

Business Analysis Notes

Business Requirement Specification (BRS)

Business requirement specifications are a set of information that describes a need that leads to one or more projects delivering a solution and the desired ultimate business outcomes. Business opportunities, business objectives, success metrics, and a vision statement make up the business requirements.

Reading Notes

SWEBOKwiki Business or Mission Analysis

[Business or Mission Analysis - SEBoK \(sebokwiki.org\)](http://sebokwiki.org)

- Concept Definition Activities - set of systems engineering activities in which the problem space and needs for the business enterprise and stakeholders are closely examined.
- Purpose of Mission Analysis - understand a mission problem or opportunity, analyze the solution space, and initiate the life cycle of potential solutions that could solve the problem
- Mission Analysis - identification, characterization, and assessment of an operational problem or opportunity within an enterprise
- Mission Analysis is used to define needed operation actions
- Mission Analysis can include mathematical analysis, modeling, simulation, visualization, and other analytical tools to characterize the mission and determine how to achieve it the best
- ConOps (concept of operations) - addresses the leaderships way of operating the organization
- OpsCon (operational concept) - describes what the system will do. User-oriented document that describes the system characteristics of the system that will be delivered from the user's view.
- To determine the technical solution for enterprise capabilities systems engineers, interact with enterprise leaders and operational analysts
- To select an alternative approach analysis, modeling and simulation, and trade studies are used

In enterprise strategy it is essential to conduct supporting mission analysis for each element of the enterprise to find out readiness of future objectives

- SWOT analysis - strength, weakness, opportunities, and threats
- Stakeholder requirements - requirements that address the customer and mission needs, the future state of core processes and capabilities of the enterprise, and the enablers to support performance of those processes and capabilities.
- Steps of Mission Analysis
 - Review and understand the enterprise mission, vision, and ConOps
 - Identify and define gaps in the future evolution strategy
 - Evaluate the solution space
 - Perform modeling, simulation, and analytical techniques to determine the feasibility of alternative candidate solutions
 - Define basic operation concept and business models
 - Evaluate the alternative and select the best one
 - Provide feedback
 - Define preliminary deployment concept, support concept, and retirement concept

29148-2018 6.2 Business or mission analysis process

[IEEE Xplore Full-Text PDF: \(fgcu.edu\)](http://fgcu.edu)

- Purpose of business analysis - define the business problem or opportunity, characterize the solution space, and determine potential solution classes
- Outcome of business analysis
 - Problem or opportunity is defined
 - Solution space is characterized
 - Preliminary operational concept is defined
 - Candidate alternative solution classes are identified and analyzed
 - Preferred candidate alternative solution classes selected
 - Any enabling systems needed for business analysis are available
 - Traceability of business problems and opportunities established
- Define the problem or opportunity space
 - Analyze the problems and opportunities in the context of relevant trade-space factors
 - Analyze customer complaints, problems and opportunities in the context of relevant trade-space factors
 - Define the mission, business, or operational problem or opportunity
- Characterize the solution space
 - Define preliminary operational concepts in life cycle stages
 - Identify candidate alternative solution classes that span the potential solution space
- Evaluate alternative solution classes
 - Assess each alternative solution class

- Select alternative solution class
- Manage the business or mission analysis
 - Maintain traceability of business analysis
 - Provide key information items that were selected for baselines

29148-2018 8.2.2 Business or mission analysis process

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1. Introduction
 - a. Business purpose
 - b. Business scope
 - c. Business overview
 - d. Definitions
 - e. Major stakeholders
2. References
3. Business management requirements
 - a. Business environment
 - b. Mission, goals, and objectives
 - c. Business model
 - d. Information environment
4. Business operational requirements
 - a. Business processes
 - b. Business operational policies and rules
 - c. Business operational constraints
 - d. Business operational modes
 - e. Business operational quality
 - f. Business structure
5. Preliminary operational concept of proposed system
 - a. Preliminary operational concept
 - b. Preliminary operational scenarios
6. Other preliminary life-cycle components
 - a. Preliminary acquisition concept
 - b. Preliminary deployment concept
 - c. Preliminary support concept
 - d. Preliminary retirement concept
7. Project Constraints
8. Appendix
 - a. Acronyms and abbreviations

29148-2018 9.3 Business requirement specification (BRS) content

[IEEE Xplore Full-Text PDF: \(fgcu.edu\)](#)

- Business purpose - describe at the organizational level reason and background the organization is pursuing new business or change the current business in order to fit a new management environment
- Business scope - identify the business domain by name, define range for business activities in domain, describe the scope of the system
- Business overview - major internal divisions and external entities of business domain
- Major stakeholders - list major stakeholders and how they will influence the business
- Business environment - define external and internal environmental factors to be taken into consideration in understanding the business and eliciting stakeholders
- Business goals - describe the business results to be obtained
- Business model - describe methods by which the business model is expected to be achieved
- Information environment - describe the strategy for organization level decisions
- Business processes - provide description of procedures of business activities and possible system interfaces within the processes
- Business operational policies and rules - describe logical propositions applied in conducting the business processes
- Business operational constraints - describe conditions to be imposed in conducting the business process
- Business operational modes - describe methods to conduct the business operation in an unsteady state
- Business operational quality - define the level of quality required for business operation
- Business structure - identify and describe structures in the business relevant to the system
- High-level operational concept - describe proposed system in a high-level manner
- High-level operational scenarios - describe examples of how users/operators/maintainers interact with the system in important contexts of use
- Project constraints - describe within cost and schedule

The Business Analysis Process: 8 Steps to Being an Effective Business Analyst

1. Get oriented
 - a. Take time to get oriented will ensure not only moving quickly but also being able to be an effective and confident contributor on the project
 - i. Clarify your role as business analyst
 - ii. Determine primary stakeholders
 - iii. Understand project history
 - iv. Understand existing systems and business processes so you have a reasonably clear picture of the current state of the project
2. Discover the primary business objectives
 - a. Uncover business needs early in the project before the scope is defined
 - i. Discover expectations from your primary stakeholder
 - ii. Reconcile conflicting expectation to have a shared understanding of business objectives
 - iii. Ensure business objectives are clear
3. Define scope
 - a. Scope makes business needs tangible so that the team can envision their contribution to the project
 - i. Define a solution approach to determine the nature and extent of technology and business process changes to be made as a part of implementing the solution
 - ii. Draft a scope statement and review it
 - iii. Confirm the business case
4. Formulate your business plan
 - a. Business analysis plan answers questions for you and your team
 - i. Choose the most appropriate type of business analysis deliverables based on your project
 - ii. Define the specific list of business analysis deliverable that cover the scope of the project and identify the stakeholders that will be a part of each deliverable
 - iii. Identify timelines for each deliverable

Research / Information Literacy

[Prof. Vanselow - Research \(google.com\)](#)

- Description - identify and collect credible reliable information from many sources
- Aspects
 - Collect - use different sources, keep hypothesis in mind, keep track of where info comes from
 - Identify - know where to find different sources, use internet, evaluate credibility, separate fact from fiction, use library

“Software Requirements” Weigers book Ch. 4 The business analyst

[Software_Requirements_3rd_Edition.pdf \(wdz.eng.br\)](#)

- Business analyst - enables change in an organizational context by defining needs and recommending solutions that deliver value to stakeholders. Elicits and analyzes others' perspectives, transforms the information collected into a requirements specification, and communicates the information to other stakeholders.
- Business Analyst responsibility - to elicit, analyze, document, and validate the needs of the project stakeholders
- Product Manager vs Business Analyst - product manager focuses on the external market and user demands, and the BA converts those into functional requirements
- Business Analyst tasks
 - Define business requirements
 - Plan the requirements approach - develop plans to elicit, analyze, document, validate, and manage requirements throughout the project
 - Identify project stakeholders and user classes - work with the business sponsors to select appropriate representatives for each user class, enlist their participation, and negotiate their responsibilities
 - Elicit requirements - helps users articulate the system capabilities
 - Analyze requirements - look for derived requirements that are a logical consequence of what the customers requested and for implicit requirements that the customers seem to expect without saying so
 - Document requirements - in a well-organized and well-written manner
 - Communicate requirements - involves ongoing collaboration with the team to ensure that they understand the information you are communicating
 - Lead requirements validation - requirement statements possess the desired characteristics
 - Facilitate requirements prioritization
 - Manage requirements - create, review, and execute the project's requirements management plan
- Essential analyst skills
 - Listening skills
 - Interviewing and questioning skills
 - Thinking on your feet - draft good questions, listen clearly to the responses, and quickly come up with the next smart thing to say or ask

- Analytical skills - understand complex information coming from many sources and to solve hard problems related to that information
- Systems thinking skills - check requirements against what he knows about the whole enterprise, the business environment, and the application to look for inconsistencies and impacts
- Learning skills
- Facilitation skills - facilitate requirements discussions and elicitation workshops
- Leadership skills
- Observational skills
- Communication skills
- Organizational skills
- Modeling skills
- Interpersonal skills
- Creativity
- Essential analyst knowledge - need to understand contemporary requirements engineering practices and how to apply them in the context of various software development life cycles
- Making of a business analyst
 - Former user - can be stuck in the here-and-now of the current ways of working, such that they don't see opportunities to improve business processes with the help of a new information system. It's also easy for a former user to think of requirements strictly from a user interface perspective
 - Former developer or tester - Can have little patience with users. y. Those who enjoy collaborating with customers to understand the needs that drive software development are good candidates to specialize in business analysis
 - Former project manager - must learn to focus on understanding the business needs and prioritizing those within existing project schedules, rather than focusing on timelines, resources, and budget constraints. They will need to develop the analysis, modeling, and interviewing skills that are less important for project managers but are essential to BA success
 - Subject matter expert - better for a business analyst to be an application domain expert or a SME, as opposed to being a typical user
 - Rookie - advantage of hiring a novice as a BA is that he will have few preconceived notions about how requirements processes should work

“Software Requirements” Weigers book Ch. 5 Establishing the business requirements

[Software_Requirements_3rd_Edition.pdf \(wdz.eng.br\)](#)

- Business requirements represent the top of the requirements chain
- Projects without clearly defined and well-communicated direction invites disaster
- Business requirements - set of information that describes a need that leads to one or more projects to deliver a solution and the desired ultimate business outcomes. Business opportunities, business objectives, success metrics, and a vision statement make up the business requirements
- Business requirements issues must be resolved before the functional and nonfunctional requirements can be fully specified
- Identifying desired business benefits
 - Business requirements set the context for, and enable the measurement of, the benefits the business hopes to achieve from undertaking a project
 - Business analyst can ensure that the right stakeholders are setting the business requirements and facilitate elicitation, prioritization, and conflict resolution.
 - Business benefit has to represent a true value for the project's sponsors and to the product's customers
- Product vision and scope
 - Product vision - describes the ultimate product that will achieve the business objectives
 - Project scope - identifies what portion of the ultimate product vision the current project or development iteration will address
 - The product vision ensures that we all know where we are hoping to go eventually. The project scope ensures that we are all talking about the same thing for the immediate project or iteration
- Conflicting business requirements
 - The tension among stakeholders with different goals and constraints can lead to clashing business requirements. The project's decision makers must resolve these conflicts before the analyst can detail the kiosk's requirements
- Vision and scope documents
 - Vision and scope document - collects the business requirements into a single deliverable that sets the stage for the subsequent development work
 - Owner of the vision and scope document is the project's executive sponsor, funding authority, or someone in a similar role. A business analyst can work with this individual to articulate the business requirements and write the vision and scope document
 - Vision and scope document only defines the scope at a high level
- Business requirements
 - Background
 - Summarize the rationale and context for the new product or for changes to be made to an existing one
 - Business opportunities
 - For a corporate information system, describe the business problem that is being solved or the process being improved, as well as the environment in which the system will be used. For a commercial product, describe the business opportunity that exists and the market in which the product will be competing.
 - Business objective
 - Summarize the important business benefits the product will provide in a quantitative and measurable way
 - Success metrics
 - Specify the indicators that stakeholders will use to define and measure success on this project

Success metrics indicate whether a project is on track to meet its business objectives. The metrics can be tracked during testing or shortly after product release

- Vision statement
 - Write a concise vision statement that summarizes the long-term purpose and intent of the product.
- Business risks
 - Summarize the major business risks associated with developing—or not developing—this product
- Business assumptions and dependencies
 - An assumption is a statement that is believed to be true in the absence of proof or definitive knowledge. Business assumptions are specifically related to the business requirements.
- Scope and limitations
 - Scope creep - rampant growth as more and more functionality get stuffed into the product.
 - At the highest level, scope is defined when the customer decides which business objectives to target.
 - At a lower level, scope is defined at the level of features, user stories, use cases, or events and responses to include
 - Major features
 - List the product's major features or user capabilities
 - Scope of initial release
 - Summarize the capabilities that are planned for inclusion in the initial product release.
 - Scope of subsequent releases
 - Subsequent releases let you implement additional use cases and features, as well as enriching the capabilities of the initial ones
 - Limitations and exclusions
 - List any product capabilities or characteristics that a stakeholder might expect but that are not planned for inclusion in the product or in a specific release.
- Business context
 - Stakeholder profiles
 - Stakeholders are the people, groups, or organizations that are actively involved in a project, are affected by its outcome, or are able to influence its outcome
 - Stakeholder profiles describe different categories of customers and other key stakeholders for the project.
 - Project priorities
 - To enable effective decision making, the stakeholders must agree on the project's priorities. One way to approach this is to consider the five dimensions of features, quality, schedule, cost, and staff
 - Each dimension fits in the constraint, driver, or degree of freedom categories on any given project
 - Deployment considerations
 - Summarize the information and activities that are needed to ensure an effective deployment of the solution into its operating environment
- Scope representation techniques
 - The purpose of tools such as the context diagram, ecosystem map, feature tree, and event list is to foster clear and accurate communication among the project stakeholders
 - Context diagram
 - The scope description establishes the boundary and connections between the system you're developing and everything else in the universe.
 - Context diagram visually illustrates this boundary. It identifies external entities outside the system that interface to it in some way, as well as data, control, and material flows between the terminators and the system
 - Ecosystem map
 - An ecosystem map shows all of the systems related to the system of interest that interact with one another and the nature of those interactions.
 - An ecosystem map represents scope by showing all the systems that interconnect and that therefore might need to be modified to accommodate your new system.
 - Ecosystem maps differ from context diagrams in that they show other systems that have a relationship with the system you're working on, including those without direct interfaces
 - Feature tree
 - A feature tree is a visual depiction of the product's features organized in logical groups, hierarchically subdividing each feature into further levels of detail
 - Feature trees provide a concise view of all of the features planned for a project, making it an ideal model to show to executives who want a quick glance at the project scope.
 - A feature tree can show up to three levels of features, commonly called level 1 (L1), level 2 (L2), and level 3 (L3). L2 features are sub features of L1 features, and L3 features are sub features of L2 features
 - Event list
 - An event list identifies external events that could trigger behavior in the system.

The event list depicts the scope boundary for the system by naming possible business events triggered by users, time-triggered (temporal) events, or signal events received from external components, such as hardware devices

My Business Analysis

I have strong information literacy skills because I am able recognize when information is needed and I have the ability to locate, evaluate, and effectively use that information. When conducting research, I collect information from different sources while keeping my hypothesis in mind and keeping track of my sources. I find sources from the internet and the library and evaluate them for credibility. This allows me to find reliable information and contributes to my information literacy skills.

When acquiring and applying new knowledge I use a variety of learning strategies. I acquire knowledge through research, asking questions, and firsthand experiences. When doing so I take notes on this information so that I can refer back to it at later times. Using different methods of soliciting information through listening, writing, reading, and visuals I am able to retain the information and apply it at later times.

Business Analysis Page link: [Business Analysis - Alaska Airlines - Confluence \(atlassian.net\)](#)