

# Business Analysis Notes

## Business Requirements Specification (BRS)

### Link to [Business Analysis](#)

After researching multiple sources, I have broken down a Business Requirements Specification into one specific summary sentence. A BRS document simply put, is the overall scope of a specific project outlining the goals, expectations, requirements, and future a client/organization hopes to achieve within the said project. Having a well-written BRS document is the foundation to having a project turn out successful, as it is created to describe the problems and solutions to highlight the anticipated outcomes to deliver a project or product as expected. The BRS document will be created by a team of Business Analysts (BA) who will interact with the clients, where they are directly responsible for understanding and assessing the changing needs of the business. The BA team can be considered to be the bridge between the client /organization, and the team of engineers who will create their solution following the requirements derived by the BA team. A project is only as good as its requirements, meaning it is highly important to correctly write the BRS document, or it will impact the overall success of the product /project moving forward.

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## Reading Notes:

- [Business Requirements Specification \(BRS\)](#)
  - [Business or Mission Analysis \( SWEBOKwiki \)](#)
  - [Business or Mission Analysis Process \(ISO/IEC/ IEEE 29148, Chapter 6.2\)](#)
  - [Business Example Outline \(ISO/IEC/ IEEE 29148, Chapter 8.2.2\)](#)
  - [Business Requirements Specification \(BRS\) content \(ISO/IEC/ IEEE 29148, Chapter 9.2\)](#)
  - [8 Steps to Being an Effective Business Analyst \(An Introduction to Business Analysis \)](#)
  - [Research / Information Literacy \(Prof. Vanselow - Research \)](#)
  - [The Business Analyst \("Software Requirements" Weiger's book, Ch. 4\)](#)
  - [Establishing the Business Requirements \("Software Requirements" Weiger's book, Ch. 5\)](#)
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## Business or Mission Analysis ( [SWEBOKwiki](#) )

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### Topic Summary:

Mission Analysis will define the problem space and analyze the solution space alternatives using quality attribute constraints driven by the enterprise objectives. When conducting the Mission Analysis there is a specific process approach one must follow in order to see a clear perspective from all angles. Within a Mission Analysis, specific documents are used to characterize the solution & problem space and determine potential solution classes. **A Mission Analysis can either be to solve a problem or take advantage of a specific opportunity while serving as an incredibly important navigational tool when thinking about the future of an enterprise.**

### Key Terms:

**Mission Analysis (MA)** - A part of a larger set of concept definition activities.

**Concept of Operations (ConOps)** - On an organizational level, a document that addresses the leadership's intended way of operating the organization. The document is used as a basis for the organization to direct the overall characteristics of future business and systems.

**Preliminary Operation Concept (OpsCon)** - A Document that describes what the system will do and why, but NOT how it will do it. Typically from the user's perspective that describes characteristics of the to-be-delivered system.

**System-of-interest (SOI)** - A collective of elements within a system that is being considered by a lifecycle, in the SWE context this is the system we are considering while in design.

**Stakeholder** - The individual or organization who has a right, share or claim within a system or in its possession of characteristics that meet their needs and expectations.

**Users** - Individual /group that interacts with the SOI.

**Acquirers** - The stakeholder who is procuring a product/service from a supplier.

**Customers** - The organization or person receiving a product or service.

**Concept Definition** - The space where the needs of the stakeholders are closely examined consisting of the problem analysis, and defined stakeholder needs of the product.

**Market Analysis** - Activates designed to determine the attractiveness of a market and the evolutions or threats that come with the market. This also gives an analysis of the organization's strengths & weaknesses.

**Operational Mode** - The state of the system characterized by its active functions. In an operational mode, the system can perform specific operational scenarios activating corresponding functions.

**Scenario** - A set of functions representing the dynamic of exchange between the functions allowing the system to achieve a goal.

**Functions** - An action, activity, or task performed to achieve the desired outcome. Typically in the form of a system that contributes to goals or objectives. (Think of functions in a program)

**Architecture Framework** - Principles & practices for the description of architectures established within a specific application by a community of stakeholders.

## Main Topics / Key Takeaways:

### Purpose & Definition:

The purpose of MA is to understand a market problem or opportunity and to begin the life cycle of a potential solution that could address the problem or take advantage of an opportunity. **Market Analysis** is purely defined as the identification, characterization, and assessment of an operational problem or opportunity within an enterprise. We begin every MA with a business vision and **Concept of Operation** (ConOps). The most important part of the MA is the operational scenarios for the mission and the context in which the solution will exist. MA will define the problem space and analyze the solution space alternatives using quality attribute constraints driven by the enterprise objectives.

### Principles & Concepts

MA, OpsCon, and ConOps are very broadly used terms, they play a major role in the organization analysis of how a system is intended to operate during specific scenarios to reach a goal or objective. The ConOps is at an organizational level, prepared by enterprise management and refined by business management. The ConOps is then used to inform the OpsCon, communicating the overall quantitative and qualitative system characteristics. ConOps and OpsCon are not limited to the sector of software-based solutions but can be implemented in almost any major business sector as all businesses serve to achieve a specific goal or outcome for a user. Typically in commercial sectors, MA is used to perform a market analysis to define adequate business strategies.

### Process Approach

There are necessary activities that must be performed during the MA process:

1. Review / Understand the vision & ConOps
2. Identify gaps and opportunities related to the future evolution
3. Examine / Evaluate the solution space
4. Appropriate modeling
5. Define basic operational concept / market strategies / business models
6. Evaluate alternatives
7. Feedback on feasibility / market factors / alternatives for use post-completion
8. Define preliminary deployment / support / retirement

All of these steps are key in the pre-design phase in order to gain perspective on all angles before making the investment of time, money, and resources. All of these steps have extensive intricacies that can be their own topics and pages of notes. For the purpose of keeping it short and clean, these are the main concepts of the process approach.

### Practical Consideration

There are some major pitfalls encountered with MA and marketing analysis:

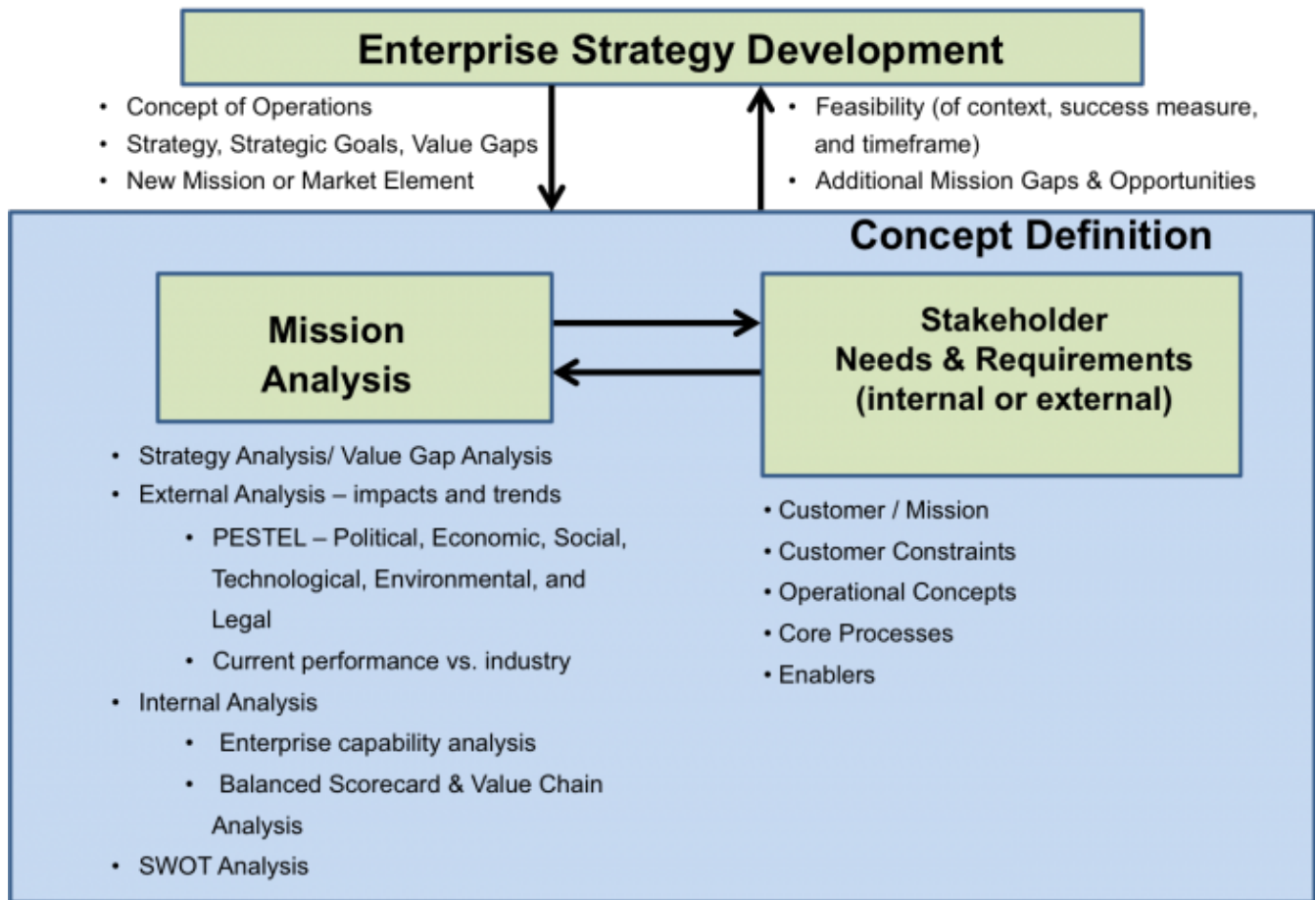
**Wrong-level of system addressed** - A classic mistake when delineating boundaries of the SOL, in the beginning, is placing the system-of-interest at the wrong level of abstraction. If placed too high or low can cause confusion of the purpose and mission of the SOL.

**Operational modes or scenarios missing** - A lack of detail within the operational modes and scenarios is frequently encountered, leaving room to make major mistakes or unforeseen circumstances leaving the stakeholders unsatisfied.

### Essential Diagram:

The figure below demonstrates the interactions of the enterprise strategy development in conjunction with the concept definition with the MA, a great way to visualize the synergy of each component.

# Enterprise Strategy and Concept Definition



## Business or Mission Analysis Process (ISO/IEC/ IEEE 29148, Chapter 6.2)

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### Topic Summary:

The key takeaway from this section is how to successfully break down and define a Mission Analysis the proper way through looking at solution spaces using alternative solution classes. When doing a Mission Analysis there are many main activities that can be broken down into tasks in order to fully analyze our mission analysis from top to bottom. This section discusses defining a problem space in order to create a solution space that is composed of solution classes, where we will use a feasibility analysis to find our candidate solution classes. A feasibility analysis will look at things like resources, life cycles, systems and support, trade-space factors, and many other potential pitfalls and future uses within a Mission Analysis. In the end, a company/client will have a mission statement or strategic mission objective with the correct solution space.

### Key Terms:

**Problem Space** - the entire range of components that exist in the process of finding a solution to a problem, This is important in fully understanding the problem at hand when developing potential solutions.

**Solution Space** - the set of all possible solutions for the combinatorial optimization problem, well-designed solution spaces will have a multitude of possible solutions in order to generate the best potential overall solution.

**Solution Class** - A specific potential solution within a solution class

**Alternate Solution Class** - a group of solutions that may represent a completely different type of design and potentially even a different type of project

**Feasibility Analysis** - an essential step to narrowing the solution domain so that the subsequent project can be managed effectively and efficiently.

**Trade-space factors** - the most critical criteria for determining the viability of alternative solution classes.

**Candidate solution classes** - All of the potential solution classes within a solution space

## **Main Topics / Key Takeaways:**

### **Purpose**

The Textbook highlights the purpose of a Mission Analysis process to define the business or mission problem, and characterize the solution space. While determining the solution space we should create potential solution classes that can aid in a problem or potential opportunity to take advantage of.

### **Outcomes**

When creating a Mission Analysis the following things should be completed to ensure it has been done correctly:

- The problem/opportunity space is defined
- Solution space is Characterized
- Life cycle stages & Operational concepts are defined
- Alternative solutions analyzed and identified
- The preferred alternative solution is selected
- Important systems or services established for the solution
- Preferred solution class is established

All of these things are broken up into activities and tasks that will be explained in more detail below, it is important that all of these are completed in-depth as the Mission Analysis is almost like the thesis within a BRS document.

### **Prepare for Business / Mission Analysis**

There are four main tasks that make up the activity where we prepare for our mission analysis, these tasks can be broken up as seen below:

- **Reviewing** Identified problems/opportunities - This includes the general intended direction of the objectives for the project through a multitude of different lenses.
- **Defining** the business/mission analysis strategy - This strategy included what approaches, milestones, and resources will be required to achieve the mission requirements
- **Planning** the necessary systems & services - This aspect includes a part of the life cycle where systems or services that provide insight for the assessment and analysis of the problem space and solution space.
- **Obtaining** the systems planned to use - this aspect is the enabling of specific resources within the organization.

All of these parts play in the overall preparation and outlining of the mission analysis.

### **Define the Problem / Opportunity Space**

When we are defining our problem and opportunity space we must complete three main tasks in order to stay on track and create a proper mission analysis.

- **Analyze** the problems & opportunities in a relevant trade-space context - In this task, we will understand the scope or drivers of the problem/opportunity. The trade space factors are the most critical criteria for determining the viability of an alternative.
- **Analyze** customer complaints, problems & opportunities - These factors will define what is important when we go to create our mission statement.
- **Define** the mission, business, or operational problem/opportunity - It is important to reduce the mission into one refined sentence, as without one simple sentence it is easy for the project direction to be lost.

It is important that each of these tasks begins with a concise statement on the opportunity or problem, this statement should be highly concise and is often known as the mission statement or strategic business objective.

### **Characterize the solution space**

When characterizing our solution space we will need to define our concepts and identify potential alternative solutions to make sure we are taking the best approach to our mission statement.

- **Define** preliminary operational concepts/life cycle stages - We will define specific life cycles in order to establish the correct requirements to address the problem/opportunity

- **Identify** candidate alternative solution classes for potential solution space - This activity identifies and describes the classes of solutions that can address the problem or opportunity.

The identification of a candidate solution class is important, as it is the main decision of how you will be going about your solution/opportunity during the developmental phase.

### Evaluate alternative solution classes

Alternative solutions can be equally great as a concept to solve or take advantage of a particular situation, but we must also consider the resources each solution class requires to be achieved.

- **Access** each alternative solution class - Feasible alternatives are considered in terms of available resources such as money, time, personnel, and materials.
- **Select** preferred alternative solution class(es) - Using decision analysis to decide the best solution class after going through potential pitfalls and resource requirements.

It is important that your project stays within budget, time constraints, and feasibility so it is important that each solution class is given a deep analysis in terms of the potential outcome.

### Manage the Business or Mission Analysis

Requirement documentation and traceability should be established and maintained to show how the business needs and requirements are intended to meet the problem and solution.

- **Maintain** traceability of business/mission analysis - An important aspect of documentation to ensure how the requirements are intended to meet the business problems and opportunities
- **Key information** items selected for baselines - Preliminary life-cycle concepts to ensure the product has a good life cycle after deployment and into retirement.

Looking above at the bolded words you can see that we start by reviewing our goals, planning, analyzing, defining, identifying, selecting, and maintaining all of the aspects within our mission analysis. These words come off as cyclical and it is important that they are completed correctly during this phase of the cycle will not play out accordingly.

### Essential Diagram:

This diagram is important as it highlights all the critical things a business analysis must attain and maintain during the Mission Analyses especially.





## Business Example Outline (ISO/IEC/ IEEE 29148, Chapter 8.2.2)

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### Topic Summary:

While there is no one perfect or optimal organization for all projects, a great example of how one should go about structuring their BRS is provided below. **The requirement clause shall be organized in a way that a consensus of all stakeholders agree the organization method aids their understanding of the requirements.** As all projects are different, it is important to at least have somewhat of a baseline idea of how a BRS document should look. This section provides a great example and minimally breaks down why each one of the 8 parts is important as a baseline for a BRS document. To get a better idea of a detailed version of this BRS example, continue to the section below (Business Requirements Specification (BRS) content (ISO/IEC/ IEEE 29148, Chapter 9.2))

### Essential Diagrams:

Below is an example outline for a BRS document. This is a great format to ensure that you cover all aspects of your analysis.

- 1. Introduction**
  - 1.1 Business purpose
  - 1.2 Business scope
  - 1.3 Business overview
  - 1.4 Definitions
  - 1.5 Major stakeholders
- 2. References**
- 3. Business management requirements**
  - 3.1 Business environment
  - 3.2 Mission, goals, and objectives
  - 3.3 Business model
  - 3.4 Information environment
- 4. Business operational requirements**
  - 4.1 Business processes
  - 4.2 Business operational policies and rules
  - 4.3 Business operational constraints
  - 4.4 Business operational modes
  - 4.5 Business operational quality
  - 4.6 Business structure
- 5. Preliminary operational concept of proposed system**
  - 5.1 Preliminary operational concept
  - 5.2 Preliminary operational scenarios
- 6. Other preliminary life-cycle concepts**

6.1 Preliminary acquisition concept
6.2 Preliminary deployment concept
6.3 Preliminary support concept
6.4 Preliminary retirement concept
<b>7 Project Constraints</b>
<b>8. Appendix</b>
8.1 Acronyms and abbreviations

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## Business Requirements Specification (BRS) content (ISO/IEC/ IEEE 29148, Chapter 9.2)

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### Topic Summary:

A Business Requirement Specification document can be broken up into organized sections pertaining to requirements or concepts in management, operational, life-cycle, constraints, and the preliminary stages. The content must be organized in a manner that meets the information management policies and provides a clear outline for both the client/organization and engineers who will be designing the system. It is highly important that the BRS document is organized in an easily understandable manner for anyone who puts their eyes on the project in its current and future state.

### Main Topics / Key Takeaways:

#### Business Purpose

This part should describe at the client/organizational level the reason and background as to why they are pursuing new business or changing current business in order to fit a new management environment. **This context should describe how the proposed system will contribute to meeting its objectives.**

#### Business Scope

There are three main parts to scope that aid in defining the business domain under consideration:

1. The business domain by name
2. The range of activities or functions performed by the business
3. The scope of the system that is developed or changed

These things aid in defining the combined objectives and requirements needed to ensure the completion of the project. Scope by definition is **the extent of the area or subject something deals with or to which it is relevant.**

#### Business overview

Describes the **internal and external divisions** of the business domain and how they are interrelated, typically covered by a diagram.

#### Major Stakeholders

**Describes all the major stakeholders** and how they will influence the business, in relation to the development and operation of the system.

#### Business environment

Internal & External environmental factors that must be considered in understanding business and eliciting stakeholder requirements for the system to be developed/changed. These can be things that could potentially influence business, for example, market trends, laws and regulations, technology, and social aspects.

#### Mission, goals, and objectives

Definition of the **expected results** to be yielded or obtained through the proposed system and its operations.

### **Business model**

The methods in which **the business mission is expected to be achieved**. Concentrated around the methods supported by the system to be developed or changed, such as potential products or services.

### **Information environment**

This can be broken down into three organizational level decisions that must be included:

1. Project portfolio - The best way to organize multiple system projects, by priority, goal, and relative potential constraints.
2. Long-term system plan - A description of the infrastructure or architecture of the system including constraints on potential design decisions.
3. Database Configuration - A database plan to be organized as well as the possible constraints on the availability of the data should be specified.

### **Business processes**

Any procedure of business activates and system interfaces within the process, this is important to represent how and in what context the system supports said activities. This provides an ordered structure where each process should be uniquely named and numbered within the structure. (typically can be created into a diagram)

### **Business operational policies and rules**

Policies and rules should be uniquely named and numbered and should be referenced in the description of the business process. **It is important to propose logical proposition's when conducting the business process.**

### **Business operational constraints**

**Conditions to be imposed in conducting the business process.** Constraints can be a range of different things from quality control, performance, or resource limitations.

### **Business operational modes**

**Methods to conduct a business operation in an unsteady state**, I.E. a manual operation mode when the proposed system is not available due to unexpected circumstances like accidents or natural disasters.

### **Business operational quality**

Defines the **level of quality required and expected for the business operation**. Things like addressing urgency with higher priority vs reliability.

### **Business structure**

Describes the **overall structure** of the business relevant to the system, things such as **departments, divisions, roles, and responsibilities**. This is a very important baseline to organize the future support of the product.

### **High-level operational concept**

Specifying the **operational features that will be provided without specifying intricate details** of each feature. Some examples are user classes, support environments, proposed system descriptions, operational policies, etc.

### **High-level operational scenarios**

Describes examples of **how the users or operators will interact with the system** in important contexts of use. These scenarios should be unique and referenced in the description of business processes.

### **Other high-level life-cycle concepts**



Breaks down **deployment, support, and retirement of the system** within interest.

### **Project constraints**

Covers any and all potential **constraints that would interfere** with performing the project in terms of **resources**. (Money, Time, Tools, Etc.)

### **Essential Diagrams:**

See the above section diagram for an example of how this BR's outline should typically be laid out, it is important to remember this is a baseline and all BRS documents will be situationally and fundamentally different.

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## 8 Steps to Being an Effective Business Analyst ([An Introduction to Business Analysis](#) )

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### **Topic Summary:**

The most common challenge in business analysis is helping stakeholders understand the value of the Business Analysis's role on any type of project. This article breaks down an 8 step framework to guide a BA and ensure that you are on the correct track. These eight steps are broken down below and a diagram is provided to get a better fundamental grasp on the structure of these steps. Continuing to leverage this framework will allow an increase in recognition for the value of a Business Analysis within major projects.

### **Main Topics / Key Takeaways:**

#### **Step 1 – Get Oriented**

BAs are expected to immediately dive in and start contributing, often times a BA will join in the middle of the project. It is important that when a BA joins they take the time to get oriented to ensure that they not only move quickly but can effectively and confidently contribute to the project.

#### **Key Responsibilities:**

- Clarify your role so that you create deliverables that meet stakeholder needs
- Determine the primary stakeholder, objectives, scope, and subject matter
- Understand project history to prevent repeated work
- Understand existing systems to understand what must change

Learn how to learn what you do not know. This will allow you to effectively contribute to a project without a lack of foundational understanding.

#### **Step 2 – Discover the Primary Business Objectives**

While it is common to immediately jump on defining the project scope, it is important to gain agreement on business needs BEFORE scope is defined.

#### **Key Responsibilities:**

- Discovering expectations from your primary stakeholders
- Remove conflicting expectations giving a shared understanding of the business objective
- Ensure clear business objectives giving the team momentum as you continue to define the project scope and detailed requirements

Before we can remotely understand our project scope it is highly important we set primary objectives, as you do not want a solution that ends up solving the wrong or unquantifiable problem

#### **Step 3 – Define Scope**

Scope creates tangible business needs where multiple project teams can envision their contribution towards implementation. The scope is a clear and complete statement giving your team a clear concept to realize the needs of the business.

#### **Key Responsibilities:**

- Fully defining a solution approach to understand the extent of changes that must be made to implement the solution and achieve the primary objectives
- Drafting and reviewing the key business scope with stakeholders who are fully satisfied with the scope statement.
- Confirming the project makes it feasible for your organization to invest in the project

The project scope is NOT an implementation plan, rather a guiding force to all the smaller steps of the business analysis process and tasks.

#### **Step 4 – Formulate Your Business Analysis Plan**

Introducing a business analysis plan brings clarity to determine the detailed requirements for the project, it is supposed to be the grail of understanding to answer all questions for the project team.

##### **Key Responsibilities:**

- Choosing the most appropriate deliverables after considering scope, methodology, and contextually important aspects to the project
- Making a list of things to be delivered that will complete the project scope, it must include what stakeholder will validate each deliverable
- Creating a realistic timeline for things to be delivered

This is highly important as if you do not define a realistic plan of deliverables, they may be defined for you. This will create an unrealistic timeline or unclear requirements, derailing the project as a whole.

#### **Step 5 – Define the Detailed Requirements**

In this phase, you will make your requirements detailed to provide your implementation team with the necessary information to implement the solution scope. It is highly important these requirements are concise as implementation teams will struggle and miss deadlines.

##### **Key Responsibilities:**

- Understanding the stakeholders overall wants for a specific feature/process
- Creating a first draft business analysis containing all detailed requirements
- Review the detailed requirements with stakeholders to fill any gaps or questions.

It is important to be aware of how you sequence your requirements to keep a good momentum and pace for the project, poor order will lead to the ambiguous scope and unnecessary project complexity.

#### **Step 6 – Support the Technical Implementation**

This is where you will create support tasks to ensure that the success of the project is met and the business objectives are met. Things like team building, customizing, and deploying software will come to aid in the drive.

##### **Key Responsibilities:**

- Reviewing the solution design to ensure it fulfills the requirements and potential additional requirements without increasing the original scope
- Updating Requirements to fully match the business objective
- Ensuring quality assurance with test cases to ensure they complete requirements
- Answering any potential questions
- Managing requirement changes ensuring your team is up to date
- Leading user acceptance testing efforts

These responsibilities will help the implementation team fulfill the intended goals and objectives of the overall project

#### **Step 7 – Help the Business Implement the Solution**

You can deliver the highest caliber project where it matches the business objective and scope exactly as intended but if the users do not use it as intended then the project will be considered to not have delivered on the original objective.

##### **Key Responsibilities:**

- Analyzing what changes need to be made to the business process
- Training a support team to create appropriate training material
- Ensuring all users understand the changes or updates.

This step is to ensure the members of the business community are prepared to embrace all the changes, as most people do not respond well to change at first.

#### **Step 8 – Assess Value Created by the Solution**

Assess the overall implemented value that the project has created in terms of a solution, this will allow you to understand if you delivered the value you originally anticipated. This also allows the BA to reflect and learn from their success or mistakes for future projects.

##### **Key Responsibilities:**

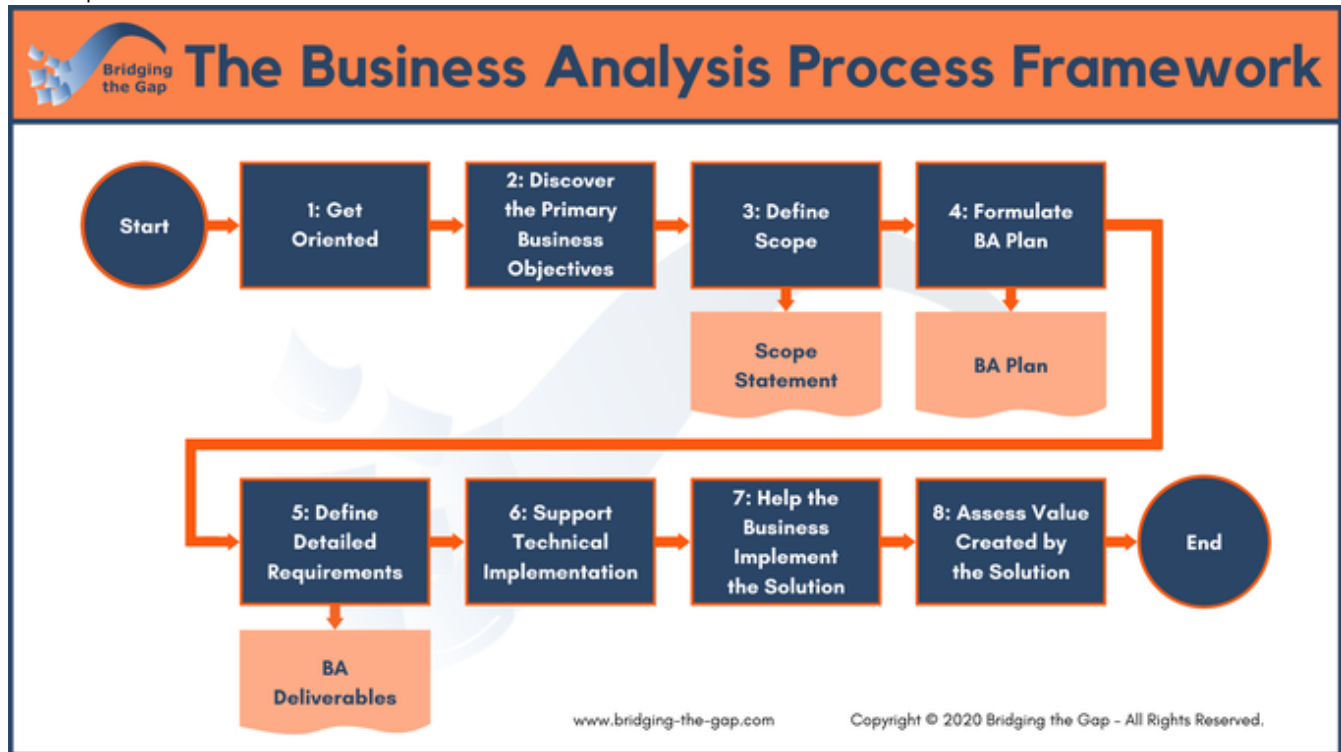
- Evaluate progress, ensuring objectives were fulfilled

- Communicating the results to the stakeholders and team
- Suggesting follow-up projects and potential solutions to fully perform to intended objectives.

This part of the project is key to either creating a new project to solve a new problem or to reflecting on your pitfalls as a BA to ensure you do not repeat the same mistakes next project.

### Essential Diagrams:

This diagram breaks down the flow of each step that has been covered below to give you a good visualization of the chronological order as each step builds off the last.



## Research / Information Literacy (Prof. Vanselow - Research )

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### Topic Summary:

This part of the website breaks down how to go about identifying, collecting, and exploring credible resources from multiple sources when doing research on a particular topic. It is important that one contemplates the topics of research to get an understanding of what they are looking for before even searching for sources. Evaluating the credibility of sources can be a very key factor to validating your sources to ensure it is not misinformation. Lastly using multiple sources to ensure that separate studies on the topic have come to the same relative conclusions, and there is no discrepancy of the data.

### Main Topics / Key Takeaways:

There are three main aspects that go into having quality research skills:

- **Collect:**
  - Use a hypothesis to base and revolve your research around
  - Stay on top of where your information comes from
  - Use different mediums of information (books, articles, websites)
- **Identify:**
  - Evaluate the credibility of the source
  - Separate fact from opinion
  - Use local libraries for research
  - Learn where to find specific kinds of information
- **Action steps:**
  - Learn how to use/manipulate academic databases

- Go to a writing center to learn how to collect information
- Use multiple credible resources supporting different views

Below is a collection of resources that explain how you can think of researching like cooking, and it includes a highly efficient tool from google to explore research papers provided by a database known as google scholar.

#### **Extra Resources:**

- [Research is Like Cooking](#)
  - [Google Scholar](#)
  - [Prof. Vanselow - Information Literacy and Organization](#)
- 

## The Business Analyst ("Software Requirements" Weiger's book, Ch. 4)

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### **Topic Summary:**

Most of the information within this section has already been covered throughout the exploration of each individual topic and source above. This chapter overall looked at the vital skills, knowledge, and functions a BA will perform to be successful within an organization. A quality analyst will be good at listening, analytical, quick on their feet, a fast learner, with great organization and leadership skills. All of these things tie into creating great requirements, scope, teams, and project management to ensure the success of a project.

### **Main Topics / Key Takeaways:**

#### **The business analyst role**

The Business Analyst has the primary responsibility to elicit, analyze, document, and validate the needs of the project stakeholders. The diagram below breaks down the communication that is expected from a BA, with every other role involved within the project. The BA has a central role in collecting and disseminating all the information on a project, this differs from a basic project manager who takes the lead in communicating project information. A talented analyst can make the difference between a project that succeeds and one that struggles, Using highly experienced analysts can reduce the project's overall required and necessary effort by one-third.

#### **The business analyst's tasks**

Below is a list of tasks that an analyst should complete to ensure they are on track to meeting the overall quality of the requirements:

- Defining Business Requirements
- Planning Requirement approach
- Identifying stakeholders
- Eliciting Requirements
- Analyzing, Documenting, and Communicating Requirements
- Leading requirement validation and prioritization

All of these should always be achieved within a project by the business analyst. I left this narrow in-depth as they have been covered in the above sections.

#### **Essential analyst skills**

Important skills of an analyst:

- Listening
- Interviewing/questioning
- Quick thinking
- Analytical
- Quick learning
- Leadership
- Observational
- Communication/Organization
- Modeling/Diagraming
- Softskills/Creativity

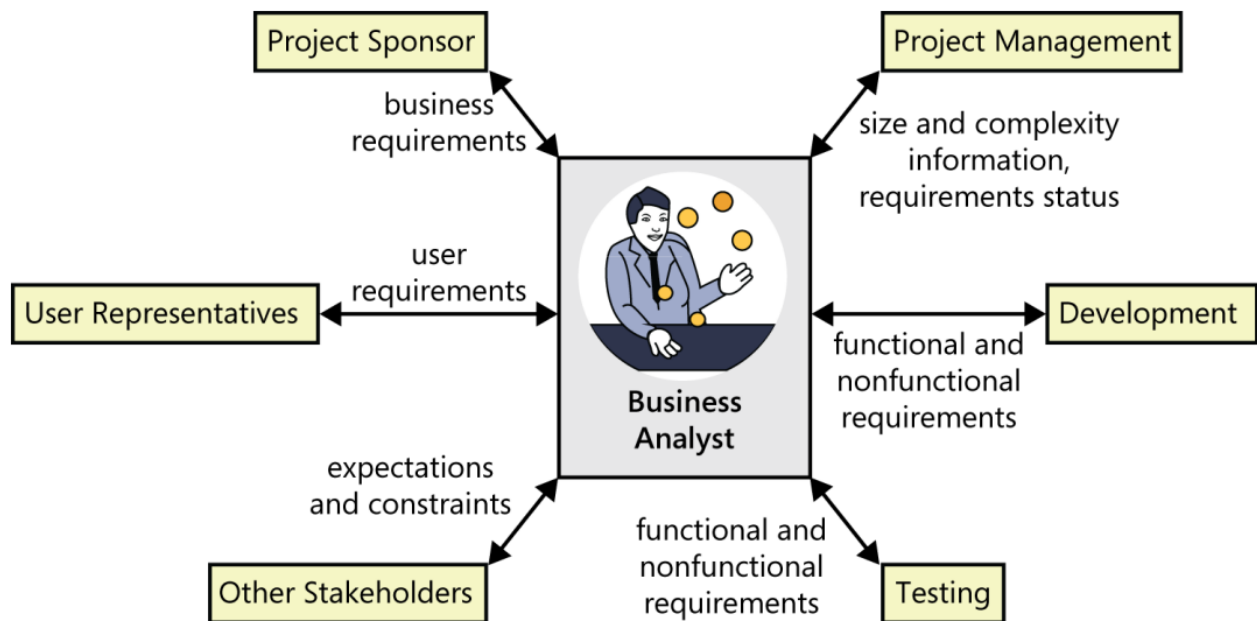
The skills listed above will make a BA have a higher caliber of success within the project.

#### **Essential analyst knowledge**

BAs need to thread the requirements needle into development and management activities through the entire project life span. Quality analysts will have a sound understanding of project management, development life cycles, risk management, and quality engineering can help prevent requirements issues from torpedoing the project.

#### **Essential Diagrams:**

The Business Analyst has the role of being the bridge of communication between the customers, developers, and stakeholders. The diagram below shows all the directions a Business Analyst goes to ensure the project comes out successful.



## Establishing the Business Requirements ("Software Requirements" Weiger's book, Ch. 5)

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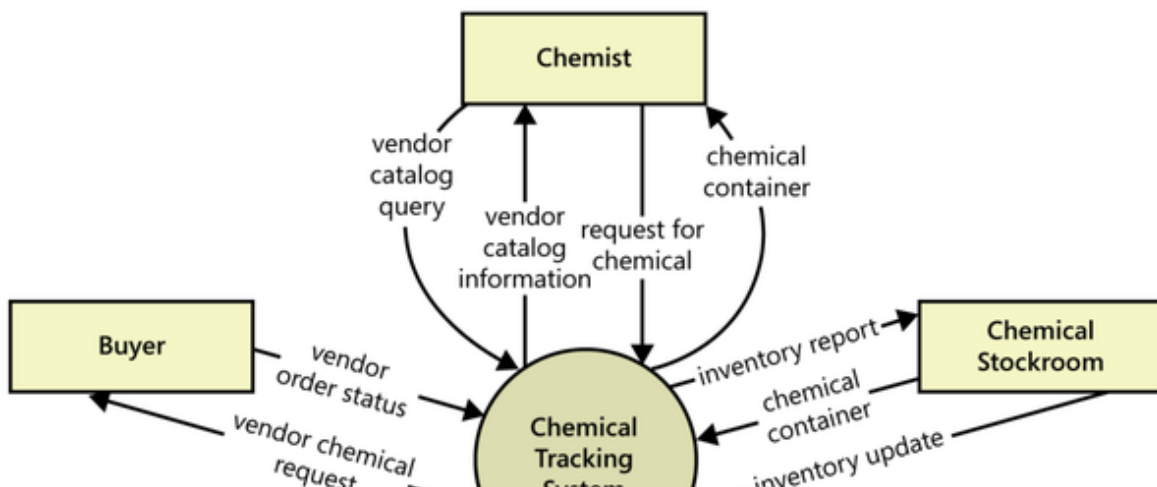
### Topic Summary:

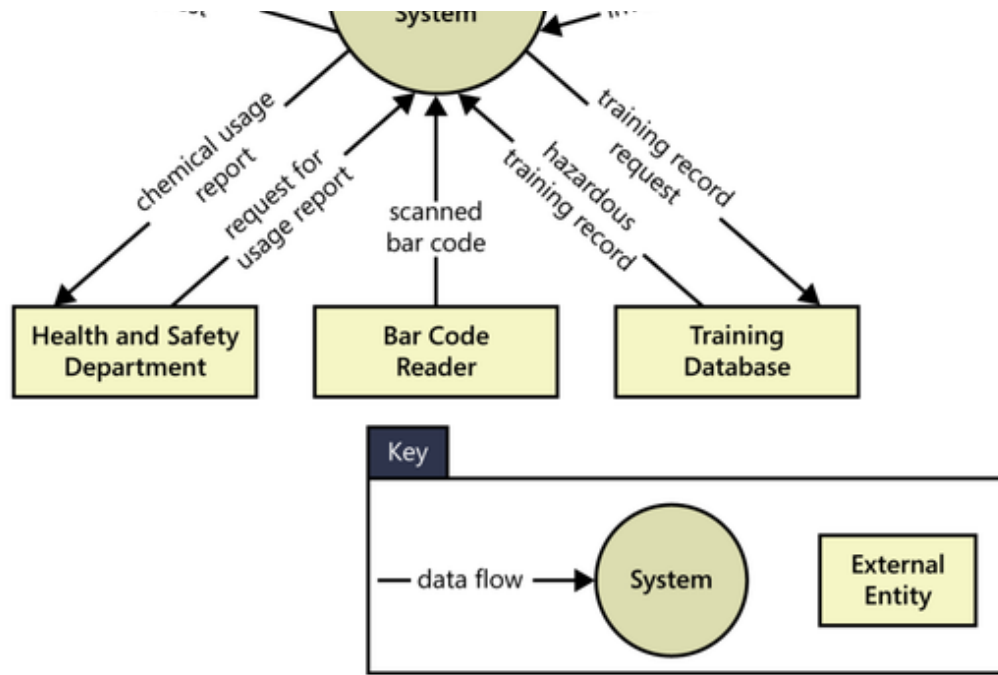
"Business Requirements" simply put refers to a set of information that describes a need that leads to one or more projects to deliver a solution and the desired outcome. Proper Business Requirements are composed of objectives, success metrics, scope, and an overall vision statement that encapsulates the main goal of the project. The Business Requirements set the stage for the business and its hopes of what it plans to achieve within a project. These requirements can be visually modeled to help aid the stakeholder's understanding of what to expect before development operations begin. See below for some examples of these visualizations.

### Essential Diagrams:

#### Context Diagram:

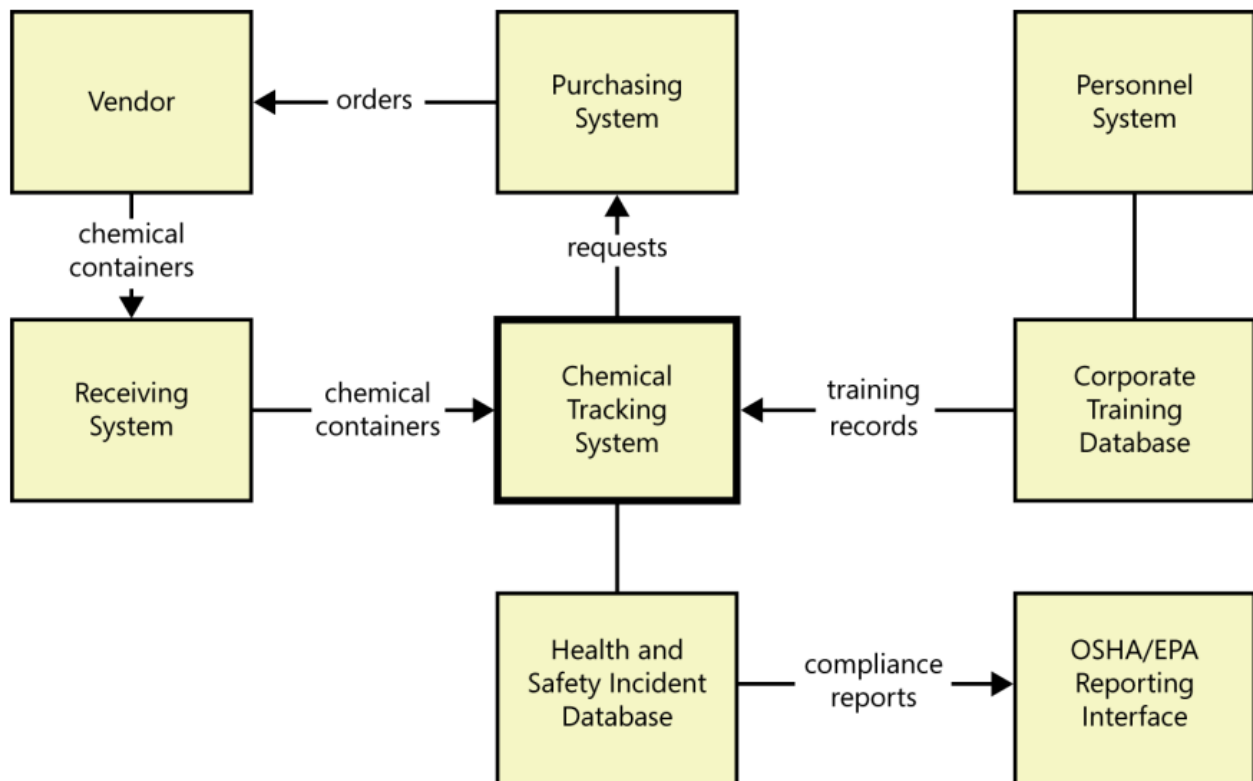
A context diagram is used to visually illustrate the boundary and connections between the system your team will develop and every external entity involved within the process. It works as a great tool to view how these external entities will interact with the flow of data or materials within the system. Below is an example of a Chemical Tracking System.





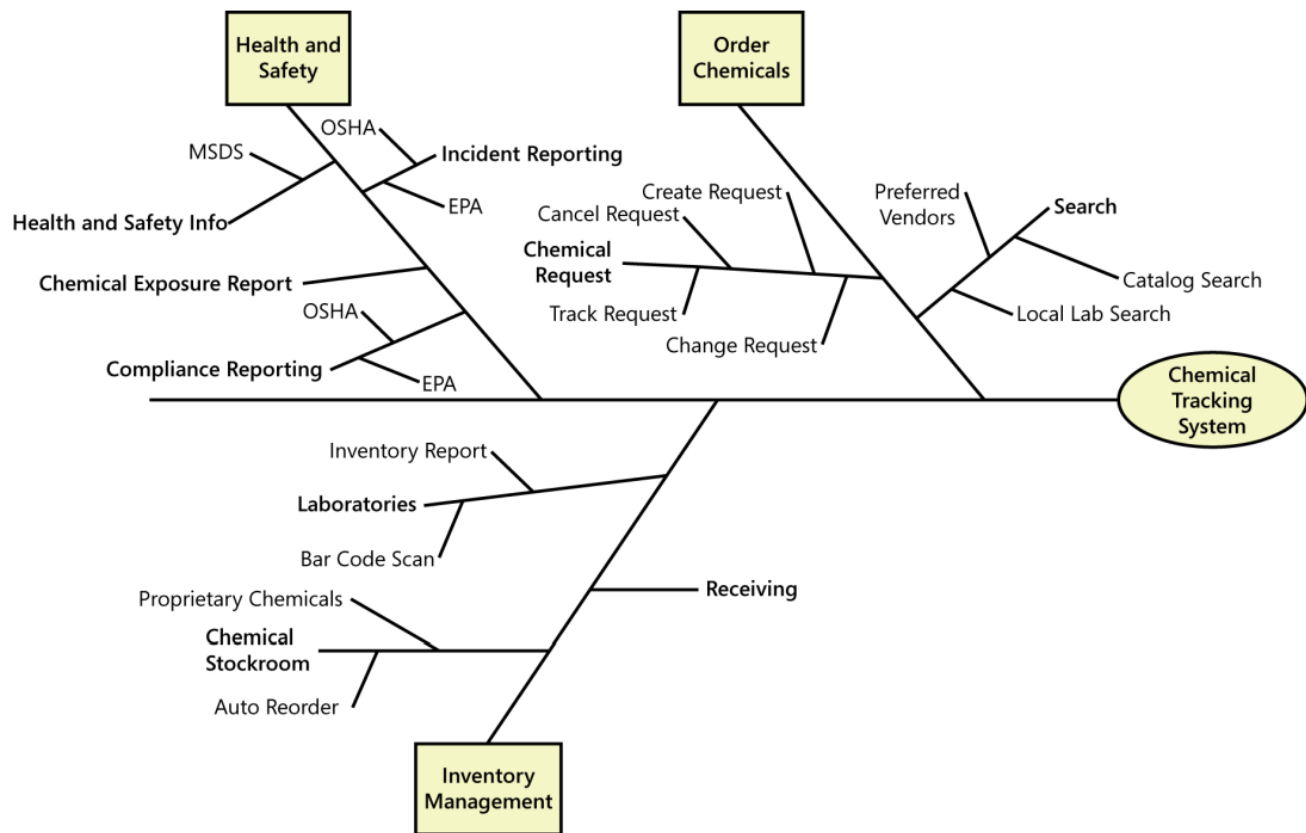
### Ecosystem Map:

An Ecosystem Map shows all of the systems related to the system of interests that act with one another, as well as the nature of the interaction. This will allow you to visualize the interconnections of the current system to ensure the successful integration of the system you are developing. Below is an example of how our Chemical Tracking System would interact with other systems.



### Feature Tree:

A Feature Tree is a visualization of the features of a product organized into logical groups, that logically subdivide each feature into a further set of details. The feature tree is a great way to provide visualization to all of the features planned for a project, allowing stakeholders to quickly grasp the project's overall scope without needing to know intricate details for each feature. Below is an example of a feature tree for our Chemical Tracking System.



## My Business Analysis

I have spent an extensive amount of time analyzing the odds and ends of creating a successful and complete Business Requirement Specification document. I began my journey by learning the importance of a Mission Analysis, ConOps, and OpsCon within the analysis. The next major topic was creating a Business Requirement Specification document, that a team of Business Analysts gets together to develop all the requirements requested by the stakeholder to implement the solution for a project. This gave me a major insight into breaking down the business domain, scope, critical mission objectives, life cycles, and more. My research not only explained to me the role of a Business Analyst but also the eight successful steps to become a quality analyst when developing a BRS document. The last major topic that I covered was the different ways that business requirements can be established, causing the scope to shift focus depending on said requirements. All of this can be organized to show the overall scope into different diagrams such as context diagrams, ecosystem maps, and feature trees. My extensive research has provided me with all the tools I will need to begin developing my own Business Requirement Specification documents, as I plan to do in the future.