Navigating the BABOK® 2.0

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Introduction

The goal of this paper is to show the structure of each knowledge area presented in the BABOK®¹ 2.0. I hope that it will help you clarify your knowledge and make it more systematic.

I quite often hear from people learning business analysis that they find it difficult to visualise how the parts of the BABOK align with each other. To address this issue, I've created an atlas of maps to help navigate the BABOK. These maps show the internal structure of each knowledge area and illustrate links between the elements within the knowledge area, as well as how it's related to other knowledge areas.

Before we dive into specific knowledge area maps, let's consider the big picture of all knowledge areas.



I used to be an electronic engineer and I spent a lot of time developing and assembling sound amplifiers and sound speaker systems as a hobby. Printed circuit boards (PCBs) were used in many of them, helping to assemble and connect the different components into a working unit. PCBs are a good analogy for explaining the structure of the BABOK.

It has six knowledge areas with multiple tasks within each of them,

linkages between tasks, their inputs and outputs. However, the visible picture of the six knowledge areas leaves some questions unanswered. An attentive reader of the BABOK 2.0 will certainly notice these areas. This series aims to fill in the gaps.

In the diagram below, I've illustrated the internal links within knowledge areas and showed the interconnections between different areas.

The names of knowledge areas are shown as abbreviations:

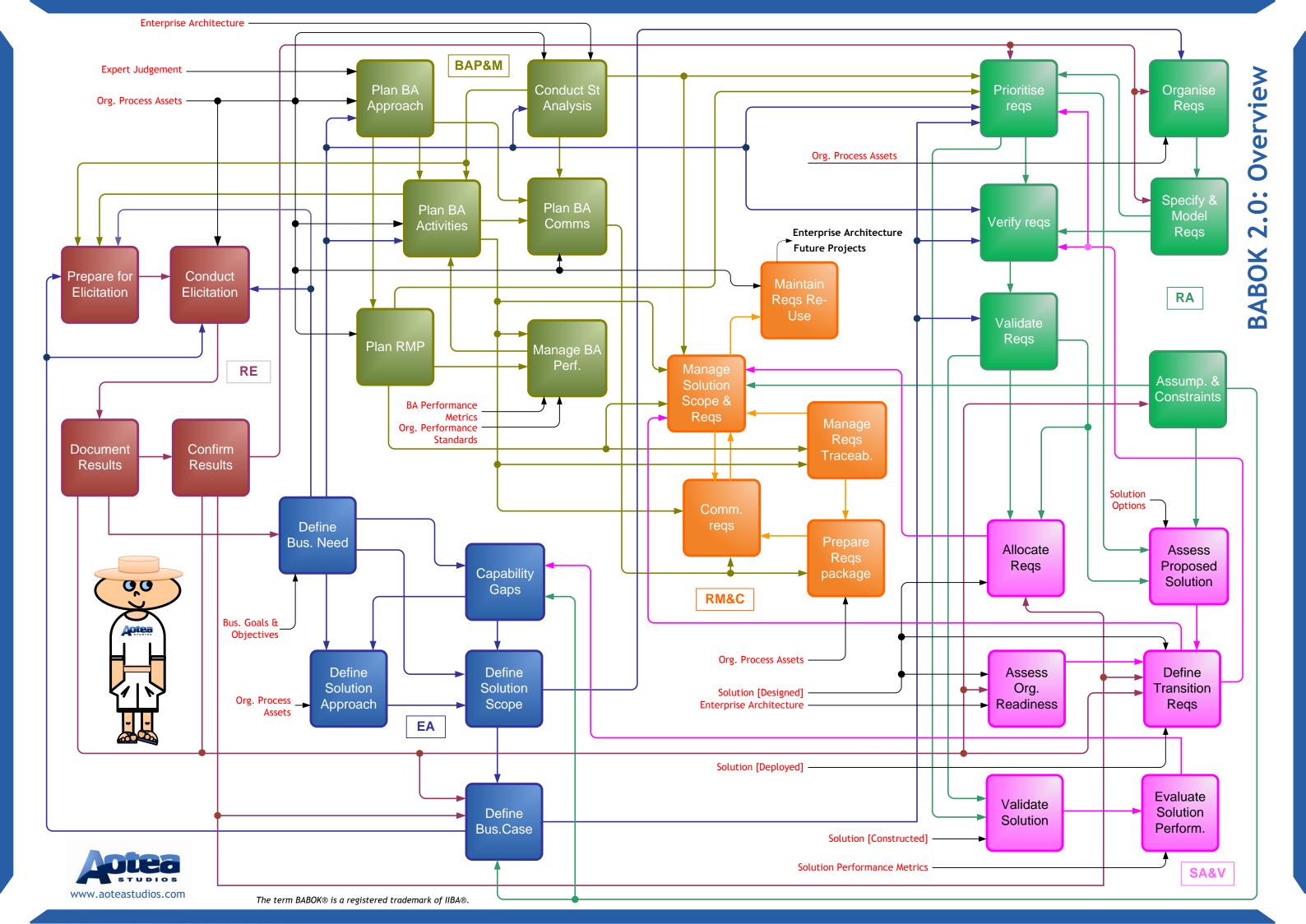
- BAP&M: business analysis planning & monitoring
- RE: requirements elicitation
- RA: requirements analysis
- RM&C: requirements management & communication
- EA: enterprise analysis

¹ The term BABOK® is a registered trademark of IIBA®.

• SA&V: solution assessment & validation

Seeing all these links in one page helps in grasping the essence of business analysis and getting a holistic perspective of all the tasks involved, as well as understanding when and why each task is performed in the certain knowledge area.

I've highlighted each knowledge area with a colour to make it easier to track links. All the knowledge domains and information external to business analysis (as defined in the BABOK) is shown in red.



Business Analysis Planning & Monitoring

The Business Analysis Planning and Monitoring knowledge area needs to be considered as two complementary components.

The BA Planning part focuses on preparing for effective execution of business analysis. A good understanding of project nature, business needs and objectives, as well as the required scale of changes to the existing state within an organisation helps to select an approach which allows performing business analysis in an effective manner, and then develop a solution for the identified needs.

The BA Planning component gets input from Enterprise Analysis as it provides information about the current business landscape and long-term business objectives. The BA Planning component includes analysis of stakeholders, their roles and responsibilities in the project, their needs for information about BA activities, the required level of detail and frequency of communication of the specified information.

All the agreed terms are then reflected in the BA Plan - a document outlining the agreed BA deliverables, schedule of the planned BA activities, approach and techniques to be used, and reporting on BA progress.

The defined BA Plan determines the approach to requirements management and the means of maintaining their traceability. The Requirements Management Plan defines how the BAs' performance will be measured during the project.

Each iteration of business analysis activities facilitates improvement of the initial planning as more information becomes available.

The BA Monitoring component focuses on ensuring that the planned activities are performed well and the agreed deliverables are produced in line with the agreed schedule. Performance of BA activities is regularly measured against the approved BA Plan and Requirements Management Plan. Where a deviation from the planned results has been identified, a corrective action (re-planning of activities) is taken to restore performance to the agreed level and probably correct the planned activities.

Organisational standards play an important role in planning, establishing performance metrics and reporting on the results.

Below you'll find a chart which summarises the business analysis planning and monitoring section of the BABOK®.

Business Need

Org.

Process

Assets

LEGEND

Inputs

External

Elements

Stakeholders

Areas

Enterprise architecture

ВА

Performance

Expert Judgement BAP&M

BUSINESS ANALYSIS PLANNING & MONITORING

Defines the tasks associated with the planning and monitoring of business analysis activities, including: BA Approach, Stakeholder Analysis, BA Plans, BA Communication Plan, Requirements Management Plan and BA Performance

BA Approach

BA Comm.

Plan

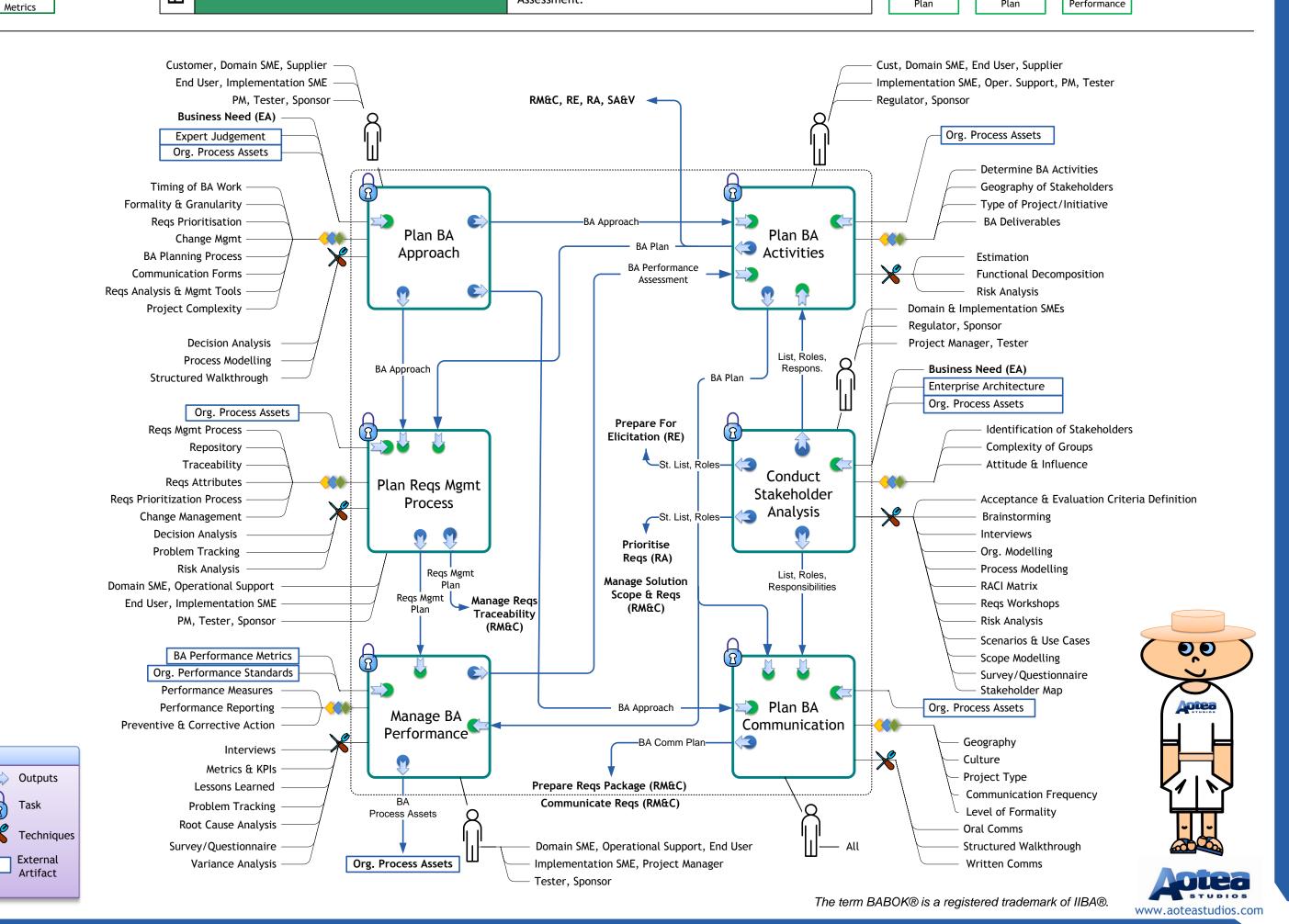
Stakeholder

Req. Mgmt

BA Plans

Performance

BA Process Assets



Enterprise Analysis

Enterprise Analysis (EA) focuses on several areas:

- identification of the business need
- understanding of the current state of an organisation
- understanding of the existing information landscape
- definition of gaps in capabilities
- definition of an approach to a solution and solution scope
- support in developing a Business Case.

Engaging business stakeholders in requirements elicitation activities helps specify the business problem. Enterprise Analysis invokes tasks from Requirements Elicitation and Requirements Analysis when it is required. It happens because the accurate definition of the business need is only possible through communication with the stakeholders.

The expressed high level requirements have to be analysed and prioritised to ensure that the requirements are clearly separated from wishes. Assumptions and constraints related to solution scope are expressed upfront to support the development of the business case.

EA feeds information about the current business landscape and long-term business objectives into BA Planning. Several disciplines facilitate obtaining this information: enterprise architecture, service operation and service help desk (ITIL), business process management (BPM).

The identified current state serves as a baseline for defining a gap between the existing and required new capabilities.

Nowadays projects often combine changes to business processes, software packages, introduction of new business services and even new models of operation. Process mapping and the enterprise architecture framework both facilitate gap analysis. They also help in defining scale of possible changes and identifying business rules governing the existing processes.

After the required capabilities have been specified, it is time to define a solution approach which should be aligned with the project approach to ensure effective execution of the project.

The defined solution approach and required new capabilities enable the definition of solution scope. Solution scope should be aligned with project scope.

The business case is the output of EA. It specifies the business need, required new capabilities, approach to the realisation of the specified new capabilities, project and

solution scope, time and cost estimations, assumptions and constraints, and finally justification of feasibility to undertake the project.

Below you'll find a chart which summarises the enterprise analysis section of the $\mathsf{BABOK}^\$.$

Reqs (Stated)

Performance

Assessment

Stakeholder

Concerns

Enterprise Architecture

EA

ENTERPRISE ANALYSIS

Describes the BA activities necessary to identify a business need, problem, or opportunity, define the nature of a solution that satisfies the identified need, and justify the investment necessary to deliver the solution. Enterprise analysis outputs create context to requirements analysis.

Business Case

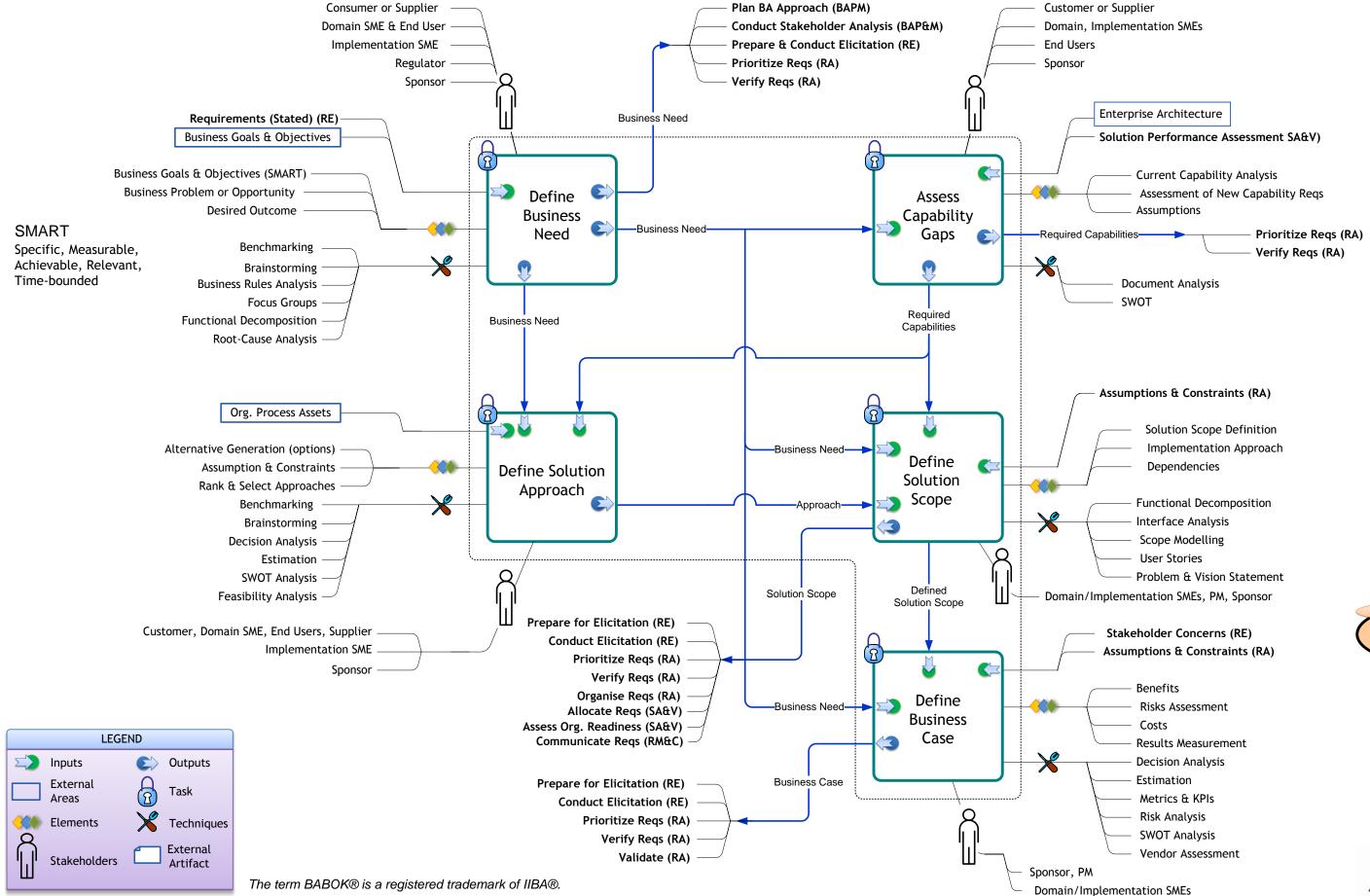
Need

Business

Required Capabilities

Solution Approach

Solution Scope





Requirements Elicitation

Requirements Elicitation focuses on the business analyst's interaction with stakeholders and facilitation of their engagement in the articulation of requirements.

It also aims to document the findings to support enterprise analysis, planning and monitoring, requirements analysis, management and communication.

Informal and formal meetings, workshops or even just short catch-ups are in play to get more information about the business need, the limitations of the existing processes and the information systems that support them.

The preparation for any of these types of interactions with the project stakeholders is important and should not be taken lightly. A clear agenda, meeting rules, expected actions, outcomes and decisions - everything should be well thought out and arranged to avoid wasting the time allocated for the meeting.

From a practical viewpoint, some time should be allocated within these elicitation workshops to discuss how the organisation will interact with its wider environment in the "to be" state. Quite often this topic is left until the point where a design is almost complete.

A certain amount of requirements analysis takes place during elicitation activities. It's necessary to separate personal wishes of the stakeholders from actual business requirements. Rough prioritisation helps draw a line between wishes and actual needs.

The business analyst records the gathered information in a structured way to facilitate its further processing, simplify confirmation and use for developing the business requirements.

The map of the Requirements Elicitation section is shown below.



Org. Process Assets

List, Roles, Responsib.

Reqs. Mgmt

Business

Solution Scope

Business Case

RE

REQUIREMENTS ELICITATION

Eliciting requirements is a key task in business analysis because the requirements serve as the foundation for a solution to the business needs. BA shall ensure that the business requirements are complete, clear, correct, and consistent.

Elicitation Results

Regs Stated & Confirmed

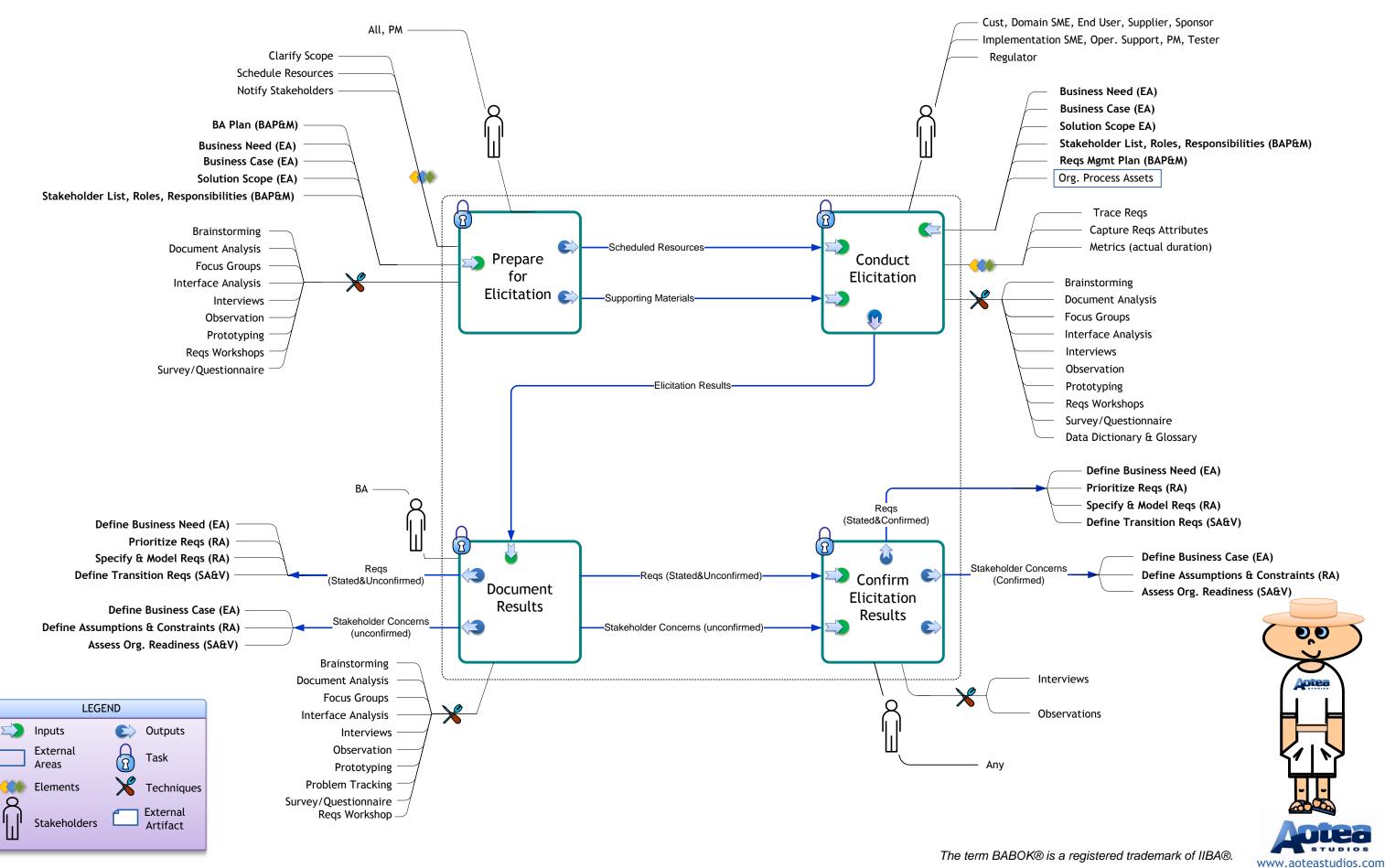
Supporting Materials

Stakeholder

Concerns

(confirmed)





Requirements Management and Communication

Requirements Management focuses on applying the requirements management plan developed during planning of the business analysis approach and detailed activities.

The key objectives of the plan are:

- requirements traceability management,
- solution scope management due to changes to the requirements,
- preparation of requirements packages to facilitate communication of the requirements.

Traceability of requirements is a crucial part of project success. Traceability enables effective impact analysis of changes to the requirements. Business users and testers use traceability to verify that the designed and developed solution delivers the requested capabilities.

On the other hand, traceability helps ensure that the external requirements (such as in compliance projects) are satisfied as well, and no penalties will occur in the future as a result of an industry audit. Well established traceability enables maintenance of requirements for re-use where it may be required.

Requirements communication aims to inform the project stakeholders about the packages of requirements which are at different stages of their lifecycle, and changes to requirements (and ultimately to solution scope) as they occur during the project.

From a practical perspective, communication of the packaged requirements should take into consideration different types of stakeholders.

It is well known from practice that the executives (project sponsor and the like) will not be interested in details as much as SMEs and solution developers and testers.

Requirements management & communication supports analysis planning and monitoring, enterprise analysis and solution assessment and validation.

The visual map of the requirements management and communication section of the BABOK is shown below.

Solution

Scope

BA Comms

REQUIREMENTS MANAGEMENT & COMMUNICATION

Describes the activities and considerations for managing and expressing requirements to different audiences. Performance of these tasks ensures that all stakeholders have a shared understanding of the nature of a solution and a common understanding of the requirements.

Reqs (Approved)

(Maintained)

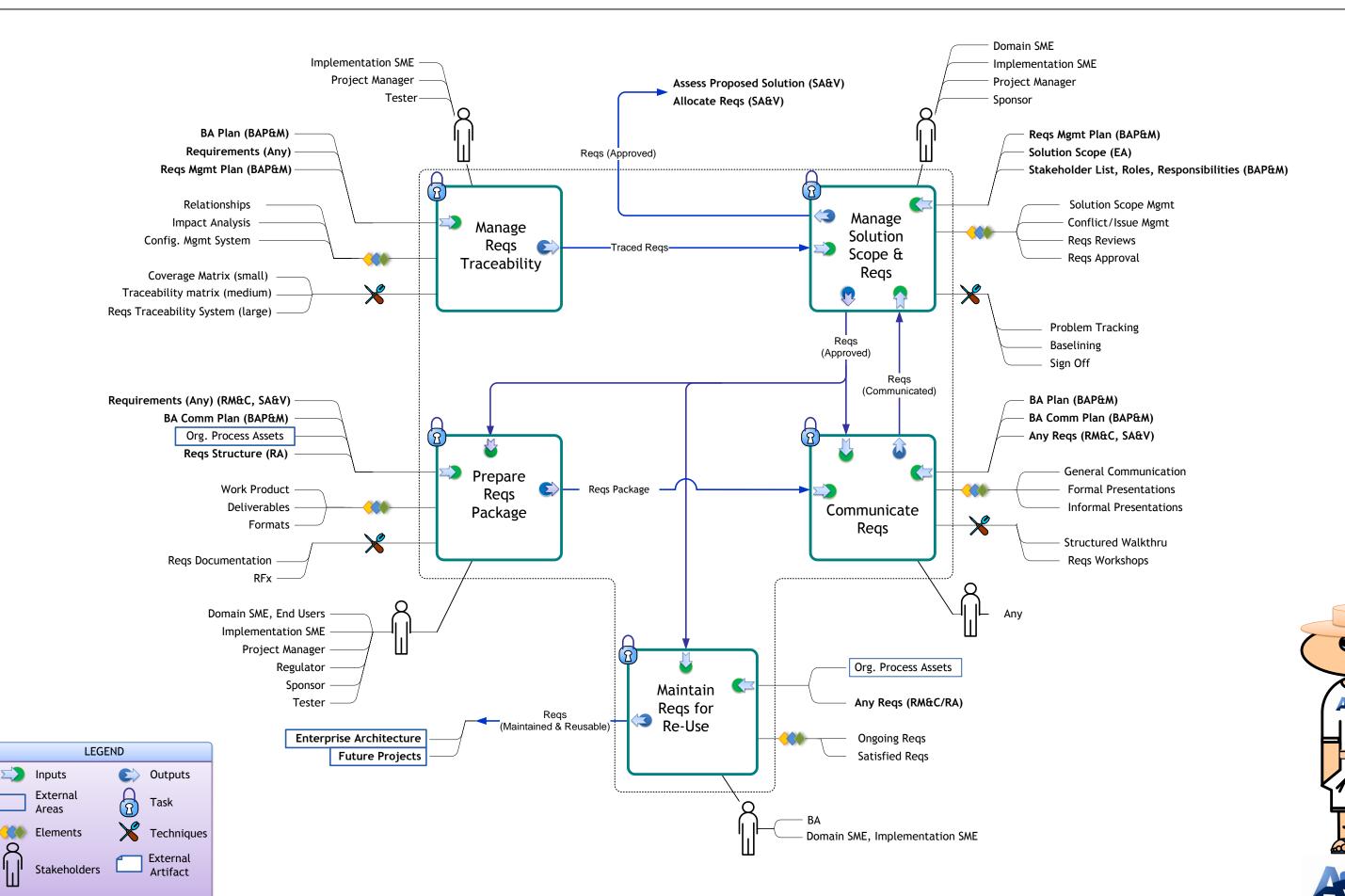
Reqs (comm-ted)

Reqs

(Reusable)

Reqs (Traced)

Reqs Package



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Requirements Analysis

Requirements Analysis focuses on organising the gathered requirements, prioritising them to ensure that the "must" and "should" requirements will be verified with business and technical SMEs and then validated to be included into solution requirements. The initially stated requirements require "post-processing". In other words, they need to be modelled and confirmed with the key SMEs.

Analysis of requirements focuses on functional and data requirements, required interfaces, modifications of business processes, logical design and possible risks to realisation of the requirements. The modelled and confirmed requirements need to be specified. Depending on the stability of the identified requirements, they can be either prioritised and then verified or verified straight away.

Validated requirements feed into the solution design and initial test plans. The validated requirements are also allocated to functional areas of the solution to facilitate better communication of the requirements to the project stakeholders. Enterprise Analysis takes into account all assumptions and constraints identified during Requirements Analysis. This information helps determine solution boundaries, project and solution scope.

In my practice I use requirements elicitation and requirements analysis jointly because it helps me shorten the duration of my tasks. Quickly prioritising the expressed requirements, I move them to the verification and validation stages using Use Cases as requirements packages.

Requirements analysis also identifies which components of the existing information landscape and business processes can be re-used. Re-usable parts improve the financials of the project, the solution leverages the stable existing components and shortens the duration of the design, development, test and implementation phases.

Requirements analysis supports requirements elicitation, planning and monitoring, enterprise analysis, solution assessment and validation, requirements management and communication. Requirements communication is in frequent use because a business analyst seeks support from technical and business SMEs, service operation and service strategy (ITIL).

The map of the requirements analysis section of the BABOK is shown below.

Assets Reqs Mgmt

Org. Process

Business Case

> List, Roles, Responsib.

Stakeholder Concerns

Business

Need

Reqs

8

Enterprise

Architecture

REQUIREMENTS ANALYSIS

Describes the tasks and techniques used by a BA to analyze stated requirements for defining the required capabilities of a potential solution that will satisfy the identified stakeholder needs. It focuses on the definition of stakeholder requirements (capabilities) and solution requirements (behavior) at a level of detail sufficient to enable to construct the solution.

Regs Structure

Reqs

(Validated)

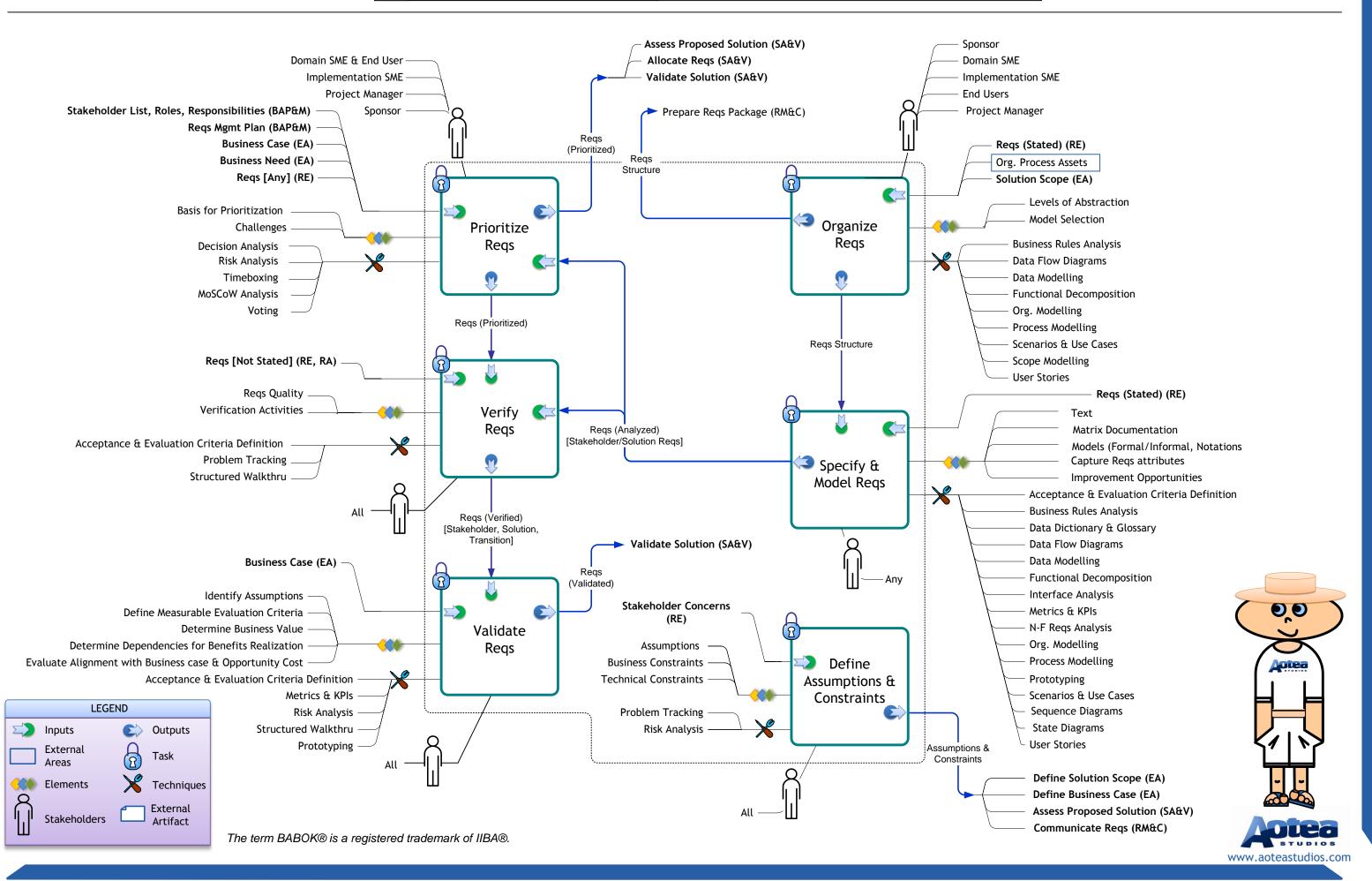
Reas (Prioritized)

Reqs

(Verified)

Assumptions & Constraints

Stakeholder or Solution Reas



Solution assessment and Validation

Solution assessment and validation has several objectives:

- Evaluate organisational preparedness to the proposed change
- Evaluate performance of existing solutions to support enterprise analysis
- Assess the proposed solution prior to its selection
- Validate the designed solution to ensure that it meets the requirements
- Determine transition requirements for moving from the current state ("as is") into the target state ("to be").

Assessment of organisational readiness to changes plays a critical role in a project's success. The results of the assessment determine the scope of the project in terms of actions to be taken to train personnel, modify business processes, change certain activities and reporting, not to mention changes to behaviour and beliefs. These results also support a definition of transition requirements which describe how the solution should be implemented and released into production with minimal disruption to the existing solutions and processes.

A business analyst performs assessment of the designed solution to ensure that the solution meets the acceptance and evaluation criteria and meets the approved requirements.

When the solution has been constructed, the business analyst validates the solution to ensure that defects are identified, their causes are known and the defects are communicated to the responsible stakeholders.

The business analyst carries out an evaluation of solution performance multiple times within the project. Firstly, an evaluation of performance of the existing solution helps identify weaknesses of the solution and supports the investigation of causes of poor performance. This information feeds into gap analysis conducted within enterprise analysis. Secondly, the business analyst evaluates performance of the solution once it's ready for deployment in order to ensure that the solution delivers the expected value to the business.

In practice, the business analyst works closely with solution architects, vendors, software developers, testers, technical personnel and change managers, acting a bit like a conductor of a big orchestra to ensure the satisfaction of the listeners.

The visual map of the solution assessment and validation section of the BABOK is shown on the next page.

Assessment Describes the tasks that are performed by a BA to ensure Mitigating Solution Enterprise Identified Transition Assumptions & Regs SAEV of Proposed SOLUTION ASSESSMENT Scope Architecture that solutions meet the identified business need and to **Defects** Actions Constraints regs Solution facilitate their successful implementation. These activities & VALIDATION Org. Solution Solution Solution Solution Stakeholder may be performed to assess and validate any component of Reqs Solution Readiness Validation (Build, Designed Performance Performance the [proposed or deployed] solution. (Allocated) Options or Deployed) Metrics Assessment Assessment Assessment Domain & Implementation SMEs Customer, Supplier, End User Operational Support Solution Selection or Design Domain & Implementation SMEs Project Manager Supplier Sponsor Assumptions & Constraints (RA) Sponsor Project Manager Operational Support Reqs [Prioritized] (RA) Communicate Reqs (RM&C) Reqs [Approved] (RM&C) Assessment **Solution Options** Solution [Designed] Results Reqs (Prioritized) (RA) Rank Solution Options Reqs [Approved] (RM&C) [Allocated] Assess Identify Additional Potential Capabilities Solution Scope (EA) **Proposed** Acceptance & Evaluation Criteria Definition Solution **Decision Analysis** Allocate Solution Components Vendor Assessment Release Planing Regs Operational Support Acceptance & Evaluation Criteria Definition Domain & Implementation SMEs **Business Rules Analysis** Project Manager Communicate Reqs (RM&C) **Decision Analysis Sponsor** Prioritize Regs (RA) Stakeholder Concerns (RE) **Functional Decomposition** Verify Regs (RA) **Enterprise Architecture Process Modelling** Solution [Designed] Scenarios & Use Cases Solution Scope (EA) Transition Regs Regs [Stated] (RE) Solution [Designed] **Cultural Assessment** Solution [Deployed] Operational/Technical Assessment Define Assess Org. Stakeholder Impact Analysis Assessment Results Data Transition Readiness Acceptance & Evaluation Criteria Definition **Ongoing Work** Reqs Org. Change Data Flows Diagrams Focus Groups, Interviews, Surveys **Business Rules Analysis** Customer, End User Data Flow Diagrams Force Field Analysis Operational Support Data Modelling Org. Modelling **Problem Tracking** Process Modelling Project Manager Org. Modelling Tester, Sponsor, Regulator Risk Analysis Domain, Implementation SMEs **SWOT Analysis** Solution Performance Metrics Business Reqs [Any] (RE, RA,RM&C) Solution [Constructed] (R Solution [Deployed]

Identified Defects

Mitigating

Actions

Solution Validation

Assessment

Solution Performance Assessment

Results

Validate

Solution

' Evaluate 🧲

Solution

Assess Capability Gaps (EA)

Solution Implementation

Performance

Reqs [Prioritized] (RA)

Reqs [Validated] (RA)

Assess Defects & Issues

Root Cause Analysis

Problem Tracking

Domain &

Regulator

Sponsor

Implementation SMEs

Operational Support

Project Manager

End User, Tester

Investigate Defective Solution Outputs

Acceptance & Evaluation Criteria Definition

LEGEND

Outputs

Task

Techniques

External

Artifact

Inputs

External

Elements

Stakeholders

Areas



Evaluate Value Delivered by Solution

Evaluate Solution Replacement or Elimination

Validate Solution Metrics

Survey/Questionnaire

The term BABOK® is a registered trademark of IIBA®.

Decision Analysis

Focus Groups

Observations

Domain SME & Supplier

Customer, End User

Operational Support

Regulator

Sponsor

Requirements Lifecycle

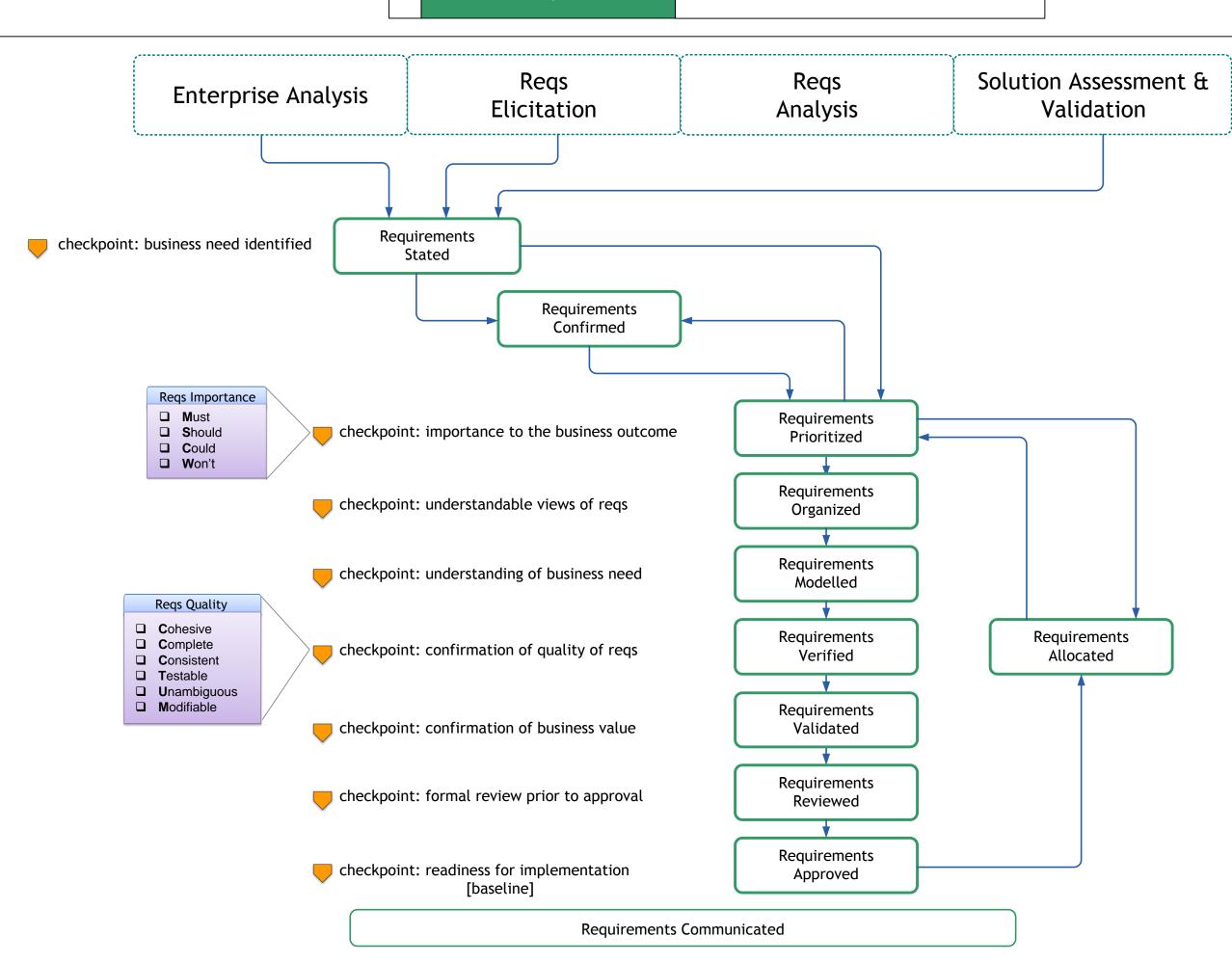
Requirements are similar to our desires. Initially, it is just an idea to have something, then the desire moves into confirmation phase, then into justification and finally into the decision phase where we are ready to satisfy the desire in some way.

To shorten the learning curve, I've created a diagram illustrating the whole requirements lifecycle. I added checkpoints for tracking the progress within a project. Requirements statuses are allocated to knowledge areas for convenience.

The diagram can be used as a check list of being on the right track: understanding of business needs, vision of the desired business outcome, understanding of packaging requirements for effective communication, preparedness to formal reviews and readiness for the deployment of the solution.

The diagram is shown on the next page.

RLC





Mapping Knowledge Areas to Project Phases

In this section, I will show how all the presented parts work together within the project lifecycle based on the projects I have carried out. I will only describe the four key phases in a project to keep it brief.

Start-Up

There are two scenarios when a project starts. First, an industry governing body can impose requirements that an organisation needs to comply with. Another scenario is where the existing solution either does not perform well or lacks capabilities required by the business.

In either case, the first task is to identify the actual business need. As the project has not been formally initiated, the business analyst (BA) talks to the concerned stakeholders (Requirements Elicitation) to understand their perception of the need (Enterprise Analysis and Solution Assessment & Validation). During these meetings the BA evaluates and roughly prioritises the requirements (Requirements Analysis).

Once sufficiently detailed information is available, the BA evaluates it to get an idea about the possible solution scope (Enterprise Analysis), the approach to business analysis if the project goes ahead (Bussiness Analysis Planning & Monitoring), and makes estimations of his/her efforts to deliver business analysis artifacts (Business Analysis Planning & Monitoring).

Initiation

After the project has been approved to go ahead, the BA determines the approach to business analysis, plans what business analysis activities will be undertaken, refines the estimation of effort, works on developing a requirements management plan and a communication plan, and specifies how progress will be monitored and reported (Business Analysis Planning & Monitoring).

The BA then conducts formal meetings and workshops (Requirements Elicitation) with the project stakeholders to gather information required to confirm the requirements. At the same time, the BA gathers information about the existing information landscape, business processes and enabling them IT services (Solution Assessment & Validation) and identifies their pain points. The BA identifies the degree of pain, defines gaps in capabilities (Enterprise Analysis) and determines a solution approach (Enterprise Analysis).

During the meetings and workshops the BA evaluates the readiness of the organisation to transition to the target state (Solution Assessment & Validation). The assumptions and

constraints are accurately documented (Requirements Analysis) and used within other stages of the project.

The Requirements Management & Communication area comes into play as soon as the first requirements have been confirmed (Requirements Elicitation). The BA establishes requirements traceability from the outset as a tool to perform impact analysis and manage solution scope when changes to requirements occur within the project lifecycle.

The BA specifies and validates the identified requirements (Requirements Analysis), creates requirements packages for communicating requirements (Requirements Analysis) to different segments of the project stakeholders. I often use Use Cases as the requirements package. This approach enables me to present information in a clear way and the requirements are easily understood by both business stakeholders (subject matter experts and business users) and technical stakeholders (software developers and testers).

I recommend reporting on progress on a weekly basis (Business Analysis Planning & Monitoring) to ensure that corrective actions can be taken in a timely manner. This is especially true about the compliance projects with fixed deadlines.

Execution

The approved requirements (Requirements Analysis) enable solution development. This project stage often results in a lot of changes to the requirements, so Business Analysis Planning & Monitoring and Requirements Management & Communication areas are both used to ensure that the planned activities are managed properly, changes are communicated in a timely manner and solution scope is under control.

As design of the solution becomes available, the BA works on assessing how well the solution meets the requirements (Solution Assessment & Validation). The BA refines transition requirements (Solution Assessment & Validation) to ensure that the organisation can move to the target state with minimal disruption to the normal business activity.

When components of the solution undergo testing, the BA works with testers to evaluate their performance (Solution Assessment & Validation). When the solution is ready for testing, the BA participates in integration testing to evaluate the value to be delivered to the business.

Two key aspects are important here. One is to ensure that the business gets what was required (processes and software functionality). Another is that the business gets what was required when the business needs it (solution availability). These two aspects ultimately define the value that the solution delivers to the business.

Closure

The final project stage is to hand over the solution to the business. The BA reports on business analysis deliverables and lessons learned (Business Analysis Planning & Monitoring). As some requirements may be re-used at later stages, the BA stores them in a way enabling re-use and maintenance (Requirements Management & Communication).

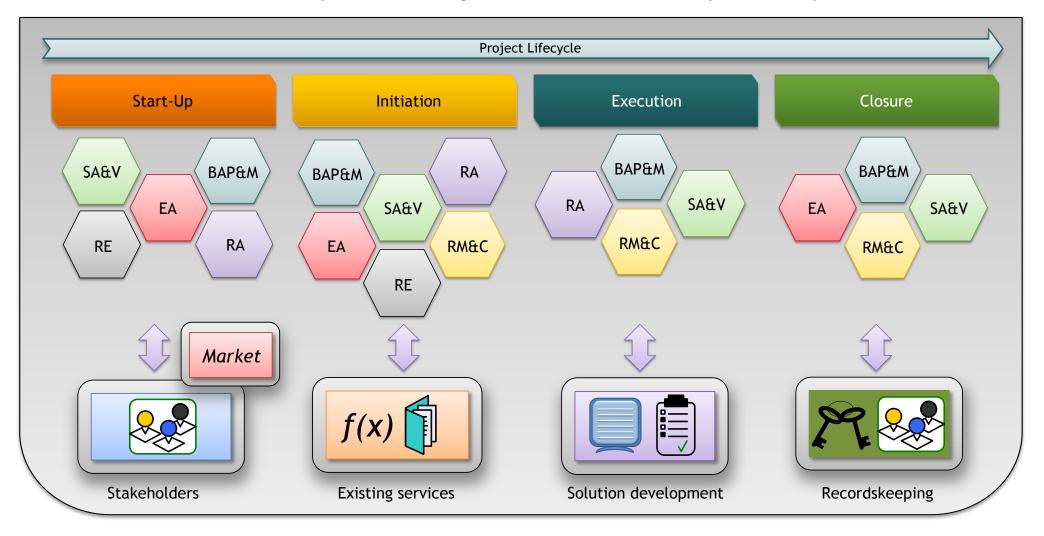
The approved business analysis artifacts go into a repository of project documents. The BA informs the project stakeholders where the documents have been stored (Requirements Management & Communication). The BA participates in the post-implementation meeting to confirm the value delivered by solution (Solution Assessment & Validation) and satisfaction of the business objectives (Enterprise Analysis). The BA communicates lessons learned to the project stakeholders (Requirements Management & Communication).

As the final activity on the project, the BA gathers stakeholders' feedback on his/her performance on the project (Requirements Management & Communication).

Diagram

On the next page you'll find a diagram showing the mapping of the knowledge areas to project phases. You'll notice that there is no linear progression through the knowledge areas during the projects. The BA has to draw on different knowledge areas throughout each stage of the project.

Business Analysis Knowledge Areas within the Project Lifecycle



BAP&M - Business Analysis Planning & Monitoring

EA - Enterprise Analysis

RE - Requirements Elicitation

RA - Requirements Analysis

SA&V - Solution Assessment & Validation

RM&C - Requirements Management & Communication

Conclusion

This paper has provided visual representations of the structure of the different areas of the BABOK with the intent of making it easier to understand and memorise the knowledge in the BABOK. It has also detailed the mapping of the knowledge areas to project phases.

About Aotea Studios

If you're a business analyst, we can help you be more effective in your job. That's our goal.

Most people learn faster & easier with the help of visual information, and retain more afterwards. Plus, a good diagram serves as great reference material later. That's why you can expect to see a lot of diagrams and other visual aids in our products.

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Boost your BA skills with this unique visual guide to business analysis. Get a framework for business analysis and requirements management, and learn about other important things like project management, risk management and stakeholder engagement.

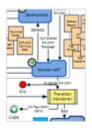
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