

BUSINESS ANALYSIS COURSES

- Foundations of Business Analysis
- How To Gather and Document User Requirements
- Process Modelling Management
- Use Case Modelling
- Logical Data Modelling
- Testing Techniques for Tracing and Validating requirements
- Facilitation Techniques for Requirements Development
- Strategic Enterprise Analysis.

Participants will learn how to:

- Identify the roles and responsibilities of the business analyst
- Define requirements
- Explain the importance of managing risk
- Define the solution vision and scope
- Plan the requirements elicitation process
- Recognize the importance of analysing and documenting requirements
- Explain the role of modelling for documenting and communicating requirements
- Perform requirements validation and traceability

Programme Objectives

At the project's earliest stages the business analyst is key to defining the requirements, as well as planning, defining and validating project scope. It's important to have an understanding of the breadth of knowledge that a business analyst brings to the project team when developing business solutions.

Foundations of Business Analysis is an introductory course designed to provide participants with a basic understanding of the benefits, functions and impact of this critical role. The target audience for this course includes those who are new to the business analyst role or those who supervise and/or work with business analysts. This course provides a special focus on the business analysis function as it relates to developing information technology solutions, given that such an understanding is essential for project success.

The course discusses the business analysis process as it is applied throughout a project to include the pre-project activities that comprise enterprise analysis. Participants also learn how a business analyst supports the project throughout the solution development life cycle, from establishing the solution vision and scope in the analysis phase to validating that requirements have been met in the testing phase.

After completing this course, participants will understand why and when to involve the business analysis function. Plus, they'll have a working vocabulary to enable them to communicate effectively with those who perform that role.

Course Topics

Introduction

- What is business analysis?
- Best practices in business analysis
- Benefits of business analysis

The Role of the Business Analyst

- The business analysis process
- BA role vs. project manager role
- BA competencies
- The BA career path

Supporting the Project Portfolio

- The project portfolio
- Strategic enterprise analysis
- Solution Development Life Cycle (SDLC)

Developing the Solution Vision and Scope

- Defining solution vision and scope
- Vision and scope report
- Conducting a visioning workshop
- Validating solution scope
- Traceability

Understanding Requirements and Business Rules

- Functional, non functional and implementation requirements
- Requirements vs. specifications
- Requirements vs. business rules
- Risk management and risk response strategies

Planning and Eliciting Requirements

- The Requirements Work Plan (RWP)
- Components of the RWP
- Work Breakdown Structure (WBS)
- Elicitation keys to success
- Elicitation techniques
- Preparing for change

Analysing and Documenting Requirements

- Analysing requirements
- Characteristics of effective requirements
- The Business Requirements Document (BRD)
- The BRD vs. the technical specifications document

- Components of the BRD
- BRD validation techniques

Modelling Requirements

- Modelling requirements
- Models vs. diagrams
- AS-IS vs. TO-BE modelling
- Types of models
- Models and the BRD

Assessing and Validating Requirements

- Validation and verification
- V-Model of testing
- Levels and types of testing
- The master test plan
- Test scenarios and test cases

Participants will learn how to:

- Define the roles of the business analyst in the requirements process
- Effectively document a solution's vision and scope
- Develop a Requirements Work Plan
- Elicit, structure, analyse, validate and document business requirements
- Structure a Business Requirements Document (BRD)

Programme Objectives

Incomplete requirements are often cited as the number-one reason projects or systems fail. Accurately identifying requirements and staying on course from the beginning is key to success in today's business world.

This "how-to" course introduces the roles of the business analyst as they relate to the elicitation, analysis and documentation of requirements. It familiarises participants with the core knowledge and skills required to

identify and document user requirements. It also addresses how these requirements are managed throughout the project life cycle.

Recommendation: The material presented in this course provides the foundation necessary for building additional business analysis skills. If you plan to take additional courses in the Business Analysis Professional Development Programme, you will need this foundation.

Course Topics

Roles, Definitions and Key Principles

- Critical role of the business analyst
- Creating and adopting a formal documentation strategy
- Key requirements documents
- Roles and mutual expectations among team members

Types of Requirements

- Attributes and types of effective requirements
- What is an effective requirement?

Vision, Scope and Quality

- Defining problem, vision and scope
- Importance of a solution's scope Statement
- Documenting project vision and scope
- Including quality measures
- Managing change

Introduction to Modelling

- Documenting and tracking business rules
- Why use models?
- Modelling techniques

Creating a Requirements Work Plan

- The value of planning
- Elements of a Requirements Work Plan
- Planning the analysis
- Identifying business analysis tasks
- Stakeholder identification and prioritisation
- User identification and profiling
- Managing risk

Elicitation Techniques

- Dealing with barriers to elicitation
- Elicitation strategy
- Elicitation techniques
- Advantages and challenges of elicitation techniques

Documenting Requirements

- The purpose of documenting requirements
- Elements of a Business Requirements Document (BRD)
- Technical writing guidelines
- Requirements analysis
- The role of modeling in requirements documentation
- Use case and activity diagrams
- Presenting requirements

Managing Consensus

- Communicating effectively
- Effective consensus building

Validating Requirements

- Validation techniques
- Decision making and approvals
- Managing change and risk postvalidation
- What happens next?

Participants will learn how to:

- Describe the Process Modeling Management (PMM) framework
- Define key PMM terms and concepts
- Conduct major activities performed during each phase of PMM, including workflow modelling
- Perform the business analyst's role and responsibilities in PMM
- Apply PMM methodologies and techniques specific to the business analyst's role and responsibilities

Programme Objectives

The importance of the business analyst's role in defining process requirements during the planning phases of a project continues to gain recognition across all industries. The business analyst, working in conjunction with the project manager, facilitates the solution of business challenges. However, when gathering requirements for a new or existing project, business analysts must be mindful that any project may require the development and redesign of accompanying processes. In fact, the business analyst must act as a change agent to help ensure that the newly implemented processes not only enhance the success of a project, but also increase the project's chance of meeting the organisation's business goals.

This highly interactive course provides participants the opportunity to perform the four phases of a process improvement project—define, analyse, implement and control—which have been derived from the leading process improvement models in the industry. 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. You'll 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.

You'll focus on the competencies necessary to perform workflow modelling to ensure you have the core tools required to document the processes. You will also practice creating "As-Is" and "To-Be" process maps and learn the steps to conduct a gap and stakeholder analysis. Finally, you'll develop the competencies required to create new process benchmarks and measurements for new processes. You'll leave this course with the preparation necessary to perform your business analysis responsibilities within the process improvement process and to employ the required skills in accordance with sensitive cost, organisational and stakeholder requirements.

Reminder: Prior to taking this course, you should have acquired the background as taught in How to Gather and Document User Requirements.

Course Topics

Key PMM Terms and Concepts

- Process modelling, process management, process improvement
- Process management activities
- Workflow modelling
- Key benefits of PMM
- Process improvement project (PIP) phases
- Business analysis roles and responsibilities
- Managing organisational change

Conducting the Define Phase

- Obtaining consensus on processes to be included in PIP
- Relating processes to business strategy
- Developing high-level plans for risk, communication and change management

Conducting the Analyse Phase

- Conducting workflow modelling
- Creating swimlane diagrams
- Conducting value stream mapping
- Developing "As-Is" process map
- Defining and gathering metrics
- Creating process benchmarks
- Performing gap analysis
- Performing root cause analysis
- Conducting stakeholder analysis
- Performing high-level cost-benefit analysis

Conducting the Implement Phase

- Documenting, validating and confirming new goals and objectives
- Formulating measurements
- Designing the new process
- Updating risk, communications and change management plans

Conducting the Control Phase

- Communicating findings
- Carrying out implementation plans
- Monitoring and controlling results

Participants will learn how to:

- Employ use cases to elicit, analyse, document and communicate functional requirements for software
- Use the Unified Modelling Language (UML) to create use case diagrams
- Determine when to employ use case modelling
- Prioritise use cases based on their importance to the business and on technical considerations
- Describe ways to develop consistent vocabulary between use cases and objects
- Analyse and document detailed requirements using an object model
- Read a class diagram

Programme Objectives

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

This course provides business analysts with the required competencies for creating use cases and use case diagrams, which serve as a vehicle for eliciting, analysing, documenting and communicating functional requirements. You will practice creating use cases in the Unified Modelling Language (UML) to graphically represent the interactions between use cases and actors. To fully gain the benefits of UML, you will create use case diagrams through

an object-oriented approach, which enables business analysts to sift through the complexity of a system by breaking it down into smaller units.

Take this course and you'll gain more than just the lexicon required for use case and object oriented modelling. Through interactive exercises, you will practice writing the alternate/exception flows, arranging objects into properly named classes, and reading class diagrams. Most importantly, you'll gain the ability to integrate use case modelling within the software development life cycle to ensure that project requirements are accurate, complete, and map to the objectives of the business.

Reminder: Prior to taking this course, you should have acquired the background as taught in *How to Gather and Document User Requirements and Process Modeling Management*.

Course Topics

Introduction to Use Case Modelling

- Organising requirements with use cases
- Use case diagrams as a UML notation
- Organising the model with packages

Identifying and Describing Actors

- Use case actors
- Business versus system actors
- Identifying actors
- Mapping stakeholders to actors
- Users versus actors

Identifying and Describing Use Cases

- Identifying use cases
- Writing a use case description
- Including preconditions, post conditions, assumptions, and scenarios

Writing Use Case Scenarios

- Identifying the main success scenario
- Identifying alternates and exceptions
- Indicating iteration

Advanced Use Case Modelling Techniques

- Diagramming an <<include>> relationship
- Diagramming an <<extend>> relationship
- Diagramming generalization and specialization
- Considering multiplicity

Ensuring Use Case Quality

- Employing quality assurance techniques
- Ensuring use cases are testable

Prioritising Use Cases

- Estimating project cost with use cases
- Employing prioritization techniques

Introduction to Object Modelling

- Use cases and Object Orientation (OO)
- Identifying objects and classes

Identifying and Describing Business Domain Objects

- Assigning objects to classes
- Guidelines for describing business objects
- Describing operations, attributes, and associations

Participants will learn how to:

- Create logical data models to define business and project requirements
- Explain the purpose, importance, and uses of logical data modelling in the requirements gathering process
- Describe the elements of data flow diagrams and functional decomposition diagrams and their relationship to logical data models
- Explain a logical data model to stakeholders
- Apply logical data modeling to the overall software development life cycle and respond to business management issues

Programme Objectives

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. Logical Data Modelling explores business rules, policies and procedures and how they can be modeled effectively. Participants will learn entity relationship diagramming, super and sub-types, attributive and associative entities, and documenting data constraints. The logical

data modelling approaches focus on the important requirements of the business that are discovered through significant user involvement during the analysis phase. You will also learn how to create models without being limited by technology or organisational structure. You'll leave this course ready to communicate business and project requirements to project stakeholders using conceptual and logical data models. In short, you'll be able to integrate multiple business units so that you understand the big picture of your organisation.

Reminder: Prior to taking this course, you should have acquired the background as taught in How to Gather and Document User Requirements, Process Modelling Management and Use Case Modelling.

Course Topics

Data Flow Diagrams (DFDs) & Functional Decomposition Diagrams (FDDs)

- Developing DFDs
- Identifying the business area
- Documenting data use in business processes (DFDs)
- Understanding their relationship to logical data models
- Modelling essential business Processes (FDDs)

Identifying and Describing the Conceptual Data Model

- Naming entities, attributes and relationships
- Discovering and defining entities
- Analysing attributes
- Defining cardinality in relationships
- Understanding concatenated and surrogate unique identifiers

The Logical Data Model

- Developing the detailed logical data model
- Identifying and applying entity types
- Modelling with subtypes and supertypes
- Understanding attributive and associative entities
- Understanding multivalued attributes
- Documenting the logical data model
- Analysing data using the CRUD matrix

Context-Level Data Flow Diagrams

- Developing diagrams that represent processes, external agents and data flows
- Defining and naming diagram components
- Drawing divergent and convergent data flows
- Leveling the data flow diagram
- Avoiding common errors in diagramming

The Transition to OO/UML

- Understanding the Unified Modeling Language (UML)
- Applying use case, class state and activity diagrams

Other Key Topics

- Applying normalisation rules
- Understanding the physical data model
- Describing the functions and benefits of CASE tools
- Verifying and presenting models to increase project success

Participants will learn how to:

- Recognise the role of the business analyst (BA) in the testing process
- Validate the business requirements document (BRD) and analysis models
- Verify that the solution conforms to the requirements
- Communicate the importance of a testing methodology
- Determine what to test and trace those requirements throughout the solution development life cycle (SDLC)
- Develop and execute a test plan
- Understand various testing techniques

Programme Objectives

Don't underestimate the importance of testing! 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 testing team develop and refine a master test plan to make sure it incorporates testing strategies for detecting any defects in the requirements, solution or corresponding documentation.

In this interactive course, you'll work to develop a master test plan under the guidance of an experienced instructor. You will also perform exercises designed to help you establish a risk-based and comprehensive master test strategy for a testing effort. These activities

help the business analyst ensure that all requirements trace back to the business need.

By attending this course, you'll develop the competencies required to create test cases and scenarios and to ensure proper test coverage according to the risk level. You will also learn about the different levels and types of testing commonly used in solution development today.

Recommendation: Prior to taking this course, you should have acquired the background as taught in *How to Gather and Document User Requirements and Use Case Modelling*.

Course Topics

Introduction to Testing

- Recognising the Importance of Testing
- Recognising the BA Role in the Testing Process
- Differentiating between Validation and Verification
- Validating the Business Requirements Document (BRD) and Models
- Verifying the Solution

The Testing Process

- Identifying the IT Strategy
- Identifying the Testing Life Cycle
- Aligning the Solution Development Life Cycle (SDLC) and the Testing Life Cycle
- Recognising the Importance of Test Methodologies
- Employing Traceability and Defect Analysis

Levels and Types of Testing

- Using the V-Model of Testing
- Planning the Different Levels of Testing
- Planning the Different Types of Testing

The Master Test Strategy

- Defining the Master Test Strategy
- Identifying Test Goals
- Defining the Test Strategies for each Level of Testing
- Identifying the Likelihood and Impact of Defects when Developing the Master Test Strategy
- Documenting the Master Test Strategy

Planning Testing

- Identifying the Roles for Developing the Master Test Plan
- Documenting the Components of the Master Test Plan
- Compiling the Master Test Plan
- Planning for Changes in Requirements, Risk, and Quality

Testing from the BA Perspective

- Testing and Assessing that Business and User Requirements are Met
- Performing User Testing and Acceptance Testing

- Conducting a Satisfaction Assessment
- Performing Usability Testing during Unit, Integration, System, and User Testing
- Conducting a Pilot Implementation Testing
- Managing and Prioritising Risk and Developing Risk Response Strategies

Test Case Design Techniques

- Developing Test Scenarios and Test Cases
- Converting Use Case Scenarios to Test Scenarios
- Performing Black Box and Glass Box Testing
- Ensuring Test Coverage is Risk-Driven
- Using Test Tools

Executing the Plan

- Executing and Updating the Master Test Plan
- Managing Changes to Test Strategies and Business Requirements
- Reviewing the Acceptance Test

Participants will learn how to:

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

Programme Objectives

The business analyst spends a significant amount of time eliciting requirements. Yet, many business analysts lack formal training on this vital skill. A successful facilitation session results in requirements that you can begin to analyse and work with. Facilitation Techniques for Requirements Development focuses on teaching the facilitation skills necessary to elicit and analyse requirements on a project. In this highly interactive course, you will learn how to effectively help stakeholders define their needs and form these needs into quantifiable requirements through facilitation. As a facilitator, you will learn how to prepare for and conduct both face-to-face and remote group sessions. You will be exposed not only to several facilitator techniques such as brainstorming, JAD and focus groups, but you will also learn how to manage conflict in a session.

Most importantly, you will have the opportunity to practice these skills in a safe environment with a trained facilitator to guide you through various activities. You 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.

Reminder: Prior to taking this course, you should have acquired the background as taught in How to Gather and Document User Requirements.

Course Topics

What is Facilitation?

- Facilitation techniques and practices
- The facilitation process

What is Business Analysis? Business Analysis Body of Knowledge® (BABOK®)

- BABOK™ areas
- The business analysis process

Facilitating in Business Analysis

- The role of the business analysis facilitator
- The responsibilities of the business analysis facilitator

Facilitation Session Preparation

Considerations for Remote Sessions

- Environmental
- Preparation
- During the session wrapping up

Facilitation in Business Analysis is Iterative

- Vision—enterprise analysis
 - Brainstorming

- Brainwriting/Crawford Slip

- Definition—requirement elicitation

- Focus group

- Joint Application Design (JAD)

- Analysis—requirements analysis and documentation

- Gap analysis

- Root-cause analysis

- Force-field analysis

- Decision—solution assessment and validation

- Multi-voting

- Criteria-based grid

- Impact/effort grid

Verification of the Facilitation Session Plan

Facilitation Practices

- Generating participation

- Neutrality

- Active listening

- Questioning

- Paraphrasing

- Using flip charts

- Maintain focus

- Intervention

- Feedback

- Summarising

- Synthesizing ideas

Executing a Facilitation Session

- Prior to the session

- Starting the session

- Conducting the session

- Ending the session

Facilitation Conflict Techniques

- Argument vs. debate

- How to intervene

- Choices in resolving issues

- Working toward consensus

Business Analysis Facilitation Opportunities

Participants will learn how to:

- Identify core competencies for the organisation
- Model the AS-IS and TO-BE business architecture
- Perform customer value analysis
- Plan for process management
- Establish the TO-BE enterprise architecture
- Recognise the importance of service-oriented architecture
- Manage the project portfolio
- Perform impact analyses, risk analyses and feasibility studies
- Prepare the decision package

Programme Objectives

Senior business analysts are increasingly involved in pre-project activities to ensure that solutions to business problems reflect the organisation's business strategy. Through strategic enterprise 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 executive management's strategy.

Strategic Enterprise Analysis is an advanced course designed to provide participants with the knowledge they need to begin working as part of a strategic enterprise analysis team. In particular, the course covers the major activities of strategic enterprise analysis that must be conducted to study the enterprise architecture. These activities include analysing core competencies, performing customer value analysis, performing process management, examining the IT architecture, and evaluating the project portfolio. The course also examines the impact of service-oriented architecture (SOA) on the enterprise architecture. Throughout the course, participants learn how the senior business analyst can help prepare the

organisation for excellence in each of these activities and ensure that the necessary business requirements are elicited, analysed, documented, validated and communicated. Process maps for each activity are emphasised to provide participants with a step-by-step approach for conducting strategic enterprise analysis.

After completing this course, participants will understand the steps for modelling the AS-IS and TO-BE business and enterprise architectures" to "modelling the AS-IS and TO-BE enterprise architectures. Participants also learn how the TO-BE architectures contribute..." to "Participants also learn how the TO-BE enterprise architecture contributes to the overall project portfolio. By conducting an impact analysis, risk analysis and feasibility study, participants will feel confident about presenting a business case for future investments that traces back to the business strategy and provides true return on investment for the organisation.

Reminder: Prior to taking this course, you should have acquired the background as taught in *How to Gather and Document User Requirements, Use Case Modelling and Process Modelling Management*.

Course Topics

Introduction to Strategic Enterprise Analysis

- What is strategic enterprise analysis?
- Identifying components of the enterprise architecture
- Planning for business rules, data management, and change management
- Identifying core competencies

Enterprise Architecture

- Creating the enterprise architecture project plan
- Modelling the AS-IS and TO-BE enterprise architectures
- Performing an impact analysis and feasibility study
- Documenting the business case for the "TO-BE" enterprise architecture in the decision package

Customer Value Analysis

- What is customer value analysis?
- Performing customer value analysis
- Using customer value analysis to improve the enterprise architecture

Process Management

- What is process management?
- Creating a process improvement project plan in support of the TO-BE enterprise architecture
- Documenting the business case for new processes

IT Architecture

- What is IT architecture?
- Create the IT architecture project plan
- Modelling the AS-IS and TO-BE IT architecture

- Ensuring the IT architecture supports the other components of the enterprise architecture
- Documenting the business case for the "TO-BE" IT architecture

Service-Oriented Architecture (SOA)

- What is SOA?
- Ensuring SOA supports the enterprise architecture
- Defining requirements for SOA

Portfolio Management

- What is portfolio management?
- Selecting projects to implement the TO-BE enterprise architecture
- Ensuring projects support the business strategy



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