ZIMBABWE CHAPTER

The Role of Business Analysis in Successful Project Delivery

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Outline

- Definitions
- Contexts for Business Analysis
- Benefits of BA in Projects and Programs
- Business Analysis Steps
- Q & A

What is Business Analysis

- Business analysis is the application of knowledge, skills, tools and techniques to:
- Determine problems and identify business needs
- Identify and recommend viable solutions for meeting those needs
- Elicit, document, and manage stakeholder requirements in order to meet business and project objectives
- Facilitate the successful implementation of the product, service, or end result of the program or project

Where is Business Analysis done?

Business analysis is conducted in support of many business initiatives:

- Pre-Project (Enterprise BAs)
- Projects and Programs
- On-going operations

PRODUCT DEVELOPMENT PROCESS DIAGRAM

Concept → # 1 → Research → # 2 → Analysis → # 3 → Develop → # 4 → Launch

1. Concept

Description of Activities:

❑Idea Generation / Ideation:

- ○Requests
- ○Customer Pain Points
- ○Market Studies
- ○Legislation/Policy /Regulation
- ○Competitor activity

❑Key deliverables

- ❖Product Concept Document

Gate #1

Description of Activities:

○Review Deliverables:

Decisions:

- **○Go/No Go to Research**
- **○Incubate Idea or Kill it**

2. Research

Description of Activities:

❑ Assess Market:

- ○Segments & size
- ○Growth potential
- ○Customer needs
- ○Legal Issues
- ○Competition

❑Key deliverables

- ❖Market Research Report(Insights & Recommendations)
- ❖Market Req. Doc
- ❖ Product Definition Statement

Gate #2

Description of Activities:

○Review Deliverables:

Decisions:

- **○Go/No Go to Analysis**
- **○Incubate Idea or Kill it**

3. Analysis

Description of Activities:

❑ Business Analysis:

- ○Cost / Benefit
- ○Resources Required
- ○Capital Expenses
- ○Profitability/Margin
- ○Anticipated Sales

❑Key deliverables

- ❖Business Case /VBM aka BMC
- ❖Profitability Analysis
- ❖ Product Requirement Document

Gate #3

Description of Activities:

○Review Deliverables:

Decisions:

- **○Go/No Go to Develop**
- **○Incubate Idea or Kill it**

4. Develop

Description of Activities:

❑ Product Development:

- ○Technical Specs
- ○Prototyping
- ○Trial Production
- ○Testing and QA
- ○Piloting /Test Market Selling

❑Key deliverables

- ❖Product Dev Schedule
- ❖Product Testing Report
- ❖Pilot /Test Market Sales Report

Gate #4

Description of Activities:

○Review Deliverables:

Decisions:

- **○Go/No Go to Launch**

5. Launch

Description of Activities:

❑ Go to Market:

- ○Marketing Plan
- ○Sales Training
- ○Distribution Plan
- ○Collateral Design
- ○Set Launch Date

❑Key deliverables

- ❖Product Launch Plan / Date Set
- ❖Product Launch Budget
- ❖Product ROI Forecast

Gate #5

Description of Activities:

○Review Deliverables:

Decisions:

- **○Go/No Go to Market**

OPERATIONS ⟷ **BENEFITS & BUSINESS VALUE**

COMMISSIONED PROJECTS

APPROVED BUSINESS CASES

PROCESS IMPROVEMENT DECISIONS

NEW OR IMPROVED PRODUCTS /SERVICES DECISIONS

ENTERPRISE BUSINESS ANALYSIS

Continuously evaluating strengths & weaknesses / opportunities & threats, industry trends etc [incorporating Market Research] and suggest new products, change to processes, automation

INTERNAL ENVIRONMENT

ENTERPRISE STRATEGY & OBJECTIVES

STRENGTHS & WEAKNESSES

EXTERNAL ENVIRONMENT

INDUSTRY / DOMAIN

OPPORTUNITIES & THREATS

Benefits of Business Analysis in executing Projects and Programs[1]

- High-quality requirements are produced resulting in the development of products and services that meet customer expectations
- Stakeholders are more engaged in the process and buy-in is more readily achieved
- Projects are more likely to be delivered on time, within scope and within budget
- Implemented solutions deliver business value and meet stakeholder needs
- Organizations develop competencies in business analysis that are reusable for future projects

Benefits of Business Analysis in executing Projects and Programs[2]

For project success, it is important that the business analysis activities are being performed **effectively**, **consistently**, and with sufficient **quality**. Business Analysis may be performed by:

- Project Managers*
- Agile Team Members
- Business Architects,
- Business Subject Matter experts
- Business Intelligence Analysts
- Enterprise Business Analysts
- Product Managers / Product Owners
- Requirements Managers

Requirements

A condition or capability that is required to be present in a product, service or result to satisfy a contract or other formally imposed specifications

Types of requirements

- Business requirement
- Stakeholder requirement
- Solution requirement
- Functional requirement
- Non-functional requirement
- Transitional requirement

Quality – "the degree to which a set of inherent characteristics fulfill requirements." PMBOK Guide – 6th Edition

Steps in Business Analysis

Needs Assessment

- Used to assess the current internal and external environments and current capabilities of the organization in order to determine the viable solutions that, when pursued, would help the organization meet the desired future state.

Business Analysis Planning

- Business analysis planning is focused on the scope of the business analysis effort. The business analysis plan includes a list of activities to be conducted and the BA deliverables to be produced, key roles, key process decisions, requirements management and acceptance.

Requirements Elicitation and Analysis

- Requirements elicitation is the activity of drawing out information from stakeholders and other sources about causes of the business problem or the reasons for addressing a current opportunity and to enable solution development and implementation.

Traceability and Monitoring

- Consists of activities completed to ensure that requirements are approved and managed throughout the project life cycle.

Solution Evaluation

- Business analysis activities performed to validate a full solution, or part of a solution, that is about to be or has already been implemented.

Needs Assessment

- Involves pre-project activities, re-visited in case of major change requests
- Examine business environment and address either a current business problem or opportunity
- Formally requested by a business stakeholder, mandated by an internal methodology, or recommended by a Business Analyst prior to initiating a project or program
- Involves completion of a gap analysis: “As is” vs “To Be”
- Side-stepping needs assessment often produces a solution that fails to address the underlying business problem or fails to solve the problem completely
- It can also produce a solution that is not needed or one that contains unnecessary features.

Steps in a Needs Assessment

1. Identify problem or need
   - Identify Stakeholders, Gather relevant data for evaluation of situation
   - Situation statement drafted
2. Assess Current Situation of Organization
   - VMOST, SWOT, Root Cause Analysis, Required vs Current Capabilities, Gaps in Org Capabilities
3. Recommend action to address business needs
   - Option Analysis, Option Feasibility, Recommend Option, CBA for recommended option (PBP, ROI, IRR, NPV)
4. Assemble Business Case
   - More than a mere input, Business Case is a living document referenced continuously
   - Inadequate Business Case or where non exists product scope is unclear or poorly defined, leading to scope creep, resulting in reworks, cost overruns and project delays
   - Avoids having a product at the end of a project which no-one will use.

Business Analysis Planning

- Performed to understand scope of the work and stakeholder expectations
- To determine the appropriate amount and level of business analysis required for the project
- Failure which makes estimation process difficult and can result in unrealistic expectations by those involved in requirements-related activities
- Heavily dependent on the selected project life cycle – a planning activity is performed differently across life cycles or not performed at all.
- Understand the expectations for the business analysis process and roadmap before embarking on requirements elicitation

Steps in Business Analysis Planning

1. Conduct or refine the stakeholder analysis
   - Identifying Stakeholders,
   - Determine Stakeholder Characteristics
2. Create the business analysis plan
   - Project life cycle considerations
   - Plan for elicitation, Plan for analysis
3. Plan the business analysis work
   - Determine who plans the Business Analysis effort
   - Build Business Analysis work plan
   - Assemble Business Analysis work plan
   - Rationale of Business Analysis approach
   - Review Plan with Stakeholders
   - Obtain Approval of Business Analysis Plan

PROJECT LIFE CYCLES

Predictive Life Cycle – project scope, time, and costs are determined early in the project life cycle, and changes are carefully managed. (Waterfall life cycles)

Iterative Life Cycle- the scope is determined early in the project but time and costs estimates are modified as the project progresses and more information is obtained.

Incremental lifecycle –e.g. incremental addition of product/service functionality within a predetermined time frame, until the final iteration.

Adaptive lifecycle – agile, iterative, or incremental with detailed scope being defined and approved before next iteration. Agile or change driven.

Hybrid life cycle – combination of a predictive for known requirements, and an adaptive for evolving elements.

How PLC Influences Planning

The life cycle provides the structure for managing the project and is determined by factors such as :

- Managerial preference
- Project characteristics
- Organizational preference

A. Predictive (fully plan-driven)

- Scope is entirely defined up-front
- Time and Cost estimates determined for entire project with scope
- BA is conducted mostly up-front, requirements are completed before product development begins
- The need and solution are known and do not change throughout the project

B. Adaptive (change driven)

- Overall scope is agreed early. Detailed scope and product requirements defined for a single iteration at a time
- Changes are expected, when new requirements are presented, these are captured in a product backlog, and then the backlog is reprioritized
- Business analysis is constant, the need and solution are unknown and unstable

Requirements Elicitation & Analysis

- Is the iterative work to plan, prepare, and conduct the elicitation of information from stakeholders, to analyze and document the results of that work, and to eventually define a set of requirements in sufficient detail to enable the definition and selection of the preferred solution
- Stakeholders do not have requirements ‘ready for gathering’, rather they often have wants and needs which they may not be able to express clearly.
- BA helps stakeholders define the problem or opportunity and determine what should be done to address it. BA often has to elicit and validate unknown needs.
- Analysis the process of examining, breaking down, and synthesizing information to further understand it, complete it and improve it. It entails looking closely at the parts of the information and how they relate to one another.

Steps in Requirements Elicitation & Analysis[1]

1. Plan for Elicitation
   - Develop elicitation plan
2. Prepare for elicitation
   - Determine Objectives, Participants, Questions for session
3. Conduct Elicitation Activities
   - Elicitation Method
   - Elicitation Technique
4. Document Outputs for Elicitation Activities
5. Complete Elicitation
6. Elicitation Issues and Challenges
7. Analyse Requirements
8. Model and Refine Requirements
   - Apply appropriate models (see next slide)

Steps for Requirements Elicitation & Analysis2

9. Document the Solution Requirements

10. Validate requirements

11. Verify requirements

12. Approval sessions

13. Resolve Requirements-related conflicts

BA Analysis Models

Category	Definition	Example Models
Scope models	Models that structure and organize the features, functions, and boundaries of the business domain being analyzed	▪ Goal and business objectives model ▪ Ecosystem map ▪ Context diagram ▪ Feature model ▪ Organizational chart (described in Business Analysis Planning) ▪ Use case diagram ▪ Decomposition model (described in Business Analysis Planning) ▪ Fishbone diagram (described in Needs Assessment) ▪ Interrelationship diagram (described in Needs Assessment) ▪ SWOT diagram (described in Needs Assessment)
Process models	Models that describe business processes and ways in which stakeholders interact with those processes	▪ Process flow ▪ Use case ▪ User story
Rule models	Models of concepts and behaviors that define or constrain aspects of a business in order to enforce established business policies	▪ Business rules catalog ▪ Decision tree ▪ Decision table
Data models	Models that document the data used in a process or system and its life cycle	▪ Entity relationship diagram ▪ Data flow diagram ▪ Data dictionary ▪ State table ▪ State diagram
Interface models	Models that assist in understanding specific systems and their relationships within a solution	▪ Report table ▪ System interface table ▪ User interface flow ▪ Wireframes ▪ Display-action-response

- Find gaps in information and identify extraneous information
- Provide context to better understand and more clearly convey information
- Requirements modelled and refined to achieve further clarity, correctness
- To elicit additional information to define details necessary for product to be built

Traceability and Monitoring

- Principles of traceability and monitoring apply to all projects and all life cycles. Each requirement must be traced to a business need, goal or objective
- Approved requirements are baselined and tracked
- As new requirements surface, these are documented, added to the traceability matrix, assessed for their impacts to the project and product, and presented to stakeholders for approval
- The status of all requirements is communicated using communication methods defined and approved within the business analysis plan
- Provide basis for confirming fulfilment of objectives and ensuring test coverage
- Enables the discovery of missing and extraneous requirements
- Maintained for the duration of the project

Steps in Traceability and Monitoring

1. Traceability
   - Ability to track product requirements from their origin to the deliverables that satisfy them
   - Qualified as bi-directional
2. Relationship and dependencies
   - Grouping of dependent relationships
3. Approving requirements
4. Baselining approved requirements
5. Monitoring requirements using a traceability matrix
6. The requirements Life Cycle
7. Managing Changes to requirements

Solution Evaluation

- Solution evaluation activities provide the ability to assess whether or not a solution has achieved the desired business result.
- Provides input to Go / No-Go business and technical decisions when releasing an entire solution or segment of it
- Evaluation must be early and often
- Requirements analysis, Traceability, Testing and Evaluation should be treated as complementary activities

Steps in Solution Evaluation

1. Purpose of solution evaluation
2. Recommended mindset for evaluation
3. Plan for evaluation of the solution
4. Determine what to evaluate
5. When and how to validate solution results
6. Evaluate acceptance criteria and address defects
7. Facilitate the Go, No Go decision
8. Obtain Sign Off of the solution
9. Evaluate long term performance of the solution
10. Solution replacement / Phase out

-The End-