

BUSINESS ANALYSIS TRAINING COURSES



Fundamentals of Business Analysis
Defining Business Needs and Solution Scope
Eliciting and Managing Requirements
Analysing Benefits and Refining Solutions
Enterprise Business Analysis
Facilitation Techniques for Business Analysis
Testing Techniques for Tracking and Validating Requirements
Business Data Modelling
Business Process Modelling
Developing Use Cases

FUNDAMENTALS OF BUSINESS ANALYSIS

2 DAYS

COURSE OVERVIEW

Many people are unaware of the discipline of business analysis, having never thought of it as a disciplined set of knowledge, skills and techniques. Therefore managers and SMEs who work with BAs often have no idea of the value that it provides.

Fundamentals of Business Analysis addresses the entire scope of business analysis including before, during and after a solution to a business problem is implemented and also covers enterprise business analysis in order to provide an overview of the value that business analysis delivers in terms of executing strategy – both doing the right work and doing the right work in the right way.

This foundational course looks at the whole organisation and how business analysis is applied in articulating and prioritising business needs, identifying and assessing solution options, making recommendations, defining solution scope, requirements management within a project, supporting a solution once it is in place, making sure the business objectives are met and continuously improving the solution to increase its business value.

Managers, business subject matter experts, developers, project managers, junior business analysts and anyone else who is responsible for delivering value through project - and programme-based work - would benefit from taking this course.

LEARN HOW TO

- ✓ Describe the discipline of business analysis
- ✓ Explain major functions in the scope of business analysis
 - Defining business needs
 - Requirements management
 - Benefits management
 - Enterprise analysis
- ✓ Describe how business analysis can contribute to your organisation and your individual work and responsibilities

COURSE TOPICS

The Basics of Business Analysis

- What is business analysis
- Who does business analysis
- Scope of business analysis: enterprise business analysis, solution recommendation and proposal, requirements management, benefits management
- Contexts for business analysis
- Asking the right questions: Who, what, where, when why and how
- It's more than just requirements: business analysis information
- Modelling
- Requirements classification
- Requirements traceability

Defining the Business Need

- A process of discovery
- What is a Business Need
- Current State Analysis
- Business goals and objectives
- Stakeholder Analysis
- Define the Future State
- Capability analysis
- Future state analysis
- Feasibility assessment
- Business Risk
- Assess alternatives

- Business case
- Solution recommendation

Requirements Management

- Business analysis planning
- Challenges and risks related to requirements work
- Roles and responsibilities
- Deliverables and artifacts
- Communication planning
- Elicitation techniques and challenges
- Solution scope and models
- Other requirements models
- Business processes
- Acceptance criteria
- Traceability
- Requirements management tools
- Supporting testing and implementation
- Lessons learned

Benefits Management

- Goals of the practice of benefits management
- Benefits and value
- Patterns of business value
- Benefits mapping
- Benefits management life cycle
- Identify and quantify
- Value and appraise

- Benefits planning
- Benefits measurement and reporting
- Benefits realisation
- Solution evaluation
- Transition requirements
- Organisational readiness
- Managing the transition
- Recommending corrective action
- Organisational change management
- Continuous process improvement
- Plan-do-study-act
- Process analysis and design

Enterprise Analysis

- Internal and external analysis
- Business ecosystem
- Enterprise analysis models
- Understanding the ecosystem
- Customer value analysis and modelling
- Marketing research
- Internal environment analysis
- Strategy mapping
- Organisation mapping
- Information mapping
- Business capabilities
- Value streams and mapping
- Portfolio of projects
- Business architecture

DEFINING BUSINESS NEEDS AND SOLUTION SCOPE

3 DAYS

COURSE OVERVIEW

The skills of business analysis can help many professionals identify the right types of solutions to solve their business challenges and build the business cases to justify those recommendations. Defining the Business Needs and Solution Scope is an intermediate to advanced course designed to provide the knowledge needed to begin working on identifying business needs and analysing the benefits of various solution options to help limit the choices before work gets underway or even before the solution work is chartered. In particular, this course "precedes" the typical project lifecycle as it sets up the benefits, value and possibilities that the change may bring, which then become the focus of the initiation phase of a project to implement those changes and execute the strategy.

This course can help anyone who needs to understand how effective projects and programmes align with organisational strategy and confer benefits that solve business problems or who makes decisions or informs those who make decisions on which projects and programmes to invest in.

LEARN HOW TO

- ✓ Explain how the concepts of business needs and value drive change initiatives
- ✓ Describe the importance of business cases to solution recommendation
- ✓ Use current state analysis to identify business needs, goals, and objectives
- ✓ Relate the discipline of benefits management to solution recommendation
- ✓ Utilise stakeholder and capability analysis to plan future states
- ✓ Conduct feasibility assessments on solution alternatives
- ✓ Develop and present business cases for or against potential solutions

COURSE TOPICS

Driving Towards Business Value

- Business value and business need
- Value proposition
- Types of business needs
- Value stream, value chain
- Who, what, where, when, why and how

The Business Case

- Purpose of a business case
- Contents and structure of a business case
- Participant roles in the business case
- Characteristics of a good business case

Define the Current State

- Define the current situation
- Facts
- Issues and concerns
- Ask the right questions
- Analyse the current state
 - Business canvas
 - SWOT analysis
 - Root cause analysis
- Define the business need in terms of prioritised problems and opportunities
- The business case: communicating the current state and business need

Establish Business Goals and Objectives

- Begin with the end in mind
- Strategic vision and alignment

- Prioritised business goals
- Participants in business goal development
- Types of goals
- SMART business objectives
- The balanced scorecard
- Goal hierarchy
- Goal prioritisation
- Approval of the business objectives

Benefits Management

- What is benefits management
- What is a benefit
- Roles in benefits management
- Identify potential benefits and dis-benefits
- Quantify the benefits
- Portfolio level benefits
- Identify stakeholders in benefits managements
- Benefits mapping
- Benefits realisation plan
- Planned and emergent benefits

Define the Solution Scope

- Future state vision
- Identify and describe stakeholder needs
 - Required capabilities
 - Conditions and constraints about the solution
- Link capabilities to goals
- Refine the solution scope in terms of who, what, where, when, why and how

Identify and Assess Alternatives

- Identify alternative solutions
- Determine the viable and non-viable alternatives
- Analyse the feasibility of the viable alternatives
 - Organisational feasibility
 - Technical feasibility
 - Economic feasibility
- Real options analysis
- Identify alternative solution approaches
- Describe the change strategy
- Refine the future state

Financial Analysis

- Cost-benefit and Financial Analysis
- Patterns of planned business value
- Estimate benefits
- Estimate costs
 - Costs to acquire the solution
 - Costs to live with the solution
- Financial analysis and indicators
 - ROI
 - Payback Period
 - Net Present Value
 - PV
 - BCR
 - IRR

Risk Analysis

- Risks to business value
- Identify risks

continued...

DEFINING BUSINESS NEEDS AND SOLUTION SCOPE

3 DAYS

continued...

COURSE TOPICS

- Business risks
- Technology risks
- Project risks
- Risk theory
- Risk management
- Risk tolerance
- Risk impact scale
- Risk log
- Allowance for risk contingency

Putting the Business Case in Context

- Approvals
- Benefits Management
- Making a No Decision
- After approval
- Revisiting the business case during development

ELICITING AND MANAGING REQUIREMENTS

3 DAYS

COURSE OVERVIEW

Eliciting and Managing Requirements is designed for individuals responsible for doing just that - eliciting requirements from users and stakeholders and managing those requirements throughout solution development. The course looks at the processes around solution scope validation, collaborative elicitation, modelling the solution, documenting effective requirements, solution validation, requirements change management and how to plan the work necessary to successfully drive the whole process.

After the scope of a solution to a business problem has been proposed and accepted, the work (typically project-based) of designing and developing that solution must commence. This course explores how the discipline of business analysis contributes to the work of a project, ensuring that the requirements of the solution being developed are fully elicited from, communicated to, and understood by all stakeholders involved. Additionally, the course discusses how business analysis in the context of a project ensures that the solution developed fulfills the intended scope as well as covers considerations for managing requirements (and changes to those requirements) throughout their effective lifecycle.

A participant does not have to be a formally titled business analyst to benefit from Eliciting and Managing Requirements. Many formal project and programme managers find themselves being asked to apply business analysis to project work to ensure that what is developed actually solves the problem it was intended to. Anyone responsible for delivering specific outcomes that meet business needs or solve problems will benefit from this course.

LEARN HOW TO

- ✓ Explain the critical role of business analysis with respect to requirements management
- ✓ Validate solution scope
- ✓ Use appropriate modelling techniques in requirements management work
- ✓ Plan the requirements elicitation and analysis to maximise efficiency and estimate the required effort
- ✓ Determine the most appropriate techniques for eliciting requirements at different points in the analysis cycle
- ✓ Analyse various kinds of requirements into complete, coherent, and organised requirements documentation
- ✓ Build consensus in order to validate and finalise the requirements
- ✓ Manage the requirements throughout the project lifecycle

COURSE TOPICS

Validating Understanding of the Solution Scope

- What is requirements management?
- Maintain alignment between strategy and projects
- Solution drivers
- As-is modelling
- Business rules
- Defining the future state
- Capability analysis
- Solution scope
- Common scoping documents
- Validating the solution scope

collaborative Elicitation and Analysis

- Developing detailed requirements
- The requirements management process
- Why elicitation?
- Requirements elicitation and validation
- Requirements elicitation and the project life cycle
- Stakeholder identification and prioritisation
- Identifying users and user profiling
- Elicitation techniques
 - Collaborative

- Research
- Experimental
- Progressive elicitation
- Diagnostic approach
- Soft skills of elicitation
- Developing requirements
- Analysing requirements
- Validating requirements

modelling the Solution

- Where is modelling used in RM?
- Modelling as part of elicitation
- What is a model?
- Why use models?
- Mapping business processes
- Standards in modelling
- As-is vs to-be modelling
- Context models
- BPMN
- UML
- Use case and activity diagrams
- Creating use case diagrams and scenarios
- Organisation models
- Business interaction models
- Location models
- Goal models

- Impact models
- Functional decomposition diagrams
- Relationship maps
- Event models
- Decision tables
- State models
- System models
- Data flow diagrams
- Logical data models
- Prototypes
- Wireframes and storyboards

Documenting and Communicating Good Requirements

- The requirements repository
- Guidelines for technical writing
 - Verbs, MOSCOW etc.
- Prioritisation
- Characteristics of effective requirements
- Analysing requirements
- Documenting correct requirements
- User stories
- Traceability
- Communicating requirements

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ELICITING AND MANAGING REQUIREMENTS

3 DAYS

continued...

COURSE TOPICS

Validating Requirements

- Why Validate?
- Sources of errors
- Requirements impact on project risk
- Choosing a validation approach
- Common validation questions
- Validation of textual requirements
- Validation of graphical requirements
- Validating for testing
- Validating for approval
- Validation techniques
- Managing consensus

Controlling Requirements

- Requirements change is inevitable
- Reasons for change
- Requirements change management defined
- Benefits of requirements change management (RCM)
- (RCM) process
- Managing requirements changes
- Change request documentation
- Impact analysis
- Traceability matrix
- Cost-benefit analysis
- Risk analysis
- The importance of stable requirements
- Change control board
- Requirements change implementation

Business Analysis Planning

- The importance of planning
- Factors in planning
 - Aligning to the project approach
 - Stakeholders and users
 - Requirements depository plan
 - Organisational assets
 - Risk management
- Develop the requirements work plan (RWP)
 - What does it do?
 - How is it used?
 - Components of the RWP
 - Work breakdown structure
 - Activities
 - Creating a schedule
 - Estimating

ANALYSING BENEFITS AND REFINING SOLUTIONS

2 DAYS

COURSE OVERVIEW

Analysing Benefits and Refining Solutions applies an approach to using business analysis skills that addresses the work needed to ensure that a solution, once in place, actually delivers the business value that was expected of it, and optimises that business value over its useful life.

A solution could have a useful life of many years, and is likely to evolve over its lifetime, just as the organisation that uses it - and the business context within which it operates, will also evolve. One of the challenges of supporting an existing solution is that often, the logic of why a solution is the way it is - and what the original requirements were, gradually gets lost.

This course explores the period after solution development and implementation. This may be a time where there is no identified project manager in place, but when an organisation should be evaluating the solution to ensure it is providing the value it was intended to provide. Business analysis remains critical at this point.

Analysing Benefits and Refining Solutions starts by reviewing the context of benefits management (principles, types of benefits and the benefit lifecycle) before exploring how to:

- Understand what is necessary to transition to new solutions
- Measure benefits
- Evaluate solution performance against intended benefits
- Establish continuous improvement of solutions and make improvement recommendations
- Manage the human factors of organisational change that accompany solutions

This course can help anyone with an interest in understanding the myriad components involved with the management and realisation of the benefits of a solution of any level of complexity. This topic is an area in which roles are generally undefined and this course is for any person concerned with being able to deliver and improve upon solutions that provide true business value.

LEARN HOW TO

- ✓ Describe how project- and programme-level solutions provide benefits that contribute to enterprise strategic goals.
- ✓ Measure, track, evaluate, and manage the solutions that are intended to deliver the required benefits.
- ✓ Define the role of change management, continuous improvement, and technology in how successfully solutions are implemented.

COURSE TOPICS

Benefits Analysis and Management

- What are benefits?
- Types of benefits
- Attributes of a good benefit
- Benefits ownership
- Emphasising benefits management
- Overview of the benefits life cycle
- Ongoing Analysis and Evaluation
- Challenges in evaluating solutions post-implementation
- Key success factors in benefits analysis
- Benefits management scorecard

Benefits Realisation, Tracking, and Reporting

- Benefits realisation mapping
- Benefits tracking
- Benefits reporting and adjustment
- Capabilities roadmap
- Benefits governance
- Transitioning from current to future state
- Analysing and evaluating CSFs and KPIs

Solution Evaluation

- Solution evaluation tasks
- Benefits measurement and reporting
- Evaluation techniques
- Assessing solution limitations
- Assessing environmental limitations

Organisational Change Management

- How are benefits realisation and change management linked?
- Value realisation
- The people side of change
- Resistance to change
- Organisational inertia
- Leveraging the organisational culture
- Individual leadership
- The Role of Communication
- Assessing organisational readiness
- Reinforcing and enforcing change
- Overall change readiness assessment

Continuous Improvement

- Designing for flexibility, scalability, and adoption
- Value stream analysis
- Reducing waste and variability
- Opportunities and emergent benefits
- Governance of continuous improvement
- Governance scope

Changes to Technology Systems

- The role of technology
- The IT perspective
- IT Considerations
- IT Governance
- The role of IT in change initiatives
- IT support for solutions and benefits

COURSE OVERVIEW

Enterprise Business Analysis applies an approach to business analysis to deal with complexity and change on an enterprise-wide basis. A skill set that helps individuals address broad organisational issues, enterprise-wide business analysis can be used when:

- Merging with or acquiring another organisation (or departments/functions)
- Expanding or contracting operations
- Consolidating the operations of multiple business units
- Dealing with multiple change initiatives at a time
- Acquiring or retiring enterprise IT systems
- Dealing with large business re-engineering initiatives

Senior business analysts are increasingly involved in pre-project activities to ensure that solutions to business problems reflect the organisation's business strategy. Through Enterprise Business Analysis, the senior business analyst becomes a vital contributor to helping the organisation determine sound investments and enhance its project portfolio. These activities ensure the organisation can maximise the return on investment, minimise duplication of efforts across the organisation and realign business operations to meet the executive management's strategy.

Enterprise Business Analysis starts with the basics – what is enterprise analysis? After exploring how it helps the strategic alignment of investments and dealing with change, the course focuses on business architecture and how business architecture fits within the enterprise architecture - including discussions around the other 'architectures': information, application, technology and governance -by looking at business architecture blueprints and frameworks, along with the roles and relationships that need to happen to execute on the strategy.

The course then turns its attention to some of the tools used at this more strategic level, including: value mapping, value proposition and customer value analysis, business modelling, business process management, capability and organisation mapping to arrive at an enterprise solution.

LEARN HOW TO

- ✓ Apply business analysis at the enterprise level
- ✓ Understand how to model the components of the enterprise and how they work together
- ✓ Identify what your customers consider to be good value and use it to assist in formulating strategy
- ✓ Explain how an organisation can enhance the effectiveness of its people and its assets through enterprise analysis
- ✓ Apply enterprise analysis to implement improvement initiatives.

COURSE TOPICS

What is Enterprise Business Analysis?

- Goals of enterprise analysis
- Positioning EBA
- Strategy – what it is and what it is not
- Strategic alignment of investments
- Dealing with change
 - Benefits management
 - Organisational change management
 - Portfolio management

Enterprise Business Architecture

- The business ecosystem
- What is the Enterprise Architecture?
- Enterprise Business Architecture Concepts
- Modelling the Enterprise
- Where does business architecture fit within an enterprise architecture
 - Business architecture
 - Application architecture
 - Data architecture
 - Technology Architecture
 - Governance
- The business value of business architecture
- Roles in EBA

- Analysis tools
 - Pest
 - Porter's 5 Forces
- Evaluating strategic gaps

Value Mapping

- What is business value?
- What is a value proposition?
- Customer value analysis
- What do your clients want?
- How well do you deliver what your customers want?
- The customer value model: the relationship between price and quality
- Value stream mapping: How you deliver value to customers
- Lean and Six Sigma

From Business Model to Blueprint

- Business architecture and business models
- Build the story
- Applying the Business Blueprint to model the key features of the business

Business Process Management

- What is a process?
- Processes and workflow

- Characterising processes
- Adapting the value chain to the business blueprint
- Process classification frameworks
- Process mapping and inventory
- Business rules

Capability Mapping

- Competencies and capabilities
- Competency analysis process
- Core and Non-Core Capabilities
- Capability analysis
- How to build a business capability map
- How to use a business capability map

Organisation Mapping

- Understanding organisational structures
- Organisational models and strategic priorities
- How to use an organisational map
- Business interaction tables

Develop the Enterprise Architecture

- Data and information management
- Knowledge management
- Linking data, processes, and workflows

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COURSE TOPICS

- Service-oriented architecture
- Risks, Rules and Interfaces of the IT Architecture

Enterprise Solutions

- The improvement approach
- The current state
- The TO-BE state
- Gap analysis
- Solution planning process
- Understanding change
- Linking action to strategy
- The business case

Organisational Learning

- Retrospectives and lessons learned meetings
- Comprehensive coverage
- Learn from the past
- Learn from the present
- Learn for the future
- Documenting the Lessons

FACILITATION TECHNIQUES FOR BUSINESS ANALYSIS

3 DAYS

COURSE OVERVIEW

Those practicing business analysis spend a significant amount of time facilitating sessions to gather requirements and other information, yet many facilitators lack formal training on how to effectively do so. A successful facilitation session results in requirements and information that can be analysed and worked with once the session is complete. Facilitation Techniques for Business Analysis focuses on teaching the facilitation skills necessary to elicit and analyse requirements on a project.

In this highly interactive course, delegates will learn how to effectively help stakeholders define their needs and form these into quantifiable requirements through facilitation. As a facilitator, this involves learning how to prepare for and conduct both face-to-face and remote group sessions, being exposed not only to several facilitation techniques, but also effective facilitation practices and how to manage conflict in a session. Most importantly, it provides the opportunity to practice these skills in a safe environment with a trained facilitator who will guide participants through various activities.

Attendees will leave the class with the confidence to prepare for a session, including creating a facilitation plan, motivating a group's participation, building consensus, managing conflict, maintaining session focus and evaluating results for lessons learned. This course can help individuals at all levels who need to better facilitate meetings and workshops around requirements or other specific outcomes. While the course focuses in the business analysis space, this is applicable to all disciplines (agile PM, traditional PM, contracting, etc.)

LEARN HOW TO

- ✓ Define facilitation in the context of business analysis
- ✓ Identify opportunities for facilitation in business analysis
- ✓ Explain the role and responsibilities of a facilitator
- ✓ Plan a facilitation session
- ✓ Choose appropriate facilitation techniques for a given session
- ✓ Conduct a facilitation session using best practices
- ✓ Manage conflict during a session

COURSE TOPICS

Facilitation and Business Analysis

- What is facilitation?
- The facilitation process
- What is a facilitator?
- Facilitation in business analysis
- Facilitation in business analysis is iterative
- Roles in facilitated sessions
- The importance of the role of the sponsor and SME's
- BA facilitation opportunities
- Good facilitation is a combination of techniques and practices
- Module summary

Facilitation Session Planning and Techniques

- Considerations for session planning
- Session planning: objective and participants
- Session planning: potential risk
- Risk management plan
- Session plan: environment
- Considerations for remote sessions
- Take advantage of virtual tools
- Remote session tips

- Session planning: agenda and techniques
- Facilitation techniques overview
- Brainstorming
- Idea Gen / grouping/categorisation
- Brain writing
- Focus group
- Various requirements workshops (i.e. process improvements, JAD's, agile iterations, others)
- Gap analysis
- Root cause analysis (i.e. Fishbone diagram, 5 Whys);
- Force field analysis
- Multi voting
- Criteria-based grid
- *Impact/effort grid
- Verification of facilitation session plan
- Session planning demo

Facilitation Practices

- Facilitation practices overview
- Executing a facilitation session: prior, during, ending
- Active listening
- Generating participation
- Neutrality

- Questioning
- Paraphrasing
- Maintaining focus
- Using visual aids
- Feedback
- Summarising
- Synthesising ideas
- Intervention
- Executing a facilitation session

Facilitation Conflict Techniques

- Argument vs. debate
- Types of conflict during facilitation
- How to prevent group dysfunction (the basics of team dynamics: 'forming, storming and norming')
- Managing conflict between participants
- Managing conflict with a participant
- How to handle 'Negativeholics'
- How to handle resistance to change
- How to manage diverse groups and other cultural considerations
- Intervention during conflict
- Resolving issues
- Steps for working toward consensus

TESTING TECHNIQUES FOR TRACKING AND VALIDATING REQUIREMENTS

3 DAYS

COURSE OVERVIEW

To ensure project success, planning and executing the testing process must begin as soon as the vision and scope for the solution takes shape. As the requirements for the solution are elicited, the business analyst and the test team develop and refine a master test plan. This plan incorporates test strategies to identify any defects in the requirements, solution or corresponding documentation.

In this interactive course, participants work to develop a master test plan under the guidance of an experienced instructor as well as perform exercises designed to help establish a risk-based and comprehensive master test strategy for a testing effort - activities which help the business analyst ensure that all requirements trace back to the business need.

Attendees of this course will develop the competencies required to create test cases and scenarios in order to ensure adequate test coverage according to the risk level. They will also learn about the different levels and types of testing commonly used in solution development today.

Reminder: Prior to taking this course, delegates should have acquired the background as taught in Eliciting and Managing Requirements and should not take Software Testing for Better Project Management.

LEARN HOW TO

- ✓ Explain and apply the role of business analysis in the testing process
- ✓ Validate business requirements documentation and analyse models with stakeholders
- ✓ Verify that the solution conforms to technical specifications
- ✓ Recognise the importance of a testing methodology
- ✓ Decide what to test, and trace those requirements throughout the solution development life cycle (SDLC)
- ✓ Develop and execute a test plan
- ✓ Describe various testing techniques
- ✓ Explain how business analysis informs and contributes to testing
- ✓ Discuss the testing process from user and acceptance testing to component testing
- ✓ Explain the relationship between test strategies, test plans, test cases, and test scenarios

COURSE TOPICS

Introduction to Testing

- Importance of testing business solutions
- Delivering quality solutions
- Test to prevent defects
- Roles in the testing process
- Responsibilities of the BA
- Other testing process roles
- BA responsibilities in validating requirements
- Validating requirements documentation
- BA responsibilities in validating requirements and models
- Developing the validation strategy
- Validating functional requirements and business rules
- Validating non-functional requirements
- Validating implementation requirements
- Validating business models
- Validation techniques
- Validating and verifying the solution

The Testing Process

- The IT strategy
- SDLC
- Iterative SDLC
- Testing the solution
- The test life cycle
- Test life cycle model—iterative

- SDLC and the testing life cycle
- Test methodology
- Benefits of a test methodology
- Risk mitigation
- Traceability
- Traceability matrix
- Defect analysis

Levels and Types of Testing

- V-model of testing
- Solution documents
- Levels of testing
- Unit testing
- Integration testing
- System testing
- User testing
- Acceptance testing
- Satisfaction assessment
- Types of testing
- Functional test types
- Non-functional test types
- Performance testing
- Usability testing
- Documentation testing
- Security and controls testing
- Backup and recovery testing
- Structural testing
- Process testing

- Considerations for testing

The Master Test Strategy

- Master test strategy
- Test goals
- Example test goals
- Test strategies
- Test strategies for each level of testing
- Test strategy considerations
- Test strategies and risk
- Probability of defects
- Impact of defects
- Creating the master test strategy

The Master Test Plan

- Master test plan
- Roles in developing the master test plan
- Master test plan components
- Master test strategy
- Acceptance criteria
- Test deliverables
- Test data/data transition management
- Risk management
- Impact analysis
- Project management
- Appendixes
- Changes in requirements, quality, and risk

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TESTING TECHNIQUES FOR TRACKING AND VALIDATING REQUIREMENTS

3 DAYS

continued...

COURSE TOPICS

Testing from the BA Perspective

- Testing and assessing that business and user requirements are met
- Testing business and user requirements
- Plan testing and assessment early
- User testing
- User test goals
- User testing strategy
- User participation
- User test plan review
- Acceptance testing
- Satisfaction assessment
- Usability testing
- Usability test goals
- Usability test strategy
- Usability standards
- Usability testing planning
- Usability testing during unit testing
- Usability testing during integration and system testing
- Usability testing during user testing
- Pilot implementation testing
- Managing risk
- Prioritising risks

Test Case Design Techniques

- What is a test scenario?
- Functional test scenarios
- Non-functional test scenarios
- Converting use case scenarios to test scenarios
- What is a test case?
- Creating test cases
- Test case characteristics
- Positive and negative test cases
- Test case procedure
- The complete test case
- Test suites
- Black box testing
- Equivalence domain partitioning
- Boundary testing
- Crud matrix testing
- Condition coverage
- ERD testing
- State diagram testing
- Activity coverage
- Glass box testing
- Activity coverage
- Decision coverage
- Condition coverage
- Error guessing
- Risk-driven test coverage

Executing the Plan

- Test tools
- Updating the master test plan
- Changes to test strategies
- Changes to business requirements
- Review test results
- Review acceptance criteria

COURSE OVERVIEW

The Business Data Modelling course explores business rules, policies and procedures and how they can be modelled effectively. Participants will learn entity relationship diagramming, super and sub-types, attributive and associative entities and documenting data constraints. The course's logical data modelling approaches focus on the important requirements of the business that are discovered through significant user involvement during the analysis phase. Delegates will also learn how to create models without being limited by technology or organisational structure.

The ability to communicate the intersection of business processes and information/data needs is key to the success of any software development project. Understanding and explaining user needs is a major challenge and opportunity for the business analyst. The business analyst who understands structured modelling has a distinct advantage in addressing and communicating requirements. And the use of models can greatly increase all stakeholders' understanding of the relevancy of business rules and data management requirements to the project at hand.

Reminder: Prior to taking this course, we recommend that delegates have acquired the background as taught in Eliciting and Managing Requirements. This course is aligned with version 3.0 of A Guide to the Business Analysis Body of Knowledge® (BABOK® Guide)™.

LEARN HOW TO

- ✓ Explain how a lack of effective data analysis and usage can affect the risk exposure, cost control, and profitability of your organisation
- ✓ Explain the role of the business analyst in gathering data-related requirements from stakeholders
- ✓ Create, communicate, and validate conceptual data models with your business stakeholders
- ✓ Create normalised logical data models as a hand-off to solution delivery

COURSE TOPICS

Business Data and Governance

- Data governance
- Data management functions
- Data governance vs. IT governance
- Data management roles
- Business analysis and data management
- Data is an organisational asset
- The value of data to the organisation
- Data management and risk
- Data, costs, and revenue
- Data quality

Conceptual Data Models

- Conceptual data models
- Systems development challenges
- Data requirements
- Where do data requirements come from?
- Models and modelling
- Data, information, and knowledge
- What is a model?
- Data models
- Data model drivers
- Why build a data model?
- What are we modelling?
- A business area: an example
- Levels of Data modelling
- Conceptual data model

Data Relationships

- Data relationships
- Relationships

- Relationship name syntax
- Naming standards for relationships
- Relationship cardinalities
- Minimum cardinality
- Maximum cardinality
- Relationships affected by time
- Modelling time-dependent data
- The importance of definitions
- Recursive relationships
- Redundant relationships
- Alternative notations

Logical Data Models

- Logical data models
- Entity types
- Introduction to entity types
- Super type and subtype entities
- Typical reasons for subtyping
- The employee subtypes
- Bottom-up subtyping
- Creativity with subtyping
- Levels of subtyping
- Subtype inheritance
- Subtype discriminators
- Attributive entities and multivalued attributes
- Multivalued attribute
- Attributive entity
- Non-dependence

Applying Logical Data Models

- Applying logical data models
- Associative entities

- Creating an associative entity
- Data constraints
- Using logical data models
- Specification of database requirements
- Analysis of organisational and geographic data distribution
- Support organisational data standards
- Software acquisition

Data Normalisation

- Data normalisation
- Normalisation
- First normal form
- Second normal form
- Third normal form
- The normalised result
- The normalisation rules
- The physical data model
- Reverse engineering
- The database designer
- De-normalisation

Verifying and Validating Models

- Verifying and validating data models
- Checking for accuracy/completeness
- Verifying and validating your models
- Verification/validation methods
- Internal verification—ERD
- Verify and validate this!
- Presenting data diagrams
- DOs and DON'Ts of presenting data diagrams
- How not to present data diagrams
- How to present data diagrams

continued...

COURSE TOPICS

Business Data Modelling Workshop

- Business data modelling workshop
- Workshop objectives
- Workshop features
- Workshop roles
- Introducing the customer
- Introducing your customer
- Corporate video – Pennatus Airlines Inc.
- Interviews and work sessions
- Validation and sign-off

COURSE OVERVIEW

This course provides participants with the opportunity to perform the four phases of a process improvement project—Define, Analyse, Implement, and Control—which have been derived from the phases of the industry's leading process improvement models. The key deliverables and outputs for the business analyst are emphasised during each phase, as well as the importance of tying all outputs back to the business strategy. Participants practice identifying and prioritising the processes that require improvement, as well as creating the documents needed to communicate these changes to the rest of the organisation. Participants focus on the competencies necessary to perform workflow modelling and create AS-IS and TO-BE process maps. Finally, participants learn how to conduct a gap analysis, create new process benchmarks, and develop measurements for tracking the effectiveness of the new processes.

Participants leave this course with the preparation necessary to perform BA responsibilities within the process improvement process and to employ the required skills in accordance with sensitive cost, organisational, and stakeholder requirements.

The course is designed for those who perform the function of business analysis (BA) and those who need to manage or participate in process improvement projects.

LEARN HOW TO

- ✓ Describe the business process modelling framework
- ✓ Define key process modelling terms and concepts
- ✓ Plan and conduct major activities performed during each phase of process modelling
- ✓ Apply process modelling methodologies and techniques specific to the BA's role and responsibilities

COURSE TOPICS

Overview of Business Process Modelling

- Overview of business process modelling
- Terms and concepts
- Brainstorm
- What is a process?
- Process models
- Why are we modelling?
- Process improvement
- What is process improvement?
- Key benefits and drivers of process improvement
- Four phases of process improvement?

Define

- Define
- Identify processes to be improved
- Identify processes for improvement
- Identify critical to quality (CTQ) attributes
- Context of process improvement
- Chance of success
- Stakeholders
- Stakeholder expectations
- Sample process selection matrix based on stakeholder expectations

Analyse (Modelling)

- Analyse (modelling)
- Process models and modelling
- What is a function?
- Process vs. function
- Components of a process diagram
- A Process diagram

- Activities: general guidelines
- Activities: naming conventions
- Flows: general guidelines
- Constraints
- Events: general guidelines
- Decisions and alternative paths
- Merge nodes
- Decisions: some considerations
- Parallel paths
- Forks: some considerations
- Actors and swim lanes
- Deliverables
- Observing the process first hand
- AS-IS process diagram
- Developing the AS-IS process diagram
- Schedule and conduct workflow modelling sessions
- Build the high-level diagram
- High-level diagram example
- Detailed diagram example
- Root cause analysis
- Root cause analysis techniques
- Five whys
- Cause-and-effect diagram

Analysing (Metrics)

- Analyse (metrics)
- Measuring process performance
- Measuring performance of the AS-IS process
- Measuring performance: metrics
- Possible metrics to use
- Direct metrics: cost
- Direct metrics: number of executions
- Direct metrics: time to execute

- Calculated metrics: key resources
- Calculated metrics: efficiency
- Using the right metrics
- Using metrics: building a matrix
- Using metrics: calculating ratios
- Using metrics: identifying processes that need further
- Investigation
- Using metrics: identifying processes that need further
- Process benchmarking
- Steps for benchmarking
- Identifying benchmark partners
- Examining the benchmark process

Implement

- Formulate measurements for the new process
- Measuring performance of the new process
- Design the TO-BE process
- The TO-BE process
- Six Process improvement enablers
- Managing process change
- Example of process improvement
- Process improvement example
- Decide on approach
- Perform gap analysis
- Gap analysis process
- Communicate implementation findings
- Prepare to transition to new process
- Roll process into production
- Document and implement the new process
- Communicate implementation findings to stakeholders

continued...

COURSE TOPICS

Control

- Monitor the new process
- Constantly monitor the new process
- Continuously improve the process

Business Process Modelling Workshop

- Introduction
- Defining the process scope
- Identifying the business process
- Producing the AS-IS process diagram
- Identifying appropriate metrics
- Using a fishbone diagram
- Identifying areas for improvement
- Identifying impacts of change
- Producing a TO-BE diagram
- Creating a gap Analysis
- Creating a cost-benefit analysis
- Determining process monitoring
- Preparing and presenting recommendations

COURSE OVERVIEW

As a fundamental component of identifying requirements for a new or upgraded system, business analysts must be able to illustrate how "actors," such as end users, stakeholders, or related systems, will be affected after the new system is implemented. This process, also known as use case modelling, provides business analysts with a powerful tool for documenting functional (and related) requirements—and the relationships between these requirements—in a manner that can be easily communicated to designers, programmers, project managers, and other project stakeholders.

This course provides business analysts with the required competencies for identifying and modelling use cases, which serve as vehicles for eliciting, analysing, documenting, and communicating functional requirements. Participants will practice creating use cases using the Unified Modeling Language (UML®) to graphically represent the interactions between use cases and actors.

To fully gain the benefits of UML, use case diagrams are created through an object-oriented approach, which enables business analysts to sift through the complexity of a system by breaking it down into smaller units.

Through interactive exercises, they will practice writing the alternative/exception flows, arranging objects into properly named classes and reading class diagrams and most importantly, gain the ability to integrate use case modelling within the software development lifecycle to ensure that project requirements are accurate, complete and map to the objectives of the business.

The course is designed for those who perform the function of business analysis (BA) and those who need to manage or participate in use case modelling.

Reminder: Prior to taking this course, delegate should have acquired the background as taught in Eliciting and Managing requirements and Business Process Modelling.

LEARN HOW TO

- ✓ Identify actors that drive use cases
- ✓ Employ use cases to elicit, analyse, document, and communicate functional requirements
- ✓ Use the Unified Modelling Language (UML®) to create use case diagrams
- ✓ Write use case scenarios with an appropriate level of detail
- ✓ Prioritise use cases based on their importance to the business and technical considerations
- ✓ Manage use cases throughout the project life cycle
- ✓ Create and validate state diagrams

COURSE TOPICS

Introduction to Use Case Modelling

- What is a requirement?
- Levels of requirements
- Types of solution requirements
- Ways to organise requirements
- What is a use case?
- The purpose of use cases
- The use case approach
- Models
- UML®
- UML® icons
- What is a use case model?
- Example of a use case diagram
- Quality guidelines for use case diagrams
- Diagrams available in UML®
- Contributors to use case modelling
- Functions, features, and processes

Identifying and Describing Actors

- Stakeholders
- Actors
- What is an actor?
- Why focus on actors first?
- Stakeholders vs. users vs. actors
- UML® icons for actors
- Naming actors

- The challenge of naming actors
- Generalised and specialised actors
- Primary and secondary actors
- Identifying and describing actors
- Identifying actor goals
- Steps to identify actors
- Identify stakeholders
- Define the scope of the subject
- Identify stakeholders outside of the subject
- Mapping stakeholders to actors
- Completing the actor profile

Identifying and Describing Use Cases

- Granularity of use cases
- Levels of use case granularity
- Identifying use cases
- Describing use cases
- Writing a use case description
- Scenarios
- Preconditions
- Assumptions
- Constraints
- Post conditions
- Use case description example

Writing User Case Scenarios

- Scenarios
- Use case scenarios
- The main success scenario
- Use case diagram of an online dating system
- Alternates and exceptions
- Analysing the main scenario to ID alternate/exception
- Scenarios
- Example of how to document an alternate
- Flow of events
- Alternate flows
- Exception flows
- Flows can have other flows
- Integrating alternates with the main scenario: method 1, 2 & 3
- Using activity diagrams to depict scenario flow
- Scenario writing guidelines
- Iteration
- Use alternate flows to correct a situation: iteration method 1
- Sometimes the order of steps is arbitrary: iteration method 2
- Use a "For each..." step: iteration method 3
- Use Pre- and Post conditions: iteration method 4
- Number of use cases and steps

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COURSE TOPICS

Reusing Use Case Models

- Three advanced use case modelling techniques
- The «include» relationship
- The «include» relationship in use case models
- The «include» relationship in scenarios
- Generalisation and specialisation
- Diagramming generalisation and specialisation
- Generalisation and specialisation in scenarios
- The «extend» relationship
- The «extend» relationship in use case models
- The «extend» relationship in scenarios
- Extending use case example
- Comparison: inclusion, generalisation, extension
- Use case tools
- Categories of use case tools
- Use case packages
- Use case packages to manage large models
- Organising the model with packages

Estimating and Prioritising Use Cases

- Estimating with use cases
- Estimating project cost with use cases
- Standard cost estimation with use cases
- Cost estimation with use cases to include complexity
- Estimating with use case points
- Setting priorities
- Business and technical priorities
- Determining business priority
- Prioritisation techniques
- Triage
- Basic stakeholder prioritisation dependency clustering
- Comparative ranking
- Advanced quantitative techniques

Ensuring Use Case Quality

- Quality Assurance
- The value of ensuring quality
- Traceability
- Quality assurance techniques
- Purpose of use case reviews
- Use case reviews
- Types of use case reviews
- Ensuring use cases are testable
- Test scenarios
- Creating test scenarios and test cases from use cases

Use Cases and Project Documentation

- Documentation formats
- Use cases within project documentation
- Business rules
- Non-functional requirements
- User interface (UI) requirements
- Data model
- Functional requirements
- State diagrams
- Example UML® state diagram
- Reports
- User documentation
- Evolution of use cases after the business analyst
- Traditional vs. iterative management of use cases
- Traditional vs. iterative project management
- What is a user story?
- Story-focused approach versus traditional approach
- Attributes of good user stories
- User story—I want to find a flight



For further information contact the relevant regional offices below

Germany

info@strategyex.de
+49 (0)69 244 327 3795
www.strategyex.de

Italy

solutions@esi-italy.it
+39 02 83847 263
www.esi-italy.it

Sweden

info@strategyex.se
+46 (0)8 555 403 80
www.strategyex.se

Middle East

info@strategyex.ae
+971 (0)4 311 6188
www.strategyex.ae

Spain

info@esi-sp.com
+34 91 700 48 70
www.esi-sp.com

United Kingdom

info@strategyex.co.uk
+44 (0)20 3743 2910
www.strategyex.co.uk