2 Tasks

Operations performed by the business analyst. Tasks use techniques, guidelines, tools and inputs in order to create artifacts.

2.1 Analyze Current State

The starting point for any change is an understanding of why the change is needed. Potential change is triggered by problems or opportunities that cannot be addressed without altering the current state. Business analysts work to help stakeholders enable change by exploring and articulating the business needs that drive the desire to change. Without clearly understood business needs, it is impossible to develop a coherent strategy, and the resulting change initiative is almost certain to be driven by a mix of conflicting stakeholder demands. Change always occurs in a context of existing stakeholders, processes, technology, and policies which constitute the current state of the enterprise. Business analysts examine the current state in the context of the business need to understand what may influence proposed changes, and what will be affected by them. The current state is explored in just enough detail to validate the need for a change and/or the change strategy. Understanding the current state of the enterprise prior to the change is necessary to identify what will need to change to achieve a desired future state and how the effect of the change will be assessed. The scope of the current state describes the important existing characteristics of the environment. The boundaries of the current state scope are determined by the components of the enterprise and its environment as they relate to the needs. The current state can be described on different levels, ranging from the entire enterprise to small components of a solution. Creating a model of the current state might require collaboration throughout or outside the enterprise. For small efforts, the scope might be only a small component of an enterprise. The current state of an enterprise is rarely static while a change is being developed and implemented. Internal and external influencers, as well as other organizational changes, can affect the current state in ways that force alterations in the desired future state, change strategy, or requirements and designs.

2.2 Analyze Performance Measures

The measures collected in the task Measure Solution Performance often require interpretation and synthesis to derive meaning and to be actionable. Performance measures themselves rarely trigger a decision about the value of a
solution. In order to meaningfully analyze performance measures, business analysts require a thorough understanding of the potential value that stakeholders hope to achieve with the solution. To assist in the analysis, variables such as the goals and objectives of the enterprise, key performance indicators (KPIs), the level of risk of the solution, the risk tolerance of both stakeholders and the enterprise, and other stated targets are considered.

2.3 Analyze Potential Value

Analyze Potential Value and Recommend Solution describes how to estimate and model the potential value delivered by a set of requirements, designs, or design options. Potential value is analyzed many times over the course of a change. This analysis may be a planned event, or it may be triggered by a modification to the context or scope of the change. The analysis of potential value includes consideration that there is uncertainty in the estimates. Value can be described in terms of finance, reputation, or even impact on the marketplace. Any change may include a mix of increases and decreases in value. Design options are evaluated by comparing the potential value of each option to the other options. Each option has a mix of advantages and disadvantages to consider. Depending on the reasons for the change, there may be no best option to recommend, or there may be a clear best choice. In some cases this means the best option may be to begin work against more than one design option, perhaps to develop proofs of concept, and then measure the performance of each. In other instances, all proposed designs may be rejected and more analysis may be needed to define a suitable design. It is also possible that the best recommendation is to do nothing.

2.4 Approve Requirements

Business analysts are responsible for ensuring clear communication of requirements, designs, and other business analysis information to the key stakeholders responsible for approving that information. Approval of requirements and designs may be formal or informal. Predictive approaches typically perform approvals at the end of the phase or during planned change control meetings. Adaptive approaches typically approve requirements only when construction and implementation of a solution meeting the requirement can begin. Business analysts work with key stakeholders to gain consensus on new and changed requirements, communicate the outcome of discussions, and track and manage the approval.

2.5 Assess Enterprise Limitations

Solutions may operate across various organizations within an enterprise, and therefore have many interactions and interdependencies. Solutions may also depend on environmental factors that are external to the enterprise. Enterprise limitations may include factors such as culture, operations, technical components, stakeholder interests, or reporting structures. Assessing enterprise limitations identifies root causes and describes how enterprise factors limit value realization. This assessment may be performed at any point during the solution life cycle. It may occur on a solution component during its development or on a completed solution prior to full implementation. It may also occur on an existing solution that is currently working within an organization. Regardless of the timing, the assessment activities are similar and require the same skills.

2.6 Assess Requirement Change

The Assess Requirements Changes task is performed as new needs or possible solutions are identified. These may or may not align to the change strategy and/or solution scope. Assessment must be performed to determine whether a proposed change will increase the value of the solution, and if so, what action should be taken. Business analysts assess the potential effect of the change to solution value, and whether proposed changes introduce conflicts with other requirements or increase the level of risk. Business analysts also

ensure each proposed change can be traced back to a need. When assessing changes, business analysts consider if each proposed change:

- aligns with the overall strategy,
- affects value delivered to the business or stakeholder groups,
- impacts the time to deliver or the resources required to deliver the value, and
- alters any risks, opportunities, or constraints associated with the overall initiative.

The results of the assessment must support the decision making and change control approaches defined by the task Plan Business Analysis Governance.

2.7 Assess Risks

Assessing risks includes analyzing and managing them. Risks might be related to the current state, a desired future state, a change itself, a change strategy, or any tasks being performed by the enterprise. The risks are analyzed for the:

- possible consequences if the risk occurs,
- impact of those consequences, • likelihood of the risk, and
- potential time frame when the risk might occur.

The collection of risks is used as an input for selecting or coordinating a change strategy. A risk assessment can include choosing to accept a risk if either the effort required to modify the risk or the level of risk outweighs the probable loss. If the risks are understood and the change proceeds, then the risks can be managed to minimize their overall impact to value. Important A number of methods include 'positive risk' as a way of managing opportunities. Although the formal definition of risk in the BABOK® Guide doesn't preclude this usage, 'opportunities' are captured as needs (and managed accordingly), and risk is used for uncertain events that can produce negative outcomes.

2.8 Assess Solution Limitations

Assessing solution limitations identifies the root causes for under-performing and ineffective solutions and solution components. Assess Solution Limitations is closely linked to the task Assess Enterprise Limitations. These tasks may be performed concurrently. If the

solution Assess Solution Limitations Solution Evaluation has not met its potential value, business analysts determine which factors, both internal and external to the solution, are limiting value. This task focuses on the assessment of those factors internal to the solution. This assessment may be performed at any point during the solution life cycle. It may occur on a solution component during its development, on a completed solution prior to full implementation, or on an existing solution that is currently working within an organization. Regardless of the timing, the assessment activities are similar and involve the same considerations.

2.9 Communicate Business Analysis Information

Business analysts must communicate appropriate information to stakeholders at the right time and in formats that meet their needs. Consideration is given to expressing the information in language, tone, and style that is appropriate to the audience. Communication of business analysis information is bi-directional and iterative. It involves determining the recipients, content, purpose, context, and expected outcomes. Task Plan Stakeholder Engagement (p. 31) evaluates communication needs and plans anticipated messages. Communicating information does not simply involve pushing information out and assuming it was received and understood. Business analysts engage stakeholders to ensure they understand the information and gain agreement. The business analyst acts on any disagreements. The method of delivering the information may need to change if the stakeholders are not receiving or understanding it. Multiple forms of communication might be required for the same information.

2.10 Conduct Elicitation

There are three common types of elicitation:

- Collaborative: involves direct interaction with stakeholders, and relies on their experiences, expertise, and judgment.
- Research: involves systematically discovering and studying information from materials or sources that are not directly known by stakeholders involved in the change. Stakeholders might still

participate in the research. Research can include data analysis of historical data to identify trends or past results.

- Experiments: involves identifying information that could not be known without some sort of controlled test. Some information cannot be drawn from people or documents—because it is unknown. Experiments can help discover this kind of information. Experiments include observational studies, proofs of concept, and prototypes. One or more elicitation techniques may be used to produce the desired outcome within the scope of elicitation. Stakeholders may collaborate in elicitation by:
- participating and interacting during the elicitation activity, and
- researching, studying, and providing feedback on documents, systems, models, and interfaces.

2.11 Confirm Elicitation Results

Elicited information is confirmed to identify any problems and resolve them before resources are committed to using the information. This review may discover errors, omissions, conflicts, and ambiguity. The elicitation results can be compared against their source and other elicitation results to ensure consistency. Collaboration with stakeholders might be necessary to ensure their inputs are correctly captured and that they agree with the results of non-facilitated elicitation. If information is not correct, the business analyst determines what is correct, which can require more elicitation. Committing resources to business analysis activities based on unconfirmed elicitation results may mean stakeholder expectations are not met. If the results are inconsistent, additional elicitation might need to be conducted to resolve the discrepancies. Confirming the elicitation results is a much less rigorous and formal review than occurs during analysis.

2.12 Define Change Strategy

Developing a change strategy is simpler when the current state and the future state are already defined because they provide some context for the change. The change strategy clearly describes the nature of the change in terms of:

· context of the change,

· identified alternative change strategies,
· justification for why a particular change strategy is the best approach,
· investment and resources required to work toward the future state,
· how the enterprise will realize value after the solution is delivered,
· key stakeholders in the change, and
· transition states along the way.

The appropriate representation of a change strategy depends on the perspective of the change team and their stakeholders. The change strategy might be presented as part of a business case, Statement of Work (SOW), an enterprise's strategic plan, or in other formats. Defining a change strategy usually involves identifying several strategies and ultimately selecting the strategy that is most appropriate for the situation. Change strategies can entail attaining only parts of a future state initially, and therefore include only some components of a complete solution. For each transition state along the path to reaching the future state, the change strategy should clarify which parts of the solution are completed and which are not, as well as which parts of the value can be realized and which cannot.

2.13 Define Design Options

When designing a solution, there may be one or more design options identified. Each design option represents a way to satisfy a set of requirements. Design options exist at a lower level than the change strategy, and are tactical rather than strategic. As a solution is developed, tactical trade-offs may need to be made Requirements Analysis and Design Definition among design alternatives. Business analysts must assess the effect these tradeoffs will have on the delivery of value to stakeholders. As initiatives progress and requirements evolve, design options evolve as well.

2.14 Define Future State

All purposeful change must include a definition of success. Business analysts work to ensure that the future state of the enterprise is well defined, that it is achievable with the resources available, and that key

stakeholders have a shared Strategy consensus vision of the outcome. As with current state analysis, the purpose of future state analysis is not to create a comprehensive description of the outcome at a level of detail that will directly support implementation. The future state will be defined at a level of detail that:

- allows for competing strategies to achieve the future state to be identified and assessed,
- provides a clear definition of the outcomes that will satisfy the business needs,
- details the scope of the solution space,
- allows for value associated with the future state to be assessed, and
- enables consensus to be achieved among key stakeholders.

The future state description can include any context about the proposed future state. It describes the new, removed, and modified components of the enterprise. It can include changes to the boundaries of the organization itself, such as entering a new market or performing a merger or acquisition. The future state can also be simple changes to existing components of an organization, such as changing a step in a process or removing a feature from an existing application. Change may be needed to any component of the enterprise, including (but not limited to):

- business processes,
- functions,
- lines of business,
- organization structures,
- staff competencies,
- knowledge and skills,
- training,
- facilities,
- desktop tools,
- organization locations,
- data and information,
- application systems, and/or
- technology infrastructure.

Descriptions may include visual models and text to clearly show the scope boundaries and details. Relevant relationships between entities are identified and described. The effort required to describe the future

state varies depending on the nature of the change. The expected outcomes from a change might include specific metrics or loosely defined results. Describing the future state allows stakeholders to understand the potential value that can be realized from a solution, which can be used as part of the decision-making process regarding the change strategy. In environments where changes result in predictable outcomes and predictable delivery of value, and where there are a large number of possible changes that can increase value, the purpose of future state analysis is to gather sufficient information to make the best possible choices among potential options. In cases where it is difficult to predict the value realized by a change, the future state may be defined by identification of appropriate performance measures (to produce an agreed-upon set of measures for business value), and the change strategy will support exploration of multiple options.

2.15 Define Requirements Architecture

Requirements architecture is the structure of all of the requirements of a change. A requirements architecture fits the individual models and specifications together to ensure that all of the requirements form a single whole that supports the overall business objectives and produces a useful outcome for stakeholders. Business analysts use a requirements architecture to:

- understand which models are appropriate for the domain, solution scope, and audience,
- organize requirements into structures relevant to different stakeholders,
- illustrate how requirements and models interact with and relate to each other, and show how the parts fit together into a meaningful whole,
- ensure the requirements work together to achieve the overall objectives, and
- make trade-off decisions about requirements while considering the overall objectives.

Requirements architecture is not intended to demonstrate traceability, but rather to show how elements work in harmony with one another to support the business requirements, and to structure them in various ways to align the viewpoints of different stakeholders.

Traceability is often used as the mechanism to represent and manage these relationships (see Trace Requirements. Traceability proves that every requirement links back to an objective and shows how an objective was met. Traceability does not prove the solution is a cohesive whole that will work.

2.16 Identify Business Analysis Performance Improvements

To monitor and improve performance, it is necessary to establish the performance measures, conduct the performance analysis, report on the results of the analysis, and identify any necessary preventive, corrective, or developmental actions. Performance analysis should occur throughout an initiative. Once potential performance improvements are identified, they become guidelines for the next time a task is executed.

2.17 Manage Stakeholder Collaboration

Business analysis work lends itself to many collaboration opportunities between groups of stakeholders on the business analysis work products. Stakeholders hold various degrees of influence and authority over the approval of work products, and are also an important source of needs, constraints, and assumptions. As the business analysis work progresses, the business analyst identifies stakeholders, confirms their roles, and communicates with them to ensure that the right stakeholders participate at the right times and in the appropriate roles. Managing stakeholder collaboration is an ongoing activity. Although managing stakeholder collaboration begins once stakeholders have been identified and analyzed, new stakeholders may be identified at any point during an initiative. As new stakeholders are identified, their role, influence, and relationship to the initiative are analyzed. Each stakeholder's role, responsibility, influence, attitude, and authority may change over time. The more significant the impact of the change or its visibility within the organization, the more attention is directed to managing stakeholder collaboration. Business analysts manage stakeholder collaboration to capitalize on positive reactions, and mitigate or avoid negative reactions. The business analyst should constantly monitor and assess each stakeholder’s attitude to determine if it might affect their

involvement in the business analysis activities. Poor relationships with stakeholders can have many detrimental effects on business analysis, including:

- failure to provide quality information,
- strong negative reactions to setbacks and obstacles,
- resistance to change,
- lack of support for, and participation in, business analysis work,

and business analysis information being ignored. These effects can be modified in part through strong, positive, and trust-based relationships with stakeholders. Business analysts actively manage relationships with stakeholders who:

- provide services to the business analyst, including inputs to business analysis tasks and other support activities,
- depend on services provided by the business analyst, including outputs of business analysis tasks, and
- participate in the execution of business analysis tasks.

2.18 Measure Solution Performance

Performance measures determine the value of a newly deployed or existing solution. The measures used depend on the solution itself, the context, and how the organization defines value. When solutions do not have built-in performance
measures, the business analyst works with stakeholders to determine and collect the measures that will best reflect the performance of a solution. Performance may be assessed through key performance indicators (KPIs) aligned with
enterprise measures, goals and objectives for a project, process performance targets, or tests for a software application.

2.19 Plan Business Analysis Approach

Business analysis approaches describe the overall method that will be followed when performing business analysis work on a given initiative, how and when tasks will be performed, and the deliverables that will be produced. The business analyst may also identify an initial set of techniques to use. This list may change as the initiative proceeds and the business analyst gains a deeper understanding of the change and its stakeholders. The business analysis approach may be defined by a

methodology or by organizational standards. In some organizations, elements of the business analysis approach may be standardized and formalized into a repeatable business analysis process which can be leveraged for each effort. Even where a standard approach exists, it may be tailored to the needs of a specific initiative. Tailoring may be governed by standards that define which approaches are permitted, which elements of those processes may be tailored, and general guidelines for selecting a process. If organizational standards do not exist, the business analyst works with the appropriate stakeholders to determine how the work will be completed. For example, if the change is delivered via a project, the standards and approach may be developed during the project planning phase. The business analysis approach should:

- align to the overall goals of the change,
- coordinate the business analysis tasks with the activities and deliverables of the overall change,
- include tasks to manage any risks that could reduce the quality of business analysis deliverables or impede task efficiency, and
- leverage approaches and select techniques and tools that have historically worked well.

2.20 Plan Business Analysis Governance

Business analysts ensure that a governance process is in place and clarify any ambiguities within it. A governance process identifies the decision makers, process, and information required for decisions to be made. A governance process describes how approvals and prioritization decisions are made for requirements and designs. When planning the governance approach, business analysts identify:

- how business analysis work will be approached and prioritized,
- what the process for proposing a change to business analysis information is,
- who has the authority and responsibility to propose changes and who should be involved in the change discussions,
- who has responsibility for analyzing change requests,
- who has the authority to approve changes, and
- how changes will be documented and communicated.

2.21 Plan Business Analysis Information Management

Business analysis information is comprised of all the information business analysts elicit, create, compile, and disseminate in the course of performing business analysis. Models, scope statements, stakeholder concerns, elicitation results, requirements, designs, and solution options are just a few examples. This includes requirements and designs, from lightweight user stories to formal requirement documents to functioning prototypes. Information management entails identifying:

- how information should be organized,
- the level of detail at which information should be captured,
- any relationships between the information,
- how information may be used across multiple initiatives and throughout the enterprise,
- how information should be accessed and stored, and
- characteristics about the information that must be maintained.

Information management helps ensure that business analysis information is organized in a functional and useful manner, is easily accessible to appropriate personnel, and is stored for the necessary length of time.

2.22 Plan Stakeholder Engagement

Plan Stakeholder Engagement involves conducting a thorough stakeholder analysis to identify all of the involved stakeholders and analyze their characteristics. The results of the analysis are then utilized to define the best collaboration and communication approaches for the initiative and to appropriately plan for stakeholder risks. When planning for stakeholder engagement, the degree of complexity can increase disproportionately as the number of stakeholders involved in the business analysis activities increases. This is important because new or different techniques for the management of stakeholders may be required when the engagement moves from collaborating with a few stakeholders into dozens, hundreds, or even thousands of people.

2.23 Prepare For Elicitation

outcomes of the activity, considering the stakeholders involved and the goals of the initiative. This includes determining which work

products will be produced using the elicitation results, deciding which techniques are best suited to produce those results, establishing the elicitation logistics, identifying any supporting materials needed, and understanding circumstances to foster collaboration during an elicitation activity.

2.24 Recommend Actions to Increase Solution Value

The various tasks in the Solution Evaluation knowledge area help to measure, analyze, and determine causes of unacceptable solution performance. The task Recommend Actions to Increase Solution Value focuses on understanding the aggregate of the performed assessments and identifying alternatives and actions to improve solution performance and increase value realization. Recommendations generally identify how a solution should be replaced, retired, or enhanced. They may also consider long-term effects and contributions of the solution to stakeholders. They may include recommendations to adjust the organization to allow for maximum solution performance and value realization.

2.25 Specify And Model Requirements

Specify and Model Requirements describes the practices for analyzing elicitation Tasks results and creating representations of those results. When the focus of the specifying and modelling activity is on understanding the need, the outputs are referred to as requirements. When the focus of the specifying and modelling activity is on a solution, the outputs are referred to as designs. Important In many IT environments, the word 'design' is used specifically for technical designs created by software developers, data architects, and other implementation subject matter experts. All business deliverables are referred to as 'requirements'. In addition to the models used to represent the requirements, this task also includes capturing information about attributes or metadata about the requirements. The specifying and modelling activities relate to all requirement types.

2.26 Validate Requirements

Requirements validation is an ongoing process to ensure that stakeholder, solution, and transition requirements align to the

business requirements and that the designs satisfy the requirements. Understanding what the desired future state looks like for stakeholders after their needs have been met is valuable to business analysts when validating requirements. The overall goal of implementing the requirements is to achieve the stakeholders' desired future state. In many cases, stakeholders have different, conflicting needs and expectations that may be exposed through the validation process.
The business analyst, in conjunction with the customer, end users, and sponsors, has the primary responsibility for determining whether or not requirements are validated. Other stakeholders may discover problematic requirements during requirements communication. Therefore, virtually all project stakeholders are involved in this task.

2.27 Verify Requirements

Verifying requirements ensures that the requirements and designs have been defined correctly. Requirements verification constitutes a check by the business analyst and key stakeholders to determine that the requirements and designs are ready for validation, and provides the information needed for further work to be performed. A high-quality specification is well written and easily understood by its intended audience. A high-quality model follows the formal or informal notation standards and effectively represents reality. The most important characteristic of quality requirements and designs is fitness for use. They must meet the needs of stakeholders who will use them for a particular purpose. Quality is ultimately determined by stakeholders.