Business Analysis for Practitioners - Needs Assessment (Domain 1)

COURSE STRUCTURE

Introduction to Business Analysis

Module 1

Needs Assessment

Module 2

Business Analysis Planning

Module 3

Requirements Elicitation and Analysis

Module 4

Traceability and Monitoring

Module 5

Solution Evaluation

Module 6

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COURSE OBJECTIVE

At the end of this course, you will understand what business analysis is all about, why it is essential to the success of any project and how to perform it on your projects…

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Business Analysis for Practitioners

MODULE 2

MODULE OBJECTIVE

What is Needs Assessment?

Why Needs Assessment

How do we perform Needs Assessment

WHAT IS NEEDS ASSESSMENT?

A needs assessment consists of the business analysis work that is conducted in order to analyze a current business problem or opportunity.

It is used to assess the current internal and external environments and current capabilities of the organization in order to determine the viable solution options that, when pursued, would help the organization meet the desired future state.

NEEDS ASSESSMENT

A project is a temporary endeavour undertaken to create a unique product or service in order to solve a problem or exploit an opportunity

Needs Assessment involves the business analysis work conducted to analyse this problem or opportunity

It is a part of the pre-project activities and a living process subject to changes throughout the project lifecycle!

NEEDS ASSESSMENT

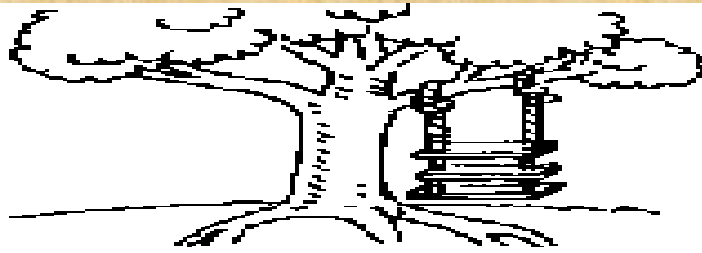**With the Gap analysis tool, we assess:**

-**current capabilities of the organisation**

- **current internal & external environments**

in order to determine viable solution options that can help the organisation meet its desired future state.
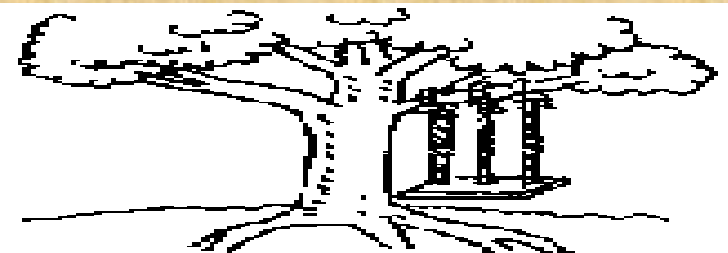
Results are fed into the business case which serves as an input to the project charter

NEEDS ASSESSMENT

1. As Management Requested It
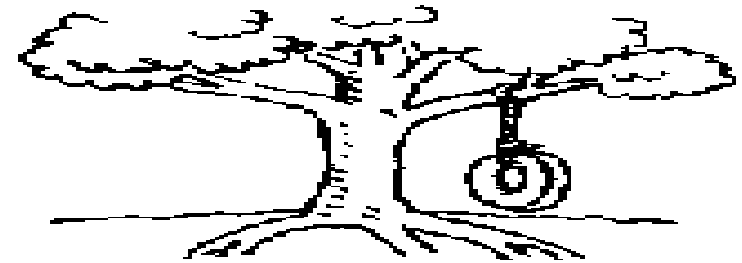
2. As Specified in the Project Request

3. As Designed By The Senior Analyst

4. As Produced By The Programmers

5. As Installed

6. What The User Wanted

NEEDS ASSESSMENT

Exercise: Do you think adequate needs assessment was done for the diagram in previous slide?

Whenever a needs assessment is bypassed, the resulting solution:

(a) Often fails to address the underlying business problem

(b) Can contain unnecessary features

(c) Fails to solve the problem completely

NEEDS ASSESSMENT

How to perform needs assessment

Identify Problem or Opportunity

Assess the current state of the Organization

Recommend Action to address Business Needs

Assemble the Business Case

Identify Problem or Opportunity

The business analyst needs to ask;

1. What problem are we solving?
2. What problems do our customers have that this opportunity will address?

The business analyst begins to elicit information to uncover the data necessary to fully identify the problem or opportunity.

NEEDS ASSESSMENT

Identify Problem or Opportunity

| Identify Stakeholders | Investigate problem or opportunity | Gather relevant data to evaluate the situation | Draft the situation statement | Obtain stakeholder approval for the situation statement |

Identify Stakeholders

During needs analysis, it is helpful to identify the following stakeholders:

• Sponsor who is initiating and responsible for the project,
• Stakeholders who will benefit from an improved program or project,
• Stakeholders who will articulate and support the financial or other benefits of a solution,
• Stakeholders who will use the solution,
• Stakeholders whose role and/or activities performed may change as a result of the solution,
• Stakeholders who may regulate or otherwise constrain part or all of a potential solution,
• Stakeholders who will implement the solution, and
• Stakeholders who will support the solution.

The affected stakeholders for a needs assessment can be categorized into one of four categories using a responsibility assignment matrix such as a RACI model:

Identify Stakeholders

• **R—Responsible.** Person performing the needs assessment,

• **A—Accountable.** Person(s) who approves the needs assessment, including the business case, when warranted,

• **C—Consult.** Person or group to be consulted for input to understand the current problem or opportunity, and

• **I—Inform.** Person or group who will receive the results of the needs assessment.

Identify Stakeholder

	Sponsor	Product Manager	Business Analyst	Product Development Team	Mobile Technical Team	Project Manager
Identify problem or opportunity	A	C	R	C	C	
Assess current state of the organization	A	I	R	C	C	
Recommend action	I	A	R	C	C	C
Prepare business case	I	A	R	C	I	I

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Investigate the Problem or Opportunity

• High Level Knowledge about the problem or opportunity to adequately understand the situation. (The AS-IS Process)

•Documentation Review

• Interviewing

• Observation

Gather Relevant Data to Evaluate the Situation

• to understand the magnitude of the problem or opportunity (also known as "sizing up" the situation)

•When no internal data exists or when it cannot be feasibly collected, benchmarking may be performed.

Benchmarking is a comparison of the metrics or processes from one organization against a similar organization in the industry that is reporting or finding similar industry averages

Draft the Situation Statement

The format of a situation statement is as follows:

- Problem (or opportunity) of "a"
- Has the effect of "b"
- With the impact of "c"

"*The cost for processing claims has been rising steadily, increasing at an average rate of 7% per year, over the last 3 years. The existing method for submitting claims either by phone or the Internet involves significant processing delays and has resulted in the need to increase staffing to process the calls and personally investigate the claims.*"

Always **Obtain Stakeholder Approval for the Situation Statement**

Assess Current State of the Organization

- It is intended to understand current organizational goals and objectives, root causes of problems that prevent achievement of these, goals and/or any important contributors to opportunities that could help attain them.

NEEDS ASSESSMENT

Assess the Current State of the Organisation

Assess Organisational goals and objectives

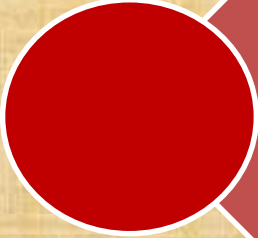- Goals and Objectives

- SMART Goals and Objectives

Relevant Criteria

SWOT Analysis

NEEDS ASSESSMENT

Assess the Current State of the Organisation

Perform Root Cause Analysis on the Situation
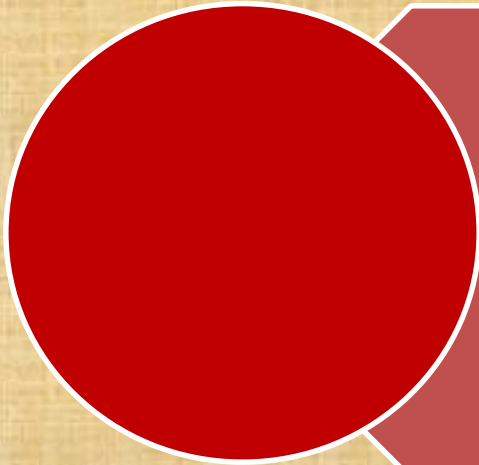
- Five Whys

- Cause and Effect Diagrams

Assess current capabilities of the organisation

Identify gaps in organisational capabilities

NEEDS ASSESSMENT

Assess the Current State of the Organisation

Determine Required Capabilities Needed to Address the Situation

- Capability Table

- Affinity Diagram

-Benchmarking

Assess Organization Goals and Objectives

Goals are typically broad-based and may span one or more years. Objectives, on the other hand, are used to enable goals; these are more specific and tend to be of shorter term than goals, often with durations of 1 year or less.

Well-written goals and objectives are also said to be "SMART"

Hierarchy from Goals to Business Cases

Goal-Objective-Business Case Hierarchy

SMART Goals and Objectives

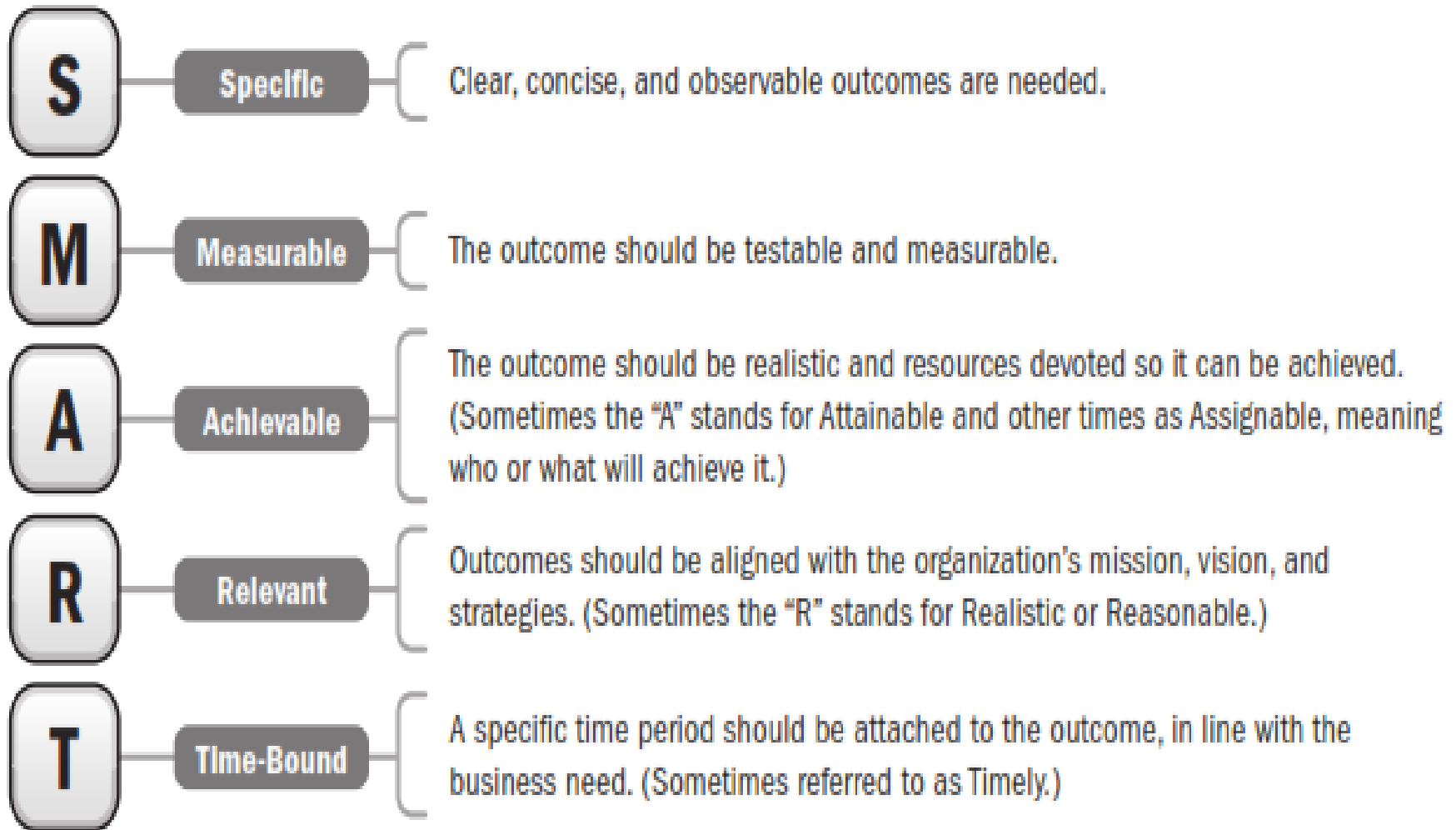|		
S	Specific	Clear, concise, and observable outcomes are needed.
M	Measurable	The outcome should be testable and measurable.
A	Achievable	The outcome should be realistic and resources devoted so it can be achieved. (Sometimes the "A" stands for Attainable and other times as Assignable, meaning who or what will achieve it.)
R	Relevant	Outcomes should be aligned with the organization's mission, vision, and strategies. (Sometimes the "R" stands for Realistic or Reasonable.)
T	Time-Bound	A specific time period should be attached to the outcome, in line with the business need. (Sometimes referred to as Timely.)

Example: SMART Goals and Objectives

An insurance company had a goal of reaching $5 billion in revenue within 5 years, with a 20% net profit margin

Objectives:

• Increase revenues by 10% by December 31 (necessary to help them reach their 5-year goal),

• Decrease overall claims costs by 5% in the same time period

• Reduce time needed to process claims by 6.25% in each quarter of the year.

SWOT

Stands for strengths, weaknesses, opportunities, and threats

It is a common method used to facilitate discussions with stakeholders when articulating high-level and important aspects of an organization, especially as it pertains to a specific situation.

It helps to translate organizational strategy into business needs.

SWOT Diagram of Insurance Company

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PROBLEM: INSURANCE CLAIMS TOO SLOW

Strengths

- Positive customer experience despite slow cycle time
- Rate of claims fraud is among lowest in the industry
- Technically savvy IT staff

Weaknesses

- Staff shortages
- Policies regarding claims are fairly inflexible
- Difficulty focusing company to new claims investigation methods

Opportunities

- Mobile device technology is widespread and accepted
- Mobile device proliferation may mitigate staff shortages
- Needed software is relatively easy to program and/or purchase

Threats

- Competitors already using mobile capabilities to report claims
- Competitor advertising that emphasizes fast claims processing may cause policy decline

Relevant Criteria

When goals and objectives involve revenue generation, then projects to expand markets or add new products are key. When one of the major objectives is to decrease costs, then projects for process improvement or cost elimination are important.

Example:

Revenue is a highly relevant criterion when the insurance company decided is to increase revenues 10% by December 31
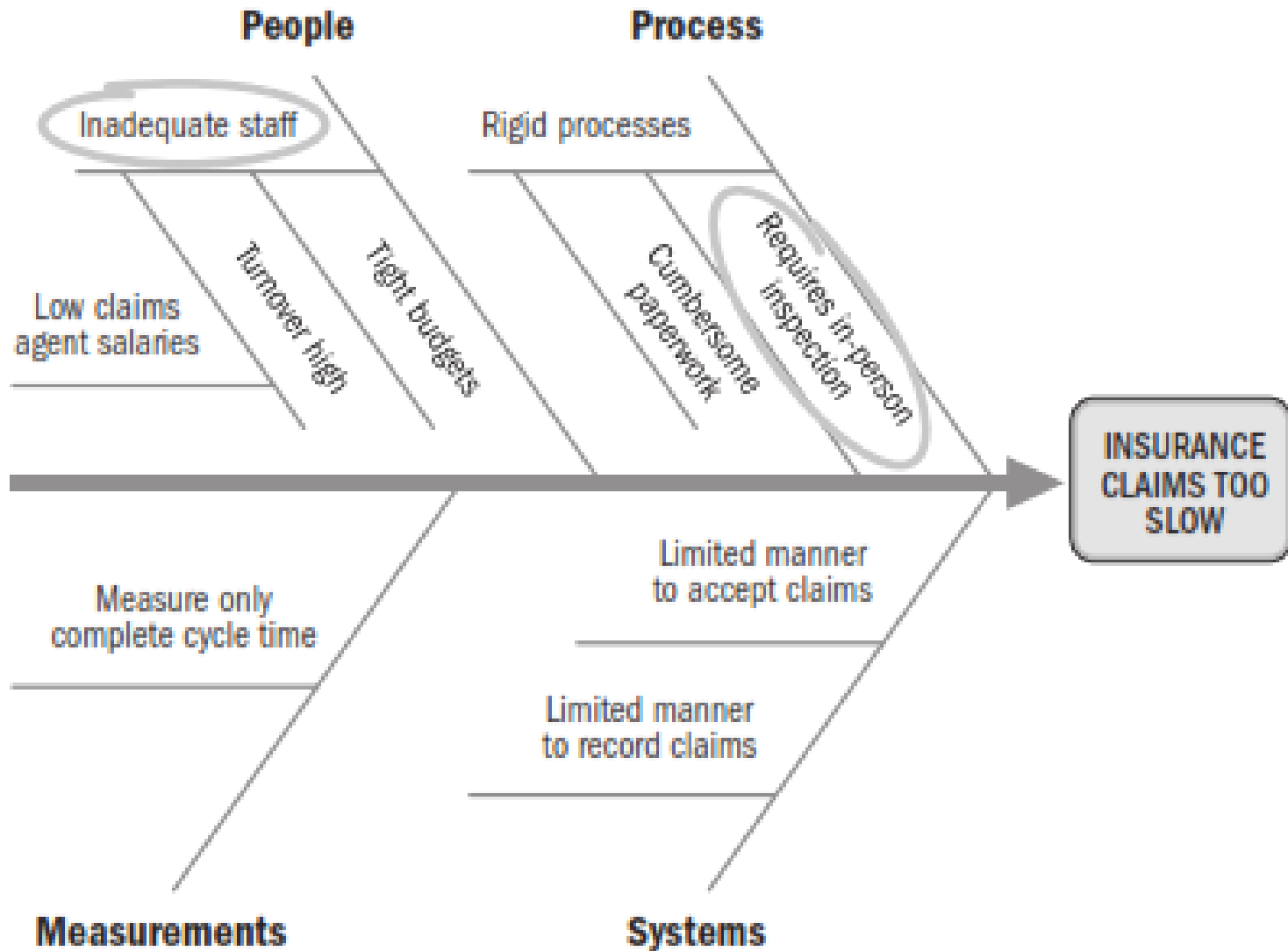
Perform Root Cause Analysis on the Situation

After agreeing on the problem to be solved, the business analyst needs to break it down into its root causes or opportunity contributors so as to adequately recommend a viable and appropriate solution

• **Root Cause Analysis.** An analytical technique used to determine the basic underlying reason that causes a variance, defect, or risk.

• **Opportunity Analysis.** A study of the major facets of a potential opportunity to determine the viability of successfully launching a new product or service to enable its achievement.

The tools and techniques used are Five Whys, Cause-and-Effect Diagram, Interrelationship Diagram and Process Flow

Fishbone Diagram

Interrelationship Diagrams

INSURANCE CLAIMS TOO SLOW

- 1,1 Low salaries
- 2,1 Shortage of staff
- 1,2 Limited ways to accept/record claims
- 1,1 Cumbersome paperwork
- 1,3 Budget cuts
- 4,0 Scheduling delays
- 0,2 In-person inspections required

Key
Factor numbers:
in, # out

Bold = strongest
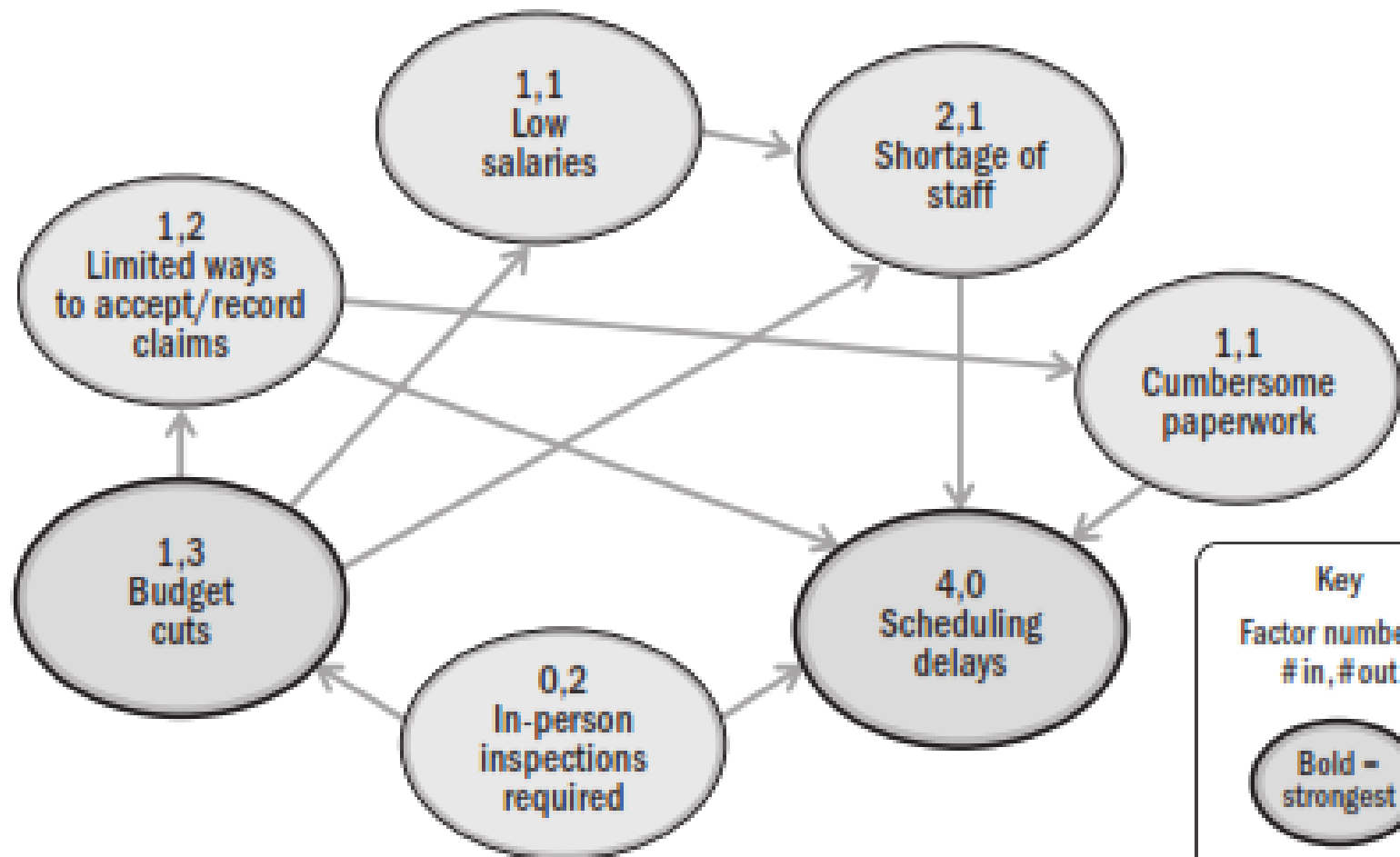
Process Flow with Root Cause Analysis

Examine Claim Process	PROBLEM: Slow Claims Processing

Telephone Claim Agent

START → Receive Call → Determine Claim Eligibility → Record Accident Details → Find Open Times for Claims Adjuster → Schedule Match?

- Receive Call:
  - Calls may wait/give up
  - Limited agents
  - Budget cuts

- Record Accident Details:
  - Internal interface only

Schedule Match? → YES → Schedule Appointment for Examination → A

Schedule Match? → NO → Continue searching?
- Continue searching? → YES → (back to Find Open Times for Claims Adjuster)
- Continue searching? → NO → Save Claim → END

- Available times are hard to find
  - Limited adjusters
  - Budget cuts

A → Examination Appointment

Claim Adjuster

Examination Appointment → Confirm Appointment → (At appointed time/place) → Examine Damages → Take Photos of Damages → Complete Claim Report → File Claim Report → END

- Examine Damages:
  - May be weeks after an accident
  - Shortage of staff
  - Not enough trained adjusters
  - Budget cuts

- Complete Claim Report:
  - Paper report (out in the field)
  - No mobile capability

- File Claim Report:
  - Reports often delayed 1-2 days
  - Internal interface only

For simple process improvement situations, it may only be necessary to recommend process changes without adding new capabilities but for more complicated situations and for opportunities, new capabilities may be needed, such as, software, machinery, skilled staff, or physical plants or properties.

Tools and techniques used to Determine Required Capabilities Needed to Address the Situation include **Capability Table, Affinity Diagram and Benchmarking.**

Capability Table

Problem/Current Limitations	Root Cause(s)	New Capability/Feature
Insurance claims too slow	Limited claims agents	• Additional trained agents • Higher pay for claims agents
	Necessity for in-person inspections	• New policy for skipping examinations based on insured's policy length, claim history, and initial intake interview • Use of insured's technology to record damage
	Limited claims adjusters	• Additional trained adjusters • See Section 2.2
Reports delayed	Limited ways to accept/record claims and reports	• New methods of accepting claims • Submit reports remotely
	Paper reports	• Eliminate paper reports

Affinity Diagram

PROBLEM: INSURANCE CLAIMS TOO SLOW

Staff Issues

- **Hire Additional Staff**
  - Limited claims agents
  - Limited claims adjusters
  - Delays in responding to claim filing
- **Raise Pay for Claims Agents**
  - Turnover of claims agents

Corporate Policy Issues

- **Set Minimum Threshold for In-Person Inspections**
  - All claims require in-person inspection
  - Trouble in scheduling inspection appointments

Interface Issues

- **New Methods of Accepting Claims**
  - Limited ways to accept/record claims and reports
- **Eliminate Paper Reports**
  - Paper reports cause delays

Assess Current Capabilities of the Organization

Common methods for assessing the current capability state include, but are not limited to the following:

• **Process flows.** Performing "as-is" process analysis or reviewing existing models reveals those current processes in place that could be refined or extended to fulfill the new capabilities.

• **Enterprise and business architectures.** Enterprise and business architectures are methods to describe an organization by mapping its essential characteristics such as people, locations, processes, applications, data, and technology needs to be made to validate that the models are up to date and still valid.

• **Capability frameworks.** A capability framework is a collection of an organization's capabilities, organized into manageable pieces, similar to business architecture.

Identify Gaps in Organizational Capabilities

Gap analysis is the technique of comparing the current state to the future state to identify the differences or gaps.

Capability Table with Gaps Listed

Problem/Current Limitations	Root Cause(s)	New Capability/Feature	Project Deliverables to Fill Gaps
Insurance claims too slow	Limited claims agents	• Additional trained agents • Higher pay for claims agents	• New training program for agents • Increased hourly rate for claims agents
	Necessity for in-person inspections	• New policy for skipping examinations based on insured's policy length, claim history, and initial intake interview. • Use of insured's technology to record damage	• Create new corporate policy with thresholds for visits • Develop new processes and interface to import insured's pictures of damage
	Limited claims adjusters	• Additional trained adjusters • New processes and interfaces to facilitate claims	• New training program for adjusters • Develop new processes and interface to import insured's pictures of damage
Reports delayed	Limited ways to accept/record claims and reports	• New methods of accepting claims • Submit reports remotely	• Develop new interface for online acceptance of claims • Develop new interface to submit remote claims reports
	Paper reports	• Eliminate paper reports	• Create online and mobile reports

NEEDS ASSESSMENT

Recommend Action to address Business Needs

| Include a high level approach for acquiring the new capabilities | Provide Alternative Options for satisfying the business need | Identify constraints, assumptions and risks for each option

- Constraints

- Assumptions

- Risks | Assess organizational impacts & feasibility of each option

- Operational

- Technology

- Cost effectiveness

- Time Feasibility | Recommend the most viable option

- Weighted Ranking | Conduct cost benefit analysis for the recommended option

-Payback period

- ROI

- IRR

- NPV |

Include a High-Level Approach for Adding Capabilities

This approach is not a detailed project management plan and does not include the level of detail in a project charter. Instead, it is a suggested path for adding the capabilities.

Example
—Using the insurance company example, additional security infrastructure may be needed
to allow claims to be submitted from mobile devices or to allow video chats with claims adjusters.

Provide Alternative Options for Satisfying the Business Need

There is rarely only one potential solution to a business problem.

A recommendation should include all of the most viable options.

Example

- The standard build vs. buy or combinations of the two
- Alternative vendors to choose from.

The primary reason for providing alternatives is to show:

- The alternatives were considered and to forestall objections from those who favor them.
- The preferred approach may not be acceptable but constraints such as cost, schedule, staffing, or vendor bias may preclude an option from being chosen

The business analyst is usually expected to make a recommendation and to support the recommendation with facts and evidence. The solution decision is made primarily by the business sponsor or problem owner

Identify Constraints, Assumptions, and Risks for Each Option

Constraints are any limitations on a team's options to execute a program or project and may be business- or technical-related. It is important to assess any known constraints regarding a potential solution when generating alternatives. Example: Time, Design and implementation constraints.

Assumptions are factors that are considered to be true, real, or certain, without actual proof or demonstration. Forecasting and Estimations are based on limited available information.

Risks are uncertain events or conditions that may have a positive or negative effect on one or more project objectives if they occur. Any risks that need a response may add cost to a potential solution.

Project managers are focused on assessing the risks of the project as a whole, while the business analyst is focused on assessing the product risks.

Assess Feasibility and Organizational Impacts of Each Option

One or more options may be discarded due to their lack of feasibility. The assessment involves comparing potential solution options for how viable each appears to be on key variables or "feasibility factors".

Analyzing the feasibility of alternatives reserves the often painstaking work of cost benefit analysis for only the most feasible option.

Types of Feasibility
- **Operational Feasibility** (business need, organization fit, Align with Nonfunctional requirement like reliability , sustainability and supportability)
- **Technology/System Feasibility**
- **Cost-Effectiveness Feasibility**
- **Time Feasibility**
- **Assess Factors**

Recommend the Most Viable Option

When faced with two or more feasible options for solutions, the remaining choices can be rank-ordered based on how well each one meets the business need.

Weighted Ranking

A weighted ranking matrix or table combines pair-matching with weighted criteria to add objectivity to a recommendation. Pair-matching is performed by taking each option and comparing it one by one to all other options, and then voting or ranking which option is the most preferred.

Items to be Ranked	Criteria (Weight)				Total Votes	Final Rank
	Increase Revenues (Weight 0.3)	Decrease Claims Costs (Weight 0.4)	Ease of Implementation (Weight 0.2)	Cost (Weight 0.1)		
XYZ software package	1 × 0.3 = 0.3	1 × 0.4 = 0.4	1 × 0.1 = 0.2	2 × 0.1 = 0.2	1.1	2
Develop smartphone interfaces in-house	2 × 0.3 = 0.6	2 × 0.4 = 0.8	…	…	1.4	1
Outsource interface development	…	…	2 × 0.2 = 0.4	1 × 0.1 = 0.1	0.5	3

Conduct Cost-Benefit Analysis for Recommended Option

The most common valuation techniques are

Payback Period (PBP)
The payback period (PBP) is the time needed to recover a project investment, usually in months or years. The longer the PBP, the greater the risk.

Return on Investment (ROI)
The return on investment (ROI) is the percentage return on an initial project investment. ROI is calculated by taking the projected average of all net benefits and dividing them by the initial project cost.

Internal Rate of Return (IRR)
The internal rate of return (IRR) is the projected annual yield of a project investment, incorporating both initial and ongoing costs. IRR is the estimated growth rate percentage that a given project is expected to attain.

Net Present Value (NPV)
The net present value (NPV) is the future value of expected project benefits expressed in the value those benefits have at the time of investment. NPV takes into account current and future benefits, inflation, and it factors in the yield that could be obtained through investing in financial instruments as opposed to a project.

Assemble the Business Case

Projects based on competitive pressure, government mandate, or executive inclination do NOT require a formal business case

The analysis performed in the business case helps organizations select the best programs and projects to meet the needs of the business

Business cases help organizations scrutinize programs and projects in a consistent manner. When this process is embraced, organizations will consistently make better decisions.

A business case explores the nature of the problem or opportunity, determines its root causes or contributors to success, and presents many facets that contribute to a complete recommendation.

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Assemble the Business Case

Business cases should contain the following minimally:
❑ **Problem/Opportunity**
❑ **Analysis of the situation**
❑ **Recommendation**
❑ **Evaluation**

A business case saves you from having unused products, lost opportunity costs & frustration

Value of the Business Case

A business case is a living document that is constantly referenced throughout a program or project of work. It may be necessary to review and update a business case based on what is discovered as a project progresses over time.

When a business case is inadequate or nonexistent, the product scope may be unclear or poorly defined. This in turn often leads to scope creep, which results in rework, cost overruns, and project delays.

A business case can help to address the possible risks of having to cancel a project due to loss of sponsor or stakeholder support, costs exceeding the perceived benefits, and changes to the business.

Business analysts work closely with the sponsor to create a business case. When the project manager is known, the business analyst consults with the project manager to achieve a stronger business case through close collaboration.

THE END

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