Business Analytics

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1: Business Analysis Foundation Concepts

LEARNING VOYAGE

Business Analysis Foundation Concepts

We will cover the following topics in this lesson:

- Understanding business analysis
- The Business Analysis Core Concept Model™
- Key terms
- Stakeholders
- Requirements classification schema
- Requirements and designs
- Test your knowledge

Understanding business analysis

- Business analysis is the practice of understanding business needs and enabling change, including the recommendation of solutions.
- Business analysis can deliver value before, during, or after a project or business initiative.
- Initiatives, where business analysis is applied, can be tactical, strategic, or operational in nature.
- Business analysis is often used to understand the business's current state and future desired state.

Who is a business analyst?

- Any person in the organization who performs the tasks that are described within the BABOK® Guide is considered to be a business analyst

- The BABOK® v3 Guide describes business analysts as follows: “Business analysts are responsible for discovering, synthesizing, and analyzing information from a variety of sources within an enterprise, including tools, processes, documentation, and stakeholders.

The Business Analysis Core Concept Model™

Key terms

There is a core set of key terms used within the business analysis profession that has been defined in the BABOK® v3 Guide. It is important for you to understand and learn the meaning of each of these terms.

- Business analysis
- Business analysis information
- Design
- Enterprise
- Organization
- Plan
- Requirement
- Risk

Stakeholders

There are stakeholder roles you should be aware of and be able to define and interpret in the context of exam questions. Here, we'll take each of these stakeholder roles and understand what part they play within the realm of business analysis.

- Business analyst
- Customer
- Domain subject matter expert
- End user
- Implementation subject matter expert
- Operational support
- Project manager
- Regulator
- Sponsor
- Supplier
- Tester

Requirements classification schema

There are four main types of requirements defined by the BABOK® Guide v3.0. These are fundamental to business analysis and require you to fully understand each classification entirely. They include the following:

- Business requirements
- Stakeholder requirements
- Solution requirements
- Transition requirements

Business Requirements
01
Why do I want it?
DESIGN
04
ACCESS OUTCOMES
Transition Requirements
What are the conditions?
Cycle continues until requirements are met.
Stakeholder Requirements
What are the needs?
DESIGN
02
03
DESIGN
Solution Requirements
What do I want?

Summary

- In this lesson, you have learned about the core concepts that are used in business analysis practices.

- In all, we learned about business analysis and business analysts, the Business Analysis Core Concept Model, the key terms, the various stakeholders involved, and the requirements classification schema.

"Complete quiz"

2: Business Analysis Planning and Monitoring

LEARNING VOYAGE

Business Analysis Planning and Monitoring

The purpose and context of these knowledge areas are as follows:

- The Business Analysis Planning and Monitoring knowledge area
- The Plan Business Analysis Approach task
- The Plan Stakeholder Engagement task
- The Plan Business Analysis Governance task
- The Plan Business Analysis Information Management task
- The Identify Business Analysis Performance Improvements task
- Real-world case studies
- Test your knowledge

BUSINESS ANALYSIS PLANNING AND MONITORING

The Business Analysis Core Concept Model™

The six core concepts, which are described as BACCM™, are as follows:

Task: Plan Business Analysis Approach

The key considerations for the business analysis approach is as follows:

- It should be in alignment with the objectives of the change or initiative.
- It should also be aligned and be coordinated to work in harmony with the overall changes and deliverables planned for the initiative.
- It should consider how the approach will cater to tasks to support any risks that may emerge during the initiative.

The elements of Plan Business Analysis Approach

These are the three key elements when you plan the business analysis approach:

- Planning the approach.
- Should you plan for a lot of detail and formality or not?
- Planning your business analysis activities.

Element 1: Planning the approach

- There are many ways to approach business analysis work and various planning methods are used across different perspectives, industries, and enterprises.

- Many of the planning methods are a variant of an interpretation of either a predictive or an adaptive approach.

Element 2: Formality and the level of detail of business analysis deliverables

- All business analysis deliverables or results should be defined in the business analysis approach.

- Predictive planning approaches are typically quite formal and produce very detailed document sets requiring formal approval, whereas adaptive planning approaches can be quite informal and often limit the documentation to the minimum until more detail is required.

Element 3: Business analysis activities

- The business analyst must decide on the process to follow for planning a project's business analysis activities.
- The business analysis work plan is often a sub-set of the overall project plan and should, therefore, be done in coordination with the project manager.

Element 4: The timing of business analysis work

- It is important to plan for when the business analysis work will be performed for a specific initiative.

- If it is a predominantly predictive approach that is being taken on the initiative, you will know that most of the business analysis work will be performed in the earlier phases of the project.

Element 5: Complexity and Risk

- As you can probably imagine, when you are faced with a large project that is attempting a complex subject matter or high-risk context, you will need to consider complexity and risk when planning the business analysis approach, as well as the specific activities.

- For example, if you are planning the business analysis work activities for an airline flight control system, there will be a lot of very detailed and accurate analysis required upfront and potentially on an ongoing basis, too.

Element 6: The acceptance of the business analysis approach and plan

- It is important for the business analyst to socialize the business analysis approach and plan with the stakeholders who will be affected by the work that will be performed.

- If everyone understands the approach and feels comfortable that the plan is achievable, then the business analyst has a strong position to start executing the business analysis activities for the initiative from.

Business Analysis Planning and Monitoring

- According to the BABOK® v3 Guide, the purpose of Plan Stakeholder Engagement is as follows:

"to plan an approach for establishing and maintaining effective working relationships with the stakeholders."

The number of stakeholders

- Something that the business analyst should also keep in mind when planning the stakeholder engagement is the number of stakeholders that would need to be engaged with.

- This will enable the business analyst to consider the engagement complexities that could arise when the number of stakeholders grows and so the format and engagement models might need to change.

Element 1: Performing stakeholder analysis

- The ultimate goal when planning the stakeholder engagement for your business analysis activities is to make sure that you are engaging with all the relevant and impacted stakeholders or groups.

- This will ensure that you have comprehensive requirements or needs a definition for the future planned solution.

Element 2: Defining stakeholder collaboration

It is important for the business analyst to consider the following aspects when planning a formal or informal collaboration with stakeholders:

- The timing and frequency of the collaboration
- The location
- The available tools to be used for collaborations
- Will the collaboration be virtual or in person?
- What type of collaboration do the stakeholders themselves prefer?

Element 3: Stakeholder communication needs

- The last element of this task is about considering the communication plan for this engagement.
- Specifically, considering aspects such as what messages need to be communicated and what the delivery methods will be—email, verbal meetings, or presentations, for example.
- You also need to determine who to communicate with, when to communicate, and how frequently to communicate.

Task: Plan Business Analysis Governance

- According to the BABOK® v3 Guide, the purpose of Plan Business Analysis Governance is as follows:

"to define how decisions are made about requirements and designs, including reviews, change control, approvals and prioritization."

The elements of Plan Business Analysis Governance

These are the four key elements to understand and include when you plan the business analysis governance. These elements are as follows:

- Decision-making
- Changing the control process
- Planning a prioritization approach
- Planning for approvals

Element 1: Decision-making

- Without effective decision-making practices in the project, there will be a lot of uncertainty created, which in turn causes stress and introduces unwelcome risks.

- Therefore, it is important to take the time to explicitly decide what the decision-making process is for the team, including understanding the escalation paths when a stakeholder collaboration cannot resolve or make a decision.

Element 2: Changing the control process

There are seven main things you must include when designing your change request processes. They are as follows:

- Determine what steps must be followed by stakeholders to request a change.
- What are the elements of the change request you want to analyze; for example, the change cost and time estimates, the benefits of implementing the change, the risks of not implementing the change, its priority, and what should be the next steps in relation to the specific change?

Element 3: Planning a prioritization approach

- In an ideal world, as business analysts, we would like to implement all the requirements so that we can delight all our stakeholders.

- However, this is not feasible and doesn’t always make sense financially or operationally. It is therefore important to plan what the approach around prioritizing requirements on the project will be.

Element 4: Planning for approvals

- A good way to ensure efficient and effective requirements and to design artifact approvals is to plan for the approvals, the method, and the format that will be used and the people who will be required to approve them.

- It is important to consider the type of project you are involved in—for example, is the project very structured and governed by the organization or is the project being run very flexibly and quite informally?

Task: Plan Business Analysis Information Management

- According to the BABOK® v3 Guide, the purpose of Plan Business Analysis Information Management is as follows:

"to develop an approach for how business analysis information will be stored and accessed."

The elements of Plan Business Analysis Information Management

There are six key elements to understand and include when you perform the Plan Business Analysis Information Management task. These elements are as follows:

- The organization of business analysis information
- A level of abstraction
- Planning a traceability approach
- Planning for requirements reusability
- Storage and access
- Requirements attributes

Element 1: The organization of business analysis information

- It is, however, not always practical or realistic to know the best structure and process for organizing information from a very early stage in the project

- it is a good idea to start with a simple but robust enough organizational system to enhance and improve during those early stages of the project.

Element 2: The level of abstraction

- This element is about considering the level of detail that is required when you describe the requirements to stakeholders.

- In some types of projects, the requirements may well be understood conceptually and the business analyst doesn’t need to delve into a high level of detail when describing the requirements.

Element 3: Planning a traceability approach

- The traceability of requirements is all about being able to trace requirements in different ways and for different purposes.
- One of the most common reasons for tracing requirements is to be able to keep track of the requirement's status or progress during the life cycle of the project.
- This is because it is important to be able to validate at the end of a project whether a particular requirement was implemented or not by referring back to the requirement's life cycle during the project.

Element 4: Planning for requirements' reuse

The most common types of requirements that can in some cases be reused include requirements such as the following:

- Regulatory requirements
- Contractual requirements
- Quality standards
- Service-level agreements
- Some types of business rules and business processes
- Requirements describing a cross-functional product or service that applies to many different areas within the business

Element 5: Storage and access

- When the business analyst considers the elements of storage and access, they should consider the business analysis approach
- The tools and storage facilities available within the organization, and any specific notations or artifacts planned that may have special access requirements.
- Ideally, the storage that is planned for should allow users to edit and change business analysis information and be accessible over a period of time.

Element 6: Requirements attributes

- Requirements attributes provide information about the requirements and help in the ongoing management of the requirements throughout the change.

The most commonly used requirements attributes are as follows:

- An absolute reference: This is the unique identifier. This identifier is completely unique to this requirement and never changed or reused, even if the original requirement is deleted.

Task: Identify Business Analysis Performance Improvements

- According to the BABOK® v3 Guide, the purpose of Identify Business Analysis Performance Improvements is as follows:

"to assess business analysis work and to plan to improve processes where required."

The elements of Identify Business Analysis Performance Improvements

There are four key elements to understand and include when you perform the Identify Business Analysis Performance Improvements task These elements are as follows:

- Performance analysis
- Assessment measures
- Analyzing results
- Recommending actions for improvement

Element 1: Performance analysis

- Every project or environment has its own expectations of what constitutes good quality business analysis work or performance.

- This could range from formal reviews and reports generated to informal verbal feedback to individuals or the team.

Element 2: Assessment measures

- Different types of assessment measures can be applied to determine the quality of the performance of business analysis within a project or environment.
- Just as with any measure, there are tangible and intangible ways that performance can be measured.
- It is not always very easy to identify true quantitative measures in terms of business analysis work outputs, but some ideas could include adhering to project time frames

Element 3: Analyzing results

- Once the assessment measures have been set and agreed for the business analysis function or team, they are then analyzed by involving the different stakeholders that can provide input to analyze each measure.

- An example could simply be that the project manager provides feedback by assessing the business analysis team's performance in terms of delivery of artifacts against the agreed timelines set in the project plan.

Element 4: Recommended actions for improvement

- Once all the assessment measures have been analyzed and the results have been gathered and understood, it is time to recommend some actions for improvement in the future.

- This could take the form of recommendations for the overall team and/or for the individual business analyst to which the feedback applies.

Summary

The following are the key concepts and tasks we covered in this lesson:

- The Business Analysis Planning and Monitoring knowledge area
- The Plan Business Analysis Approach task
- The Plan Stakeholder Engagement task
- The Plan Business Analysis Governance task
- The Plan Business Analysis Information Management task
- The Identify Business Analysis Performance Improvements task

"Complete quiz"

3: Elicitation and Collaboration

Elicitation and Collaboration

The following shows the workflow of this lesson:

- Purpose and context of this Knowledge Area
- Task: Prepare for Elicitation
- Task: Conduct Elicitation
- Task: Confirm Elicitation Results
- Task: Communicate Business Analysis Information
- Task: Manage Stakeholder Collaboration
- Real-world case study
- Test your knowledge

ELICITATION AND COLLABORATION

The Business Analysis Core Concept Model™

- The six core concepts that describe the Business Analysis Core Concept Model TM are as follows:

Task: Prepare for Elicitation

- Elicitation and collaboration can be planned, unplanned, or both.
- Planned activities such as workshops, experiments, and/or surveys can be structured and organized in advance.
- Unplanned activities happen at the moment without notice, such as last-minute or just-in-time collaborations or conversations.

Purpose

- According to the BABOK® v3 guide, the purpose of the task: Prepare for Elicitation is as follows:

"to understand the scope of the elicitation activity, select appropriate techniques, and plan for (or procure) appropriate supporting materials and resources."

Elements

These are the five key elements when you prepare for elicitation:

- Understand the scope of elicitation.
- Select elicitation technique.
- Set up logistics.
- Secure supporting material.
- Prepare stakeholders.

Element 1: Understand the scope of elicitation

- There are a number of different aspects that the business analyst should consider when preparing for the elicitation session.
- Considering these aspects will assist the business analyst in understanding what type of business analysis information will be discovered during the elicitation and will also assist in the process of deciding which elicitation techniques to apply.
- The most important aspects to consider include the following:

1. The business domain
2. Overall culture and environment
3. Stakeholder locations etc

Element 2: Select elicitation techniques

- It is important to realize that with any elicitation activity, it is very likely that the business analyst will apply multiple elicitation techniques.

- It often depends on factors such as the constraints that might exist around cost and time, what information is available to the business analyst, the culture of the organization, and of course the planned ideal outcomes of the elicitation sessions themselves.

Element 3: Set up logistics

A key step in preparing for elicitation is to ensure that the logistics of the session or series of sessions are well planned for by considering the following key aspects:

- The goals of the session.
- Who are the participants and what are their roles?
- Scheduled resources including people, rooms, and tools such as flip charts.
- Locations and communication channels.
- Techniques that will be used.

Element 4: Secure supporting material

- As part of the preparation activities for the elicitation session, the business analyst needs to make sure to collate, prepare, and understand the information that exists prior to the session.
- The information can come from people, systems, historical data, materials, and other documents.
- Documents can include any type of relevant documentation that can help support the goals of the elicitation activities.

Element 5: Prepare stakeholders

- There may be a need for the business analyst to explain to the business stakeholders how an elicitation activity works prior to conducting the session.
- It may also be required by the business analyst that stakeholders prepare specific information for the elicitation session itself.
- A good practice is to ensure that the stakeholders clearly understand the purpose of the planned elicitation session and what the benefits are.

Task: Conduct Elicitation

- The second task of the Elicitation and Collaboration Knowledge Area is: Conduct Elicitation. This task describes the execution of elicitation sessions as it was planned and is now performed by the business analyst.

- There are a number of different ways of conducting elicitation with stakeholders and in most cases, the business analyst will use a combination of different approaches, techniques, and styles to obtain and complete the elicitation activities.

Types of elicitation

The BABOK® v3 guide has identified three common types of elicitation:

- Collaborative
- Research
- Experiments

Elements

These are the two key elements to consider when performing the task: Conduct Elicitation:

- Guide elicitation activity.
- Capture elicitation outcomes.

Element 1: Guide elicitation activity

- During the elicitation session, it is important for the business analyst to understand the proposed representations of business analysis information (prepared during the preparation task)

- The elicitation session can be guided toward the anticipated results for the session at the relevant level of detail.

Element 2 – Capture elicitation outcomes

- Although the conducting of elicitation is frequently iterative and takes place in a series of sessions, it is imperative to capture the elicitation outcomes in a well-organized and succinct fashion.

- If the elicitation activity happens in an ad hoc or unplanned way, the conversations and decisions or outcomes must also be documented and integrated into the planned outcomes.

Task: Confirm Elicitation Results

- The third task of the Elicitation and Collaboration Knowledge Area is Confirm Elicitation Results.

- This describes the tasks of checking that the information gathered during an elicitation session is accurate, complete, and consistent with any other or previously documented elicitation results.

Purpose

- According to the BABOK® v3 guide, the purpose of Confirm Elicitation Results is as follows:

"to check the information gathered during an elicitation session for accuracy and consistency with other information."

Elements

These are the two key elements when you carry out the Confirm Elicitation Results task:

- Compare elicitation results against source information.
- Compare elicitation results against other elicitation results.

Element 1: Compare elicitation results against source information

- This element describes how the business analyst performs follow-up meetings or reviews and compares elicitation results against what stakeholders provided during the elicitation sessions to correct or update any elicitation results that may not be fully accurate or complete.
- It may also happen that the stakeholders confirm elicitation results independently from the business analyst's follow-ups.

Element 2: Compare elicitation results against other elicitation results

- This element describes the further activity of comparing the elicitation results from elicitation sessions against any source information or alternative elicitation results that may exist.
- Where variations in results are identified, it is the business analyst's role to resolve these variations by working in collaboration with stakeholders.

Task: Communicate Business Analysis Information

- The fourth task of the Elicitation and Collaboration Knowledge Area is to Communicate Business Analysis Information.

- This task describes the activities a business analyst performs when communicating the business analysis information gathered during elicitation sessions to business and technology stakeholders.

Purpose

- According to the BABOK® v3 guide, the purpose of the task: Communicate Business Analysis Information is as follows:

"to ensure stakeholders have a shared understanding of business analysis information."

Elements

These are the two key elements when you move to the Communicate Business Analysis Information task:

- Determine objectives and the format of communication.
- Communicate the business analysis package.

Element 1: Determine objectives and format of communication

Business analysis information is often developed and shared as a business analysis package. The business analysis package is used as a communication vehicle for requirements and other business analysis information. The information package may be prepared for a variety of different reasons, including the following:

- Communication of requirements and designs to stakeholders
- Early assessment of quality and planning

Element 2: Communicate the business analysis package

- The main aim of communicating the business analysis package of information is to provide stakeholders with the relevant information pertaining to the change or initiative at a level that enables them to have a good understanding of what is being described.

- Often the stakeholders will get the opportunity to review and ask questions about the business analysis information package and raise any issues or concerns that they may identify.

Task: Manage Stakeholder Collaboration

- The fifth task of the Elicitation and Collaboration Knowledge Area is Manage Stakeholder Collaboration.

- This task describes the activities a business analyst performs when working with stakeholders to collaborate effectively toward a common goal.

Purpose

- According to the BABOK® v3 guide, the purpose of Manage Stakeholder Collaboration is the following:

"to encourage stakeholders to work toward a common goal."

Elements

These are the three key elements in the Manage Stakeholder Collaboration task:

- Gain agreement on commitments.
- Monitor stakeholder engagement.
- Collaboration.

Element 1: Gain agreement on commitments

- A key challenge that business analysts often face is the availability and focused commitment of the relevant stakeholders to participate and contribute to the business analysis efforts.

- It is therefore recommended that the business analyst determines what level of commitment of time and resources would be required as early as possible so that this could be planned for and agreed on early in the initiative.

Element 2: Monitor stakeholder engagement

Business analysts stay informed of the level of the participation and performance from stakeholders to make sure of the following:

- The right subject-matter experts and other stakeholders are participating effectively.
- Stakeholder attitudes and interest levels are staying constant or improving.
- Elicitation results are confirmed in a timely manner.

Element 3: Collaboration

- The key to successful stakeholder collaboration is for the business analyst to work closely with the stakeholder in a way that makes them feel important, valued, and involved in a worthwhile endeavor.

- It is important for the business analyst to encourage two-way communication in an environment that is open to new ideas, suggestions for improvements, or any innovations.

Summary

The following are the key concepts and tasks we covered during this lesson:

- The Elicitation and Collaboration Knowledge Area
- Task: Prepare for Elicitation
- Task: Conduct Elicitation
- Task: Confirm Elicitation Results
- Task: Communicate Business Analysis Information
- Task: Manage Stakeholder Collaboration

"Complete quiz"

4: Requirements Life Cycle Management

LEARNING VOYAGE

Requirements Life Cycle Management

The following topics will be covered in this lesson:

- Purpose and context of this knowledge area
- Task: Trace Requirements
- Task: Maintain Requirements
- Task: Prioritize Requirements
- Task: Assess Requirements Changes
- Task: Approve Requirements
- Real-world case study
- Test your knowledge

REQUIREMENTS LIFE CYCLE MANAGEMENT

What is Requirements Life Cycle Management?

The Business Analysis Core Concept Model™

- The six core concepts of the Business Analysis Core Concept Model™ are listed here:

Task: Trace Requirements

- The first task described as part of the Requirements Life Cycle Management knowledge area is that of tracing requirements during the life of the initiative.

Purpose

- According to the BABOK® v3 guide, the purpose of Trace Requirements is to do the following:

"…ensure that requirements and designs at different levels are aligned to one another, and to manage the effects of change to one level on related requirements."

Elements

There are three elements to consider when you trace requirements:

- Level of formality
- Relationships
- Traceability repository

Element 1: Level of formality

Is a high level of formality and detail required?

- Always remember that the more the level of formality increases, the more difficult it becomes to effectively trace a requirement.

- There might be a few reasons why a certain level of detail is being documented for a specific requirement.

Element 2: Relationships

What are the relationships between requirements?

- There are several types of relationships between requirements; it helps to know and understand these relationships

- In order to determine the most appropriate traceability approach for your specific project situation and traceability needs.

Element 3: Traceability Repository

- Requirements traceability is documented and maintained in line with the methods and tools identified by the business analysis approach.

- Many organizations today will manage traceability with elaborate spreadsheet templates, but it should be noted that there are sophisticated requirements management software tools, such as Jira, that are available to facilitate effective traceability on projects.

Task: Maintain Requirements

- You will know that when working with requirements on an initiative, there are many factors that can influence the requirements on a regular basis.

- The task of maintaining requirements is all about working to keep requirements as accurate and consistent as possible throughout the entire initiative.

Purpose

- According to the BABOK® v3 guide, the purpose of the Maintain Requirements task is to do the following:

" … retain requirement accuracy and consistency throughout and beyond the change during the entire requirements life cycle, and to support reuse of requirements in other solutions."

Elements

There are three key elements to consider when you maintain requirements:

- Maintain requirements
- Maintain attributes
- Reusing requirements

Element 1: Maintain requirements

- It is required that a business analyst continuously conducts maintenance to ensure that the requirement is correctly and accurately documented and readily available.

- If anything with regards to the requirement changes, it should be analyzed and updated in a timely way.

Element 2: Maintain attributes

- The attributes of a requirement can continuously change throughout a project and need to be maintained at all times.
- The documentation thereof is referred to as Maintain Attributes.
- Requirements attributes refer to things such as a requirement's source, priority, and complexity.

Element 3: Reusing requirements

- It will drastically decrease the time spent on future analysis of requirements if certain requirements can be reused and are documented.

- During the course of an initiative, you will often find that there are some requirements that can be reused, either in different areas of the business or within other current projects.

Task: Prioritize Requirements

- The task of prioritizing requirements is important to the overall life cycle of requirements because it reflects the level of importance that stakeholders place on a specific requirement relative to all other requirements.

- During this section, we will delve into the reasons why prioritizing requirements on an initiative is important.

Purpose

- According to the BABOK® v3 guide, the purpose of the task Prioritize Requirements is to do the following:

"… rank requirements in the order of relative importance."

Why do we need to prioritize requirements?

- Requirements are prioritized in order to document their relative importance to stakeholders.
- This is a very important step in the Requirements Life Cycle Management knowledge area because when the requirements of a project have been prioritized, you can determine the order in which they will need to be delivered.
- It will also aid in understanding the value that the stakeholders attach to each of the requirements.

Elements

There are three elements to consider when you prioritize requirements:

- Basis of prioritization
- Challenges of prioritization
- Continual prioritization

Element 1: Basis of prioritization

- There are many factors that influence the priority of a requirement.
- It is important to consider each of these factors and do so in collaboration with stakeholders to determine which of these factors will carry the most weight when requirements are being prioritized within the team.

Element 2: Challenges of Prioritization

- What are the challenges when it comes to requirements prioritization?
- We have already determined that prioritization is really an assessment of the relative value of requirements.
- Each stakeholder may value a different aspect of the requirements set and have different motivations for supporting certain requirements to have a high priority for implementation.

Element 3: Continual prioritization

- Priorities may continuously change, For example, stakeholders may initially prioritize based on benefits.
- The implementation team may then re-prioritize the requirements based on the sequence in which requirements must be implemented due to technical constraints.
- Once the implementation team has provided the cost of each requirement, the stakeholders may choose to re-prioritize again.

Task: Assess Requirements Changes

- Every business analyst knows that change is a constant factor that must be managed during any initiative.

- The task of assessing requirements changes outlines the purpose of these tasks as well as the key elements to consider when change occurs with the requirements.

Purpose

- According to the BABOK® v3 guide, the purpose of the Assess Requirements Changes task is this:

"to evaluate the implications of proposed changes to requirements and designs".

Elements

There are three key elements to consider when the business analyst assesses requirements changes:

- Assessment formality
- Impact analysis
- Impact resolution

Element 1: Assessment formality

- Is a high level of formality and detail required when assessing a proposed change to a requirement?
- The amount of information available may determine the level of formality required in the assessment process.
- The other two factors that may impact the level of formality that is required during the assessment of the change to a requirement include the perceived importance of the proposed change as well as the organization's governance process.

Element 2: Impact analysis

- What are the effects of a change to a requirement?

An impact analysis determines the effect of a change by considering certain factors relating to the requirement and the proposed change of that requirement.

Element 3: Impact resolution

- Document impacts and resolutions to help stakeholders make a decision.
- The business analyst is required to document and communicate all impacts and resolutions resulting from the change analysis to share information with all stakeholders.
- The stakeholders will be responsible for approving or rejecting the proposed change based on the impact analysis and results presented by the business analyst.

Task: Approve Requirements

- The business analyst will reach the stage in the requirements life cycle when the requirements and designs must be approved
- In order for the life cycle to progress to the next stage of an initiative.

Purpose

- According to the BABOK® v3 guide, the purpose of the Approve Requirements task is to do the following:

"… obtain agreement on and approval of requirements and designs for business analysis work to continue and/or solution construction to proceed."

Elements

There are four key elements to consider when a business analyst performs the Approve Requirements task:

Element 1: Understand stakeholder roles

- It is the responsibility of the business analyst to understand who holds the decision-making power to approve a change.
- The business analyst should also be aware of whom to inform or consult with regard to a requirement.
- It is important for the business analyst to consider that there may only be a small number of stakeholders who have the authority to approve or reject requirements or changes to requirements.

Element 2: Conflict and issue management

- As a business analyst, you are responsible for gaining consensus on requirements well in advance of asking stakeholders to formally approve any requirements.

- Stakeholders and stakeholder groups may have different opinions, priorities, and perspectives with regard to the requirements and hence conflicts may need to be identified and resolved prior to seeking formal approval from stakeholders or key decision-makers.

Element 3: Gain consensus

- It is the responsibility of the business analyst to ensure that the stakeholder with approval authority is comfortable and in agreement with the requirements and the business value they will generate.

- The business analyst can gain consensus by facilitating effective communication with accountable individuals and ensuring that all decision-makers are in agreement and accepting the requirements of the solution being delivered.

Element 4: Track and communicate approval

- The business analyst is required to keep a record of all approval decisions and of current approval statuses.
- Stakeholders must be able to determine what requirements and designs are currently approved and ready to progress to the next phase of the project.

Summary

The following are the key concepts and tasks that we covered during this lesson:

- The Requirements Life Cycle Management knowledge area
- Task: Trace Requirements
- Task: Maintain Requirements
- Task: Prioritize Requirements
- Task: Assess Requirements Changes
- Task: Approve Requirements

"Complete Quiz"

5: Strategy Analysis

Strategy Analysis

Concepts you will learn:

- Understand the context of this BABOK® v3 guide knowledge area within a real-world scenario
- Understand and apply the Analyze Current State task to real-world scenarios
- Understand and apply the Define Future State task to real-world scenarios
- Understand and apply the Assess Risks task to real-world scenarios
- Understand and apply the Define Change Strategy task to real-world scenarios

What is Strategy Analysis?

STRATEGY ANALYSIS

The Business Analysis Core Concept Model™

First, let's refresh our memory of the six core concepts described in the Business Analysis Core Concept Model™:

Task: Analyze Current State

- The first task described as part of the strategy analysis knowledge area is defined as analyzing the current state of the organization or business area under consideration.

- It is about understanding what is currently being done, performed, or executed to achieve particular goals or outcomes.

Purpose

- According to the BABOK® v3 guide, the purpose of Analyze Current State is as follows:

"to understand the reasons why an enterprise needs to change some aspect of how it operates and what would be directly or indirectly affected by the change."

Elements

There are eight elements to consider when you analyze the current state:

Element 1: Business needs

What is a business need and where does it come from?

- Business needs are problems and opportunities of strategic importance experienced by the organization.
- They can come from different levels within the organization.

Element 2: Organizational structure & culture

Do we need to carry out a cultural and structural assessment?

- Firstly, the term organizational structure refers to the formal relationships between people working in the organization.

- The communication channels and relationships within the organization are not limited to the organizational structure, however, they are often driven by it.

Element 3: Capabilities and processes

- Identifying the activities performed within an organization.
- Capabilities and processes are all the functions performed within the organization, including products, services, and decision-making methods.
- The business analyst can use a capability-centric view or a process-centric view to assess the benefit of a change.

Element 4: Technology and infrastructure

How can technology and infrastructure impact a solution?

- Information systems used by the organization support people in using processes, making business decisions, and having interactions with vendors and customers.

- The infrastructure describes the organizations in terms of their physical aspects and capabilities and most typically includes components such as computer hardware, physical plants, and logistics, as well as the operation and upkeep of those aspects.

Element 5: Policies

How can policies impact a suggested solution?

- Policies can be seen as a set of rules that provide guidance to staff on behavior and actions; they also address routine operations.

- The policies of an organization can impact the possibility of implementing a specific solution if the solution does not meet or is in conflict with the organization's policy requirements within a particular context.

Element 6: Business architecture

- When analyzing the current state, the business analyst avoids considering only parts of the whole situation to avoid working on certain aspects in isolation from other parts.

- The business analyst must know how all the parts work and fit together in order to recommend changes that will be effective once implemented.

Element 7: Internal assets

- As part of performing a current state analysis, business analysts will identify organizational assets.
- These assets can be tangible or intangible and can include assets such as financial resources, patents, reputation, know-how, and brand.

Element 8: External influences

There are external influences on the organization that could impact the change by introducing constraints, dependencies, or other drivers that affect the current state. Some of these sources of external influences come from the following areas:

- Industry structure
- Competitors
- Customers
- Suppliers
- The political and regulatory environment
- Technology
- Macroeconomic factors

Task: Define Future State

- The second task described as part of the strategy analysis knowledge area is to define the future state of the organization or business area under consideration.
- This task is an important business analysis activity to support the business on its journey to define the future vision for the solution to the business needs.
- This task is about understanding what the desired outcomes or results we are expecting are by making the change when addressing the business need.

Purpose

- According to the BABOK® v3 guide, the purpose of Define Future State is as follows:

"to determine the set of necessary conditions to meet the business need."

Elements

- Business goals and objectives
- The scope of the solution space
- Constraints
- Organizational structure and culture
- Capabilities and processes
- Technology and infrastructure
- Policies
- Business architecture
- Internal assets
- Identify assumptions
- Potential value

Element 1: Business goals and objectives

- Very often, a future state is described in terms of business objectives or goals.
- These goals then act as a guideline to define and develop the change strategy and help define measures for the potential value to be had.
- Goals tend to be long-term and ongoing statements.
- Goals are also more qualitative in nature and describe a state or condition that the organization wants to establish or maintain.

Element 2: The scope of the solution space

- This element is about describing which types of changes will be considered as in scope to achieve the desired future state.

- For example, would changes to the organizational structure, people, and processes be considered part of the solution?

- Or would the solution scope be limited to only updating technology solutions with minimal or no changes to the organizational structure or people?

Element 3: Constraints

- Constraints are the boundaries that the current state and future state must be defined within.

- For example, a client requests a new website to be built for their company, however, it must be built using a specific framework, such as WordPress.

- It must be built in such a way that the clients can maintain it themselves after delivery, and the development of the new website cannot take longer than 7 days.

Element 4: Organizational structure and culture

- Often, when a large-scale change is introduced into an organization, the formal and informal working relationships that exist within the organization need to change to help achieve the desired future state.

- An example when the organizational structure and cultural element should be considered in terms of the definition of the future state is a case where two teams will be merged and duplicate job functions will be created or changes will be made to the reporting lines of employees.

Element 5: Capabilities and processes

- When you define the future state, a key element to include is any changes to the current activities being performed in the organization.
- Any new processes or capabilities, or changes to existing ones, relating to any function being affected by the change should be included as the future state definition and description.

Element 6: Technology and infrastructure

- This element is about the business analyst assessing what the potential technology and infrastructure changes should include in order to achieve the desired future state.
- Let's consider some real-world examples of where changes to technology and infrastructure may need to be identified and analyzed by the business analyst:
- Example 1: The current accounting software package at a financial institution runs on a Linux-based server.

Element 7: Policies

Policies would need to be updated if the business analyst finds the current policies to be insufficient to cater to the desired future state.

Element 8: Business Architecture

- All the components of any future state must support one another and work toward the business goals and objectives.
- The overall desired future state of the organization as a whole must be considered as part of the definition of the desired future state of any individual initiative or solution.

Element 9: Internal assets

- When you consider the element of internal resources in the context of defining the future state, you will see that the role of the business analyst here is to assess the existing capabilities and resources the organization has and whether there is a need to increase or change those resources to support the future state.

- This also includes an assessment of whether the existing capabilities and resources can be reused as part of the desired future state.

Element 10: Identify assumptions

- Most strategies are predicated on a set of assumptions that will determine whether or not the strategy can succeed, particularly when operating in a highly uncertain environment.

- It will often be difficult or impossible to prove that the delivery of a new capability will meet a business need, even in cases where it appears reasonable to assume that the new capability will have the desired effect.

Element 11: Potential value

- The element describing the potential value that the desired future state expects to deliver is about considering not only the implementation costs of the new solution or change but understanding the potential future value that the change will bring to the business.

- This could be expressed in terms of a financial return or it could be expressed in less tangible terms.

Task: Assess Risks

- The third task described as part of the strategy analysis knowledge area is to assess risks that exist in the context of moving into the future state or once the organization is in the future state.
- As a business analyst, this is an important task to incorporate into your work because the business analyst is in a unique position to understand the business needs in detail as well as to have a broad understanding of the solution aspects being considered.

Purpose

- According to the BABOK® v3 guide, the purpose of the Assess Risks task is the following:

"to understand the undesirable consequences of internal and external forces on the enterprise during a transition to, or once in, the future state. An understanding of the potential impact of those forces can be used to make a recommendation about a course of action."

Elements

There are five elements to consider when you assess risks:

- Unknowns
- Constraints, assumptions, and dependencies
- Negative impact on the value
- Risk tolerance
- Recommendations

Element 1: Unknowns

What if you don't know all the risks?

- Often in an initiative, there is some uncertainty of the likelihood of any specific risk occurring and what the exact impact would be.

- The role of the business analyst is to work with stakeholders in relation to any identified risks and aim to elicit as much information as possible about the risk, its likelihood, and the potential impact.

Element 2: Constraints, Assumptions, and Dependencies

- If we consider the task of assessing risks, it is worth understanding that any constraints, assumptions, or dependencies that have been defined for your change or initiative should also be analyzed in terms of identifying risks.

- This may result in reformulating the constraint, assumption, or dependency as a risk and then managing it as such going forward.

Element 3: Negative impact on the value

- One of the fundamental reasons it is important to identify risks while performing business analysis is because we need to know the conditions that will increase the likelihood of a negative impact on the value we are working toward delivering.

- It is important to determine the level of risk and the likelihood of the risk eventuating.

Element 4: Risk tolerance

What is risk tolerance and how is it measured?

- Risk tolerance is a measure of how much uncertainty a stakeholder or an enterprise is willing to take on in exchange for potential value.
- There are three broad ways of describing a company's attitude toward risk in general:
- Risk aversion: When a company is risk-averse, it means that their preference is to not take risks or there is an unwillingness to accept much uncertainty.

Element 5: Recommendations

There are very common categories these recommendations would fall into:

- Continue to pursue the benefits of a change regardless of the risk level
- Pursue the benefits of a change while spending time and effort to reduce the likelihood and/or impact of that risk
- Aim to find more ways to increase the benefits of making a change to outweigh the risk
- Recommend not pursuing the benefits of a change due to the risk level

Task: Define Change Strategy

- Defining the change strategy is a key task in the context of business analysis because it supports the transition from the current state to the desired future state in a planned and systematic way.

- It guides and ensures that the change strategy is supported by sound analysis of the elements that influence the success of an initiative.

Purpose

- According to the BABOK® v3 Guide, the purpose of Define Change Strategy is the following:

"to develop and assess alternative approaches to the change, and then select the recommended approach."

Elements

Solution scope
Gap analysis
Enterprise readiness assessment
Change strategy
Transition states and release planning

Element 1: Solution scope

What is the solution scope and why is it required?

- Let's start by defining the term solution in this context.
- The term solution here simply refers to the outcome or result once a change has been implemented in order to meet a particular business need.

Element 2: Gap analysis

- The idea of a gap analysis is often used when describing a document or set of activities that identify all the differences between the current state and the future state capabilities.

- To be able to perform an effective gap analysis, it is important that both the current and future state is defined in detail.

Element 3: Enterprise readiness assessment

- The enterprise readiness assessment is about the activities performed to determine whether an organization has the capacity and ability to accept the change being proposed, as well as whether the organization will be able to sustain the solution and realize value from the solution.

- This is an important assessment to do in order to facilitate a successful project outcome.

Element 4: Change strategy

- When you formulate a change strategy, you are creating a high-level plan that describes the key activities that will be executed to move or transform the organization from their current situation to the future state.

- Change strategies are most commonly described either as a one-off (big-bang) implementation or a phased or iterative style implementation.

Element 5: Transition states & release planning

- A transition state is where the organization has to keep operating within a state where the change has not been fully implemented yet.
- It is often considered as part of the release planning, which is when it is decided which capabilities of the new solution will be included in which parts of the solution release for implementation.
- Other factors that determine which capabilities will be included in the releases are factors such as budget, time, and resource constraints.

Summary

- The following are the key concepts and tasks we covered during this lesson:

- The strategy analysis knowledge area
- Task: Analyze Current State
- Task: Define Future State
- Task: Assess Risks
- Task: Define Change Strategy

Make sure you revise these before completing the knowledge quiz at the end of this lesson.

"Complete Quiz"

6: Requirements Analysis and Design Definition

LEARNING VOYAGE

Requirements Analysis and Design Definition

By the end of this lesson, you will understand the following concepts and tasks:

- The purpose and context of this knowledge area
- Specifying and modeling requirements
- Verifying requirements
- Validating requirements
- Defining the requirements architecture
- Defining solution options
- Analyzing the potential value and recommending a solution

What is Requirements Analysis and Design Definition?

Business Analysis Core Concept Model™

- The six core concepts that are described in BACCM™ include the following:

Task: Specifying and modeling requirements

- The first task described as part of the Requirements Analysis and Design Definition knowledge area is about analyzing the requirements information

- The business analyst has elicited from stakeholders and then creating requirements and design artifacts of those results.

Purpose

- According to the BABOK® v3 guide, the purpose of specifying and modeling requirements is as follows:

"…to analyze, synthesize, and refine elicitation results into requirements and designs."

Elements

There are four elements to consider when you specify and model requirements, which are as follows:

- The model requirements.
- Analyzing the requirements.
- Representing the requirements and attributes.
- Implementing the appropriate levels of abstraction.

Element 1: The model requirements

What are model requirements and why are they used?

- A model is any visual representation of information that has the specific purpose of supporting the understanding of analysis among different stakeholder groups.

- Models are generally used to confirm the information and identify duplicates, or even identify information gaps that might exist.

Element 2: Analyzing the requirements

Why do requirements need analysis?

- Business analysis information needs to be further decomposed to understand the information from the following perspectives:

- To ensure that everything that might need to change to meet the business needs has been noted and documented

Element 3: Representing requirements and attributes

- A business analyst is required to document and represent all the attributes identified for a requirement as part of the elicitation results information.

- All requirements must be documented in enough detail so that they exhibit the characteristics of the requirements and design quality.

Element 4: Implementing the Appropriate Levels of Abstraction

- The level of abstraction for a requirement refers to the different perspectives, the level of detail, and the representation formats that are used for different stakeholder audiences.

- Not all stakeholders may require the same level of information or require information in the same format or representation.

Task: Verifying the requirements

- The second task described as part of the Requirements Analysis and Design Definition knowledge area is about verifying the requirements

- The business analyst can ensure that the quality standards have been met and that the requirements are fit for purpose.

Purpose

- The BABOK® v3 guide defines the purpose of verifying the requirements as follows:

"to ensure that requirements and designs specifications and models meet quality standards and are usable for the purpose they serve..."

Elements

There are three elements to consider when you verify requirements:

- The characteristics of the requirements and design quality.
- The verification activities.
- The checklists.

Element 1: The characteristics of the requirements and the design quality

- What are the characteristics of the quality requirements and designs?
- Good quality requirements and designs will exhibit certain characteristics.

Element 2: The verification activities

What types of verification activities exist?

- Activities to verify requirements are often performed iteratively throughout the requirement analysis process.
- When requirements are verified, it is often done in an iterative and ongoing way.

Element 3: Checklists

Why would you use checklists when verifying requirements?

- Checklists are used to assist with quality control when verifying requirements and designs.

Some example quality check questions that could be included on a checklist include the following:

- Have the correct and latest document templates been used?
- Have all the calculations and samples been used correctly?

Task: Validating the requirements

The third task described as part of the Requirements Analysis and Design Definition knowledge area is about validating the requirements that align with the business needs and support the delivery of the anticipated value.

Purpose

- According to the BABOK® v3 Guide, the purpose of validating requirements is as follows:

"to ensure that all requirements and designs align to the business requirements and support the delivery of needed value..."

Elements

There are three elements to consider when you validate requirements:

- Identify the assumptions.
- Define the measurable evaluation criteria.
- Evaluate the alignment with the solution scope.

Element 1: Identifying assumptions

Why should you identify assumptions?

- In some cases, it is necessary to identify assumptions that may have been made when requirements were raised or designs were completed.
- These assumptions can assist us in providing a basis for decision making, when information may not be available, or in managing any risks that might be associated with a particular solution.

Element 2: Defining measurable evaluation criteria

- While the expected benefits are defined as part of the future state, the specific measurement criteria and evaluation process may not have been included.

- Business analysts define the evaluation criteria that will be used to evaluate how successful the change has been after the solution is implemented.

Element 3: Evaluating the alignment against the solution scope

- The purpose of this element is to ensure that the requirement delivers the required benefits to the stakeholder.
- Let's look at a real-world example of how this might happen.
- A stakeholder has received a new laptop and they need to install Microsoft Word and Microsoft PowerPoint on their machine.

Task: Defining the requirements architecture

- The fourth task described as part of the Requirements Analysis and Design Definition knowledge area is defining the requirements architecture.

- This task is about establishing the structure of all the requirements to form cohesive requirements that support the business objectives for the change.

Purpose

- According to the BABOK® v3 guide, the purpose of defining the requirements architecture is as follows:

"to ensure that the requirements collectively support one another to fully achieve the objectives..."

Elements

There are five elements to consider when you define the requirements architecture:

- The requirements architecture viewpoints and views.
- The template architectures.
- The completeness.
- Relating and verifying the requirements relationships.
- The business analysis information architecture.

Element 1: The requirements architecture viewpoints and views

How do viewpoints and views impact the requirements architecture?

- A viewpoint is a set of standards or guidelines that defines how requirements will be represented and how these representations will be organized.
- It also shows how requirements are presented and communicated to stakeholders.
- A viewpoint provides a template to use to communicate requirements to a particular stakeholder group.

Element 2: Template Architectures

What is the significance of template architectures?

- In essence, an architectural framework, in this context, is described as a collection of viewpoints that is standard across industry, sector, or organization.

- These frameworks can be used by business analysts as predefined templates to start from when defining their own requirements architecture.

Element 3: Completeness

- Using requirements architecture as a guide can also assist in the requirements' level of completeness.

- This is because using provided templates can guide the author to ask pertinent, predefined questions that will assist them in ensuring all of the requirements and perspectives are captured.

Element 4: Relating and verifying the requirements relationships

- Requirements are often related to each other and there are various different ways that these relationships might exist.

- It is important that the business analyst identifies and analyzes these relationships clearly.

Element 5: The business analysis information architecture

- The structure of business analysis information is also referred to as information architecture and because it describes how business analysis information relates to each other in a structured way and forms part of the requirements architecture.
- The information architecture helps the stakeholders to understand how the models, requirements, and designs are related and linked and how information is shared between them.

Task: Defining the design options

- The fifth task described as part of the Requirements Analysis and Design Definition knowledge area is defining the design options.

- This task is about defining the solution approach as well as allocating requirements and designs in a way that will support achieving the desired future state.

Purpose

- According to the BABOK® v3 guide, the purpose of defining the design options is as follows:

"to define the solution approach, identify opportunities to improve the business, allocate requirements across solution components, and represent design options that achieve the desired future state..."

Elements

There are four elements to consider when you define the design options:

- Define the solution approaches.
- Identify improvement opportunities.
- The requirements allocation.
- Describe the design options.

Element 1: Defining the solution approaches

- When a solution approach is formulated, it is essentially a determination of whether a solution component will be purchased or created, or perhaps a combination of these two approaches.

- When it is decided to follow an approach where the solution component is created, it means that the requirements will be used by experts to develop, construct, or assemble the solution.

Element 2: Identifying the Improvement Opportunities

Part of the task of defining the design options often includes identifying opportunities to improve business operations. This section will look at some common examples of how this might occur.

- Increasing efficiencies
- Improving access to information
- Identifying additional capabilities

Element 3: Requirements allocation

What is the requirements allocation?

- Requirements allocation is an activity where requirements are assigned to specific solution components or planned releases to ensure that the requirements are delivered in the most efficient way while providing the highest business value.

Element 4: Describing the design options

- Design options are described when considering the desired future state and the anticipated business value it must deliver.
- They are also described to ensure the design option is valid and feasible.
- A design option is often described using design elements.

Task: Analyzing the potential value and recommending a solution

- The sixth and final task described as part of the Requirements Analysis and Design Definition knowledge area is to analyze the potential value and recommend a solution.

- This task is about assessing the potential business value of each design option and recommending the best design option that will meet most of the business's defined requirements.

Purpose

- According to the BABOK® v3 guide, the purpose of analyzing the potential value and recommending a solution is as follows:

"to estimate the potential value for each design option and to establish which one is most appropriate to meet the enterprise's requirements..."

Elements

There are four elements to consider when you analyze the potential value and recommend a solution:

- The expected benefits
- The expected costs
- Determine the value
- Assess the design options and recommend a solution

Element 1: The expected benefits

- When you consider the expected benefits of a solution, you focus on the positive value that a particular design option can bring to the business when it is delivered.

- The expected benefits can include financial benefits as well as benefits such as reduced risk, compliance with business policies and regulations, improved user experience, or any positive outcome for the organization.

Element 2: The expected costs

- When you consider the expected costs of a solution, you focus on the negative value a new solution may introduce to the organization.
- A negative value can be described in different ways, including the cost to acquire the solution or any negative effects it might have on stakeholders.
- It can also include the cost to maintain the solution over time.

Element 3: Determining the value

- Now that you have considered the expected benefits and the expected costs, it is time to look at determining the value of a particular design option.

- You do this by establishing whether the expected benefits outweigh the expected costs or vice versa.

Element 4: Assessing the design options and recommending a solution

- An organization wants to implement a fully integrated call center solution.

- In order to be able to implement this solution, they need to replace all existing phone handsets because the existing handsets are not compatible with the special integration requirements for a fully integrated call center solution.

Summary

The following are the key concepts and tasks we covered in this lesson:

- The Requirements Analysis and Design Definition knowledge area
- Specifying and modeling requirements
- Verifying requirements
- Validating requirements
- Defining the requirements architecture
- Defining the solution options

"Complete Quiz"

7: Solution Evaluation

Solution Evaluation

By the end of this lesson, the reader will have knowledge about the following concepts and tasks:

- Purpose and context of solution evaluation
- Task: Measure Solution Performance
- Task: Analyze Performance Measures
- Task: Assess Solution Limitations
- Task: Assess Enterprise Limitations
- Task: Recommend Actions to Increase Solution Value
- Real-world case study quiz

What is Solution Evaluation?

- Solution evaluation deals with the assessment and analysis of an actual solution that already exists within the organization.
- This knowledge area has some similarities to other knowledge areas, namely strategy analysis, requirement analysis, and design definition.
- The key distinction between these knowledge areas' activities and solution evaluation is that solution evaluation involves working with an existing solution that is already operational within the organization.

SOLUTION EVALUATION

Measure Solution Performance

Recommend Actions to Increase Solution Value

Analyze Performance Measures

Assess Enterprise Limitations

Assess Solution Limitations

Business Analysis Core Concept Model™

The six core concepts, which are described in the Business Analysis Core Concept Model, are as follows:

- Change
- Need
- Solution
- Stakeholder
- Value
- Context

Task: Measure Solution Performance

- The first task that is described as part of solution evaluation is about determining what the measurements are for evaluating the performance of a solution.

- In this section, we will cover the purpose of this task and the different aspects of measuring solution performance in the context of the task's core elements.

Purpose

- According to the BABOK® V3 Guide, the purpose of measuring solution performance is "to define performance measures and use the data collected to evaluate the effectiveness of a solution in relation to the value it brings."

- When we refer to performance measures, we are referring to those measures that can help us determine the value that a newly implemented or existing solution is bringing to the organization.

Elements

There are three elements to consider when you measure solution performance. These include the following:

- Defining solution performance measures
- Validating performance measures
- Collecting performance measures

Element 1: Defining solution performance measures

- What should be considered when you define solution performance measures?
- The first thing to consider when defining solution performance measures is which performance measures already exist, or whether there are methods in place to capture these measures.
- If there are some performance measures in place, then it is the role of the business analyst to ensure that they are accurate and relevant, and if any further measures are needed.

Element 2: Validating performance measures

Why validate performance measures?

- It is important to validate the performance measures with the stakeholders who are responsible for delivering business value from the solution.

- The performance measures that the business analyst proposes must make sense to them and their business objectives.

Element 3: Collecting performance measures

- Business Analysts can also use some basic statistical sampling concepts when defining the performance measures.

Some of these basic concepts are related to the following considerations when formulating performance measures:

- Volume or sample size
- Frequency and timing
- Currency

Task: Analyzing Performance Measures

- The second task described as part of the field of solution evaluation involves the business analyst providing insights and analysis of the results in terms of the business value being delivered by an existing implemented solution.

- We will discuss the key concepts around the desired value versus the actual value being delivered by the solution, the risks to consider, trends that may arise in our performance results, and the importance of considering the accuracy of our results.

Purpose

- According to the BABOK® V3 Guide, the purpose of analyzing performance measures is "to provide insights into the performance of a solution in relation to the value it brings."

- Business analysts need to consider the goals and objectives of the business, as well as existing key performance indicators when working out what the expected business value is that the stakeholders are hoping to achieve.

Elements

There are five elements to consider when you analyze performance measures:

- Solution performance versus desired value
- Risks
- Trends
- Accuracy
- Performance variances

Element 1: Solution performance versus desired value

- This element involves the business analyst working with the stakeholders to collect measurements that were previously identified in relation to the value that the organization desires from the solution.

- It is important to understand that while a solution might be performing very well, such as an efficient online transaction processing system, the business value that it brings could still be fairly minimal.

Solution Element 2: Risks valuation

- Performance measures can also bring about new risks to solution performance and to the wider organization. These risks should be identified and managed like any other risks.

- Let's consider a brief real-world example:

- While analyzing performance measures for an existing loan-application system, it is discovered that certain data fields within the database are being prepopulated with test data (as opposed to real customer data).

Element 3: Trends

- When analyzing performance data, business analysts must consider the age of the data that is being used for trend analysis.

- If the data is out of date and deemed not relevant to the current analysis, it should be replaced with more relevant and timely datasets to prevent any skewed or misinterpreted findings.

Element 4: Accuracy

- There is a simple way to determine whether the results obtained from performance measures are accurate, and this is to ensure that the same performance results are reproducible and repeatable using a different but similar dataset.

- Let's consider a practical example:

- Consider a speed test for websites at a web design company.

Element 5: Performance variations

- The difference between the expected and actual performance represents a variance that is considered when analyzing solution performance.
- Root-cause analysis may be necessary to determine the underlying causes of significant variances within a solution.

Task: Assessing Solution Limitations

- The third task described as part of solution evaluation is about investigating any internal solution factors that may impact the solution's ability to realize its full business value.

- In this section, you will learn about the root causes of ineffective or underperformance in existing solutions.

Purpose

- According to the BABOK® V3 Guide, the purpose of assessing the solution limitations is "to determine the factors internal to the solution that restricts the full realization of value."

- The tasks of assessing solution limitations and assessing enterprise limitations are similar in nature and can be performed at the same time.

Elements

Element 1: Identify internal solution component dependencies

- This element is about assessing the solution components from the perspective of efficiency and identifying which parts of the solution are dependent on each other and which of those parts are the least effective.

- Once the business analyst understands these dependencies and inefficiencies, it is possible to determine which parts of the solution are responsible for limiting a solution's ability to realize its fullest potential business value.

Element 2: Investigate solution problems

- This element of the task is about the different aspects that a business analyst should consider when performing problem analysis.
- Sometimes a solution will repeatedly produce ineffective or incorrect outputs that clearly point to a problem somewhere in the solution.

Element 3: Impact assessment

- Now that the business analyst identified some problem areas in relation to the solution, it is important to review the impact that these problems have on the wider organization or the ability for the solution to deliver its potential business value.

- As with most impact assessments, this is about understanding the severity of the problem, as well as the probability of the problem reoccurring, the impact it may have on the business operations, and also the capacity of the business to absorb the impact overall.

Task: Assessing Enterprise Limitations

- When we assess the enterprise limitations, we do this in the context of the performance results for the solution we are analyzing.

- The fourth task described as part of the field of solution evaluation is to assess enterprise limitations.

- This task describes the activities involved in assessing the factors external to the solution that limit its potential to deliver its full business value.

Purpose

- According to the BABOK® V3 Guide, the purpose of assessing enterprise limitations is "to determine how factors external to the solution are restricting value realization."

- When we consider the external environment of a solution, we should consider its interactions and interdependencies, as well as other environmental factors that exist outside of the enterprise.

Elements

There are four elements to consider when you assess enterprise limitations:

- Enterprise culture assessment
- Stakeholder impact analysis
- Organizational structure changes
- Operational assessment

Element 1: Enterprise culture assessment

- When the business analyst performs an enterprise culture assessment, they try to gain a level of understanding of what makes an enterprise ‘tick’, as it were.
- The business analyst needs to understand hat the deeply rooted beliefs, values, and norms that are shared between the members of the organization.
- This is important because often the culture of an organization will directly impact the actions they take.

Element 2: Stakeholder impact analysis

- When performing the task of assessing enterprise limitations, it is important to do a stakeholder impact analysis.
- This entails gaining insights into how the solution impacts a particular stakeholder group.
- There are some specific factors to consider when you perform the stakeholder impact analysis.

Element 3: Organizational structure changes

- In some situations, depending on the solution being implemented, there may be an impact on the organizational structure of the organization.
- These are referred to as the formal structures or relationships of the organizations.
- These formal relationships can cause blocks or obstacles when implementing a new solution.
- It is important to also keep in mind that informal relationships in an organization can also cause blockers.

Element 4: Operational assessment

Why is an operational assessment performed?

- Firstly, an operational assessment is about considering whether the organization is able to adapt to or use a solution effectively.

- This is done by identifying the relevant tools and procedures within the organization that will potentially benefit from the solution and ensuring that the appropriate assets are in place to support it.

Task: Recommending Actions to Increase the Solution Value

- The fifth and final task described as part of solution evaluation is recommending actions to increase the solution value.

- This task describes the elements and considerations that a business analyst needs to include when preparing to recommend actions to the organization to ensure better solution value.

Purpose

- According to the BABOK® V3 Guide, the purpose of recommending actions to increase the solution value is "to understand the factors that create differences between potential value and actual value, and to recommend a course of action to align them."

- Up until now, we have discussed the tasks that assist the business analyst in measuring, analyzing, and understanding the root causes of unacceptable solution performance.

Elements

There are two elements to consider when you recommend actions to increase the solution value:

- Adjust solution performance measures
- Recommendations
- Let's now consider each element in terms of a practical example.

Element 1: Adjust solution performance measures

- The adjustment of solution performance measures describes the consideration that in some cases, a solution may be acceptable, but the measures that are used to track its performance are inadequate or not aligned for business goals or objectives.

- In these cases, it may simply be a matter of redefining the performance measures to track the business value in alignment with business objectives.

Element 2: Recommendations

- Although in many cases, a recommendation would encompass a series of activities to enable an increase in a solution's performance, this may not always be the case.

- In some cases, the business analyst may decide not to do anything different or to potentially change or adjust external aspects that may impact the performance of a solution instead of changing the solution itself.

Summary

The following are the key concepts and tasks that we covered during this lesson:

- The purpose and context of this knowledge area
- Task: Measuring solution performance
- Task: Analyzing performance measures
- Task: Assessing solution limitations
- Task: Assessing enterprise limitations
- Task: Recommending actions to increase the solution value

"Complete Quiz"

8: Underlying Competencies

Underlying Competencies

We will cover the following key topics in this lesson:

- The purpose and context of the underlying competencies
- Analytical thinking and problem-solving
- Behavioral characteristics
- Business knowledge
- Communication skills
- Interaction skills
- Tools and technology
- A real-world case study
- Testing your knowledge

Underlying Competencies

UNDERLYING COMPETENCIES

Analytical thinking and problem-solving

The analytical thinking and problem-solving core competencies include the following:

- Creative thinking
- Decision-making
- Learning
- Problem-solving
- Systems thinking
- Conceptual thinking
- Visual thinking

Core competency 1: Creative thinking

- The first core competency in analytical thinking and problem-solving is the ability to think in a creative way.
- This involves being able to find ways of generating new ideas and approaches when considering problems and opportunities.

Core competency 2: Decision-making

- Being able to make effective decisions is about developing your ability to understand the criteria involved when making a decision and supporting other people to make better decisions by applying the criteria in a suitable way.

- Ultimately, decision-making is about finding the path that will be most beneficial to the stakeholders and the organization as a whole.

Core competency 3: Learning

- Learning is central to practicing business analysis because it means being able to absorb new and different types of information efficiently and correctly.

- It is also about being adaptable and being able to adjust existing knowledge to suit new environments.

Core competency 4: Problem-solving

- This competency is key to the practice of business analysis.
- It is about finding the true root cause of any problem so that the solution options you consider indeed address the real cause of the problem at hand.
- Another key aspect of problem-solving is ensuring that all stakeholders have a common understanding of the underlying issues.

Core competency 5: Systems thinking

- Systems thinking refers to the ability to understand an organization holistically in terms of the people, processes, and technology within it.
- When you develop your ability to apply systems thinking, you aim to understand not only the individual components within an organization but also how they are all interconnected.
- You look at not only the components that are isolated entities but also the people and the entire internal and external organizational environment.

Core competency 6: Conceptual thinking

- Conceptual thinking is the ability to make sense of large amounts of information on a conceptual level.

- When you are presented with a large amount of new information, your ability to make sense of this information by linking contexts, solutions, needs, changes, stakeholders, and value in an abstract way is called conceptual thinking.

Core competency 7: Visual thinking

- The core competency of visual thinking refers to the business analysts' ability to transform complex ideas, concepts, or information into clear, straightforward visual representations.
- The purpose of this activity is to effectively communicate new or complex concepts to a wide audience through the use of visualization.
- Visual representations allow stakeholders to quickly and easily understand complex or brand new ideas and are a very effective communication tool.

Exploring behavioral characteristics

- Behavioral characteristics are common to everyone and are not exclusive to business analysis. They improve personal and professional effectiveness in the practice of business analysis.

The behavioral characteristics of core competencies include the following:

- Ethics
- Personal accountability
- Trustworthiness
- Organization and time management
- Adaptability

Core competency 1: Ethics

- Ethics as a core competency has two main applications.
- Firstly, when a business analyst behaves ethically it means that they are respected by stakeholders and they demonstrate fairness, consideration, and moral behavior in their work effort.

Core competency 2: Personal accountability

- The core competency of personal accountability is about making sure that the business analysis tasks are completed on time and to the expectations of peers and stakeholders.

- A strong ability to demonstrate personal accountability enables a business analyst to establish credibility within their role.

Core competency 3: Trustworthiness

- Just as it is important to be trustworthy in your personal life, it is of equal importance to building a reputation of trustworthiness in the workplace.

- Business analysts are often referred to as the agents of change in an organization and change is often associated with uncertainty and even fear among stakeholders.

Core competency 4: Organization and time management

- The core competency of organization and time management skills is about having the ability to carry out tasks effectively and use your work time efficiently.

- This also includes being able to prioritize work in an effective and time-efficient manner so that tasks are executed in an optimal way.

Core competency 5: Adaptability

- A business analyst's ability to adapt to changing environments, stakeholders and work priorities is essential to performing effectively.

- Adaptability is the ability to change communication styles, formats, and approaches on the go in order to suit changing environments and meet demands.

Business knowledge

- The underlying competency of business knowledge refers to the ability of a business analyst to make sense of and perform well in their business, industry, solution, and methodology.

- It is an important competency because it enables the business analyst to relate their work in a change initiative back to the higher-level context of the business in terms of its benefits, structure, and the value delivered.

Core competency 1: Business acumen

- Business analysis requires an understanding of fundamental business principles and best practices in order to ensure they are considered as solutions and reviewed.

- Business acumen refers to the requirement for a business analyst to have a fundamental understanding of business principles.

Core competency 2: Industry knowledge

- Industry knowledge refers to the knowledge and understanding that a business analyst collects and learns by working within a particular industry.

- It can include knowledge of current practices in a particular industry or similar business processes performed across industries (for example, financial processes such as payroll processes).

Core competency 3: Organization knowledge

- Organization knowledge is all about a business analyst's level of understanding of an organization's structure, architecture, and enterprise as a whole.

- With this competency, it is important for the business analyst to have an understanding of the organizational strategy and goals, how they generate profits, and generally, what business they are in.

Core competency 4: Solution knowledge

- Solution knowledge is about the knowledge and experience a business analyst has within a particular solution space.

- In some cases, a business analyst may have gained previous experience when working within a specific solution arena, which becomes a strong core competency to assist them in their next, similar initiative.

Core competency 5: Methodology knowledge

- Methodology knowledge refers to the knowledge a business analyst has of different methodologies that are followed by different organizations.
- This knowledge is about understanding the context, dependencies, opportunities, and constraints that are defined so that a suitable business analysis approach can be developed.

Communication skills

- Let's start by considering a basic definition of what communication skills are:

"Communication is the act of a sender conveying information to a receiver in a method that delivers the meaning the sender intended."

Core competency 1: Verbal communication

- Verbal communication means simply using words and language to convey ideas, concepts, facts, and opinions to different stakeholders.

- These are spoken words and are often viewed as an effective and efficient form of communication that can be supported by written and non-verbal communication.

Core competency 2: Non-verbal communication

- Non-verbal communication is the most powerful yet most understated form of communication.
- More than 93% of our communication is non-verbal; in other words, not using words.
- Non-verbal communication consists of all body language, tone of voice, eye contact, gestures, facial expressions, and more.

Core competency 3: Written communication

- Just as a business analyst can use verbal communication to convey ideas, concepts, facts, and opinions to different stakeholders, they can also use written communication to do the same.

- Often, these two forms of communication are used together to support each other, thereby producing a stronger and more effective message.

Core competency 4: Listening

- Listening is about a business analyst's ability to actively listen and interpret the meaning of the words they hear.
- It is about being engaged with the stakeholder in a way that supports effective communication, building a sense of rapport, and distilling information so that it presents a clear meaning.

Interaction skills

- When we refer to interaction skills, we are referring to all types of interaction with every type of stakeholder across every level of an organization.

- A business analyst is placed in a unique position where their role requires them to be able to engage with different types of stakeholders in ways that are most suitable to the individual.

Core competency 1: Facilitation

- Facilitation refers to the ability to interact with stakeholders in a way that helps them to make decisions, exchange ideas, or reach an agreement on priorities or the need for a certain set of requirements.

- It is about moderating discussions and enabling a group of people to come to constructive conclusions while fostering an atmosphere where people appreciate different viewpoints and perspectives on different topics.

Core competency 2: Leadership and influencing

- Leadership and influencing is the ability to guide stakeholders during business analysis activities toward a common-aligned goal.

- This often takes the format of an agreed set of requirements, a resolved set of requirements conflicts, or another analysis activity that requires influencing skills and leadership toward shared objectives.

Core competency 3: Teamwork

- Teamwork is about a business analyst's ability to work effectively within a team, which includes directing team members as well as wider stakeholders involved within an initiative.

- A business analyst's ability to foster strong relationships and work well in a team is critical to the success of any initiative and, ultimately, the success of the enterprise as a whole.

Core competency 4: Negotiation and conflict resolution

- Negotiation and conflict resolution are about a business analyst's ability to help mediate discussions between stakeholders where a requirements conflict has been identified.

- The business analyst aims to mediate the conflict in a way that will build stronger relationships and clearer understandings of different viewpoints, as well as resolve any conflict that might exist.

Core competency 5: Teaching

- Teaching is about being able to share business analysis information with stakeholders in a way that increases their knowledge and understanding on a certain topic.
- Teaching also aims to help stakeholders retain information so that they can use it in the future to help develop and finalize requirements.

Exploring tools and technology

- In order for a business analyst to be effective in their daily roles, there are certain types of tools and technology that they should master in order to convey the results of the information they discover in an effective and efficient way.

- They need these tools and technology to convey information in the form of artifacts, models, and diagrams; to track issues and risks, and to increase their overall productivity.

Core competency 1: Office productivity tools and technology

- Office productivity tools and technology refers to all the tools a business analyst needs to use to prepare business analysis information artifacts.

- A business analyst uses these tools and technology to organize, dissect, edit, understand, and ultimately, communicate business analysis information to stakeholders.

Core competency 2: Business analysis tools and technology

- Business analysis tools and technology refers more specifically to the tools that a business analyst uses to produce business analysis-specific information, such as diagrams, mapping requirements, or other specialized tools designed to help document and track the life cycle of requirements.

Core competency 3: Communication tools and technology

- The last core competency, referred to as communication tools and technology, includes all the tools that a business analyst needs to use to communicate with stakeholders and peers.

- These communication tools are used to plan and complete tasks related to conversational interactions and collaborative interactions and also allow business analysts to work with virtual and co-located teams.

Summary

The following are the key concepts and tasks we covered in this lesson:

- The purpose and context of the underlying competencies
- Analytical thinking and problem-solving
- Behavioral characteristics
- Business knowledge
- Communication skills
- Interaction skills
- Tools and technology

"Complete Quiz"