Trace Requirements and Designs



Purpose or Need

To ensure that requirements and designs at different levels are aligned with one another and to manage the effects of a change to one level on related requirements.



Value

Traceability enables effective impact analysis, the discovery of inconsistencies and gaps in requirements and designs, and assists in scope, change, risk, time, cost, and communication management.



Techniques

Frequently used techniques:

- Business Rules Analysis;
- Functional Decomposition;
- Process Modelling;
- Scope Modelling.

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



Solution

To have requirements and designs that are traced and available for additional work.



Stakeholder

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

Task Inputs and Outputs



Description of Change

Trace Requirements and Designs includes analysis and maintenance of the relationships between requirements, designs, solution components, and other work products for impact analysis, coverage, and allocation.

Reference (Guidelines and Tools)

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

- Domain Knowledge;
- Information Management Approach;
- Legal/Regulatory Information;
- Requirements Management Tools/Repository.



Consider...

Traceability identifies the lineage of requirements backwards and forwards. It's used to help ensure alignment and is important for all types of initiatives.

Example: Consider building a new product and ensuring alignment across organizational strategy, from product vision to daily work plans.

See Guide to Product Ownership Analysis – Sec 5.1.1 Set Up the Organization for Success

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



Maintain Requirements and Designs



Purpose or Need

To retain requirement and design accuracy and consistency throughout and beyond the change initiative during the entire requirements lifecycle and to support the reuse of requirements and designs in other solutions.



Value

Keeping requirements and designs maintained and current ensure that they remain valid over time.



Techniques

Frequently used techniques:

- Business Rules Analysis;
- Data Flow Diagrams;
- Data Modelling;
- Use Cases and Scenarios;
- User Stories.

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



Solution

Requirements and designs that are up-to-date.



Stakeholder

Typically involves subject matter experts, operational support, regulators, and any additional stakeholders identified.



Description of Change

Maintain Requirements ensures that requirements and designs are accurate and current throughout the lifecycle and facilitates the reuse of requirements and designs where appropriate.

Reference (Guidelines and Tools)

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

- Information Management Approach.

Task Inputs and Outputs



Consider...

Maintaining information can save costs, time, and effort for different types of initiatives.

Example: Consider regulatory changes that require an update to financial systems. Having accurate existing information speeds up impact analysis and allows quick identification of required system changes.

See BABOK Guide – 11.3 The Information Technology Perspective

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



Prioritize Requirements and Designs



Purpose or Need

To rank requirements and designs in the order of relative importance.



Value

Prioritization seeks to ensure that maximum value is achieved.



Techniques

Frequently used techniques:

- Backlog Management;
- Decision Analysis;
- Estimation;
- Prioritization;
- Risk Analysis and Management.

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



Solution

High-valued requirements and designs are maintained and available for use.



Stakeholder

Typically involves subject matter experts, operational support, regulators, and any additional stakeholders identified.



Description of Change

Prioritize Requirements and Designs assesses the value, urgency, dependencies, and risks associated with requirements and designs to ensure that analysis and delivery work is done on the most important ones at any given time. Prioritization is an ongoing process, with priorities changing as the context changes.

Reference (Guidelines and Tools)

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

- Business Constraints;
- Change Strategy;
- Domain Knowledge;
- Governance Approach;
- Requirements Architecture;
- Requirements Management;
 Tools/Repository;
- Solution Scope.





Consider...

Prioritization is an important task relevant to every type of initiative.

Example: It becomes critical to prioritize product value for customers when building and evolving a product as a series of smaller product increments.

See Guide to Product Ownership Analysis – Sec 5.5 Deliver Often

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Assess Requirements and Designs Changes



Purpose or Need

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



Value

Gained clarity around proposed changes ensures that each proposed change aligns with the overall strategy.



Techniques

Frequently used techniques:

- Business Rules Analysis;
- Decision Analysis;
- Document Analysis;
- Interviews;
- Risk Analysis and Management.

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



Solution

Requirements and designs change assessment with recommendation on how to act on proposed changes.



Stakeholder

Typically involves subject matter experts, operational support, regulators, and any additional stakeholders identified.

Task Inputs and Outputs



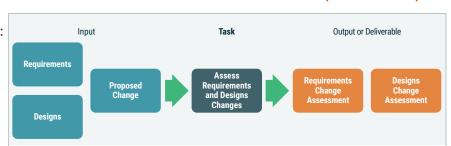
Description of Change

Assess Requirements Changes evaluates (by performing impact analysis) new and changing requirements and designs to determine whether a proposed change will increase the value of the solution and whether they need to be acted on within the scope of a change.

Reference (Guidelines and Tools)

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

- Change Strategy;
- Domain Knowledge;
- Governance Approach;
- Legal/Regulatory Information;
- Requirements Architecture;
- Solution Scope.



Consider...

As part of operating in a dynamically changing environment, it's important for every type of initiative to continually assess what needs to change and adapt to deliver greater value.

Example: A widely acknowledged good practice for developing new products is to learn from customers and adapt to their evolving needs.

See Guide to Product Ownership Analysis – Sec 5.6 Learn Fast

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



Approve Requirements and Designs



Purpose or Need

To obtain approval of requirements and designs to continue with subsequent activities.



Value

Approved requirements and designs enable the work to move forward.



Solution

Requirements and designs which are agreed to by stakeholders and are ready for use in subsequent business analysis or solution development efforts.



Techniques

Frequently used techniques:

- Acceptance and Evaluation Criteria;
- Decision Analysis;
- Item Tracking;
- Reviews;
- Workshops.

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



Stakeholder

Typically involves executive sponsor, management, subject matter experts, operational support, regulators, and any additional stakeholders identified.



Description of Change

Approve Requirements and Designs helps stakeholders involved in the governance process to reach approval and agreement on requirements and designs.

Reference (Guidelines and Tools)

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

- Change Strategy;
- Governance Approach;
- Legal/Regulatory Information;
- Requirements Architecture;
- Solution Scope.

Task Inputs and Outputs



Consider...

There's always approval needed — a lightweight step for some adaptive initiatives or a rigorous process for some complex, predictive initiatives.

Example: Consider heavily regulated businesses where audit or compliance requirements need to be met. These are the type of initiatives where a rigorous process becomes mandatory.

See BABOK Guide – 11.3 The Information Technology Perspective

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

