

Essential Skills for Business Analysis

Introduction

- Definition & Role?
- Major tasks performed by the business analyst.
- Essential skills needed to perform their tasks.
- Identify project stakeholders and their roles.
- Interactions of Business Analyst with different Stake Holders

Requirements Elicitation Process

- One-on-one interviews
- Requirements workshops
- Surveys
- Brainstorming
- Document analysis
- Focus group
- Job shadowing/observation
- Competitive analysis
- Interface analysis
- Reverse engineering

Project Scoping – A business Analyst’s Perspective

- Understand the need for execution of the project.
- Understand the organizational environment.
- Requirements scoping through Interactions
- Context Level DFD's

Requirements Detailing

- Understanding Requirements and Quality of Requirements
- Learn how software developers use requirements
- Analysis and design or
- Business vs. technological requirements.
- Understand the important aspects of every requirement
 - Entity
 - Attribute
 - Process (use case)
 - External Agent (actor)
 - Business Rule

Requirements Analysis Techniques

- Categories of Requirements (FURPS Model)
 - Business Requirements
 - Functional Requirements
 - Non-functional Requirements

- Technical Requirements
- Requirements Traceability Matrix.
- Tools for evaluating Requirements
 - Structured textual templates
 - Entity relationship diagram
 - Decomposition diagram
 - User stories, use case diagram and use case descriptions
 - Workflow diagram (UML, BPMN, ANSI, swim lane)
 - Prototyping

Requirements Review

- Process & participants
- Artifacts verified
- Next Steps

Requirements Validation

- Role of BA in Software testing
- Introduction to Software Testing processes
- Requirements to Test case mapping

Overview of Application Development Methodologies

- Discuss various methodologies for application development.
- Learn which models are used in each methodology:
 - Waterfall
 - Information Engineering
 - RAD
 - Iterative/Agile
 - Object Oriented - UML
 - Spiral/RUP

Data Normalization

- What is data normalization and why is it important?
- What are the rules of normalization?

Detailing the Data Requirements

- Detailing repeating data elements.
- Detailing complex business rules.
- Detailing sub-category entities.
- Review techniques for documenting data conversion, interface requirements and perform gap analysis.

Defining Functional Requirements

- Learn to elicit user stories and scenarios.

- Learn to identify use cases.
- Outline each use case for a high-level understanding of broad behavior.
- Identify primary path, alternate path, and exception paths.
- Decompose large use cases into smaller sub-sets, identifying reusable use cases where possible.
- Learn how and where to document system user messages.
- Learn to create detailed use case descriptions.

Designing User Interfaces

- Learn to identify where prototypes are necessary.
- Create and document prototypes.
- Learn to document report requirements, including ad-hoc and predefined. Learn the definition of business intelligence.
- Learn to document field edits and screen functionality.
- Incorporate usability principals into user interfaces.

Analyze Interface Requirements

- Identify required interfaces based on the phase/iteration plan.
- Determine how each interface is affected by the solution design.
- Write interface requirements for each interface.

Identify Non-Functional Requirements

- Identify requirements not previously addressed by business, functional, or technical requirement categories:
 - Performance requirements
 - Security requirements
 - Quality requirements
 - Scalability
- Consider which non-functional requirement types are important for your project.
- Discuss the business analyst role in the development of these requirements.

Tools required from a Management perspective

- Estimation using FP & UCP Mechanisms (Creating models for estimation using EXCEL)
- Introduction to CMM & Process Quality
- Introduction to RFP and Response to RFP processes
- Very basic concepts of Project management and role of BA in Project maangement