with advice on how to make this your own template.

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

Solving the right business problem is absolutely crucial for software and product development. Therefore the emphasis of this course is to show you how to work with your customers in a more agile way to ensure that you—and they—discover the right problem. In short, we show you how the business analyst is crucial to good agile development, and how you become a valued member of the agile team.

Learning Objectives

• Understand and solve your customer’s real business problem
• Be more responsive to your customers and their real work
• Discover the capabilities of your customers and design better solutions for them
• Work in an agile and iterative manner with your customers
• Work in synchronisation with the agile development team
• Communicate more precisely with the developers by writing the right stories

Course Outline

agile Business Analysis
• A framework for discovering the customers and their needs
• Finding solutions and evaluating them
• How business analysis integrates with either agile or traditional development

Do You Know What Your Customers Value?
• Identify and prioritise customer segments
• Understand your customer’s real business problem
• Determine the customer’s value proposition
• Work in an agile and iterative manner with your customers

Are You Solving the Right Problem?
• Generate candidate solutions with your customers
• Safe-to-fail probes to prove candidate solutions
• Determine the viability, suitability and the outcome of a solution
• Ensure the candidate solves the right problem
• Prove you are fulfilling the right need

Investigate the Solution Space
• Inspect the necessary business processes and data
• The solution space includes the people, software and devices to meet the need

• Ensure that everybody understands the business environment

Designing the Solution
• Form the business solution to make it usable and convenient
• Fulfil the desired impact of the business solution
• Utilise the behaviour of the target customer segments

Writing the Right Stories
• An approach to writing the right stories
• Address the real customer problems
• Use story maps to give you a more descriptive and usable backlog
• Story maps as the ideal repository for business analysis information
• Managing the stories needed for the development cycles

Jack Be Nimble, Jack Be Quick
• A review of the course
• How business analysis activites are overlapping and iterative
• How business analysis can be done quickly and effectively

Audience

Business analysis is a skill that should be present in all development efforts, and is usually, but not necessarily, associated with job titles such as:
• Business Analyst
• Product Owner
• Agile Team Member
• Systems Analysts
• Requirements Engineer
• Product or Program Manager
• Business Stakeholders
• Users
• Software Customers
• Testers

Special Features

• Participants receive a copy of Business Analysis Agility – solve the real problem, deliver real value by James Robertson & Suzanne Robertson
• Teaching chapters are reinforced with hands-on workshops
• The course is interactive with lot of opportunity to discuss your issues with the instructor and other participants
• Your instructor has real-world experience and can discuss how you can be most effective doing business analysis in your organisation

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
Pre-Project Problem Analysis: Practical Techniques for Early Business Analysis Engagement

Adrian Reed

5-6 March 2020, London
15-16 October 2020, London
Fee: £1,295 + VAT
Group Booking & Multiple Seminar Discounts Available

Overview
Increasingly, organisations are operating in fast-moving and often volatile business environments. Project teams need to respond quickly to tricky and often ill-defined problem situations, enabling the organisation to adapt and meet the ongoing demands of its customers and environment. In these contexts the pre-project stage is crucial: For our change initiatives to be successful, we need to truly understand the problem we are trying to solve. By understanding the problem we can ensure that any future project activity is built upon a firm foundation, and is heading towards a set of goals that are concise, precise and have been agreed upon. This practical, hands-on workshop, focuses on the problem-solving skills that practitioners need in order to collaboratively explore and describe problems, and to co-create potential options for improvement. These skills are extremely valuable pre-project and early in the project lifecycle, and this course will be of interest to business analysts and other practitioners who help analyse, assess and solve tricky organisational problems.

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

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

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

Understanding the Problem Situation
- Elicitation Techniques: Overview of a range of techniques for eliciting information about a problem situation
- Problem Analysis Techniques: Practical overview of: 5 Whys, Fishbone Diagram, Multiple Cause Diagram, Causal Loops
- External Environment Analysis: Practical overview of STEEPLE technique for analysing the broader business or organisational context
- Perspectives: The importance of understanding that different stakeholders may perceive the problem situation differently
- Defining the Problem: Overview of a typical ‘Problem Statement’, along with a discussion of pros/cons and when it is most useful
- Defining Success: Critical Success Factors (CSFs), Key Performance Indicators (KPIs), Balanced Business Scorecard

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

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

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

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

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

- Business Analysts
- Business Systems Analyst
- Consultants
- Requirements Manager
- Requirements Engineers
- Product Owner

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
Zachman Enterprise Architecture Certification:
Modelling Workshop
John Zachman and Cort Coghill

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

Learning Objectives
• Identify the sense of urgency for aggressively pursuing Enterprise Architecture
• Identify a comprehensive definition (description) of Enterprise Architecture
• Differentiate between Enterprise Architecture from Systems Implementation
• Differentiate an Ontology from Methodology
• Utilizing Enterprise Architecture for operational decision making
• Identify the elements for creating a strategy for reducing “time-to-market” for systems implementations to virtually zero
• Create a strategy for integration beyond jurisdiction (Interoperability)
• Identify architectural principles for meeting enterprise requirements
• Develop traceability across the artifacts for impact analysis and change management
• Employ primitive problem patterns to address complex issues facing any enterprise.

Course Outline
Setting the Context for Enterprise Architecture (EA)
• The contribution of IT People to an Information Age Enterprise
• Global Environment: Escalating Complexity and Escalating 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. Discussions include version 3.0 of the framework and its evolution.:
• Definition of Enterprise Architecture
• The Zachman Framework – Architecture is Architecture Is Architecture
• Ontologies Versus Methodologies
Workshop: Row 1 Models: Defining enterprise scope and developing the enterprise lexicon
Workshop: Row 2: Defining business concepts and business value
Workshop: Row 3: Developing enterprise logic to support technology and implementation decisions.

Enterprise Engineering
• Models from My Bookshelf – 75 years of experience (Implementation, Composite Models)
• The Elegance of Primitives (Their essential contribution)
• Enterprise Entropy – Removing Internal Cost of Operations
• Enterprise Engineering Design Objectives
• Alignment, Integration, Reusability, Flexibility, Interoperability
• Reducing Cycle Time from Order to Implementations (Mass-Customization)
• Implementation Practicalities
• “Federated Architecture” (Integrating Beyond Jurisdictional Boundaries)
• Migrating from Legacy to Architecture
Workshop: Using Primitives to create horizontal Integration and Vertical Transformation
Case Study: Application Rationalization Using Primitives
Workshop: Identify Framework Cells for Given Enterprise Problem Definitions
Workshop: Using Primitives to solve for enterprise entropy

Audience
• CIOs
• Enterprise Architects
• Chief Architects
• Business Architects
• IT Architects
• Process Architects
• Application Architects
• Solution Architects
• Software Architects
• Technology Architects
• Data Architects
• Business Analysts
• System Analysts
• IT Strategists
• Business Strategists
• Strategic Planners
• Program Managers
• Information Systems Management
• Business Process Managers
• Data, Applications, Technology-Management Consultants

This course is available as a public course (face to face) or via live streaming
In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
Overview

Is your organization planning, initiating or undergoing a digital transformation initiative? Then you know how important architecture and technology is to building a sustainable foundation. Yet so much has changed in the past 2 or 3 years that it’s hard to know what that should look like anymore. The environment is now part of a larger business ecosystem. Scale, speed, and scope are greatly expanded. AI and cognitive technologies are everywhere. Business architecture is different. Information and data architecture are different. Application architecture is different. Technology architecture is different. Security architecture is different. And, how they all fit together is different too. This workshop answers two key questions:
1. What does architecture for a digital transformation platform look like?
2. How can you keep up to speed on all the changes that implies?

This workshop briefly explores the requirements for the new digital economy, and then describes the new “Digital Business Platform” necessary to meet those requirements and sustain success. Continuing from there, it lays out the overall architecture needed to create that platform and goes into detail about the new business, information, application, technology, performance, and security architectures that comprise it. A detailed case study is woven throughout the workshop to illustrate the platform, architectural tradeoffs, and a wide variety of work products across all domains. Interactive exercises will give attendees an opportunity to use the new techniques in real time.

Learning Objectives

• How the Digital Economy requires a new platform and architecture
• The overall architecture for the “Digital Business Platform”
• How to use business architecture to evaluate and plan digital transformation opportunities and options and shape the platform requirements
• The new information and data architecture to support an intelligent core and the ‘sense, compute, act’ paradigm and typical usage patterns that drive tradeoffs.
• Performance architecture for providing real time reporting on key enterprise business outcomes
• Application architecture in the era of microservices, containers, APIs, Daas, FaaS, PaaS.
• Cloud and hybrid technology architectures for a sustainable, scalable, reliable, flexible business platform
• Security architecture to ensure Digital Trust, including Intelligence AI, and SECaaS.

Course Outline

What is Digital Transformation?
• Digital Transformation defined
• Dimensions of transformation
  • Business Model, Operating Model, Information, Technology

The new Digital Business Platform
• Intelligent core, Integration, Development, Engagement

Architecting the new Digital Business Platform
• The new architecture framework
• 5 S’s of architecture transformation
• Sense, Compute, Act: The new paradigm

Value Proposition
• Canvas
• Identifying Customer, Pain and Gain
• Products and Services
• Workshop

Business Models
• Digital Business Models
• Business Model Canvas
• Evaluating Opportunities
• Workshop

Operating Models
• Digital Operating Models
• Operating Model Canvas

Workshop
• Business Architecture
  • BA overview
  • Articulating strategies
  • Value Stream workshop
  • Capability framework
  • Capability workshop

Retail Case Study

Audience

Attendees should have an understanding of Enterprise Architecture and a familiarity with a variety of architectural model and deliverables. Typical delegates include:

• Enterprise Architects
• Business Leaders
• CIOs, CTOs, IT Executives
• IT Architects
• Application Architects
• Business Analysts

• Strategic Planners
• Business Leaders
• IT Executives
• Anyone else concerned with designing and sustaining an agile digital transformation

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
Overview
Is your organization planning to, or already underway with Agile development and / or DevOps? Does it seem like an excuse not to do architecture, analysis or design?. At a project level, you’re building things faster, but at an enterprise level, you don’t know if you’re building the right things, or instead, just going faster at creating redundancy and inconsistency. While speed is important, it is the right things at the right speed -- the “speed of business change” -- that is critical to success in the new digital economy. And, while DevOps is a critical component of any business or digital transformation initiative, it is not incompatible with, in fact it is better with, architecture and design.

BizOps extends the continuous feedback, faster cycle time, and tighter integration atmosphere, mindset, and process of Lean, Agile, and DevOps, “development-to-operations” upstream to include “business-to-development-to-operations” creating alignment with strategy while ensuring flexibility and agility. This includes a business driven “intentional architecture” and common vision that enable innovation, rapid change and emergent business design.

This workshop will mix presentations and simulation planning exercises to answer three key questions:
1. How does BizOps improve delivery and speed of business change?
2. How can you successfully integrate business and enterprise architecture into your DevOps and Agile environments?
3. How do architecture, analysis, design, and development activities change to take advantage of the best of both worlds?

Learning Objectives
- What is BizOps
- How to scale DevOps
- What are the core principles of Agile and Lean that must be scaled
- How architecture and Agile practices complement each other
- How to create an "intentional architecture" using DevOps
- How to extend DevOps to BizOps using business architecture and analysis
- How to fit architecture and analysis into a CD/CI and test-driven environment
- The new role of architects and business analysts

Course Outline

What are BizOps and DevOps?
- Agile and Lean Principles
  - Shorter cycles, continuous feedback, smaller batches, lower transaction cost, faster cycle time, test driven, tighter integration...
- Scaled Agile Approaches
  - SAFe
  - Scaled Agile

Architecture, Analysis and Design in the world of DevOps
- Opportunities
- Benefits
- Challenges

Business Architect and Analysis helps Agile Scale
- Extending SAFe roles
- Business architecture and the portfolio Kanban
- Value Streams influence backlogs and priorities
- Business Capabilities influence Features
- Intentional architecture and Enablers
- Portfolio concerns

Workshop Part I: Architecture and Analysis at the Portfolio Level

Creating an 'Intentional Architecture'
- Architectural enablers
- Shared vision
- Individual responsibility
- Clarity and competence

Workshop Part II: Architecture and Analysis at the Program Level

Fitting Architecture into Scrum
- Creating 'enabling' stories
- Managing the backlog
- Defining 'done'
- Daily standup
- Test-driven architecture

Workshop Part III: Architecture and Analysis at the Team Level

Architecture and Testing
- Test-driven development
- Automated testing
- Continuous Integration

Getting Architects and Analysts to "Think Agile"

New Roles and Responsibilities
- Architects
- Analysts
- Agile / DevOps leaders
- Developers

Conclusions

Audience

Audience Skill Addressed: All levels. Attendees will gain an understanding of how all the different techniques fit together. Attendees with exposure to Agile and DevOps will be able to quickly apply the learnings to their organizations.

- Enterprise Architects
- Business Architects
- IT Architects
- Application Architects
- IT Managers
- Agile Leaders and Developers
- Business Analysts
- Participants in DevOps
Overview

Old masterpieces, such as BI and DW, are the foundation for a digital business but only table stakes for survival. Data lakes, predictive analytics, social media, and the Internet of Things are but stepping stones to the digital future; as they stand, they won’t guarantee a thriving transformation. We need a new IT architecture that reimagines all decision making and action taking across all the people, processes, and information of the coming digital era. An architecture that incorporates all the technological advances in databases, NoSQL stores, data integration and delivery, as well as the old challenges of operational BI, spreadsheets, metadata, virtualisation, collaboration, and more. That promises a comprehensive structure for information and process integration—with speed and consistency—across the entire enterprise.

Building on modern tools and techniques, from object stores to cognitive computing, from algorithms to neuroscience, from on-premises to hybrid cloud. Building on thirty years of data warehousing experience and expanding from his comprehensive and well-respected “Business unIntelligence” architecture to include a host of emerging topics, from smart things to neural networks, Dr. Barry Devlin charts a creative but realistic path from data warehouses and lakes, BI and analytics, to show how to design and build a digital business from the existing systems running your enterprise today. With the clear and enormous impact of digital transformation, now is the time to start building the skills, organisation and infrastructure in architecture, technology and planning to build out your BI environment with AI and other emerging techniques to create a successful digital business.

Learning Objectives

- The meaning and implications of digital business
- Drivers, structure and components of digital business architecture including:
  - The Business unIntelligence conceptual and logical architectures
  - Data and information—the foundation for everything
  - Formal and informal business processes—getting from information to action
  - Data collection, preparation, integration, and use in a digital business
  - Business context and meaning in information use
  - People—action-oriented decision making and engaging innovation
  - Technical foundations of information processing, traditional and emerging
  - Database and data management technologies
  - Data virtualization and preparation processes to integration across warehouses and lakes
- BI tools, analytics and algorithms in support of decision making
- A dive into artificial intelligence and cognitive computing:
  - A brief history and explanation of AI evolution, key concepts, and terminology
  - Understanding how IoT and social media enable AI as the new driver of business value
  - Approaches to applying AI to decisions and actions:
    - Augmentation vs. automation
    - Technology needed to build business applications and manage AI data for AI
  - Planning and implementation—practical steps for building a digital business
- Ethical, economic, and social considerations for your business and society

Course Outline

Digital Business—History and Emergence
- A brief history of decision-making support—from BI to AI
- Origins and meaning of digital business
- Rationales pro and con digital business

The Why and How of a New Architecture
- The emergence and impact of big data, the Internet of Things and artificial intelligence
- New, future-proof hypotheses for a new architecture
- A new approach beyond laying—Information, Process, and People
- The pillars of a new architecture that supports multiple storage technologies

The Information Resource—the Foundation for Everything
- New classes of information and data—human-sourced and machine-generated—and how they interact with the traditional data and information
- Big data and data lakes—hype and reality, sources and types, business and IT implications
- Key considerations—timeliness/consistency/structure/context, and reliance/usage
- New conceptual and logical architectures for all information and data
- Metadata as information—sources and stores, tools and techniques, data modelling
- Relational database evolution—structures, software and hardware
- NoSQL and NewSQL data stores, object stores, and more
- What’s happening to Hadoop?

Artificial Intelligence—History and Foundations
- A brief history and directions of AI
- Overview of artificial neural networks and other techniques
- Directions for development and use

The Processes—Getting from Data/Information to Decisions and Actions
- Data preparation, ETL, data warehouse automation, wrangling, and data virtualisation
- The new role of users in “application development”
- Understanding adaptive, closed-loop business processes
- Service Oriented Architecture and Microservices
- A model for decision making and action taking—the adaptive decision loop
- How pervasive mobile connectivity, processing and storage combine with the Cloud to reinvent business processes

Managing and Governing Data in an AI-Flavoured World
- Data sources for AI use
- Data information preparation and governance from external sources
- Conflicting and overlapping data, erroneous data
- The role and importance of context in gathering, preparing and using data for AI
- Governance, privacy and other ethical issues

The People—Understanding Needs and Engaging Innovation
- Motivation and the workings of the human mind in business
- Clases of BI—information-centric, process-centric and collaborative
- BI, analytic and other decision support tools
- Decision-making and action-taking in a closed-loop, real-time environment
- Beyond rational choice theory and the role of emotions and social behaviour in decisions

Applying AI to Decision Making
- AI in information use and decision making / action taking
- Operational, tactical and strategic decision-making considerations
- Automation vs. augmentation—the importance of understanding the difference
- Centralisation vs distributed processing
- Model management

Planning and Implementation
- Evolution—not revolution
- The Staged Implementation Roadmap
- Organisational considerations; changes in IT culture and responsibility
- Selectable possible first migration steps

Building the Digital Business—Overarching Considerations
- Ethical considerations for data-based analytics and AI in business
- Environmental and organisational concerns for society
- The impact of AI on the economy and employment
- Avoiding societal breakdown

Audience

- Enterprise, Systems, Solutions and Data Warehouse Architects
- Systems, Strategy and BI/Analytics Managers
- Data Warehouse/Lake and Systems Designers and Developers
- Data and Database Administrators
- Tech-savvy Business Analysts
Overview
This course looks at the challenges faced by companies trying to deal with an exploding number of data sources, collecting data in multiple data stores (cloud and on-premises), multiple analytical systems and at the requirements to be able to define, govern, manage, unify, and make trusted data products and high computing. It also explores a new approach to organising your data in a logical data lake and how IT data architects, business users and IT developers can work together to build ready-made trusted data products that can be published in a data marketplace available to others to consume and use to drive value. This new Data lake approach to unifying data includes data cleaning, tagging and publishing data in an information catalog. It also involves refining raw data to produce trusted ‘data products’ available as a service that can be published in a data marketplace (catalog) available for consumption across your company.

Learning Objectives
- How to define a strategy for producing trusted data as a-service in a distributed environment of multiple data stores and data sources
- How to organise data in a centralised or distributed data environment to overcome complexity and chaos
- How to design, build, manage and operate a logical or centralised data lake within their organisation
- The critical importance of an information catalog in understanding what data is available as a service
- How data standardisation and business glossaries can help make sure data is understood
- An operating model for effective distributed information governance
- What technologies and implementation methodologies they need to get their data under control and produce ready-made trusted data products

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

Information Production Methodologies
- Information production and information consumption
- A best practice step-by-step methodology for trusted data governance
- Why the methodology has to change for semi-structured and unstructured data
- Methodologies for structured Vs multi-structured data

Data Standardisation, the Business Glossary and the Information Catalog
- Semantic data standardisation using a shared business vocabulary within an information catalog
- The role of a common vocabulary in MDM, RDMS, SOA, DW and data virtualisation
- The common vocabulary relevant in a data lake, data marketplace and a Logical Data Warehouse
- Approaches to creating a common vocabulary
- Business glossary products storing common business definitions
- Alterix Connect Glossary, ASC, Collibra, Integrated Informatica
- IBM Information Governance Catalog, Microsoft Azure Data Catalog
- Business Glossary, SAP Information Steward Metaplexia, SAS Business Data

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

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

The Data Refinery Process
- What is a data refinery?
- Key requirements for refining data
- The need for multiple execution engines to run in multiple environments
- Options for refining data – ETL versus self-service data preparation
- Key approaches to scalable ETL data preparation using Apache Spark
- Self-service data preparation tools for Spark and Hadoop, e.g. Alteryx Designer, Informatica Information Catalog, Data Lake, IBM BigInsight, Pentaho, Tableau Prep, Talend, Trifacta
- Automated data profiling using analytics in data preparation tools
- Executing data refinery jobs in a logical data lake and using Apache Beam to run anywhere
- Approaches to integrating IT ETL and self-service data preparation tools
- ODP Egeria for metadata appliances
- Joined up analytical processing from ETL to analytical pipelines
- Publishing data and data integration jobs to the information catalog
- Mapping produced data products into your business vocabulary
- Data provisioning – publishing trusted ready-made data products as an Enterprise Data Marketplace
- The Enterprise Data Marketplace – enabling information consumers to shop for data
- Provisioning trusted data using data virtualisation, a logical data warehouse and on-demand information services
- Consistent data management across cloud and on-premises
- Fuelling rapid ‘last mile’ analytical development to reduce time to value

Unified Big Data, Master Data and Data Warehouse Data to Drive Business Value
- A walk through of end-to-end data lake operation to create a Single Customer View
- Types of big data & small data needed for single customer view and the challenge of bringing it together
- Connecting to Big Data sources, e.g. web logs, clickstream, sensor data, unstructured and semi-structured content
- Integrating 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
- Governing data in a Data Science environment

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

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
Information Management Fundamentals
(with optional CDMP Professional Certification)

Chris Bradley

Overview

This course provides a solid foundation of the different information disciplines across the complete Information Management spectrum. By attending the course, delegates will get a firm grounding of the core Information Management concepts that illustrate their practical application with real examples of how they are applied. Additionally, this course highlights the key curriculum items for students wishing to take the Industry professional certification the DAMA Certified Data Management Professional (CDMP). At the end of day 3 of the course, students will optionally have the opportunity to take the CDMP examination. Full details of the CDMP examinations, levels and costs are available at https://cdmp.info/.

Learning Objectives

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

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

Course Outline

Introduction to Data Management, DMBoK & overview of the CDMP certification path.
- What is Data Management, the drivers if it goes wrong
- What is the DMBoK, its intended purpose and audience of the DMBoK
- What are the disciplines of Data Management in the DMBoK
- Overview of the DAMA CDMP professional certification, what are the levels and how can you progress from one level to the next.

Data Governance
- What is Data Governance?
- Why Data Governance is at the heart of successful Information Management.
- A typical Data Governance reference model.
- Data Governance roles & responsibilities. Organisation structures & type of Operating models to support Data Governance.
- Principles for Data Governance
- The role of the Data Governance Office (DGO) & its relationship with the PMO.
- How to get started with Data Governance.

Data Quality Management
- What is Data Quality?
- The different facets of Data Quality, and why “Validity” is often confused with “Quality”
- The different dimensions of Data Quality.
- The policies, procedures, metrics, technology and resources for ensuring Data Quality is measured and ultimately continually improved.
- A Data Quality reference model & how to apply it.
- Root cause analysis & 5-whys
- Capabilities & functionality of tools to support Data Quality management.
- Data Quality measures – guidelines for their creation & monitoring.

Master & Reference Data Management
- The differences between Reference & Master Data.
- Identification and management of Master Data across the enterprise.
- 4 generic Master Data Management architectures & their suitability in different cases.
- The different genres of Master Data Management solutions & pitfalls to avoid
- Different approaches for Master Data Management implementation.
- The essential relationship between Master Data Management, Data Quality, and Data Governance
- The under looked but critical aspect of Reference Data Management.

Data Warehousing & BI Management
- What is a Data Warehouse & why are they used.
- Provision of Business Intelligence (BI) to the enterprise and the way data consumed by BI solutions and the resulting reports are managed. Particularly important if the data is replicated into a Data Warehouse.
- The major DW architectures (Inmon & Kimball)
- Introduction to Dimensional Data Modelling
- Overview of slowly changing dimensions and why they are required

Data Modelling
- What are Data Models & why do we need them.
- What are the different types of Data Models & their use and how they interrelate.
- The development, and exploitation of data models, ranging from Enterprise, through Conceptual to Logical, Physical and Dimensional.
- Data modelling & Big Data - why data modelling is NOT just about Relational Database design
- The use of data models in Data Governance, and Data Quality Management.

Metadata Management
- What is (and isn’t) Metadata
- The provision of metadata repositories and the means of providing business user access and glossaries from these
- Different types of Metadata & their uses
- Where is metadata found – the different styles and types of Metadata
- What metadata do we need to manage Metadata & Business Glossaries. What’s the connection?

Data Integration & Interoperability
- Data Integration & Data Interoperability - What’s the difference?
- What are the business (and technology) issues that Data Integration is seeking to address?
- The different styles of Data Integration & Interoperability, their applicability and implications.
- The approaches, plans, considerations and guidelines for provision of Data Integration and access
- Consideration of Data integration & interoperability approaches including: P2P, ETL, ELT, CDC, Hub & Spoke, Services Oriented Architecture (SOA). Data Virtualization, and an assessment of their suitability in different cases.

Data Architecture & Data Lifecycle Management
- Types of Enterprise Architectures
- Proactive planning for the management of Data across its entire lifecycle from inception through, acquisition, provisioning, exploitation eventually to destruction.
- Considerations for Data across the value chain
- Differences between Data Lifecycle & a Systems Development LifeCycle (SDLC).

Data Risk Management, Security, Privacy & Regulatory compliance
- Identification of threats and the adoption of defences to prevent unauthorized access, use or loss of data and particularly abuse of personal data.
- Exploration of threat categories, defence mechanisms, approaches, and implications of security & privacy breaches.

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

Records & Content Management
- Why document & records management is important
- The records management lifecycle

Audience

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

In-House Training: This course is available on-site. E-mail customerservice@irmuk.co.uk with your enquiries.
Overview
With data being at the forefront of ALL business, the need for organisations to produce a wide-ranging Data Strategy is greater than ever, with both the increase in data regulations and the focus on data driven business outcomes. Yet, creating an enterprise wide data strategy and the governance to support it can be a formidable task. Often it is difficult to know where to begin, and how best to prioritise efforts due to the large number of stakeholders and many competing initiatives. Data is at the heart of all organizations, almost like blood flowing through its arteries and veins. However, all too often Information is not professionally managed with the rigour and discipline that it demands. Nonetheless the implications of poorly managed information can be catastrophic, from legal and regulatory sanctions ultimately to business collapse. Professor Joe Peppard (European School of Management, Cranfield) summed it up when he said: “The very existence of an organisation can be threatened by poor data”. This 2-day course will provide concrete practical approaches to get you started on your Data Strategy, the typical contents of a Data Strategy, and the ways in which your supporting Data Governance framework can be organised.

Learning Objectives
Level set understanding & terminology:
• Understand the key components that comprise a Data Strategy.
• Learn how to create a case for obtaining business buy-in for a data strategy.
• Understand the different types of Data Strategy and how to set the scope for it.
• Learn how to create metrics for tracking the progress of your data strategy.
• Learn about the need for and the application of Data Asset management and Governance for different categories of challenges
• Understand why a Business focused Data Governance framework must be aligned with your emerging data strategy.
• Appreciate the critical role that Data Governance plays in core Information disciplines including Master Data Management and Data Quality management, and why this should be recognised in your Data Strategy.

Pragmatic Learning:
• Discover the different types of data strategies and which is most appropriate and practical for you.
• Learn the different motivations for Data Asset management and Governance and how best to implement DG approaches
• Develop a set of usable techniques that can be applied to a range of information management challenges
• Learn the best practices for managing Enterprise Information needs
• Learn how to create an actionable road map to implement your data strategy.
• Understand how to identify the additional activities that are necessary to support the data strategy.

Course Outline
Components of a Data Strategy
• Where do I Start & What is the Scope of the Data Strategy?
• Building Blocks of a Data Strategy & Architecture
Establishing Goals & Gaining Buy-In
• Motivation and Drivers
• Internal Factors
• External factors
Data Management Maturity Assessment
• Data Management Maturity Assessment of the Disciplines of Data Management.
• Maturity for Organisational Enablers of Information Management
  • People
  • Executive Sponsorship/Policy
  • Technology
  • Compliance
  • Measurement
Data Management Processes / Practice
Data Governance: Managing people, Organisation & Process
  • Governance
  • organisational structure for data governance
  • Charters or terms of reference for steering group(s) and the recommended constitution of each group.
  • Sponsorship.
  • Roles & Responsibilities & People Capabilities
  • The essential Data Governance roles
  • Capabilities for core Data Management roles may be covered in a strategy
  • Data Management Process
  • A Data strategy should tie in the Change Management Process, and
Audience
• Data Strategists
• Data Governance Managers
• Data Quality Managers
• Data Architects
• MDM Managers
• Information Architects
• Business Intelligence & Data Warehouse Developers & Architects
• Enterprise Architects
• Solution Architects
• Application Architects

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

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

Defining an Actionable Roadmap
• Success Metrics
• From the Principles and Minimum standards, quantifiable success metrics can be developed. Examples will be used to illustrate this.
• Priorities & Quick Wins
• Business initiatives and priorities that are used in the formulation of the roadmap and transition steps. In particular, the transition steps will be aligned with business initiatives.
• Roadmap, Dependencies and Transition Steps
• Roadmap of the recommended activities to move the data initiative forward.
• The overall roadmap must make it clear that there will be dependencies with some activities, for example to undertake XYZ Master Data Management, a minimum viable Data Governance process and responsibilities must be established for area XYZ.
• The overall “Roadmap” is made up of Transition steps which can be bundled into Transition projects. The key consideration here is that the most successful transitions are where they are aligned with business initiatives and are not simply ‘data projects’.
• Culture, Communication, Sustainability & Education
• Development of a communication plan regarding the data strategy. The communication plan needs to have at least: Audience, Message, Method, Frequency.
• Development of an education plan to raise Data Management competencies across the organisation & ensure the sustainability of the strategy.
• Funding Model
• Recommendations on funding approach for Data initiatives.

Additional Activities to Support the Strategy
• Identify Candidates for Roles
• Determine Data Owners & Stewards
• Assess Current Roles and Skills, Perform Gap Analysis
• Identify Training Required to Address Gaps
• Brief and Mentor Data Owners
• Define Data Subject Areas & Develop Conceptual Data Models
• Determine & Prioritise Business Areas for Data Governance Rollout

Add your comments or questions here.

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

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2-3 April 2020
18-19 November 2020
Data Modelling Essentials
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Mastering Data Modelling Techniques
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Only one discount can be applied at any one time

Presenters
Christopher Bradley has spent 39 years in the forefront of the Information Management field, working for International organisations in Information Management, Strategy, Data Governance, Data Quality, Information Assurance, Master Data Management, Metadata Management, Data Warehousing and Business Intelligence. Chris is an Information Strategist and a recognised thought leader. He advises clients including, Alinma Bank, American Express, ANZ, British Gas, Bank of England, BP, Celgene, Cigna Insurance, EDP, Emirates NBD, Enterprise Oil, ExxonMobil, GSK, HSBC, NAB, National Grid, Riyad Bank, SABB, SAM, Saudi NIC, Saudi Aramco, Shell, StatOil, and TOTAL. He is VP of Professional Development for DAMA International, the inaugural Fellow of DAMA CDMP past president of DAMA UK. He is an author of the DMBoK 2 and author and examiner for professional certifications. In 2016 Chris received the lifetime achievement award from DAMA International for exceptional services to furthering Data Management education & to the International Data Management community. Chris guides Global organisations on Information Strategy, Data Governance, Information Management best practice and how organisations can genuinely manage Information as a critical corporate asset. Frequently he is engaged to evangelise the Information Management and Data Governance message to Executive management, introduce data governance and new business processes for Information Management and to deliver training and mentoring. Chris is Director of the E&P standards committee “DMBoard” , sits on several International Data Standards committees, teaches at several Master’s Degree University Classes Internationally. He authored “Data Modelling for the Business”, is a primer author of DMBoK 2.0, a member of the Meta Data Professionals Organisation (MPO) and a holder at “Fellow” level of CDMP and examiner for several professional certifications.

New!
Data Modelling Essentials

Chris Bradley

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Only one discount can be applied at any one time

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

Learning Objectives
This course explains the essential data modelling building blocks. It will help students to understand the differences between relational and dimensional models, and between the different levels of Conceptual, Logical and Physical models. On completion they will be able to:
- Describe the purpose of, Conceptual, Logical, and Physical data models
- Create a Conceptual and a Logical Data model
- Read and interpret a data model
- Understand different approaches for fact finding and how to apply normalisation techniques
- Understand how to validate a data model.

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

Level Set Understanding & Terminology:
- Learn about the need for and application of Data Models
- See the areas where Data modelling adds value to Data Management activities
- Understand the critical role of Data models in Master Data Management and Data Governance.

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

Presenter
Chris Bradley has spent 37 years in the forefront of the Information Management field, working for international organisations in Information Management Strategy, Data Governance, Data Quality, Information Assurance, Master Data Management, Metadata Management, Data Warehouse and Business Intelligence. He advises clients including National Grid, EDP, BP, Enterprise Oil, Saudi Aramco, Shell, StatOil, TOTAL, Qatari Gas, Alba Leasing, Alinma Bank, American Express, ANZ, Bank of England, Céline, Cigna Insurance, Emirates NBD, GSK, HSBC, NAB, SABB and Riyad Bank. Chris is Director of the E&P standards committee “DMBoard”, an author of several books including “Data Modelling for the Business” and “DMBoK 2.0”, a member of the Meta Data Professionals Organisation (MPO) a Fellow of BCS and DAMA CDMP, recipient of the DAMA Lifetime Achievement Award for Data Management Excellence, and author of significant parts of professional certifications. Chris is an acknowledged thought leader in Data Modelling and Data Governance, author of several papers and books including “Data Modelling for the Business”.

Course Outline

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

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

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

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

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

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

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

Audience
Practitioners who will need to read, consume or create data models to gain a better understanding of data during Information Management initiatives including:
- Business Intelligence & Data Warehouse Developers & Architects
- Data Modellers
- Data Architects
- Data Analysts
- Enterprise Architects
- Solution Architects
- Application Architects
- Information Architects
- Business Analysts
- Developers
- Database Administrators
- Project / Programme Managers
- IT Consultants
- Data Governance Managers
- Data Quality Managers
- Information Quality Practitioners

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

Overview

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

Learning Objectives

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

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

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

Course Outline

Data Modelling Recap
- Data modelling basics
- Major constructs
- Identifying entities
- Data model types, and the linkage between them

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

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

Data Modelling for Big Data & NoSQL
- What has to change when we are developing data models for a Hadoop or other Big Data environment?
- Do modelling tools support Big Data technologies, what are the restrictions and considerations?
- What data modelling techniques are applicable when targeting a Big Data platform?
- Does normalisation still have a place in the Big Data world?
- Where’s our metadata in the model now?
- In the age of big data, popular data modelling tools (eg ER/Studio, ERWin, PowerDesigner) continue to help us analyse and understand our data architectures by applying hybrid data modelling concepts. Instead of creating pure a relational data model, we now can embed NoSQL sub-models within a relational data model. In general, data size and performance bottlenecks are the factors that help us decide which data goes to the NoSQL system.
- Key Value Pairs: A common misconception is that using data structures like JavaScript Object Notation (JSON) prevents us from needing a data model; THIS IS WRONG. We’ll show several examples & conclude that a set of JSON files can be just as complicated as a 100 table 3rd Normal Form data model.
- NoSQL & Hadoop: How the 4 types of NoSQL databases still need data models, and how the ACID vs BASE paradigm affects this.

Modelling for Hierarchic Systems & XML
- What must change when developing data models for XML & Hierarchic systems?

Services Oriented Architecture (SOA)
- Why data models are essential for success.

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

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

Application Packages & Data Models
- Do we need to develop data models when implementing a COTS package?
- Uses and benefits.

Using Data Models for Data Integration & Lineage
- How to exploit data models for design of data integration approaches and in data lineage.

Top Down Requirements Capture
- When is it appropriate
- What are the limitations.

Bottom Up Requirements Synthesis
- When this works, where is it inappropriate.
- How do we cope with existing DBMS’s and systems.

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

Checking the Data vs the MetaData: Why Does it Matter?

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

Different Data Modelling Notations & a Comparison Between Them

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

Audience

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

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1-3 June 2020
Design and Build a Data Driven Digital Business
1-3 June 2020

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

10% 15% 20% 25%

Group Booking Discount

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

Presenter

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

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Overview

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

• What is Data Governance?
• Why is it increasingly a ‘must have’ for organisations
• Building the internal case for Data Governance
• How and where do you start to introduce Data Governance
• What are the main components of a successful Data Governance initiative
• How can you revitalise or recover a faltering Data Governance programme
• Creating the Data Governance roadmap

Learning Objectives

• Understand what Data Governance is, and what it isn’t
• Assess the readiness of your organisation for Data Governance
• Be able to align a Data Governance proposal and initiative with your key organisational & departmental drivers

Course Outline

Scene Setting & Introductions
• Scope & objectives of the seminar
• Seminar agenda & attendee expectations
• Introduction to the case study

Data Governance Context & Drivers
• The overall data landscape
• Some recent data disasters & horrors
• Current & future data challenges
• The overall industry impact of poor data
• A call for action

Data Governance – An Industry Assessment
• Data Governance - definitions and focus
• How successful has Data Governance been?
• Why Data Governance can fail
• Key components of success – breaking down the barriers

The Components of Successful Data Governance
• The DAMA DMBOK wheel – the centrality of Data Governance
• The Data Governance Framework explained:
  • Vision & Strategy
  • Organisation & People
  • Processes & Workflows
  • Data Management & Measures
  • Culture & Communications
  • Tools & Technology
• Applying the Data Governance Framework

Establishing a Starting Point – Data Governance Readiness
• Plotting the journey – Data Governance maturity
• Implications of the maturity assessment
• Case study exercise 1 – context and maturity assessment

Building the Data Governance Strategy
• Vision & Strategy
  • Creating a clear Data Governance vision
  • Understanding business drivers
  • Identifying key data challenges
• Producing a Motivation Model
  • Building a business case for Data Governance
• Case study exercise 2 – Creating a Motivation Model
• Organisation & People
  • Organising for Data Governance – industry model structures
  • The pros & cons of each model
  • Required teams, roles & skills
  • Deciding on the right model for any specific organisation
• Case study exercise 3 – Designing a Data Governance organisation
• Processes & Workflows
  • Data Governance & business processes & design & operation
  • Analysing business processes – Lean approaches
• Designing Data Governance processes & workflows
• Data Governance processes explained
• Case study exercise 4 – Business process analysis & Data Governance processes and workflows
• Data Management & Measures
  • The importance of measurement in Data Governance
  • What to measure & how to measure it – the importance of data definition
  • Establishing baselines and improvement targets
• Data Improvement Projects
• Tracking and sustaining the benefits

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Only one discount can be applied at any one time.

Presenter
Nigel Turner is Principal Information Management Consultant for EMEA at Global Data Strategy Ltd. and Vice-Chair of the Data Management Association of the UK. Nigel has worked in Information Management for over 25 years, both as an in-house implementer of Information Management solutions at British Telecommunications plc and subsequently as an external consultant to more than 150 clients, including the Environment Agency, British Gas, HSBC, Intel US and others.

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

• Heads of Data Governance & their teams
• Chief Data Officers & their teams
• Data Stewards
• Data Owners
• Information Strategists & Architects

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

Danette McGilvray

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 investments in business processes and systems. The Ten Steps to Data Quality course teaches a practical approach to creating, improving, and managing the quality of information critical to providing products and services, satisfying customers, and achieving goals for any type of organization. If you are working on real data quality-related issues that need real results, this is the course for you. What is learned applies to all kinds of data and every type of organization—for-profit businesses of all sizes, education, government, healthcare, and nonprofit—because all depend on trusted information to succeed. Both concepts and practical application are included. Concepts provide a foundation for understanding data quality. Concepts are put into action through the Ten Steps™ process. Both are needed to apply the methodology appropriately to the many data quality related situations that attendees will face within their organizations. In addition to discussion and exercises (individual and as a group), attendees will practice what is learned by applying the steps and techniques to a course project of their choice. Come with your particular need in mind, be ready to participate, practice applying what is learned to your situation and leave with realistic methods for managing data quality.

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, (for example, the Framework for Information Quality, information life cycle, data quality dimensions, business impact techniques, root cause analysis)
- Choose the appropriate steps/activities from the Ten Steps™ process to address business needs
- See how other data management topics such as data governance, data modeling, metadata, business rules, master data, reference data, and data standards fit into the process for ensuring high quality data
- Design the data capture and assessment plan

Course Outline

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

Key Concepts – A Necessary Foundation for Understanding Information Quality
- Framework for Information Quality (FIQ) – Components that impact information quality:
  - Business Needs - Goals, Strategies, Issues, Opportunities
  - Information Life Cycle (PUSHAD - Plan, Obtain, Store, 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, Constraints, Responsibility, Improvement and Prevention, Structure and Meaning, Communication, Change)
- The relationship between Data Governance, Stewardship, and Data Quality

Step-by-Step: The Ten Steps™ Process
- Each of the Ten Steps is covered in the seminar with instructions, techniques, examples, templates and best practices.
- Data quality tools will also be discussed in the applicable steps.
- Exercises and working on a course project with small teams give attendees the opportunity to practice what is learned.

Step 1 Determine Business Need and Approach
- Define and agree on the issue, the opportunity, or the goal to guide all work done throughout the project.
- Refer to the business need throughout the other steps in order to keep the goal(s) 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

Step 3 Assess Data Quality
- Evaluate data quality for the data quality dimensions applicable to the issue
- Results of assessments provide a basis for future steps, such as identifying root causes and determining needed improvements and data corrections
- Overview of all the dimensions of data quality and how to choose which dimensions will best support business needs

Step 4 Assess Business Impact
- Determine the impact of poor-quality data on the business using a variety of quantitative and qualitative techniques.
- 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 so important that it is part of every step in their business depends
- Managers and project managers of individual contributors and team members. They need to understand what is involved in addressing data quality because they hire resources, assign people’s time, provide support, and remove roadblocks to data quality work.
- Users of data whose work has been affected by poor data quality and want to find solutions for those problems.

Audience

Individual contributors and team members responsible for or interested in the quality of data in their business processes, systems or databases. This includes roles such as:
- Data Analysts
- Data Quality Analysts
- Business Analysts
- Data Designers/Modellers
- Data Stewards
- Application Developers
- Any data professional impacting the quality of data upon which

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"I learnt so much from the event; networked and met some fantastic people."
Louise Tharnthong, Head of Transformational Change, O2

"It is a 'must attend' MDM & DG event for any practitioners and the program gets better every year."
Mary Drabble, Principal Data Governance Analyst, Aberdeen Standard Investments

"Really enjoyed it – I leave having learned loads and full of ideas on how to apply at Lloyds. Thank you."
Marta Korus, Lead Business Analyst, Lloyds Banking Group

"There’s a reason why people keep coming back year after year – great conference (as always)."
Terje Bremnes, Enterprise Architect, Helse Vest, Norway

"Great conference, the best event in Data Management! Excellent speakers and very interesting content."
Ana Teresa Szmoes, Caixa Geral de Depósitos

"There's a reason why people keep coming back year after year – great conference (as always)."
Terje Bremnes, Enterprise Architect, Helse Vest, Norway

"Possibly the best conference I've ever attended for the insights and ideas it has provided."
Philip Ainsworth, Business Architect, Student Loans Company

"High quality event with top speakers and topics. A perfect mix between MDM and Data Governance status and trends."
Galand Vincent, Senior Business Analyst, ING Belgium

"Great networking opportunities with people at the top of their game!"
Emmanuelle Sangster, Business Change Manager, AWE Plc.

"I have absolutely loved the conference. Great people, great presentations, great venue."
Thamer Miles, Lead Analyst, Data & BI, Whitbread

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

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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 – 12.15 Course
12.15 – 13.15 Lunch
13.15 – 17.00 Course

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

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