

Specify and Model Requirements and Designs



Purpose or Need

To analyze, synthesize, and refine elicitation results into requirements and designs.



Value

Requirements and designs specification and analysis provides a basis for discussion with stakeholders to reach a conclusion about solution options.



Solution

Requirements and designs which are specified and modelled in the form of text, matrices, and diagrams.



Techniques

Frequently used techniques:

- [*Acceptance and Evaluation Criteria*](#);
- [*Data Modelling*](#);
- [*Interface Analysis*](#);
- [*Use Cases and Scenarios*](#);
- [*User Stories*](#).

Refer to the **BABOK Guide v3** for the complete list of techniques.



Stakeholder

Typically involves any stakeholders that could have relevant knowledge or experience to participate in these activities.



Description of Change

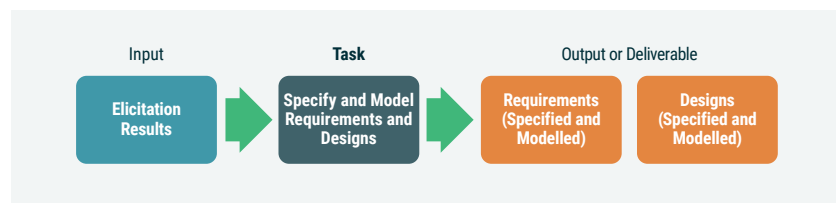
Specify and Model Requirements and Designs describes a set of requirements or designs in enough detail using suitable analytical techniques.

Reference (Guidelines and Tools)

The following resources, if they exist, can be used to transform the inputs into the outputs:

- Modelling Notations/Standards;
- Modelling Tools;
- Requirements Architecture;
- Requirements Life Cycle Management Tools;
- Solution Scope.

Task Inputs and Outputs



Consider...

This task is about capturing important business information that can be effectively reviewed and communicated to build a shared understanding of the desired future changes. This is important for different types of initiatives.

Example: Creating models that represent different views of the enterprise can be used to support the ongoing delivery of value.

See [**BABOK Guide – 11.4 The Business Architecture Perspective**](#)

Certifications: ECBA, CCBA, CBAP – Refer to the **BABOK® Guide** for study purposes

Verify Requirements and Designs



Purpose or Need

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



Value

Verification ensures that the requirements and designs have been defined correctly, are ready for validation, and provides the information needed for further work to be performed.



Solution

Requirements and designs of sufficient quality that can be used as a basis for further work.



Techniques

Frequently used techniques:

- [Acceptance and Evaluation Criteria](#):
- [Item Tracking](#):
- [Metrics and KPIs](#):
- [Reviews](#).

Refer to the [BABOK Guide v3](#) for the complete list of techniques.



Stakeholder

Typically involves subject matter experts and any additional stakeholders with relevant knowledge or experience to verify requirements and designs.



Description of Change

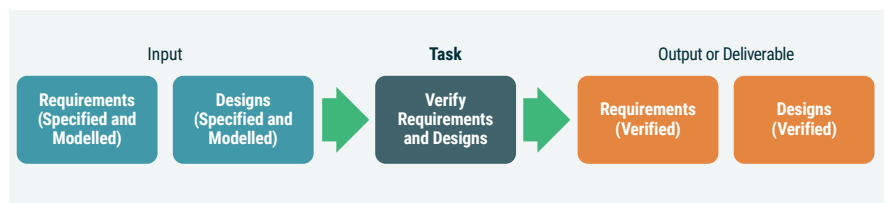
Verify Requirements ensures that a set of requirements or designs has been developed in enough detail to be usable by a particular stakeholder, is internally consistent, and is of high quality.

Reference (Guidelines and Tools)

The following resources, if they exist, can be used to transform the inputs into the outputs:

- Requirements Life Cycle Management Tools.

Task Inputs and Outputs



Consider...

The appropriate level of verifying requirements and design can improve the quality of outcomes and reduce the amount of rework.

Example: Consider a custom software build for a client requesting a new inventory management system. Ongoing verification with relevant experts ensures high-quality requirements and designs which can be used to develop the desired software with increased confidence.

See [BABOK Guide – 11.3 The Information Technology Perspective](#)

Certifications: ECBA, CCBA, CBAP – Refer to the [BABOK® Guide](#) for study purposes

Validate Requirements and Designs



Purpose or Need

To ensure that all requirements and designs align with the business requirements and support the delivery of needed value.



Value

Having stakeholders validate the requirements and designs will ensure that requirements and designs will deliver value.



Solution

Validated requirements and designs that are aligned with the business goals and objectives of the change, and will deliver value to stakeholders.



Techniques

Frequently used techniques:

- [*Acceptance and Evaluation Criteria*](#);
- [*Financial Analysis*](#);
- [*Item Tracking*](#);
- [*Metrics and KPIs*](#);
- [*Reviews*](#).

Refer to the **BABOK Guide v3** for the complete list of techniques.



Stakeholder

Typically involves subject matter experts and any additional stakeholders with relevant knowledge or experience to validate requirements and designs.



Description of Change

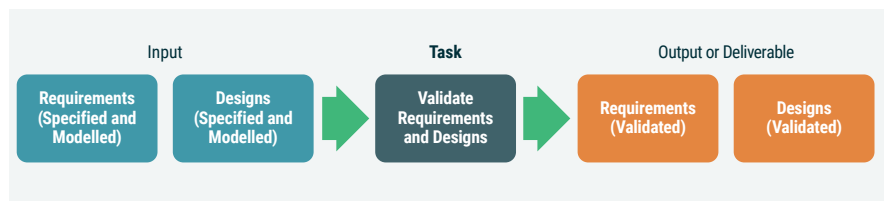
Validate Requirements ensures that stakeholder, solution, and transition requirements align to the business requirements, that the designs satisfy the requirements, and that both requirements and designs deliver business value and support the organization's goals and objectives.

Reference (Guidelines and Tools)

The following resources, if they exist, can be used to transform the inputs into the outputs:

- Business Objectives;
- Future State Description;
- Potential Value;
- Solution Scope.

Task Inputs and Outputs



Consider...

Every type of initiative requires validation of the outcomes produced. Depending on the approach taken, this can be ongoing throughout the work or at milestone deliveries.

Example: When using adaptive approaches for developing new products, validation occurs through frequent customer feedback sessions.

See [*Guide to Product Ownership Analysis – Sec 5.6 Learn Fast*](#)

Certifications: ECBA, CCBA, CBAP – Refer to the **BABOK® Guide** for study purposes

Define Requirements Architecture



Purpose or Need

To ensure that the requirements and designs collectively support one another to achieve the objectives fully.



Value

A requirements architecture ensures that all requirements and designs form a single whole that supports the overall business objectives and produces a useful outcome for stakeholders.



Solution

Defined requirements architecture that shows the interrelationships among requirements and designs.



Techniques

Frequently used techniques:

- [Data Modelling](#);
- [Functional Decomposition](#);
- [Process Modelling](#);
- [Scope Modelling](#);
- [Workshops](#).

Refer to the **BABOK Guide v3** for the complete list of techniques.



Stakeholder

Different stakeholders may assist in defining and confirming as well as assessing the completeness of the requirements architecture.



Description of Change

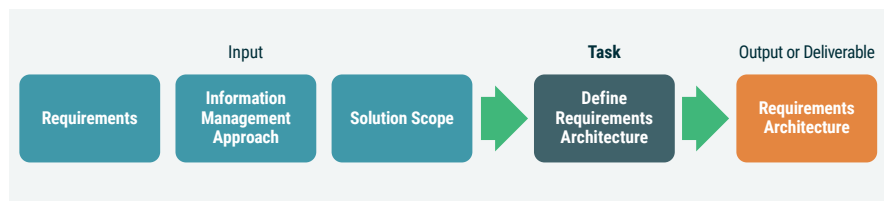
Define Requirements Architecture structures all requirements and designs so that they support the overall business purpose for a change and that they work effectively as a cohesive whole.

Reference (Guidelines and Tools)

The following resources, if they exist, can be used to transform the inputs into the outputs:

- Architecture Management Software;
- Legal/Regulatory Information;
- Methodologies and Frameworks.

Task Inputs and Outputs



Consider...

This can be a rigorous process for large scale predictive initiatives or most often (but not always) less rigorous for adaptive initiatives.

Example: Creating enterprise models that can be used for ongoing value delivery often use commercially available or industry standardized reference models.

See [BABOK Guide – 11.4 The Business Architecture Perspective](#)

Certifications: ECBA, CCBA, CBAP – Refer to the **BABOK® Guide** for study purposes

Define Design Options



Purpose or Need

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.



Value

An understanding of the potential of the future state.



Solution

Defined design options to satisfy the business need.



Techniques

Frequently used techniques:

- [Brainstorming](#);
- [Document Analysis](#);
- [Mind Mapping](#);
- [Root Cause Analysis](#);
- [Vendor Assessment](#).

Refer to the **BABOK Guide v3** for the complete list of techniques.



Stakeholder

Typically involves project managers, implementation subject matter experts, operational support, and any additional stakeholders identified.



Description of Change

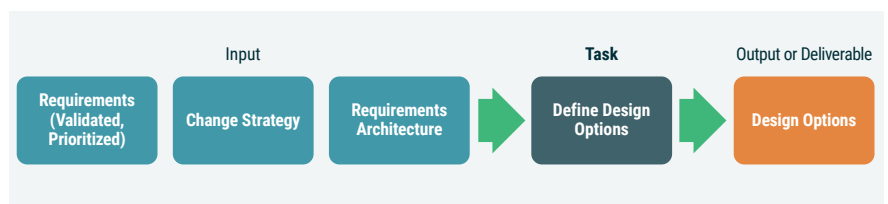
Define Design Options identifies, explores, and describes different ways of meeting the business need. Possible solution approaches include creating (I.e. building), purchasing (I.e. buying), or a combination of both.

Reference (Guidelines and Tools)

The following resources, if they exist, can be used to transform the inputs into the outputs:

- Existing Solutions;
- Future State Description;
- Requirements (Traced);
- Solution Scope.

Task Inputs and Outputs



Consider...

Avoid deciding on the ideal solution design too early, and remember that the best designs often emerge from ongoing conversations with customers to better understand context and needs.

Example: There are factors to consider when redesigning an end-to-end business process. The process redesign team will typically identify options that can be discussed with business experts.

See [BABOK Guide – 11.5 The Business Process Management Perspective](#).

Certifications: ECBA, CCBA, CBAP – Refer to the **BABOK® Guide** for study purposes

Analyze Potential Value and Recommend Solution



Purpose or Need

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



Value

To identify and recommend the solution option that delivers the greatest overall potential value.



Solution

Recommendation of the most appropriate solution based on an evaluation of all defined design options.



Techniques

Frequently used techniques:

- [Acceptance and Evaluation Criteria](#);
- [Estimation](#);
- [Financial Analysis](#);
- [Metrics and KPIs](#);
- [Risk Analysis and Management](#).

Refer to the **BABOK Guide v3** for the complete list of techniques.



Stakeholder

Typically involves sponsors, project managers, subject matter experts, customers, users, and any additional stakeholders identified.



Description of Change

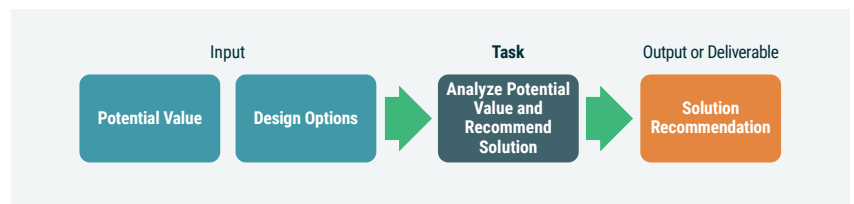
Analyze Potential Value and Recommend Solution assesses the business value of a potential solution and compares options, including trade-offs. Each option has a mix of advantages and disadvantages to consider. The potential value of a solution to a stakeholder is based on the benefits delivered by that solution, associated costs, and identified constraints.

Reference (Guidelines and Tools)

The following resources, if they exist, can be used to transform the inputs into the outputs:

- Business Objectives;
- Current State Description;
- Future State Description;
- Risk Analysis Results;
- Solution Scope.

Task Inputs and Outputs



Consider...

There's rarely one correct answer or one perfect solution. Every team needs to find methods for determining what to recommend as the best way forward.

Example: When deciding on how best to address a business challenge, data teams often use criteria to evaluate recommendations from analytic results that are best aligned with business needs.

See [Guide to Business Data Analytics](#) – 2.5.1 Recommend Actions

Certifications: ECBA, CCBA, CBAP – Refer to the **BABOK® Guide** for study purposes