Perspectives

Chapter Study Group
Learning Materials
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INTRODUCTION

“Perspectives are used within business analysis work to provide focus to tasks and techniques specific to the context of the initiative.”

– A Guide to the Business Analysis Body of Knowledge - BABOK v3
INTRODUCTION – THE 5 PERSPECTIVES

“Perspectives are used within business analysis work to provide focus to tasks and techniques specific to the context of the initiative.”

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INTRODUCTION – PERSPECTIVE STRUCTURE

• Perspectives help Business Analysts to understand the tasks and knowledge areas in the BABOK® Guide from the standpoint of the context of the current initiative.

- Change Scope
- Business Analysis Scope
- Methodologies and Approaches
- Underlying Competencies
- Impact on Knowledge Areas
11.1 The Agile Perspectives
INTRODUCTION – THE AGILE PERSPECTIVE

• The Agile Perspective highlights the unique characteristics of business analysis practiced in the context of agile environments.
  • Agile is a philosophy and approach to delivery.
  • It’s a set of values and principles that promotes collaboration, continuous improvement, evolving requirements, and adapting to change.

• The four values of agile\(^1\)
  • **Individuals and interactions** over processes and tools.
  • **Working software** over comprehensive documentation.
  • **Customer collaboration** over contract negotiation.
  • **Responding to change** over following a plan.

1. Source: www.AgileManifesto.org
INTRODUCTION – THE AGILE PERSPECTIVE

• Business analysts conduct analysis and deliver work products at the last responsible moment to allow **flexibility for change**.

• The focus is on detailed analysis work needed in the near term while analysis needed in the future is less detailed or delayed and completed **just in time** for use by the agile team.

• Allows for **flexibility** and encourages **rapid response** to change without wasted effort.

• Business analysis work is performed **continuously** throughout the initiative.
11.1.1 CHANGE SCOPE

- Scope for agile initiatives constantly evolves
  - Scope changes are managed through the backlog.
  - Backlog is continuously reviewed, reprioritized, and refined.
  - Continuous backlog refinement allows teams to meet the evolving needs of the business.
  - A project may be suspended and reassessed if a change emerges that significantly impacts the goal and value.
11.1.1 CHANGE SCOPE

- Agile approaches may be used for software development projects as well as non-software related changes such as process improvement.

- Agile projects may be contained within a single department or span multiple divisions and teams.

- Organizations new to agile should focus on continuous improvement, behavioral change, and incremental improvement to move toward adopting an agile mindset rather than thinking of agile as a methodology.
11.1.1 CHANGE SCOPE

• Agile practices are often applied to initiatives in which:
  • There is commitment from the customer and active engagement of empowered subject matter experts
  • The business need or proposed solution is complex
  • Business needs are likely to change or are still emerging

• An agile approach can be used:
  • For initiatives that are developing a new solution for the first time
  • For maintaining and enhancing an existing solution
  • As part of a larger program of work in which other elements are developed using agile or another methodology depending on the need
11.1.1 CHANGE SCOPE

- An Agile approach emphasizes
  - Delivering value early
  - Collaboration
  - Adaptive planning with a focus on continuous improvement

- Agile teams adapt to change through frequent product reviews and seeking feedback
  - Stakeholders frequently review the product and provide feedback.
  - Team adapts based on feedback.
  - Frequent reviews may uncover missed requirements and allows the solution to evolve over time.
  - Enables team to deliver value that meets changing stakeholder needs.
11.1.1 CHANGE SCOPE

- Some example agile approaches include:
  - Scrum
  - Kanban
  - Extreme Programming (XP)
  - Crystal
  - Dynamic Systems Development Method (DSDM)

- Agile approaches focus on personal interactions, adapting to change, and continuous delivery of value.

- Each approach has a unique set of characteristics
  - Teams can select the approach that best fits the initiative.
  - Teams often combine elements from more than one agile approach based on unique team composition, skills, experience, operating environment, and other factors.
11.1.1 CHANGE SCOPE

- Assumptions in an agile environment align to the values and principles in the Agile Manifesto
  - We welcome changing requirements, even late in development.
  - Business problems can be reduced to a set of needs that can be solved through some combination of technology and business process change.
  - Initiatives have highly engaged customers and empowered subject matter experts (SMEs).
11.1.1 CHANGE SCOPE

• Assumptions for agile teams
  • Team membership is constant – members are not moved to other teams.
  • Teams are co-located to encourage face-to-face communication. However, agile can work well with distributed teams if effective communication practices are followed.
  • Team members are multi-skilled and can perform more than one role within the team if needed.
  • Team members have a continuous improvement mindset and accurately deliver value through regular review and feedback.
  • Teams are built around motivated, self-organizing individuals and are empowered.
11.1.2 BUSINESS ANALYSIS SCOPE

• The sponsor of an agile initiative must:
  • Be familiar with agile philosophy, mindset, and approaches
  • Be open to frequent feedback
  • Accepts the use of adaptive planning over predictive planning
  • Accepts the use of a fixed time period for a work cycle
  • Understand the need and value of active sponsor involvement

• These characteristics are critical so that the sponsor can:
  • Understand the product under development
  • Provide the team with continuous feedback
  • Adjust the product as customer needs change
• The change agent is a stakeholder and can include:

• **Agile Team Leader:** Uses servant leadership to **facilitate** the work of the team. Allows team to perform tasks of planning, scheduling, and prioritization of work.

• **Product Owner (Scrum) or Customer representative (XP):**
  Active team member responsible for ensuring that the change being developed by the team **meets the needs of the customer.**

• **Team members:** Specialists or domain experts responsible for **delivering** the needed change. May include technical and customer representation.

• **External stakeholders:** Stakeholders outside of the team who are interested in the project outcome or are needed for its completion.
11.1.2 BUSINESS ANALYSIS SCOPE

• Who performs business analysis activities on agile teams?
  • The preference for cross-skilled team members on agile teams means that teams may have one or more individuals with business analysis skills performing those activities.
  • Team members may or may not have the title of business analyst.

• Business analysis activities may be performed by:
  • A business analyst who is a member of the team
  • The product owner / customer representative
  • The activities may be distributed throughout the team
  • A combination of the above
11.1.2 BUSINESS ANALYSIS SCOPE

- Successful business analysis enables key outcomes in agile projects
  - Open communication and collaboration.
  - Project vision and direction align with organizational goals and business need.
  - Acceptance criteria and strategic criteria for project completion are defined.
  - Product vision statement is well defined and understood.
  - Create just-in-time documentation

Business Analysis Outcomes
11.1.3 APPROACHES AND TECHNIQUES

• All Agile approaches use business analysis but few define the business analysis role.

• Teams may use one or a combination of approaches to more effectively deliver value given the nature of the project and their work environment.

  • Scrum: A lightweight framework in which work is planned for and performed in a series of fixed length iterations (Sprints) lasting 1 to 4 weeks. The goal of each sprint is to produce working software that is potentially shippable or delivered to the customer.
11.1.3 APPROACHES AND TECHNIQUES

- **Feature Driven Development (FDD):** Focuses on delivering functionality based on customer value. Once a feature list is identified, all planning and development performed by the team are based on those feature sets.

- **Extreme Programming (XP):** Focuses on technical development processes and effective software engineering practices. Practices include pair programming, test driven development (TDD), and other approaches to software craftsmanship. XP practices are often used with one of the agile frameworks.

![XP Process Diagram](image-url)
11.1.3 APPROACHES AND TECHNIQUES

- **Kanban**: Focuses on completing work through a continuous flow of activity by limiting the amount of work in progress (WIP). Kanban does not use fixed iterations and instead is a pull system in which work may begin only when it is needed to maintain downstream flow and after the previous item has been completed.

- **Disciplined Agile Delivery (DAD)**: A decision process framework incorporating aspects of other agile approaches. Allows teams to customize their product development lifecycles and approaches from initiation through delivery.

- **Evolutionary Project Management (Evo)**: A project management method for developing and delivering a product incrementally. The focus of Evo is on quantifying stakeholder value and planning increments to deliver that value. Uses impact estimation tables for assessing solutions based on value for a given cost.
11.1.3 APPROACHES AND TECHNIQUES

- **Crystal Clear**: Part of a family of Crystal methodologies based on hardness (business criticality or potential to cause harm) and color (complexity/heaviness of the project across several dimensions including project risk and number of people needed). As hardness increases, more rigor and predictive planning is required.

- **Dynamic Systems Development Method (DSDM)**: A framework focused on fixed cost, quality, and time while managing a contingency by varying the features to be delivered. Work is managed through short periods of time (time boxes) with defined goals. MoSCoW prioritization is used for scope management.

- **Scaled Agile Framework® (SAFe™)**: A framework for implementing agile at enterprise scale. SAFe provides a framework with roles, activities, and artifacts needed to scale agile from the team to the program level and to the enterprise level.
11.1.3 APPROACHES AND TECHNIQUES

• Techniques used with agile approaches
  • Behavior Driven Development (BDD): An approach that expresses product needs using concrete examples to facilitate communication between team members and stakeholders.
  • Kano Analysis: A technique for understanding which product features will drive customer satisfaction.

• Lightweight Documentation: An agile principle to ensure any documentation produced fulfills a need, has value to stakeholders, and does not create unnecessary overhead. Documentation should be just enough to meet the need.
11.1.3 APPROACHES AND TECHNIQUES

- **MoSCoW Prioritization**: A prioritization method to develop a common understanding or the relative importance of delivering a piece of product value. MoSCoW stands for Must have, Should have, Could have, Won’t have.

- **Personas**: Fictional characters, avatars, or archetypes that demonstrate the way a person of similar characteristics may interact with the product.

- **Planning Workshop**: A collaborative workshop that allows an agile team or group of teams to determine what value can be delivered over a time period such as an iteration or release.
11.1.3 APPROACHES AND TECHNIQUES

- **Purpose Alignment Model**: A model used to assess ideas in terms of value to the customer.

- **Real Options**: An approach to help understand when to make decisions rather than how.

- **Relative Estimation**: An estimation technique allowing teams to understand the development effort required to deliver a piece of product value. Common estimates include the use of story points (represent the relative complexity of a user story) and ideal days.
11.1.3 APPROACHES AND TECHNIQUES

- **Retrospectives**: A process similar to Lessons Learned in which teams focus on continuous improvement at regular intervals (often at the end of each iteration).

- **Story Decomposition**: Ensures product requirements are at the correct level of detail and align to delivering a valuable business objective.

- **Story Mapping**: A technique for creating a visual representation of the sequence of activities to be supported by a product. Story Mapping can be used to decompose stories and determine the minimum viable product.
11.1.3 APPROACHES AND TECHNIQUES

- **Storyboarding**: Provides information visually and textually related to the sequence of activities that represent user interactions with a system or product.

- **Value Stream Mapping**: Provides a fact-based, time-series representation of the stream of activities needed to deliver a product or service to the customer.
11.1.4 UNDERLYING COMPETENCIES

• By embodying the values and principles of the Agile Manifesto, business analysts develop competencies in:
  • **Communication and collaboration**: Communicate vision and needs, influence others to support the vision, negotiate priorities, and facilitate collaborative agreement on solutions.
  • **Patience and tolerance**: Maintain self-control under pressure and keep an open mind when interacting with others.
  • **Flexibility and adaptability**: Develop cross-functional skills that allow the business analyst to support other team members.
  • **Ability to handle change**: Quickly assess impact of change, determine business value, and assist in reprioritization of work.
  • **Ability to recognize business value**: Understand how changes and new features can deliver value and support the vision.
  • **Continuous Improvement**: Periodically review and reflect with the agile team and make changes to become more effective.
11.1.5 IMPACT ON KNOWLEDGE AREAS

- This section explains how business analysis practices within agile are mapped to business analysis tasks and practices as defined by the BABOK® Guide
  - How each knowledge area is applied or modified within the context of an agile approach.
  - Some of the additional BA techniques needed to fulfil the work of the agile perspective.
11.1.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  
  • With agile approaches, detailed business analysis planning can be deferred until work on an activity is ready to begin rather than planning everything upfront.
  
  • Initial, high level plan of business analysis activities is developed at the beginning of the project and then updated prior to the start of each cycle to ensure the plan is up to date.
11.1.5 Impact on Knowledge Areas

**Introduction**

- Progressive elaboration and elicitation take place throughout an agile initiative.
- In every cycle, more detailed elicitation takes place for backlog items to be developed in the next cycle.
- The goal is to minimize the time between the elaboration of customer needs and solution delivery.
- Requires a focus on collaborative elicitation approaches.
11.1.5 Impact on Knowledge Areas

• **Introduction**
  - Scope of the initiative is defined with increasing specificity as the initiative progresses.
  - We expect customer needs to change and solution design will evolve over time.
  - Review and validation of the evolving solution with stakeholders occurs at the end of every iteration, taking the place of a formal requirements approval process.
  - Business value and development priority drives the work to be done in the next cycle.
11.1.5 Impact on Knowledge Areas

- **Introduction**
  - Strategy analysis is used to ensure that the solution being delivered continues to provide value to stakeholders.
  - For each cycle, the proposed solution is reevaluated in the current business context to ensure it will meet business goals.

- **Strategy Analysis helps agile teams:**
  - Define and understand product vision
  - Create and modify the development roadmap
  - Assess risks
11.1.5 Impact on Knowledge Areas

• Introduction
  • Analysis and design are performed on a just-in-time basis, either just before or during the iteration in which the solution component will be developed.
  • Analysis performed just before the iteration is to provide the team with enough information to estimate the planned work.
  • Analysis performed during the iteration is to provide the team with enough information to develop or deliver the planned work.
  • Analysis and design approach used should support progressive elaboration, be adaptable to change based on learning, and not cause the team to select solutions prematurely.
11.1.5 Impact on Knowledge Areas

- **Introduction**
  - Stakeholders and agile team continually reassess and evaluate the solution as it is incrementally built and refined throughout the project.
  - Evaluation of the evolving solution with the stakeholders occurs at the end of every development cycle to ensure the deliverable meets their needs and satisfies their expectations.
  - The business analyst ensures that the product meets expectations before it is released and identifies new opportunities that will add value to the business.
11.2 The Business Intelligence Perspectives
INTRODUCTION – THE BUSINESS INTELLIGENCE PERSPECTIVE

• Business Intelligence definition - The transformation of data into value-added information:
  • Where to source it
  • How to integrate it
  • How to enhance it
  • How to deliver it
INTRODUCTION – THE BUSINESS INTELLIGENCE PERSPECTIVE

• Business Intelligence definition - The transformation of data into value-added information

• **Business Intelligence Perspective:** in the context of delivering reliable, consistent, high-quality information that enables stakeholders to better manage strategic, tactical and operational performance.

  • The focus of business intelligence is the transformation of data into valued-added information to deliver analytic insight.
11.2.1 CHANGE SCOPE

Business Intelligence Solution – Conceptual Framework
11.2.1 CHANGE SCOPE

- **Key objectives of a business intelligence system**
  - Provide a ‘Single version of the truth’.
  - Provide effective Information delivery methods and tools.
  - Promote an enterprise-view of the information management.
  - Integrate multiple data sources.
  - Integrate different types of data.
  - Support Infrastructure services.

- **Value of a Business Intelligence Initiative**: provides timely, accurate, and actionable information

- **Drives better informed decision making**
11.2.1 CHANGE SCOPE

- Business Intelligence initiatives focus on the information needed to support decision making at, or across different levels within the organization.
11.2.2 BUSINESS ANALYSIS SCOPE

- **The change sponsor is the business executive from the impacted area:**
  - Understand the value of business intelligence
  - Champion and promote the projects
  - Influence other executives
  - Approve the budget

- **Targets are the business decisions that are made:**
  - People
  - Process
  - Technology
11.2.2 BUSINESS ANALYSIS SCOPE

- **Business Analyst role working on BI initiatives**
  - Business analyst who is competent in the definition of business requirements and the assessment of potential solutions.
  - Business intelligence functional analyst who has an understanding of data mining and predictive analytic techniques, as well as skills in developing visualizations.
  - Data analyst who is experienced at defining source systems data to be used for the required analytical purposes.
  - Data Modeler/architect who is skilled in defining the source and target data structures in logical data models.
11.2.2 BUSINESS ANALYSIS SCOPE

The Business Intelligence Perspective

The specification of **business decisions** to be influenced or changed

The collection of data from source systems

The **integration** of divergent sources into a convergent enterprise framework

The provision of targeted information and **analytic insight** to business stakeholders

Major components

Business Analysis Outcomes
11.2.2 BUSINESS ANALYSIS SCOPE

- Business Process Coverage
- Decision Models
- Business Analytics requirements
- Solution Architecture
- Source logical data model and data dictionary
- Source data quality assessment
- Transformation Rules
- Target logical data model and data dictionary
11.2.3 METHODOLOGIES AND APPROACHES

Types of Analytics

- **Descriptive Analytics – what happened?**
  - Understand and analyze past business performance.
  - Requirements for standard reporting and dashboards, ad hoc reporting, and query functionality.

- **Predictive Analytics – What will happen?**
  - Identify patterns and relationships to predict future events.
  - Requirements for pattern recognition through data mining, predictive modeling, forecasting and condition-driven alert.

- **Prescriptive Analytics – What will improve?**
  - Identify decisions and initiate actions to improve business performance.
  - Requirements for business objectives, constraints criteria and business rules for decision-making process.
11.2.3 METHODOLOGIES AND APPROACHES

Structured & Unstructured data

**Structured Data**

- Data models
- Data dictionaries
- Business rules

**Unstructured Data**

- Metadata definitions
- Data matching algorithms

Business Analysis focus
11.2.4 UNDERLYING COMPETENCIES

- The Business Analyst needs to be effective in liaising with both business stakeholders and technical solution providers:
  - Business data and functional usage
  - Analyze complex data structures
  - Understand business processes including KPIs
  - Decision modeling
  - Data analysis techniques
  - Data warehouse and intelligence
  - Logical & physical data models
  - ETL (Extract, Transform, Load) best practices
11.2.5 IMPACT ON KNOWLEDGE AREAS

- **Introduction**
  - Consider the level of stakeholders’ and business analysts’ expertise on the planned approach.
    - How experienced the stakeholders are expressing their business needs in the business intelligence context
    - How skilled the business analysts are in interpreting those business requirements into business intelligence technical specifications
  - Business Analysts should be aware that Business Intelligence solutions.
    - Typically engage many stakeholders with overlapping requirements
    - Individual requirements need to be synthetized in a set without conflicts and redundancies between stakeholders
    - Deliver longer-term strategic value that goes beyond short-term operational benefits
11.2.5 IMPACT ON KNOWLEDGE AREAS

- **Introduction**
  - Employ specialized documentation tools and techniques to elicit particular requirements from stakeholders, both business and technical.
  - Work closely with individual stakeholders that might only posses partial knowledge and expertise on business decisions, data elements, data sourcing, business rules and information delivery.
  - Interview individual stakeholders to identify their information needs to support their decision making.
  - Elicit workshops with stakeholders to detect common, overlapping information requirements.
  - Use data models, process models and decision models to identify data sources, data analytic requirements and business rules for decisions.
11.2.5 IMPACT ON KNOWLEDGE AREAS

- **Introduction**
  - Will need to establish the infrastructure capabilities of the required solution, so this will drive requirements-related work.
  - Consider the structural dependencies within the solution that might affect the prioritization of individual business needs.
  - Achieve efficiencies by implementing related requirements at the same time.
11.2.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  - Use high-level conceptual data models to map the current state of corporate information, to identify information silos and to assess their related problems and opportunities.
  - Use high-level models to map the BI architecture.
    - Logical data models -> Solution architecture
    - Data flow diagrams -> Dynamic data-in motion
    - Decision models -> Business decisions & Data Analytics
    - Physical data models -> Data Warehouse & Data Marts
  - Deliver incremental implementations across different functional areas of the business based on business needs, business impact and priorities.
11.2.5 IMPACT ON KNOWLEDGE AREAS

- **Model back-end solution**
  - Source data / Transformations & Business rules / Target data
  - Define Data availability & Data quality
  - Illustrate the management of data latency and accessibility

- **Model From-End solution**
  - Analyze existing reports gaps and identify improvements
  - Design content & format of new/update outputs

- **Asses the capability of the proposed solution**

  **Functional requirements**
  - Self-serve facilities
  - Data analytics tools
  - Data presentation tools
  - Drill-down capabilities

  **Non-functional requirements**
  - Data quality
  - Data latency
  - Query performance
11.2.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  • Deliver longer-term strategic value that goes beyond short-term operational benefits.
  • Educate the organization on the Business Intelligence functionalities and benefits.
  • Guide & consult stakeholders on the business requirements that will add value to their decision making process.
  • Do not simply replace or repair existing information outputs.
  • Explore and evaluate opportunities for additional value that are enabled by a business intelligence solution.
11.3 The Information Technology Perspective
THE INFORMATION TECHNOLOGY PERSPECTIVE

- Business analysts articulate/translates business vision and needs to technology stakeholders

- Key Factors to consider:
  - **Solution impact**: value and risks to the business
  - **Organizational maturity**: formality and flexibility
  - **Change scope**: breath, depth, complexity and context for the proposed change
11.3.1 CHANGE SCOPE

- Reasons for initiating changes to IT System:
  - Creating a new organizational capability
  - Achieving an organizational objective by enhancing an existing capability
  - Facilitating an operational improvement
  - Maintaining an existing information technology system
  - Repairing a broken information technology system
11.3.1 CHANGE SCOPE

- Different scenarios for IT systems requiring different Business analysis approach

- Nature of Business analysis activity depends on factors impacting solutions

- Details required to be defined to assess if the documentation are relevant to delivering value.
  - Technical details
  - Integration effort
  - How IT supports the organization operations
11.3.1 CHANGE SCOPE

- Organizational value added due to changes in IT systems include:
  - Reducing operating costs
  - Decreasing wasted effort
  - Increasing strategic alignment
  - Increasing reliability and stability
  - Automating error-prone or manual processes,
  - Repairing problems,
  - Making it possible to scale up, enhance, or make more readily available a business capability
  - Implementing new functionality and new capabilities.
11.3.2 BUSINESS ANALYSIS SCOPE

- **Personnel who can be assigned Business analysis task**
  - BA who works specifically with the business users of an IT system.
  - IT business analyst who is the designated liaison between the technical team and the business group which uses the application.
  - SME experienced with the current software implementation.
  - Software user experienced with the daily activity of how the software is used and can focus on usability.
  - Systems analyst who has experience within the business domain, but does not have experience with the specific application.
  - Business process owner who has a depth of experience with the business capabilities or processes, but may not have IT experience.
  - Technical person with a depth of technical experience.
  - COTS representative who leverages vendor package knowledge and past implementation experience to customize packaged solution implementations.
11.3.2 BUSINESS ANALYSIS SCOPE

- **Deliverables for Business Analyst**
  - Defined complete testable prioritized and verified requirements
  - Analysis of alternatives
  - Business rules
  - Gap analysis
  - Functional decomposition
  - Use cases and scenarios and/or user stories as appropriate
  - Interface analysis
  - Prototypes
  - Process analysis, Process models, or State models
  - Decision models
  - Context models or scope models
  - Data models
11.3.3 METHODOLOGIES

- **Organizational approaches for solution development**
  - **Predictive**
    -> Structured processes which emphasize planning
    -> Formal documentation of the processes used for change
    -> Phases of processes are completed sequentially
  - **Adaptive**
    -> It allows for reworking within process cycles
    -> It is both iterative and incremental
    -> The focus is on growing the product in both breadth & depth
  - **Hybrid**
    -> It may include an overall vision for the whole initiative.
    -> It defines details within individual cycles or iterations
11.3.4 UNDERLYING COMPETENCIES

- **Critical skills required to be successful as a Business Analyst**
  - A strong understanding of the detail required within a requirements package to support technical solutions
  - An understanding of what is **technically feasible** within the constraints of an organization’s technical architecture.
  - **Influencing** and **facilitation** skills for working with stakeholders.
  - **Negotiation** skills for dealing with business and technical staff to come to agreements and decisions on solution
  - **Systems thinking** is a crucial competency for business analysts practicing in an IT environment
• **Introduction**

  - A well-defined business analysis plan integrates into the overall project plan and provides business analysts with the opportunity to define and schedule.

  - Some organizations may have some standards and processes to identify analysis tasks and deliverables.

  - Business analyst needs to understand the context of analysis including inter-operation of software systems, business processes and data flow between them so that systems impacted by change can be correctly assessed.

  - COTS solutions introduction can involve major systems integration efforts, customizations, and many unexpected tasks. Hence relevant internal user and external stakeholders with COTS expertise need to be engaged during planning.
11.3.5 IMPACT ON KNOWLEDGE AREAS

• Introduction
  • It is beneficial to have at least one elicitation session with all stakeholders to build on their expertise and perspectives.
  • Business analysts practicing in an IT environment may utilize techniques like investigation, simulations, experimentation.
  • Information technology changes can be seen as a distraction or cost by business stakeholders if the change is not perceived as mission critical or if the stakeholder is experiencing negative value from the change.
  • IT business analysts can decrease the risk of rework by engaging information technology and business in collaboration activities.
11.3.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  
  • While creating change, through exploration the business analyst discovers the implications of the new functionality provided by the solution.
  
  • It is the role of the business analyst to work with stakeholders to develop a consistent method for reviewing evolving requirements to ensure alignment with the business objectives for the initiative.
  
  • As the complexity of an information technology environment grows, it becomes increasingly important to track each change to each requirement or between requirements and other information. Traceability that includes dependencies and relationships among requirements makes it easier for stakeholders to understand what is changing about the IT system and predict impacts of additional changes.
  
  • Traceability also helps in understanding why some functionality is dropped.
11.3.5 IMPACT ON KNOWLEDGE AREAS

• Introduction
  • Within IT organization, Strategy analysis focuses on the technologies and systems, business units, business processes, and business strategies impacted by a proposed change.
  • Business analysts plan for a thorough understanding of the current state and a large context of the enterprise at first, with the understanding that the scope will narrow as the future state is identified.
  • Future state description may be process or capability related and usually includes how current system functionality is required to change in order to support the future vision and meet the objectives of both individual stakeholders and the enterprise.
  • Once the aspects of the change scope and desired future state are understood, business analysts assess uncertainty and risk.
Introduction

- The term design is viewed more broadly from the business analyst’s point of view. Designs are usable representations that focus on the solution and understanding how value might be realized by a solution if it is built.
- Business analysts define requirements to a level of technical detail that will be used as part of solution design and input into technical designs. This elaboration will include both functional requirements and non-functional requirements.
- For some change initiatives, the definition of non-functional requirements could define all business goals for the change effort.
- As part of requirements analysis, an IT business analyst may partner with another business analyst with a different focus, such as an enterprise business analyst or business architect, to ensure that the IT requirements align to business or organizational strategy.
Solution Evaluation

11.3.5 IMPACT ON KNOWLEDGE AREAS

- Introduction
  - Solution evaluation focuses on solution components and the value they provide. Within an IT context, this includes a focus on the interactions between multiple systems within the change and the surrounding environment.

  - Testing or quality assurance, as part of solution evaluation, ensures that the solution performs as anticipated or designed, and that it meets the needs of the business or stakeholders who requested the change effort.

  - The value realization for IT solution is commonly associated with better support for business processes and procedures.

  - Business and technical objectives are associated with benefits and value realization which are measured against defined metrics used to evaluate success. Requirements should trace back to the objectives, and this traceability provides a foundation for solution evaluation.
11.3 The Business Architecture Perspective
INTRODUCTION – THE BUSINESS ARCHITECTURE PERSPECTIVE

- Provide Common Understanding
- Align to Strategic Objectives
- Support Ongoing Transformation

Business architecture
INTRODUCTION – THE BUSINESS ARCHITECTURE PERSPECTIVE

• Business Architecture principles
  • Scope – the entire enterprise.
  • Separation of concerns and scenario driven – different blueprints
    • What
    • How
    • Who
    • Where
    • Why
    • How well
  • Knowledge based
11.4.1 CHANGE SCOPE

- Entire enterprise and may be performed
  - Across enterprise as a whole
  - Across a single line of business
  - Across a single functional division

- Executive or management level
11.4.1 CHANGE SCOPE

- Capabilities
- Value
- Processes
- Information and data
- Organization
- Reporting and management
- Stakeholders
- Security strategies
- Outcomes
11.4.1 CHANGE SCOPE

- Strategic planning
- Business remodeling
- Organizational redesign
- Stream-lining business operations
- Cost reduction
- Formalization of institutional knowledge
- Transformation initiatives
- Improve customer retention.
11.4.2 BUSINESS ANALYSIS SCOPE

• The goal is to:
  • Understand the entire enterprise context
  • Provide balanced insight into all the architecture elements and their relationships
  • Provide a holistic view of all the specialties within the organisation

• Required insights, skills and knowledge:
  • Business strategy and goals
  • Conceptual business information
  • Enterprise IT architecture
  • Process architecture
  • Business performance and intelligence architecture
11.4.2 BUSINESS ANALYSIS SCOPE

• **The general outcomes:**
  - Alignment of the organization to its strategy
  - The planning of change in the execution of strategy
  - Ensuring that as change is implemented, it remains aligned

• **Key deliverables include:**
  - Business capability maps
  - Value stream maps
  - Organization maps
  - Business information concepts
  - High-level process architecture
  - Business motivation models
• Reference models are predefined architectural templates that provide one or more viewpoints for a particular industry or function.
  • Considered the default architecture ontology (industry or function).
  • Provide a baseline architecture starting point.

<table>
<thead>
<tr>
<th>Reference Models</th>
<th>Industry/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACORD</td>
<td>Insurance and financial industry</td>
</tr>
<tr>
<td>BMM</td>
<td>Generic</td>
</tr>
<tr>
<td>COBIT</td>
<td>IT governance and management</td>
</tr>
<tr>
<td>eTOM &amp; FRAMEWORX</td>
<td>Telecommunications</td>
</tr>
<tr>
<td>FEA SRM</td>
<td>Government (US)</td>
</tr>
<tr>
<td>ITIL</td>
<td>IT service management</td>
</tr>
<tr>
<td>SCOR</td>
<td>Supply chain management</td>
</tr>
</tbody>
</table>
### 11.4.3 REFERENCE MODELS AND TECHNIQUES

- **Common architecture techniques not included in the BABOK**

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archimate®</td>
<td>Open standard Modeling language</td>
</tr>
<tr>
<td>Business Motivation Model (BMM)</td>
<td>Formalization of the business motivation: mission, vision, strategies, tactics, goals, objectives, policies, rules, and influencers</td>
</tr>
<tr>
<td>Business Process Architecture</td>
<td>Modeling of processes and interface points, identifies core, supporting and management processes</td>
</tr>
<tr>
<td>Customer journey map</td>
<td>Customer journey through various touch points and stakeholders across the organisation. Used to analyze customer experiences</td>
</tr>
<tr>
<td>Capability map</td>
<td>Hierarchical catalogue of business capabilities (what the business does)</td>
</tr>
<tr>
<td>Enterprise core diagram</td>
<td>Models integration and standardizations of the organisation</td>
</tr>
<tr>
<td>Information map</td>
<td>Catalogue of business entities associated with business capabilities and value delivery</td>
</tr>
</tbody>
</table>
### 11.4.3 REFERENCE MODELS AND TECHNIQUES

- **Common architecture techniques not included in the BABOK**

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational map</td>
<td>Model showing relationships of business units, external parties, capabilities &amp; information</td>
</tr>
<tr>
<td>Project portfolio analysis</td>
<td>Model of programs, projects and portfolios to provide holistic view of change initiatives</td>
</tr>
<tr>
<td>Roadmap</td>
<td>Models actions, dependencies, responsibilities to move from current state to future state</td>
</tr>
<tr>
<td>Service oriented architecture (SOA)</td>
<td>Provides a holistic view of the IT infrastructure of the organization</td>
</tr>
<tr>
<td>TOGAF</td>
<td>A method to develop an enterprise architecture</td>
</tr>
<tr>
<td>Value mapping</td>
<td>Holistic representation of the stream of activities required to deliver value</td>
</tr>
<tr>
<td>Zachman framework</td>
<td>Provides an ontology of enterprise concepts based on matrix of six interrogatives and six levels of abstraction</td>
</tr>
</tbody>
</table>
11.4.4 UNDERLYING COMPETENCIES

- High tolerance for ambiguity and uncertainty
- A great deal of political acumen
- Ability to:
  - Put things into a broader context
  - Transform requirements and context into a concept
  - Suppress details and provide higher level views
  - Think in long term time frames
  - Deliver tactical outcomes
  - Interact with people at the executive level
  - Consider multiple scenarios and outcomes
  - Lead and direct change
11.4.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  
  • BA’s are required to understand enterprise level context:
    • Strategy and direction, operating model and value proposition, current business and operational capabilities, stakeholders and their points of engagement, plans for growth, governance, and planning processes, culture and environment, and capacity for change
  
  • Governance planning and monitoring focuses on:
    • Selecting which initiatives will provide the most benefit in achieving the business strategies and outcomes
    • Determining which frameworks or models exist or are utilized within the organization
11.4.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  - BAs need to deal with a great deal of ambiguity & uncertainty.
  - Communicate with and understand a diverse range of stakeholders.
  - Elicit inputs such as strategy, value, existing architectures, and performance metrics to develop deep understanding.
  - Advocate for the organization’s strategy working to ensure alignment of individual initiatives to the strategy.
  - Play a role to bridge the needs of individual stakeholders, projects and operational groups to optimize the enterprises goals and strategy.
  - Optimize organization’s goals and strategies, discouraging activities that achieve a narrow goal.
11.4.5 IMPACT ON KNOWLEDGE AREAS

- **Introduction**
  
  - BA’s need to understand how projects impact the business architecture on an ongoing basis and work to expand, correct or improve the architecture.
  - Essential BA’s have executive level support and agreement.
  - Engage with architecture review board to review and assess changes to the architecture.
  - Identify possible emerging changes both internal and external.
  - Decide how to incorporate changes into the business architecture of the organization.
11.4.5 IMPACT ON KNOWLEDGE AREAS

- **Introduction**
  - Play a significant role in strategy analysis.
  - Business architecture provides views on current state, transitional state and future state of the organization.
  - Develop roadmaps based on the organization’s change strategy to ensure the organization continues to deliver value and remain competitive throughout the change.
  - Analyze factors such as:
    - Market conditions
    - Which markets to move into
    - How to compete in the transition state
    - How to best position the organization’s brand proposition
11.4.5 IMPACT ON KNOWLEDGE AREAS

- **Introduction**
  - BA’s select a variety of architectural models or views for various stakeholders to provide context and information.
  - These models result in better requirement analysis and design, as they:
    - Remove need to make assumptions
    - Minimise risk of duplicating already existing capabilities, systems or sub-optimizing the whole enterprise
    - Synthesize knowledge and insights from multiple architectural views to determine if proposed changes work towards or conflict with organizations goals.
11.4.5 IMPACT ON KNOWLEDGE AREAS

• **Introduction**
  - BA’s need to understand how well the business is performing and investigate these measures against the expected outcomes and initiatives.
  - Must be able to collect capability and process performance data collected by business owners, operational or IT managers.
  - BA’s analyze the results of measurements and use these to evaluate solution impact and factor these into subsequent planning.
11.5 The Business Process Management Perspective
INTRODUCTION – BUSINESS PROCESS MANAGEMENT PERSPECTIVE

• Business Process Management (BPM) is a management discipline and a set of enabling technologies that:
  • Focuses on how the organization performs work to deliver value across multiple functional areas to customers and stakeholders
  • Aims for a view of value delivery that spans the entire organization
  • Views the organization through a process-centric lens

• BPM initiative delivers value by implementing improvements to the way work is performed in an organization.

• BPM determines how manual and automated processes are:
  • Created
  • Modified
  • Cancelled
  • Governed
CHANGE SCOPE

• Business analysts working within the BPM discipline may address:
  • A single process with limited scope
  • All of the processes in the organization

• Focus is on how the **processes** of an organization can be changed in order to improve and meet the objectives of the organization.
BPM LIFE CYCLE

Introduction

Designing

Optimizing

Modeling

Execution and Monitoring
BPM LIFE CYCLE

• **Designing**
  - Identification of processes.
  - Definition of current state (as-is).
  - Determining how we get to the future state (to-be) by taking in consideration stakeholders’ expectations of how the business should be run.

• **Modeling**
  - Graphical representation of the process that documents the process as well as comparing current and future state.
  - Provides input to requirements and solution design specification as well as analyzing their potential value.
  - Simulation may use quantitative data so that the potential value of variations on the process can be analyzed and compared.
BPM LIFE CYCLE

• **Execution and Monitoring**
  • Provides the same type of input as Modeling but in terms of the actual execution of processes.
  • Data collected as a result of the actual business process flow is reliable and objective.
  • Collected data is used in analyzing value and recommending alternatives for design improvement.

• **Optimizing**
  • Ongoing repetition or iteration of the previous phases.
  • May be a source of requirements and solution design definitions that comes directly from stakeholders and the user community.
  • Demonstrates the value of a suggested solution modification and justifies process and product improvement initiatives.
The goal of BPM is to ensure that value delivery is optimized across **end-to-end processes**.

**BPM frameworks** are sets or descriptions of processes for:
- Generic organization
- Specific industry
- Professional area, or
- Type of value stream

BPM frameworks define particular levels of processes throughout the organization's process architecture.

Business analysts involved with BPM are frequently engaged in continuous improvement activities as a part of it.
BPM ACHIEVEMENTS

- BPM achievements could be evaluated by reducing cost/risks or by operational performance improvement.
  - Effectiveness
  - Efficiency
  - Adaptability
  - Quality

- **Transparency** into processes and operations is a common core value of BPM initiatives, providing decision makers a clear view of the operational consequences of process-related decisions.

- Starting point – identification of the business need of the customers.
BPM DRIVERS

• Cost reduction initiatives
• Increase in quality
• Increase in productivity
• Emerging competition
• Risk management
• Compliance initiatives
• Next generation process automation
• Core system implementation
BPM DRIVERS

- Innovation and growth
- Post merger and acquisition rationalization
- Standardization initiatives
- Major transformation programs
- Establishment of a BPM Centre of Excellence
- Increased agility
- Speed or faster processes
BUSINESS ANALYST ROLES

The Business Process Management Perspective
PROCESS ARCHITECT

- Responsible for:
  - Modeling, analyzing, deploying, monitoring, and continuously improving business processes.
  - Developing and maintaining standards and the repository of reference models for products/services, business processes, key performance indicators (KPIs), and critical success factors (CSF).
- Knows how to design business processes & enhance them.
  - Enhances & transforms business processes into technically enhanced and executable process templates.
  - Focuses on managing business performance or on mapping technology to business operations.
- Addresses & guides the decisions about process knowledge, methodology, and technology.
PROCESS ANALYST/DESIGNER

• Has detailed process knowledge, skills, and interest

• Expert in documenting and understanding process design along with performance trends

• Has an interest in business process optimization to increase overall business performance

• Understands the detailed process and performs the necessary analysis for process optimization
  • Performs analysis and assessment of as-is processes
  • Evaluates alternate process design options
  • Makes recommendations for change based on various frameworks
PROCESS MODELER

• Captures & documents business processes:
  • Current (as-is)
  • Future/target (to-be)

• Documents a process for implementation or support by an information technology system.

• The process analyst/designer and the process modeler functions frequently reside within a single position.
OUTCOMES WITHIN THE DISCIPLINE OF BPM

• Business process models
• Business rules
• Process performance measures
• Business decisions
• Process performance assessment
• Adaptive Case Management (ACM)
  • Used when processes are not fixed or static in nature, and have a lot of human interaction.

• Business Process Re-engineering (BPR)
  • Fundamental rethinking and redesigning of business processes to generate improvements in critical performance measures.

• Continuous Improvement (CI)
  • Ongoing monitoring and adjustment of existing processes to bring them closer to goals or performance targets.

• Six Sigma
  • Continuous improvement methodology that focuses on the elimination of variations in the outcome of a process.
COMMONLY USED METHODOLOGIES

- **Lean**
  - Continuous improvement methodology that focuses on the elimination of waste in a process.

- **Total Quality Management (TQM)**
  - Processes of the organization should provide the customer and stakeholders with the highest quality products and services.
  - Products/services meet or exceed the expectations.

- **Theory Of Constraints (TOC)**
  - Performance of a process is dominated by one key constraint at any given time, and the process can only be optimized by improving the performance of that constraint.
  - Performance can be optimized by managing three variables: throughput of a process, operational expense to produce it and inventory of products.
BASIC SKILLS

- Challenge the status quo.
- Dig to understand the root causes of a problem.
- Assess why things are being done in a particular way.
- Encourage subject matter experts (SMEs) to consider new ideas and approaches to make their processes more efficient and effective.
- Analyze internal and external views of the processes.
  - Understand
  - Articulate
  - Move back and forth between views
Due to the effects that changes to processes have on the working habits of individuals, interaction skills are valuable.

- Negotiate and arbitrate between individuals with different opinions.

- Expose and resolve conflicts between different groups within the organization.

- The business analyst is a neutral and independent facilitator of the change.

- Communicate across organizational boundaries as well as outside the organization.
Progressive elaboration is used due to the amount of information available for full planning may be limited in the initial stages.

Common cause of failure of BPM initiatives is the failure to plan for ongoing monitoring of the effect of changes to the process.

Initial focus of business analysis work is on:

- Analyzing and improving the business process before considering:
  - Technology used to support the process
  - Any changes that might be required to software applications or work procedures
The scope of the initiative and the scope of the affected process must be defined and understood.

**Process Modeling** and **stakeholder analysis** are generally utilized during the elicitation phase of a BPM initiative.

**Process maps** are an important tool to drive elicitation in BPM initiatives and stakeholders are frequently consulted during their development.

Process changes can have significant impacts across the organization, so **managing stakeholders** and their **expectations** is critical.
11.3.5 IMPACT ON KNOWLEDGE AREAS

- BPM is a set of approaches that focus on ways to deliver value across multiple functional areas through a process-centric lens.

- BPM activities can drive out business requirements resulting in new design, coding, implementation, and post-implementation changes.

- Business analyst ensures that communication is effectively conducted with stakeholders and process owners.

- Business processes documentation is available to all stakeholders as it is to be used in the daily operation of the business.
11.3.5 IMPACT ON KNOWLEDGE AREAS

- Strategy analysis involves understanding the role the process plays in an enterprise value chain.
- Any process that interacts with the processes affected by the BPM initiative must be considered.
- Both current and future states need to be described by the value chain and performance measures for the business process.
- Continuous improvement methods focus on the performance measures to determine the strategy.
- The change strategy will involve the identification of possible process changes.
11.3.5 IMPACT ON KNOWLEDGE AREAS

- Focus on defining the to-be process model.

- The requirements architecture includes:
  - The process model
  - Associated business rules and decisions
  - Information requirements
  - Organizational structure

- Solution options include:
  - Changes to IT needed to support the process
  - Outsourcing of aspects of the process
11.3.5 IMPACT ON KNOWLEDGE AREAS

- Solution evaluation occurs repeatedly during BPM initiatives to assess the business process performance.
- As processes are evaluated for different scenarios, they can be refined and the results are monitored.
- Solution evaluation assists in understanding of the impact and value delivered by business process change.
11.3.5 IMPACT ON KNOWLEDGE AREAS

- Analyze solution performance task
  - Understanding the differences between potential & actual value.
  - Determining if a solution can perform better/realize more value.

- The evaluation examines:
  - Opportunities or constraints of the implemented solution
  - How it satisfies needs
  - How it could be improved

- Solution evaluation result:
  - Triggers further optimization of the process
  - Can lead to repeating of the BPM life cycle