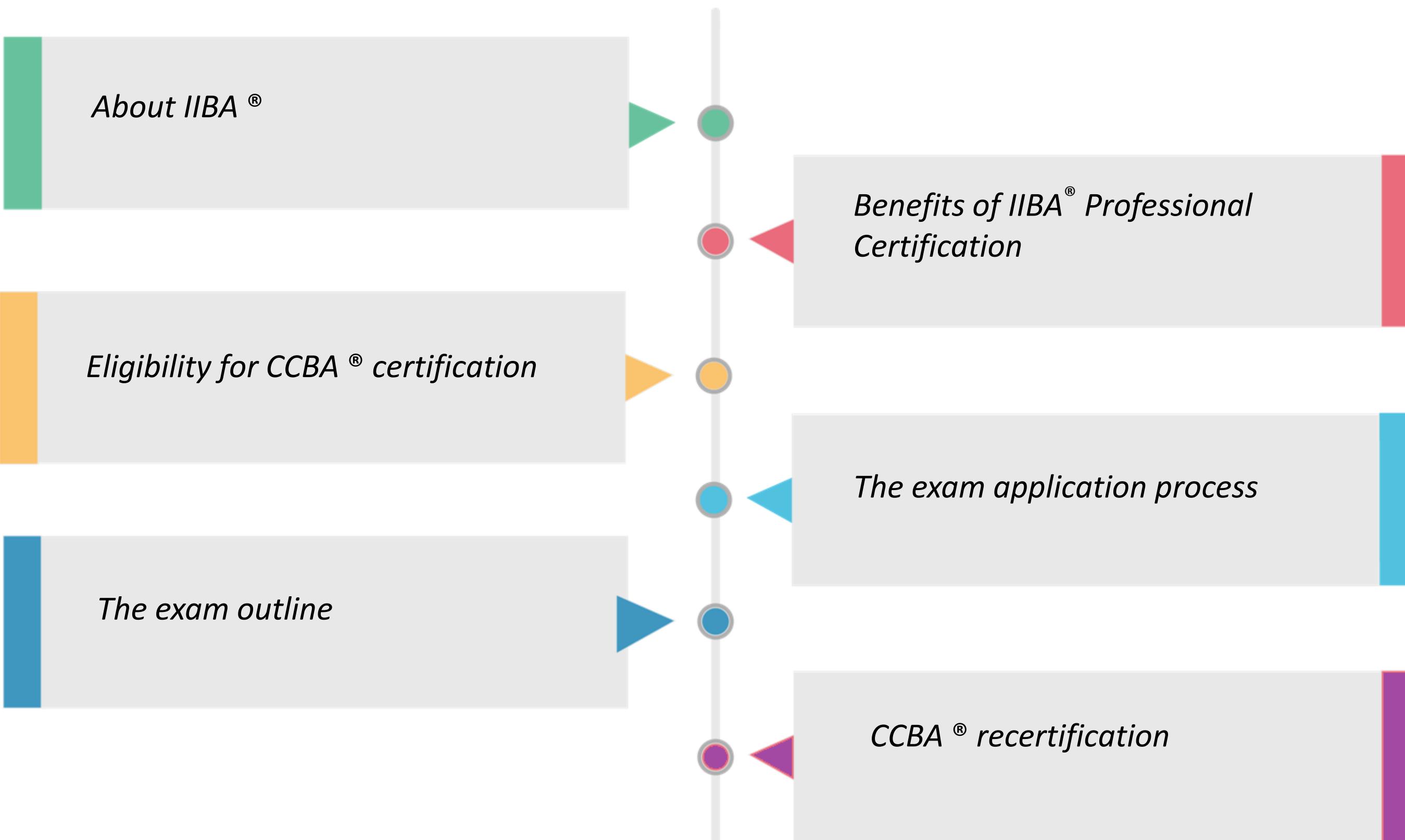


CCBA® Exam Preparation Course

Lesson 1 – Introduction to IIBA ® and CCBA ® Certification



WHAT'S IN IT FOR ME



```
graph TD; A[About IIBA ®] --> D1(( )); B[Eligibility for CCBA ® certification] --> D2(( )); C[The exam outline] --> D3(( )); D[Benefits of IIBA ® Professional Certification] --> D4(( )); E[The exam application process] --> D5(( )); F[CCBA ® recertification] --> D6(( ));
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About IIBA ®

Eligibility for CCBA ® certification

The exam outline

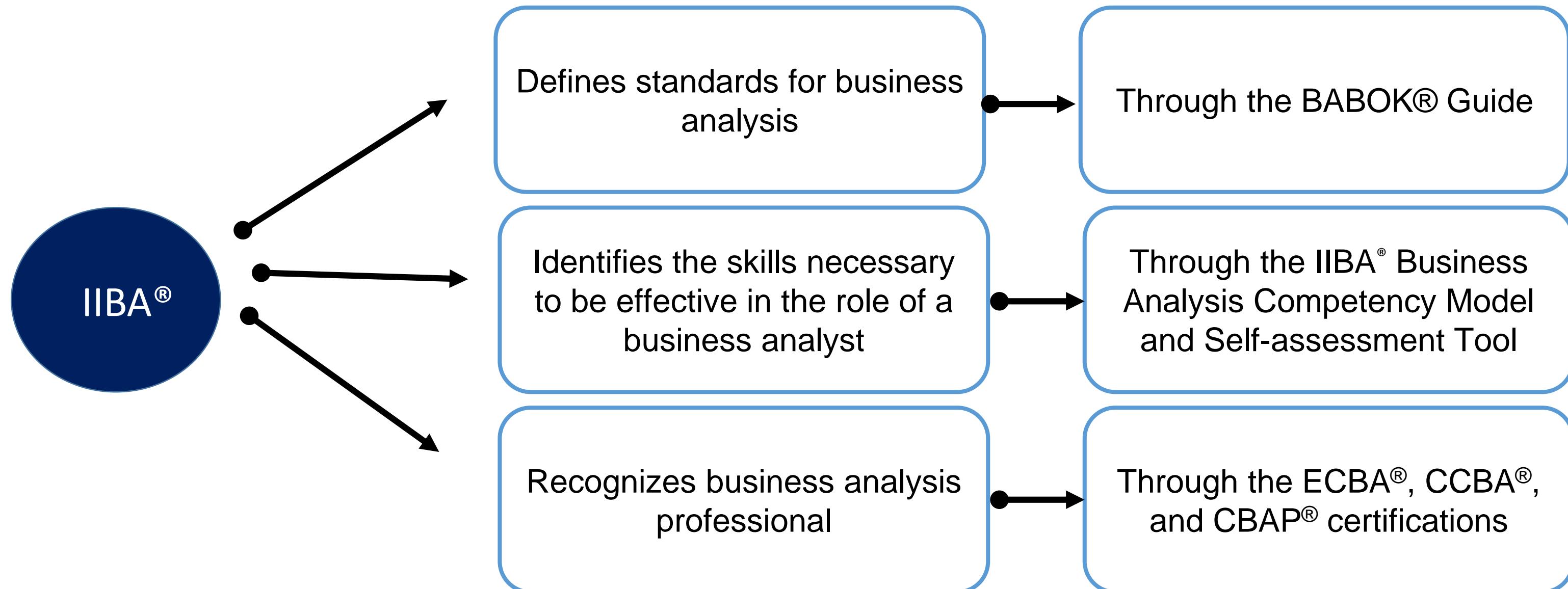
Benefits of IIBA ® Professional Certification

The exam application process

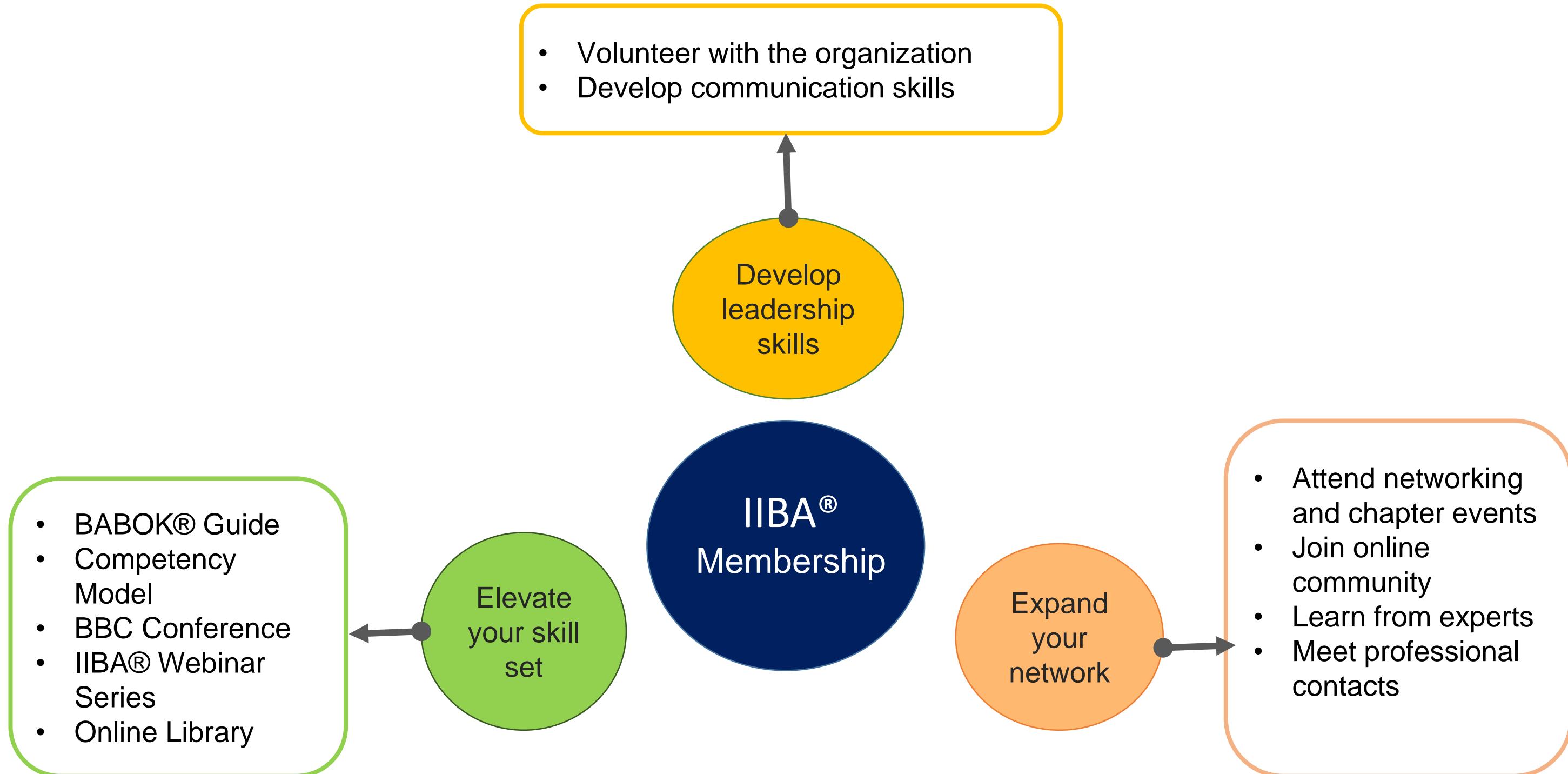
CCBA ® recertification

ABOUT IIBA®

International Institute of Business Analysis



IIBA ® MEMBERSHIP BENEFITS

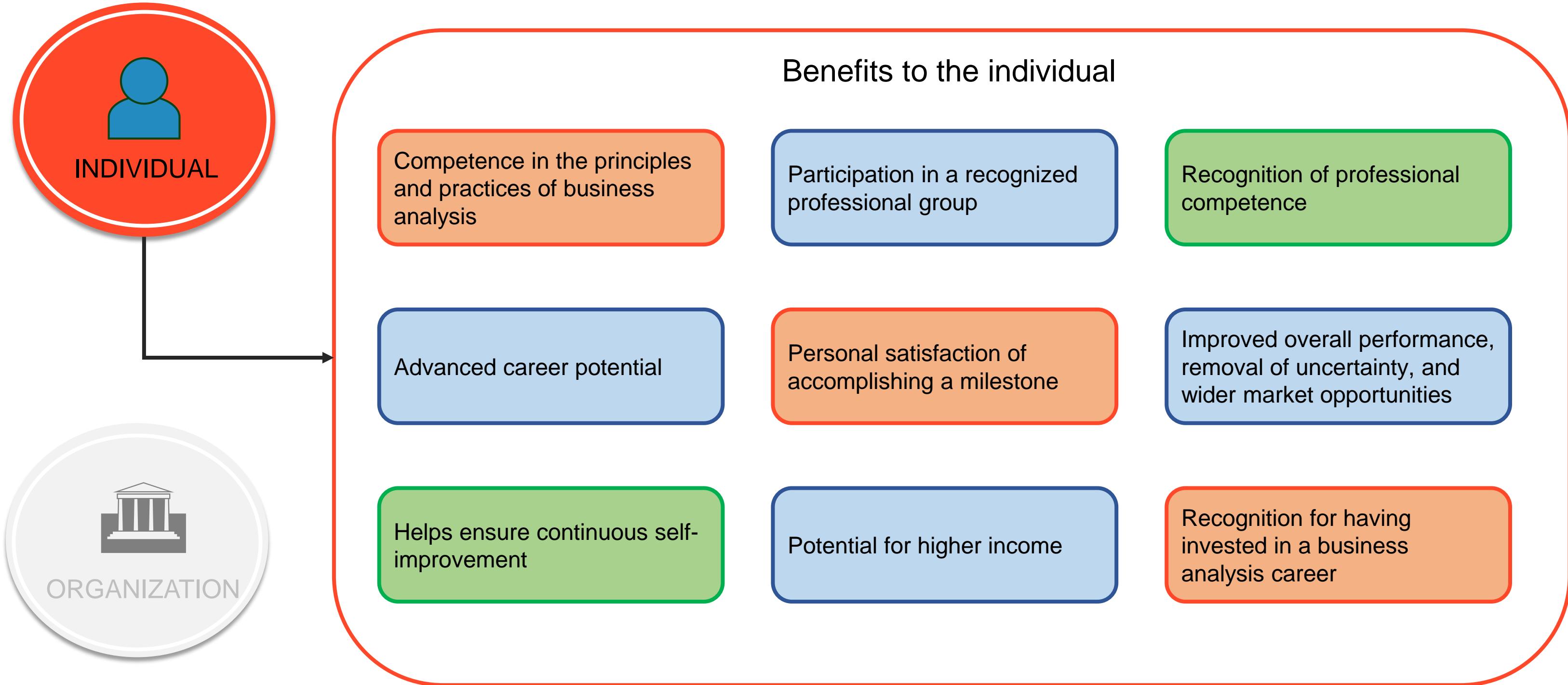


BENEFITS OF CCBA ® CERTIFICATION



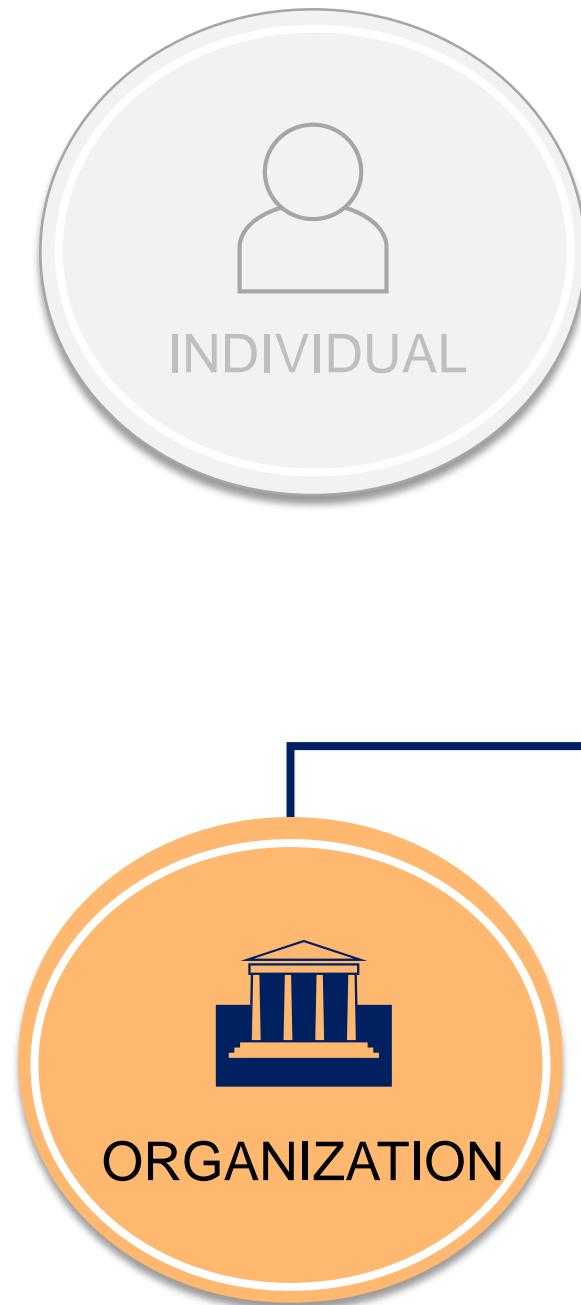
BENEFITS OF CCBA® CERTIFICATION (contd.)

INDIVIDUAL



BENEFITS OF CCBA ® CERTIFICATION (contd.)

ORGANIZATION



Benefits to the organization

Professional development, advancement, and recognition for staff

Enables establishment and implementation of business analysis practices as outlined in the BABOK Guide

Demonstrates use of industry-standard business analysis practices

Ensures more reliable and higher quality results are produced with increased efficiency and consistency

Demonstrates that business is run effectively

Helps identify professional business analysts to clients and business partners

Improves staff responsibility, commitment, and motivation

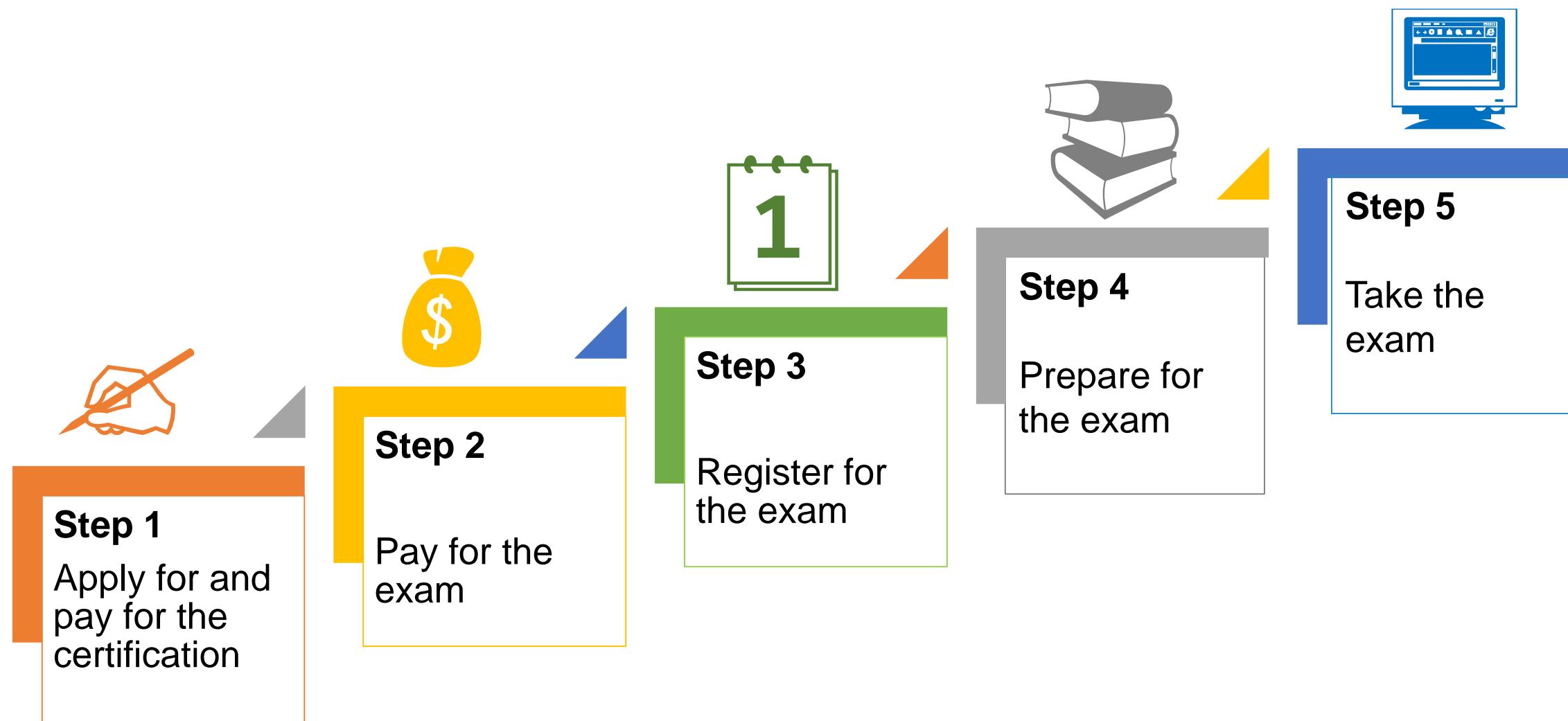
Demonstrates commitment to the field of business analysis

ELIGIBILITY CRITERIA

FOR CCBA ®

Criteria	Requirement
Work Experience	Minimum 3750 Hours of Business Analysis experience in the last 7 Years
Knowledge Area Expertise	Minimum 900 hours in two of the six knowledge areas or 500 hours in four of the six knowledge areas
Professional Development	21 Hours in the last 4 Years
References	2
Signed Code of Conduct	Yes

APPLICATION AND EXAM PROCESS



APPLICATION AND EXAM FEES

- **Application and Exam Fees**

Fee	Member	Non-member
Application Fee (non-refundable)	\$125	\$125
Exam Fee – English and Japanese	\$325	\$450
Exam Fee – German	*\$770	\$880

- **Other Fees**

Fee	Member	Non-member
Exam Cancellation Fee (CBT)	\$50	\$50
Exam Re-write Fee – English and Japanese	\$250	\$375
Exam Re-write Fee – German	*\$430	\$540

→**NOTE:**

- *IIBA® is partnering with The European Association of Business Analysis (EABA) and, in a joint effort, is now offering business analysis certification exams in German-speaking Europe and at all test center locations where IIBA exams are offered.
- All fees are payable in U.S. dollars (USD) plus GST/HST if you are a Canadian resident or a GST/HST registrant.
- The application fee is not refundable regardless of whether an application is approved or approved pending audit and if an application audit is not passed.

PREPARING FOR THE EXAM



The CCBA® exam is a 3.5-hours long exam and consists of 150 multiple choice questions with four possible answers to select from.

To prepare for the exam:

Review the IIBA® BABOK® Guide

Review the BABOK® Learning Guide found in the Online Library on the Community Network

Review Frequently Asked Questions (FAQ) on the IIBA website

Review recommended resources on the IIBA® website

Attend training as needed

Find opportunities to practice tasks by following the BABOK® Guide

Find a business analysis mentor

Join a study group

Attend local IIBA® Chapter meetings

Review available study guide(s)

CCBA EXAM BLUEPRINT

Domain	Percentage
Business Analysis Planning and Monitoring	12%
Elicitation and Collaboration	20%
Requirements Life Cycle Management	18%
Strategy Analysis	12%
Requirements Analysis and Design Definition	32%
Solution Evaluation	6%

RECERTIFICATION

REASONS

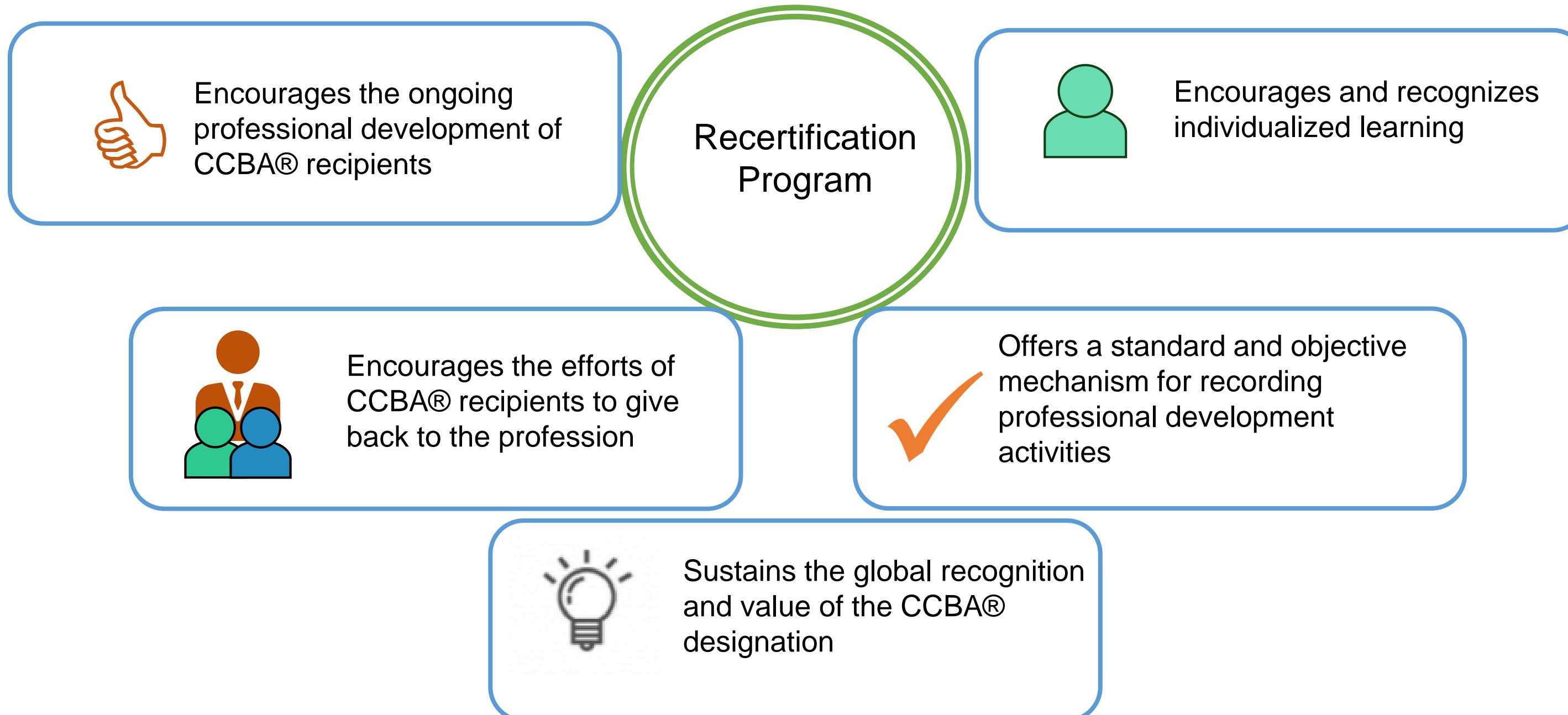
The CCBA® Recertification program helps individuals demonstrate an ongoing professional commitment to the business analysis profession.



RECERTIFICATION

PURPOSE

The Recertification program supports the ongoing professional development of individuals who have attained the CCBA® designation.



RECERTIFICATION

NOTES

All CCBA® recipients are required to meet continuing proficiency requirements to maintain their designation.

CERTIFICATION RENEWAL

IIBA® certification to be renewed every three years

CCBA® Recertification Handbook and related forms are posted on the IIBA® website

ADDITIONAL NOTES

To ensure receiving all IIBA® communication:

- Update your email address in profile on IIBA® website.
- Check bulk mail folders
- Add certification@iiba.org to personal address book

Report 60 accepted CDUs and submit the recertification application prior to the end of the three year cycle

CDU CATEGORIES

1. Formal Academic Education

2. Professional Development

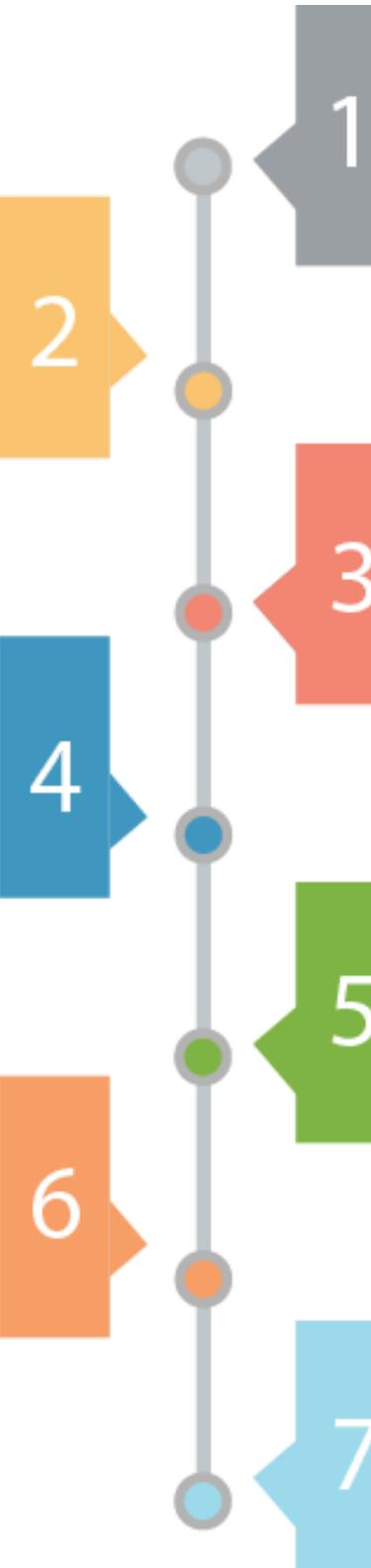
3. Professional Activities

4. Self-directed Learning

5. Volunteer Service

6. Professional Experience

KEY TAKEAWAYS



- 1
- 2
- 3
- 4
- 5
- 6
- 7

The International Institute of Business Analysis or IIBA® assists business analysts by defining standards for business analysis, identifying the skills needed for business analysis, and recognizing business analysis professionals.

With an IIBA® membership, business analysts can elevate their skill set, develop leadership skills, and expand their network.

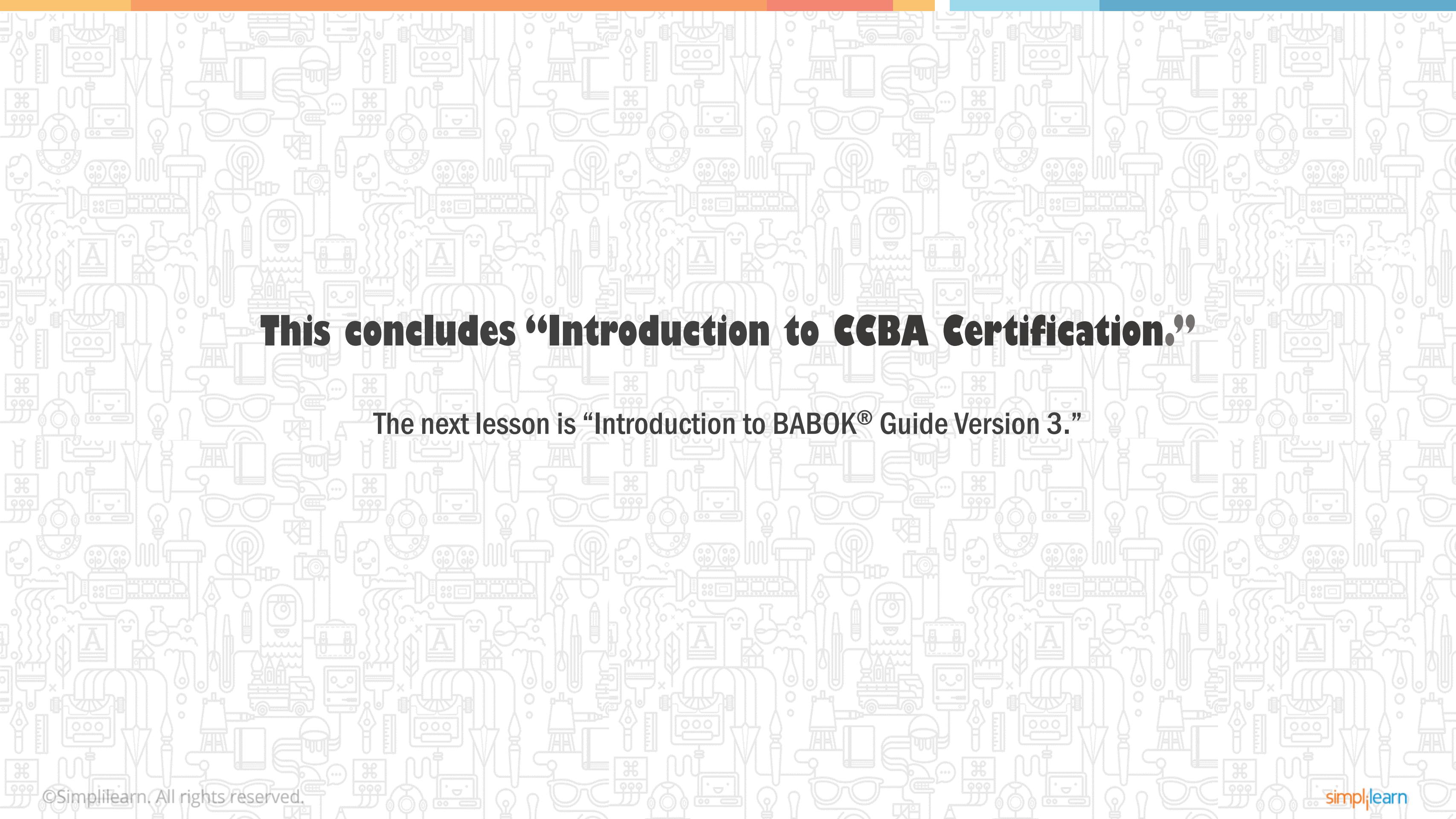
To prepare for the exam, business analysts can review the BABOK® Guide, review the FAQs on the IIBA® website, attend trainings as needed, practice tasks by following the BABOK® Guide, find a BA mentor, and review available study guides.

Eligibility for the CCBA certification includes specified levels of work experience, knowledge area expertise, and professional development.

Membership of IIBA® provides several benefits, both to the individual as well as to organizations.

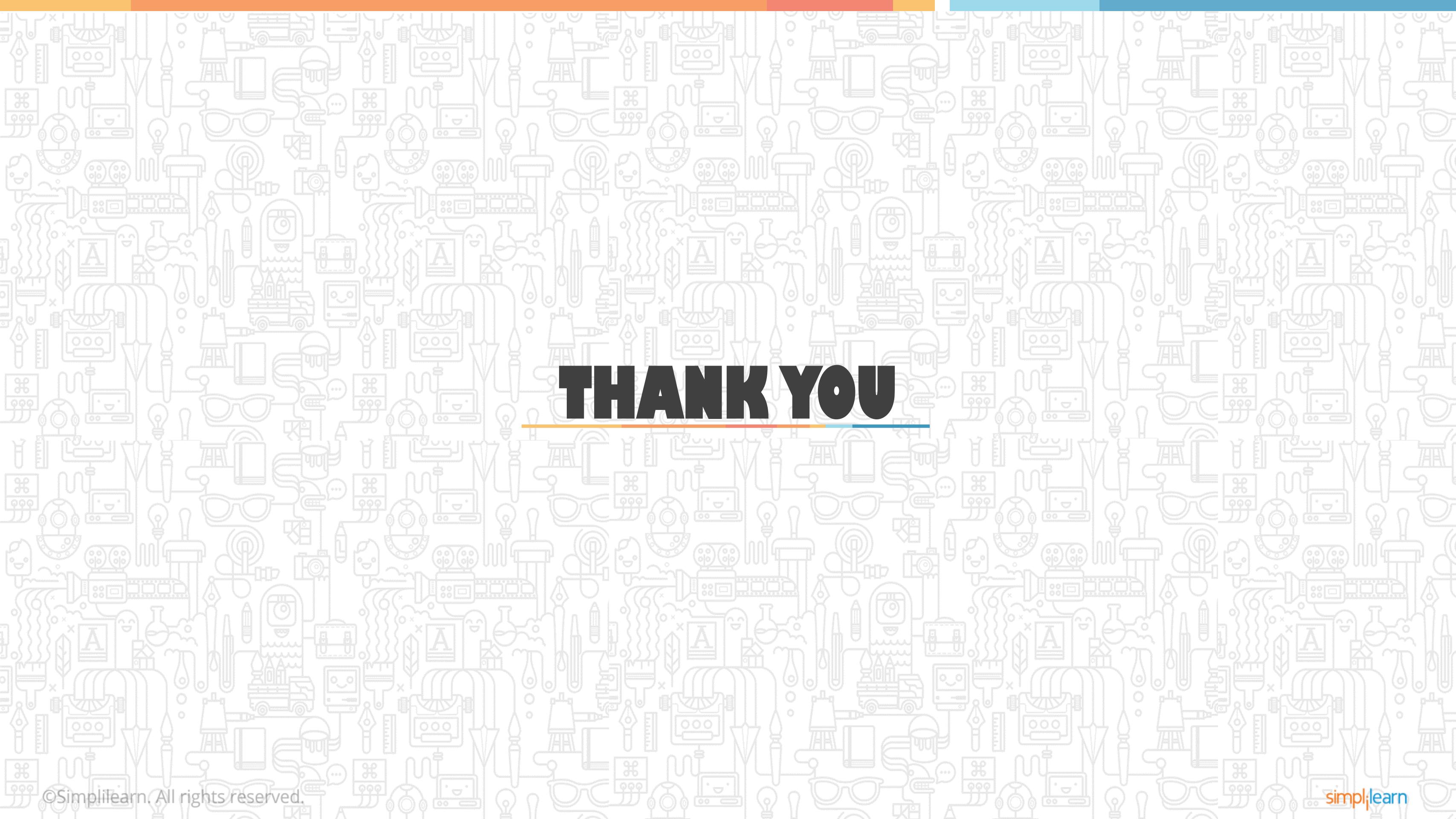
Applying and taking the exam is a 5-step process.

The CCBA exam is a 3.5-hours long exam and consists of 150 multiple choice questions with four possible answers to select from.



This concludes “Introduction to CCBA Certification.”

The next lesson is “Introduction to BABOK® Guide Version 3.”



THANK YOU

CCBA® Exam Preparation Course

Lesson 2 - Introduction to BABOK® V3



WHAT'S IN IT FOR ME



What is business analysis?



What does a business analyst do?

*Business Analysis Core Concept Model
Model™ — the Knowledge Areas
defined in BABOK® Version 3*

*What are the underlying competencies
of a business analyst?*

*Techniques and perspectives in
business analysis*

INTRODUCTION – WHY BUSINESS ANALYSIS



INTRODUCTION – WHY BUSINESS ANALYSIS (contd.)



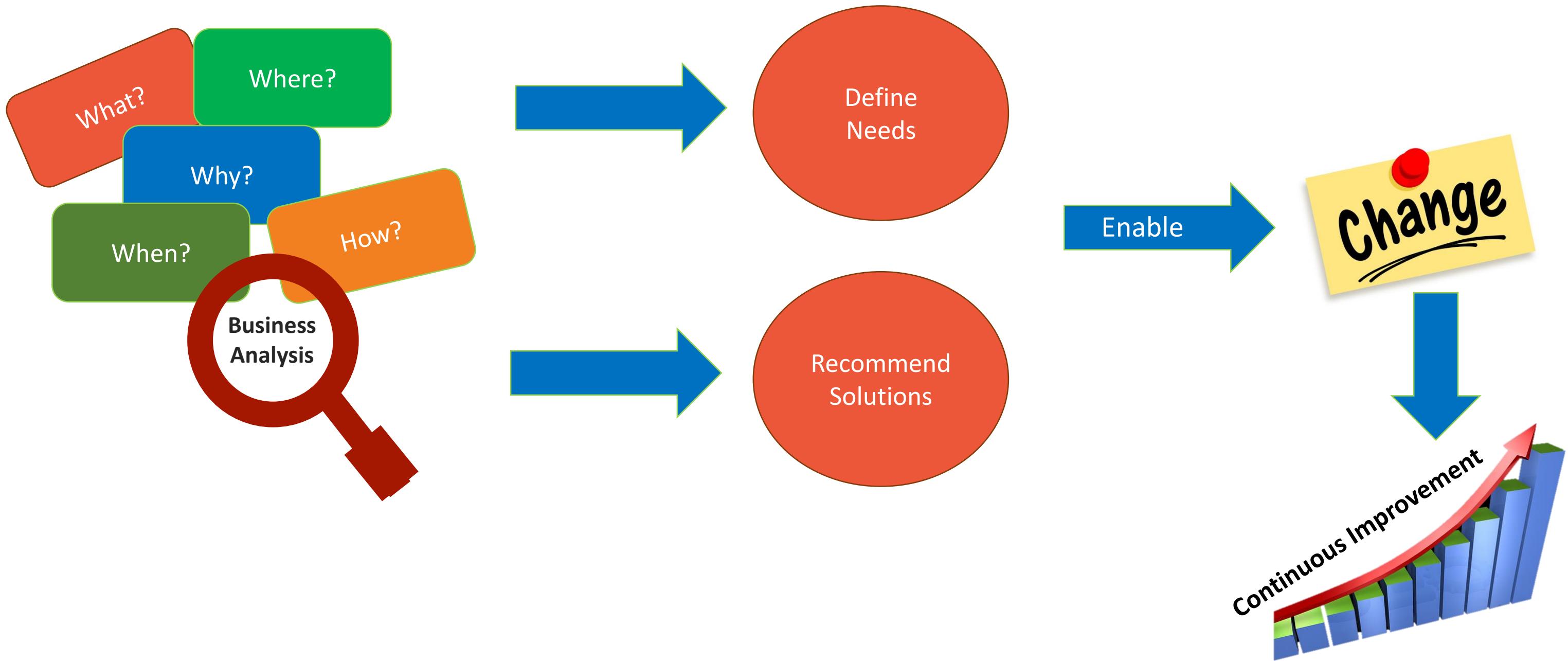
Lesson 2: Introduction to BABOK® V3

Topic 2.1: Key Concepts of Business Analysis

- ✓ Who is a Business Analyst?
- ✓ Business Analysis Core Concept Model
- ✓ Business Analysis Knowledge Areas
- ✓ Requirements classification
- ✓ Requirements and Design
- ✓ Who is a Stakeholder?

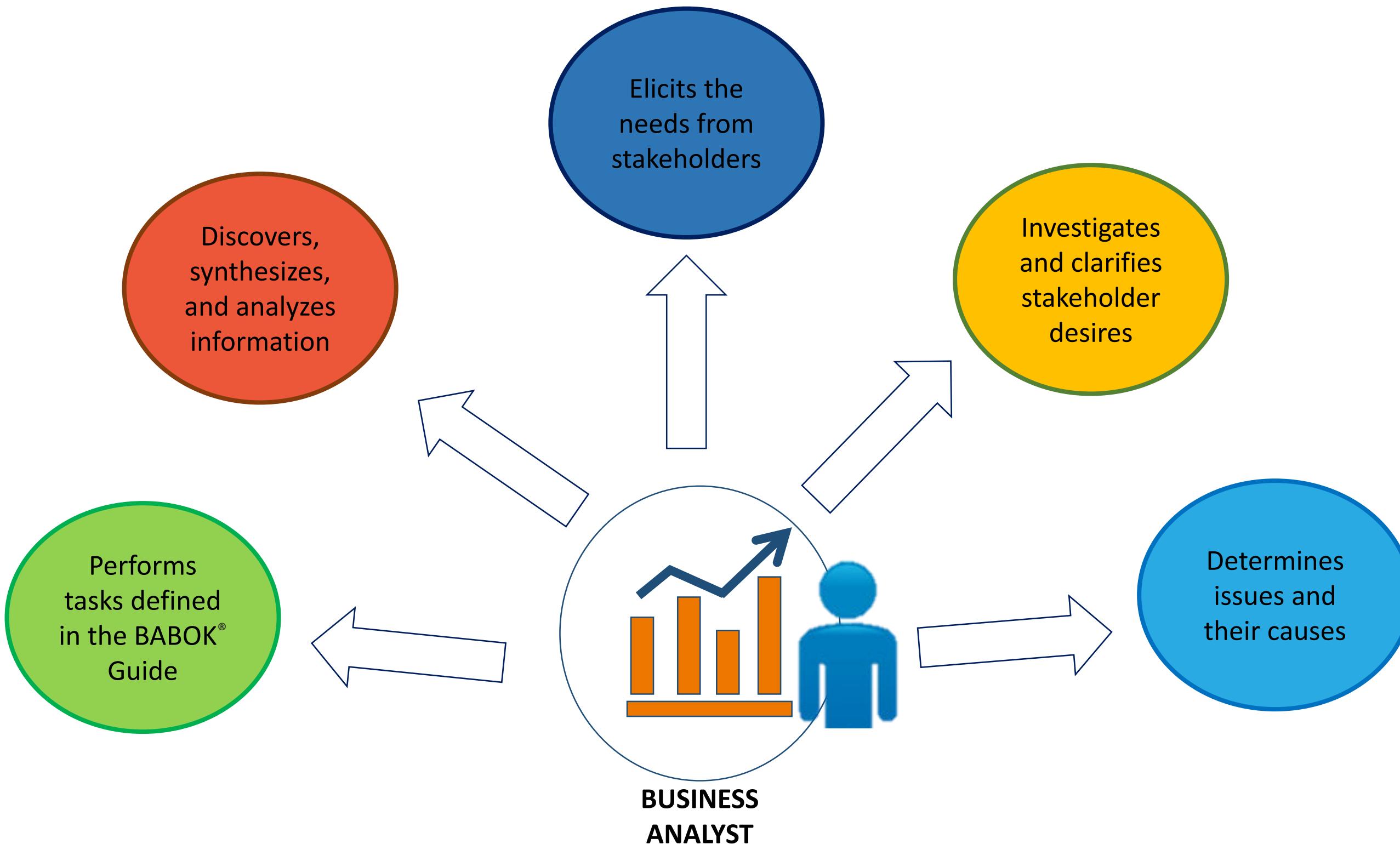
BUSINESS ANALYSIS

WHAT IS BUSINESS ANALYSIS



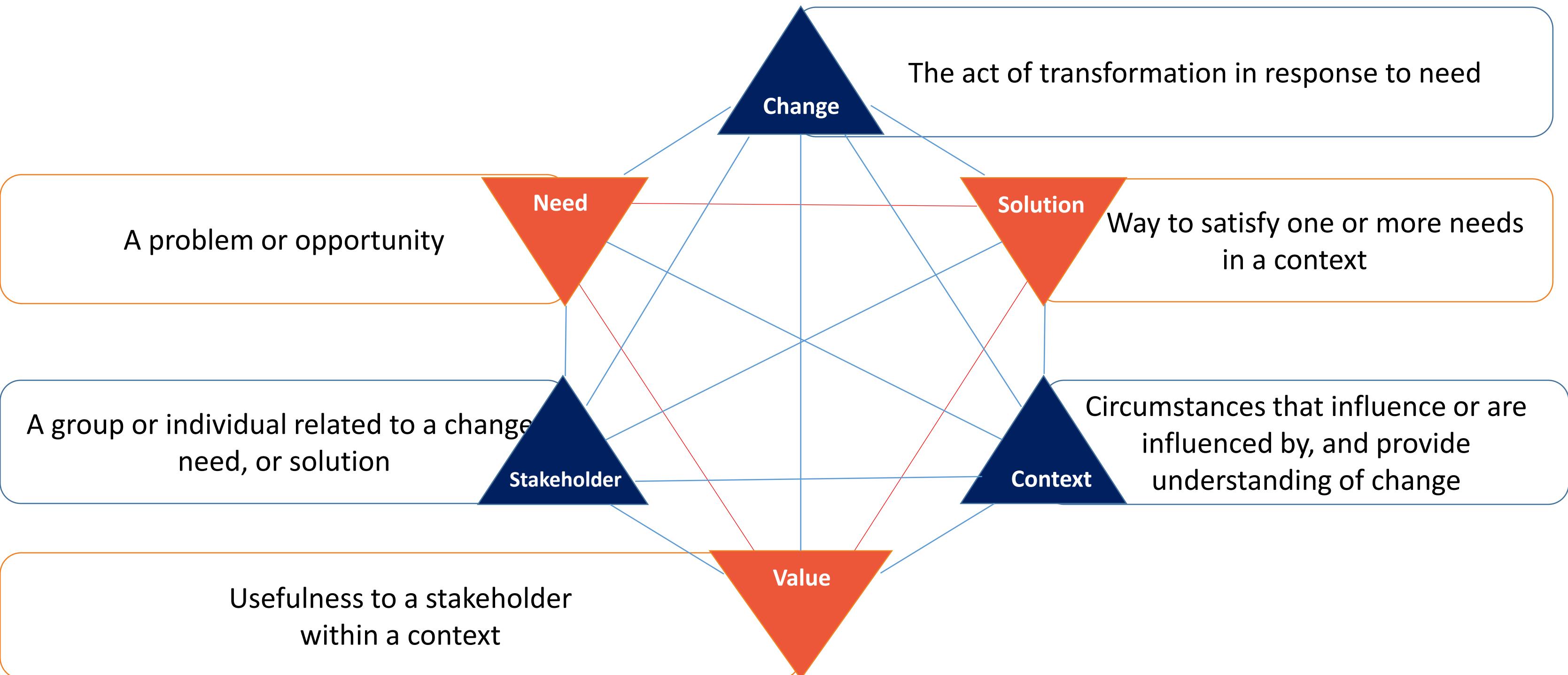
BUSINESS ANALYSIS

WHO IS A BUSINESS ANALYST



BUSINESS ANALYSIS

BUSINESS ANALYSIS CORE CONCEPT MODEL™



BUSINESS ANALYSIS BODY OF KNOWLEDGE

KNOWLEDGE AREAS

1. Business Analysis Planning and Monitoring

2. Elicitation and Collaboration

3. Requirements Lifecycle Management

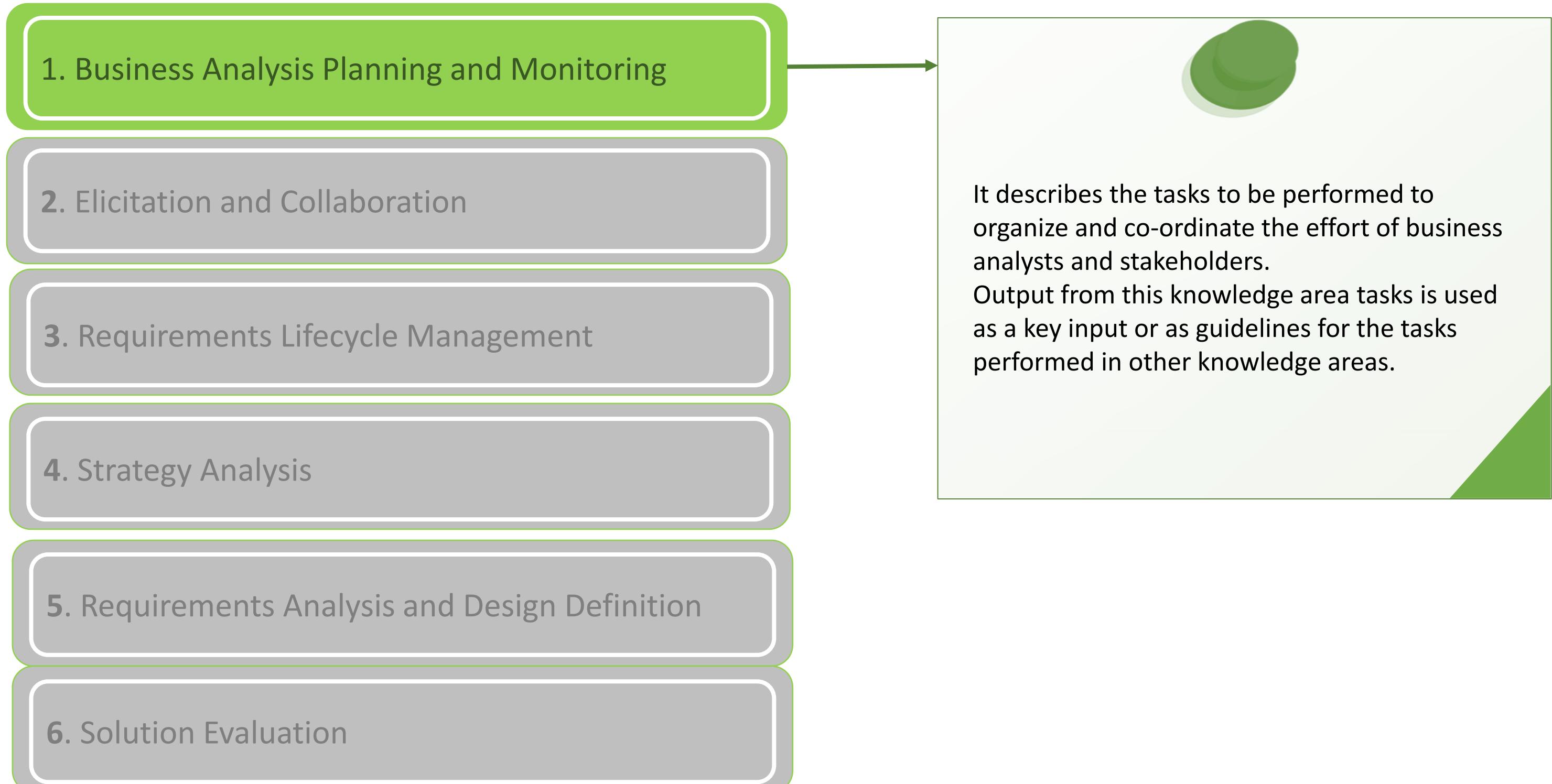
4. Strategy Analysis

5. Requirements Analysis and Design Definition

6. Solution Evaluation

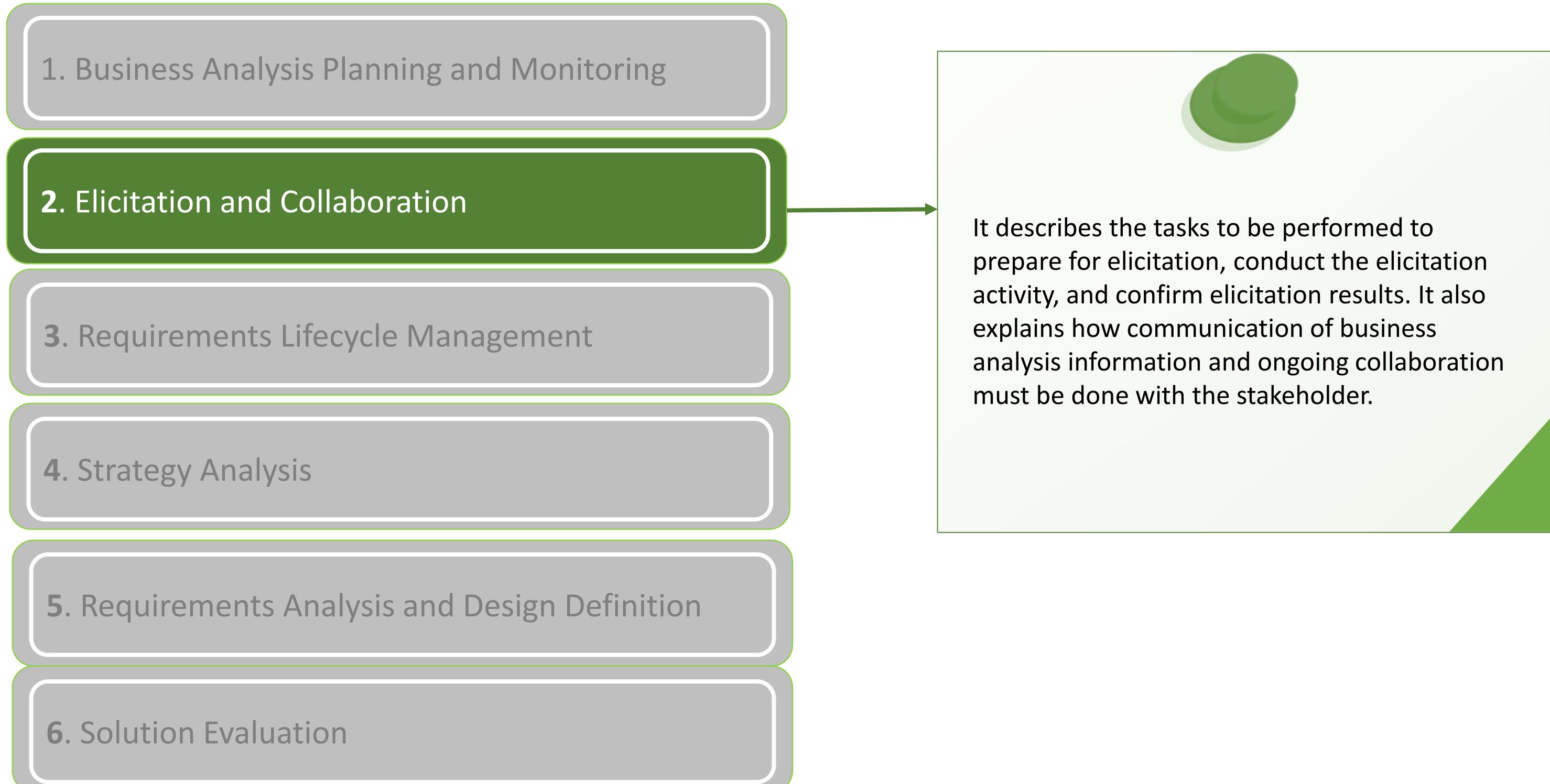
BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



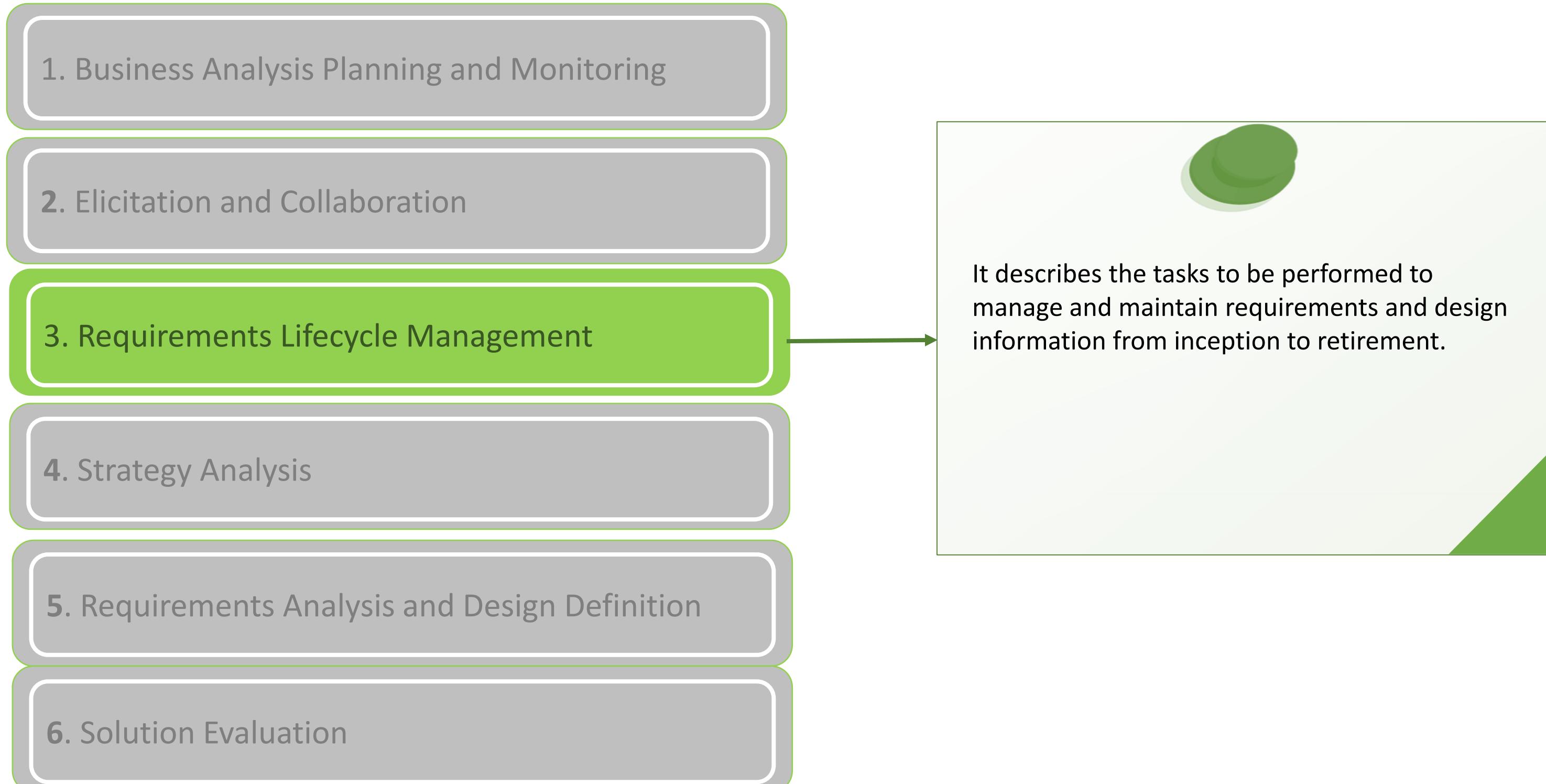
BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS

1. Business Analysis Planning and Monitoring

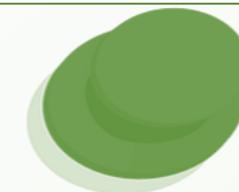
2. Elicitation and Collaboration

3. Requirements Lifecycle Management

4. Strategy Analysis

5. Requirements Analysis and Design Definition

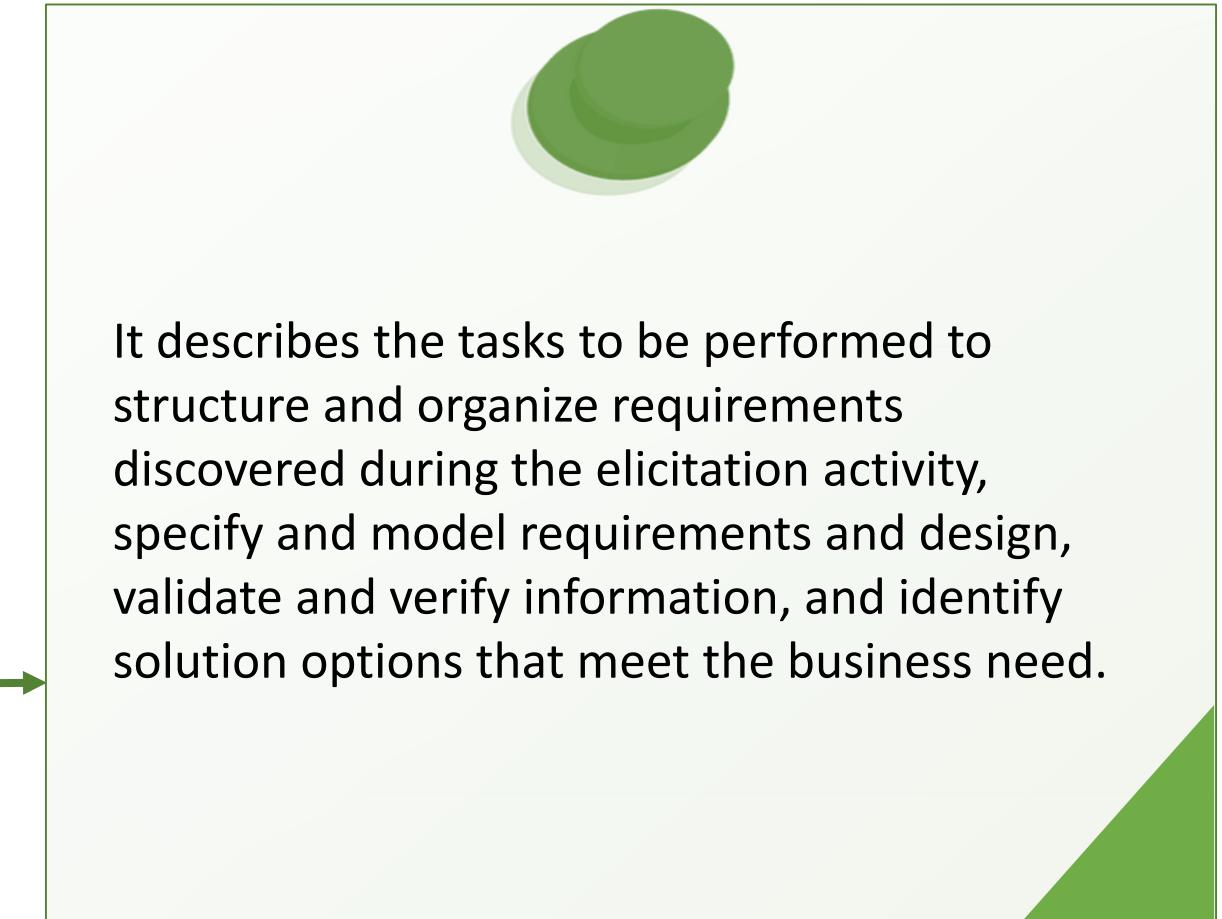
6. Solution Evaluation



It describes the tasks to be performed for collaboration with the stakeholder to identify the real need and enable the organization to address that need. It also explains the tasks to align the resulting strategy for the change with higher- and lower-level strategies to address the need.

BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS

1. Business Analysis Planning and Monitoring

2. Elicitation and Collaboration

3. Requirements Lifecycle Management

4. Strategy Analysis

5. Requirements Analysis and Design Definition

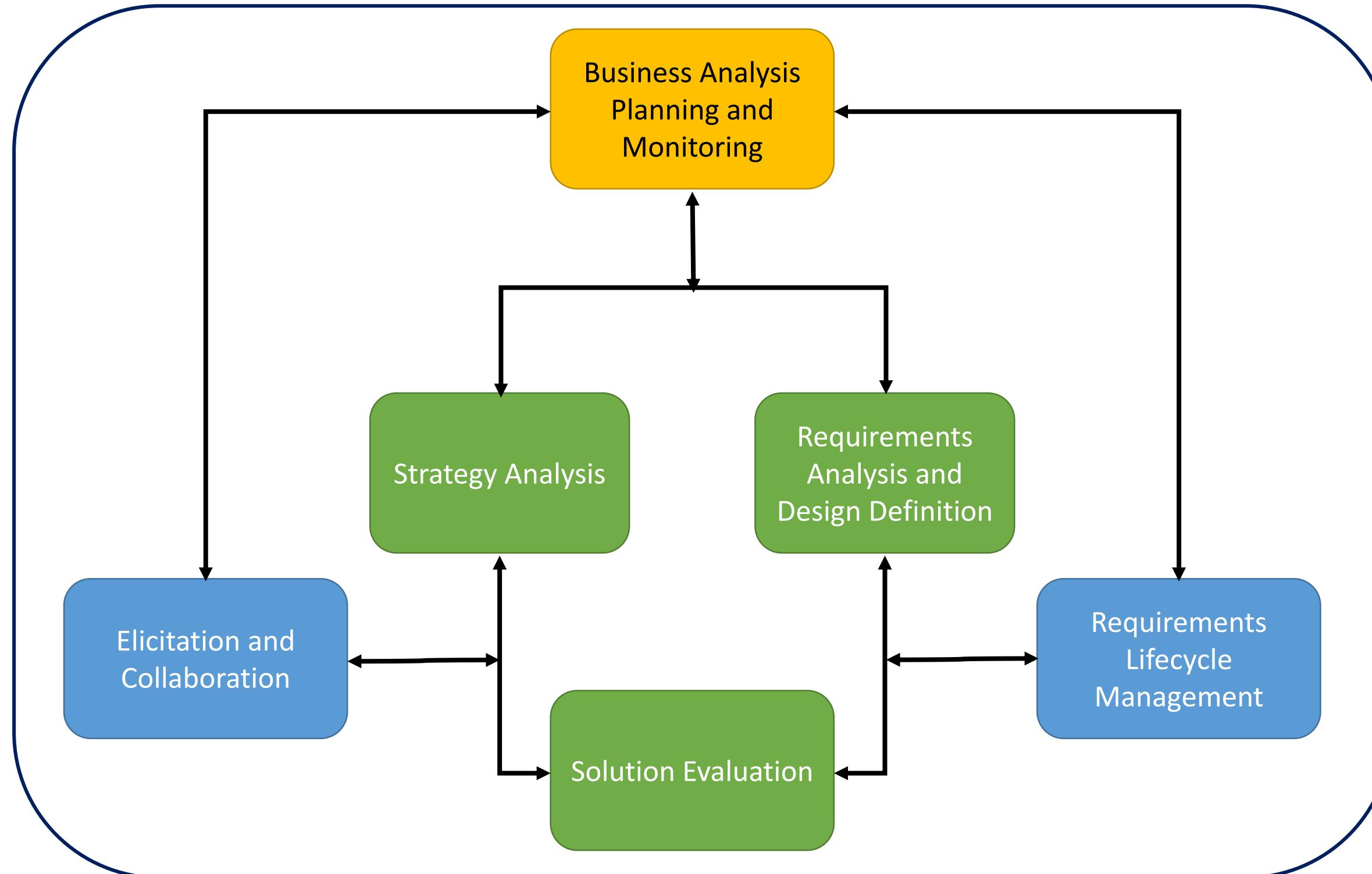
6. Solution Evaluation



It describes the tasks to be performed to assess the performance of and value delivered by a solution and recommend actions to be taken to realize the full value of the solution.

BUSINESS ANALYSIS BODY OF KNOWLEDGE

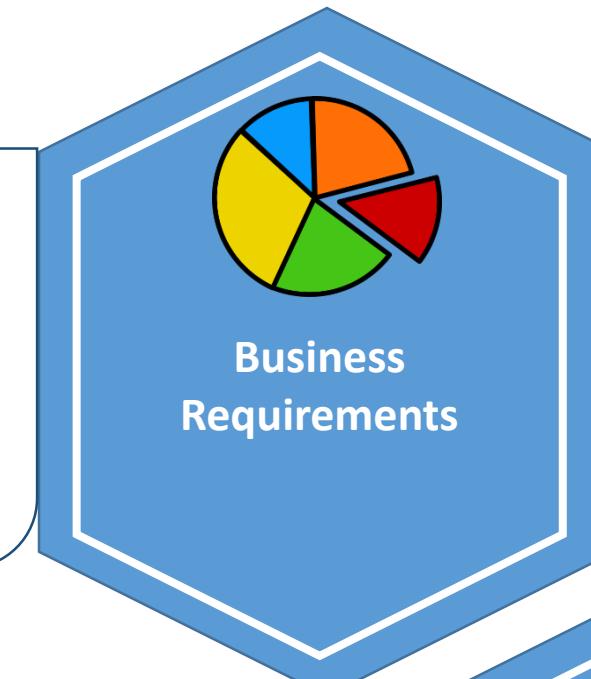
KNOWLEDGE AREAS – RELATIONSHIPS



REQUIREMENTS

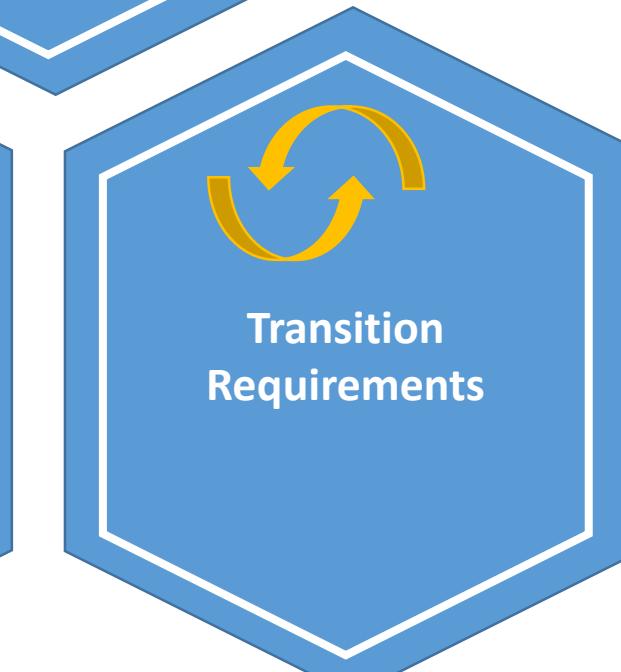
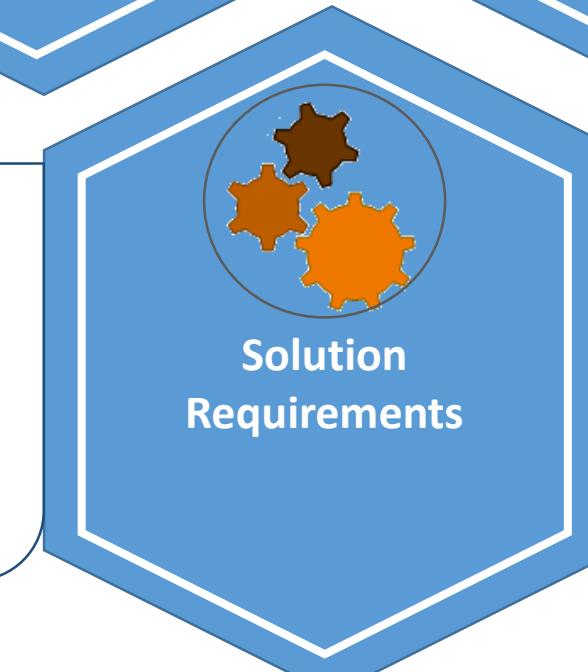
REQUIREMENTS CLASSIFICATION

Statements of goals, objectives, and outcome that describe why a change has been initiated



Describe the needs of the stakeholders that must be met to achieve the business requirements

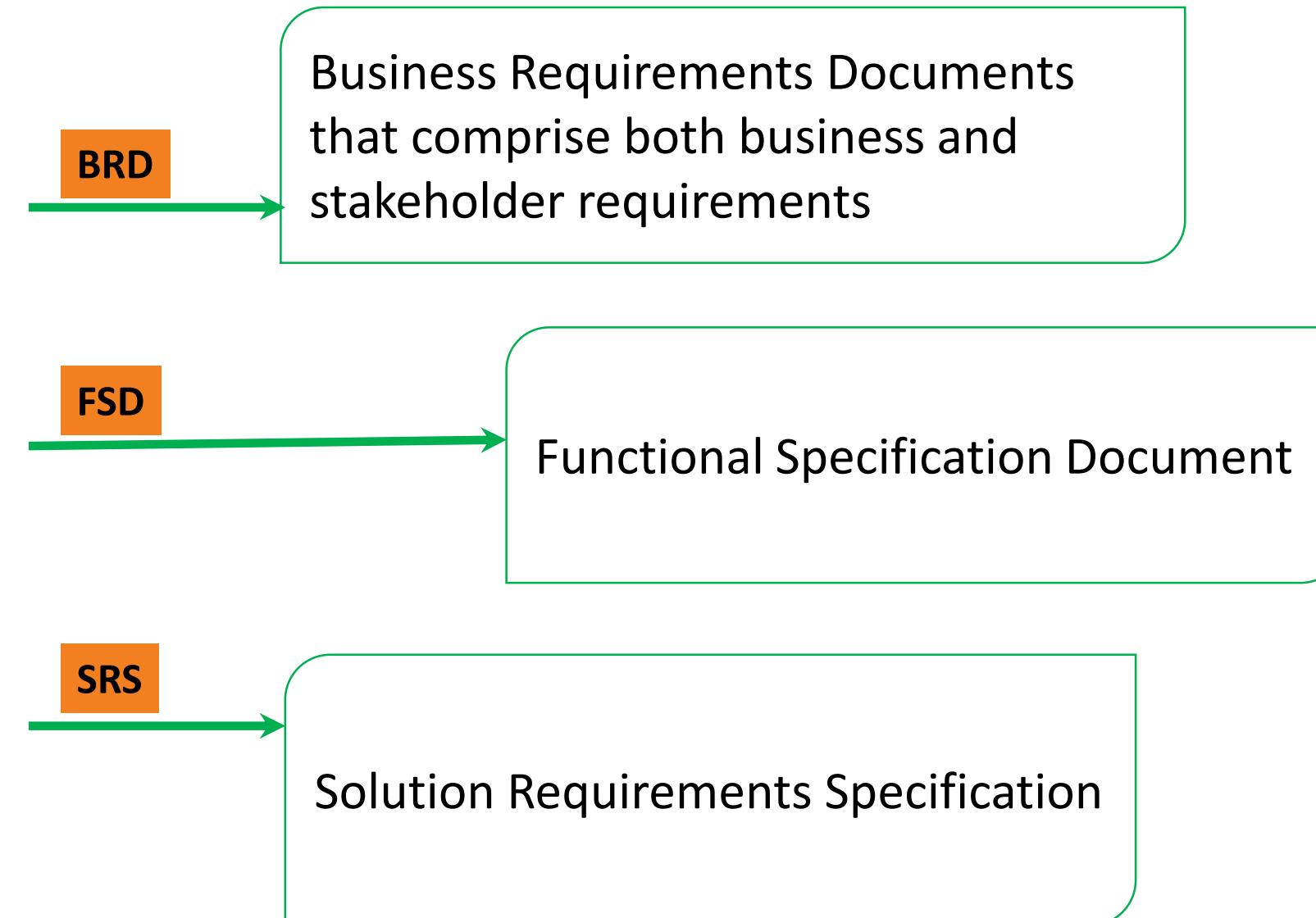
Describe the capabilities and qualities of a solution that meets stakeholder requirements; can be *Functional requirements* or *Non-functional requirements*



Describe the capabilities that the solution must have to facilitate transition **of the organization** from the current state to the future state

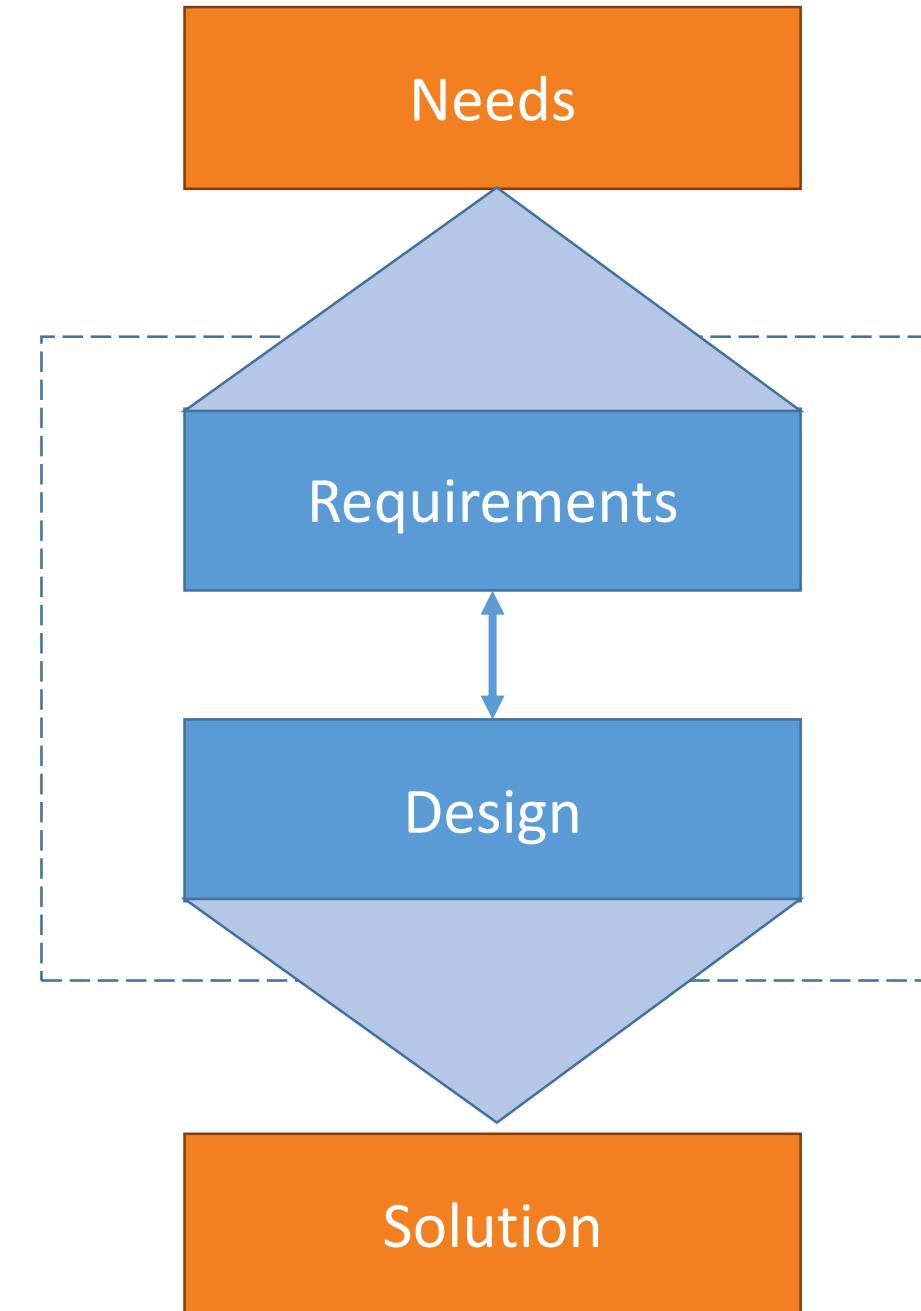
REQUIREMENTS (contd.)

REQUIREMENTS DOCUMENTS



REQUIREMENTS AND DESIGN DESIGN CYCLE

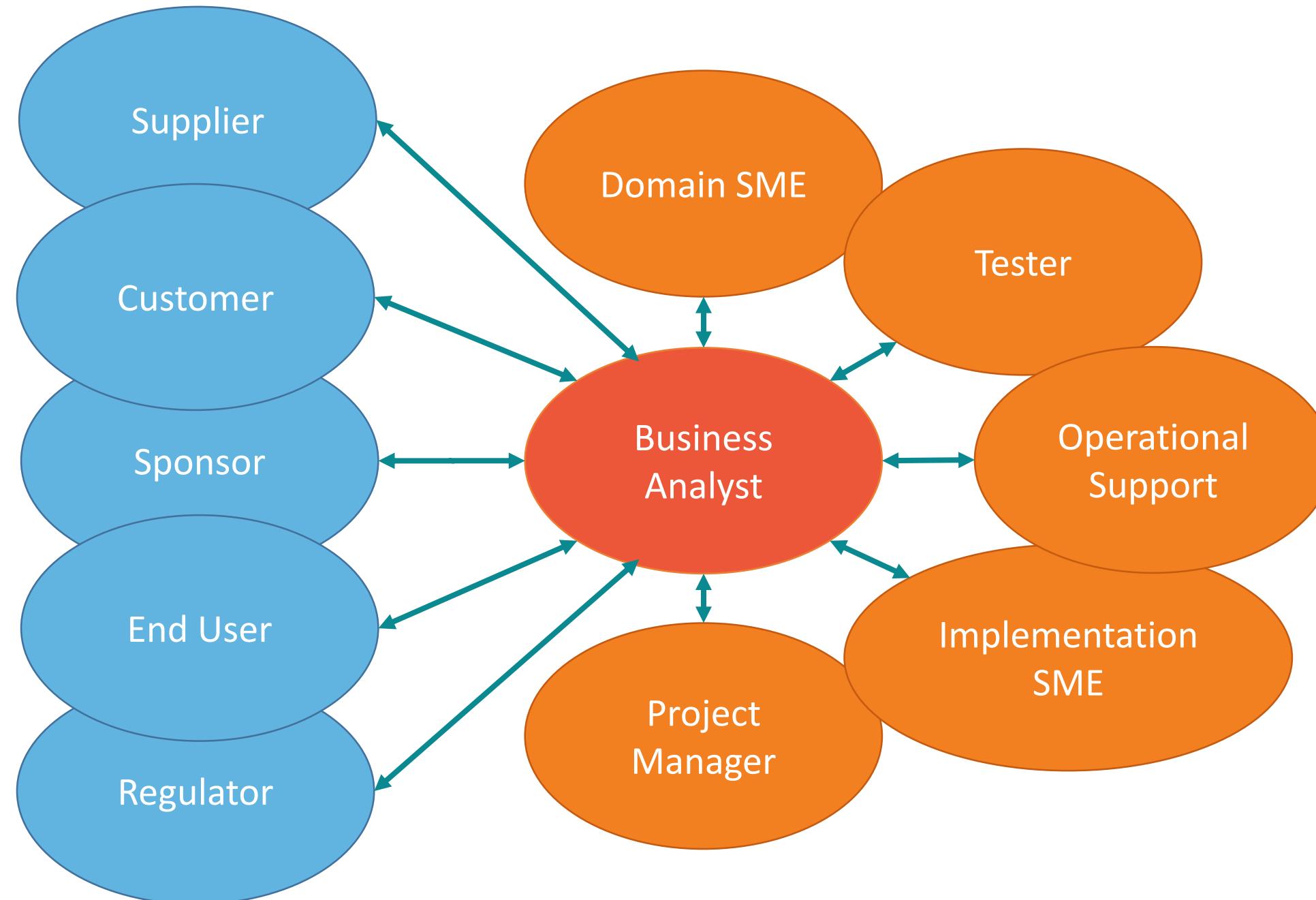
	<p>Requirements lead to design.</p>	
	<p>Requirements may be used to define design.</p>	
	<p>Requirements are focused on needs and design is focused on the solution.</p>	
	<p>Requirements and design could be recursive.</p>	
	<p>A Business Analyst reviews designs to ensure they align with the requirements.</p>	



BABOK® GUIDE SPECIFICATIONS

STAKEHOLDERS

A *stakeholder* is an individual or group that a Business Analyst is likely to interact with directly or indirectly.



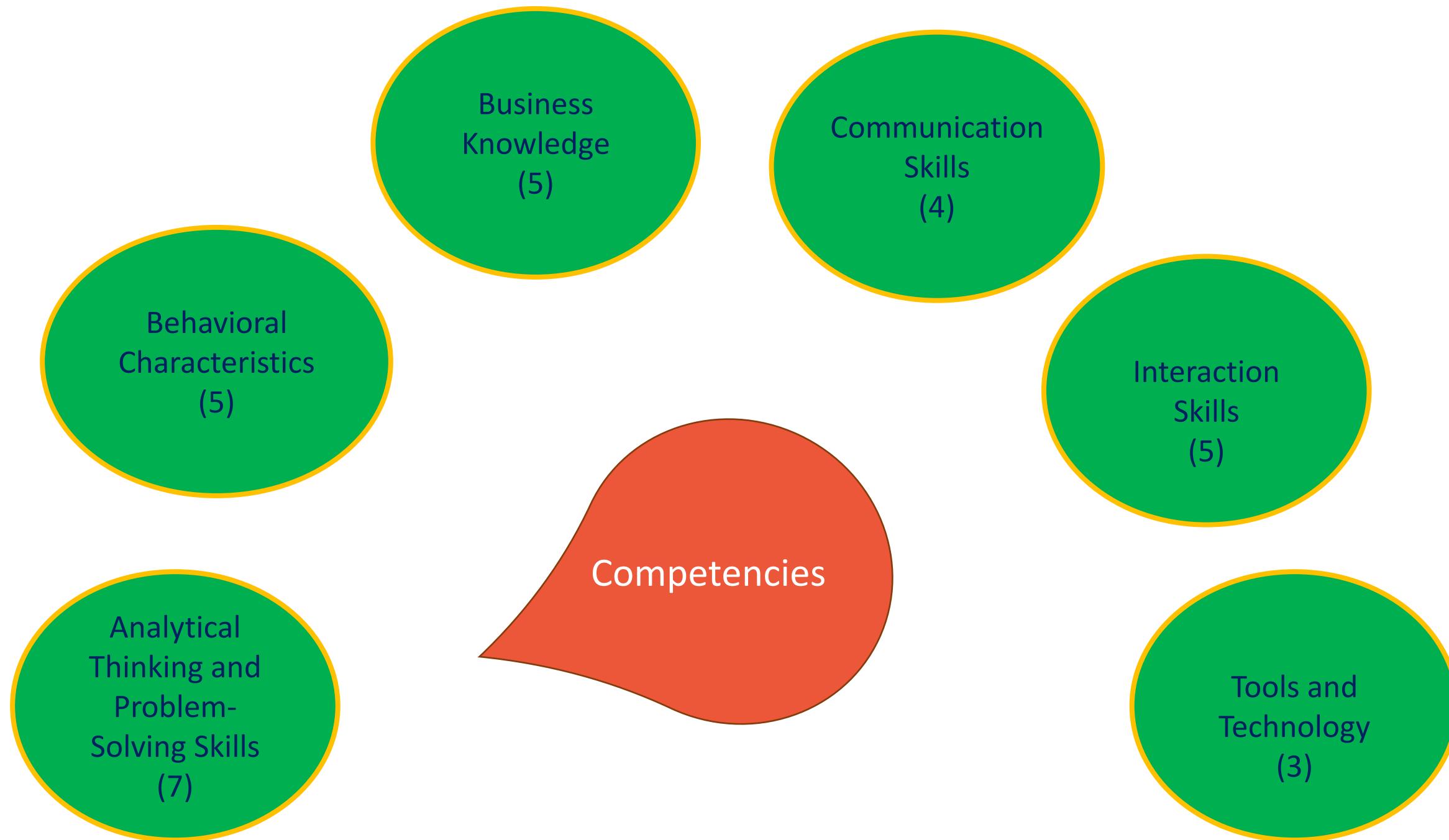
Lesson 2: Introduction to BABOK® V3

Topic 2.2: Competencies of a Business Analyst

✓ Competencies of a business analyst

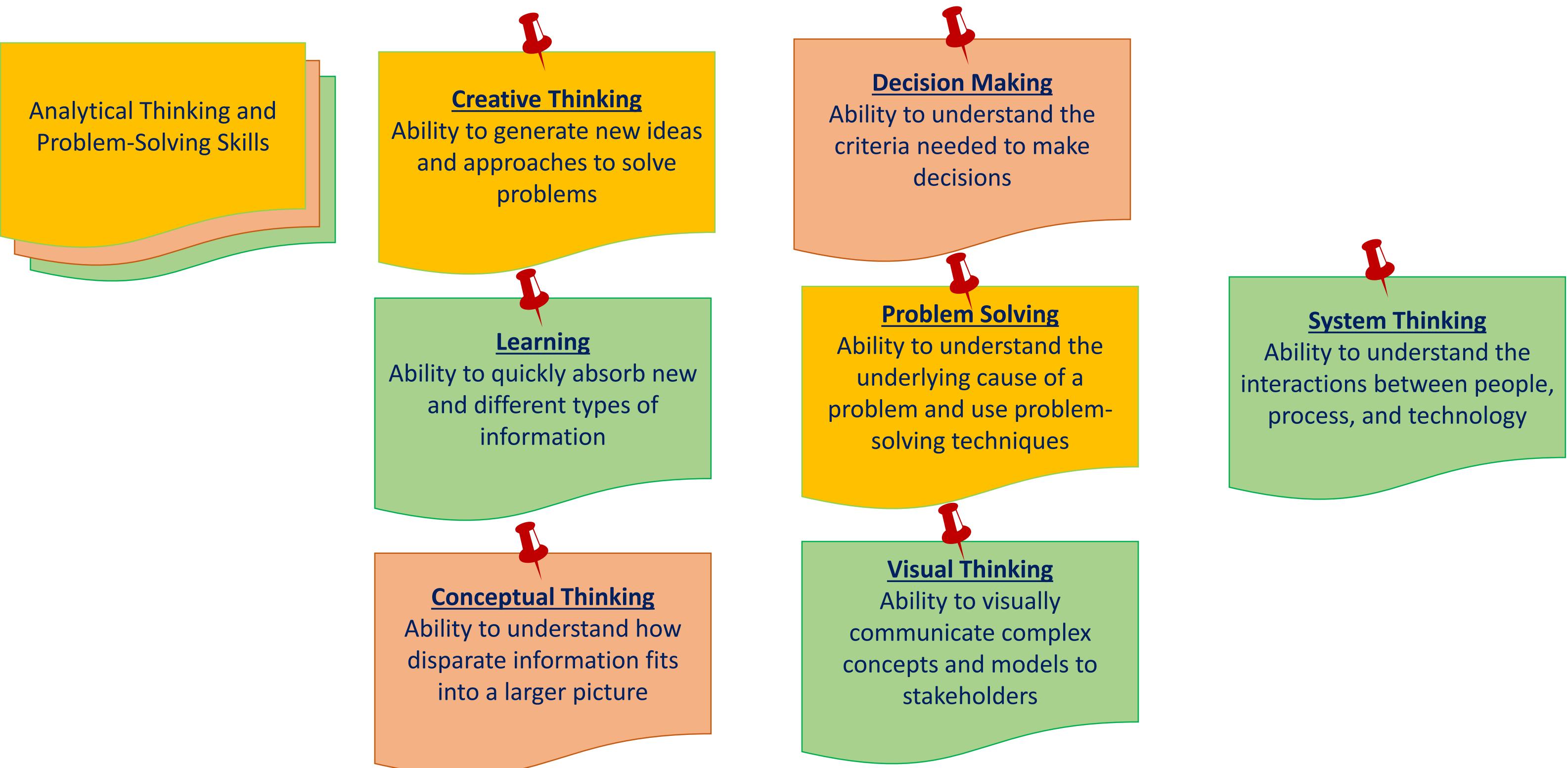
COMPETENCIES OF A BUSINESS ANALYST

CATEGORIES



COMPETENCIES OF A BUSINESS ANALYST (contd.)

ANALYTICAL THINKING AND PROBLEM SOLVING



COMPETENCIES OF A BUSINESS ANALYST (contd.)

BEHAVIORAL CHARACTERISTICS

Behavioral Characteristics

Ethics

Enable a business analyst to earn the respect of stakeholders

Personal Accountability

Enables a business analyst to achieve target goals

Trustworthiness

Perception that one is worthy of trust

Organization and Time Management

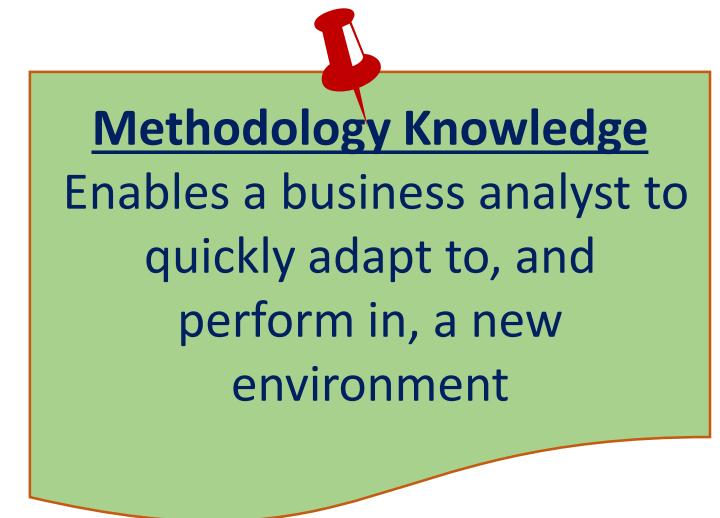
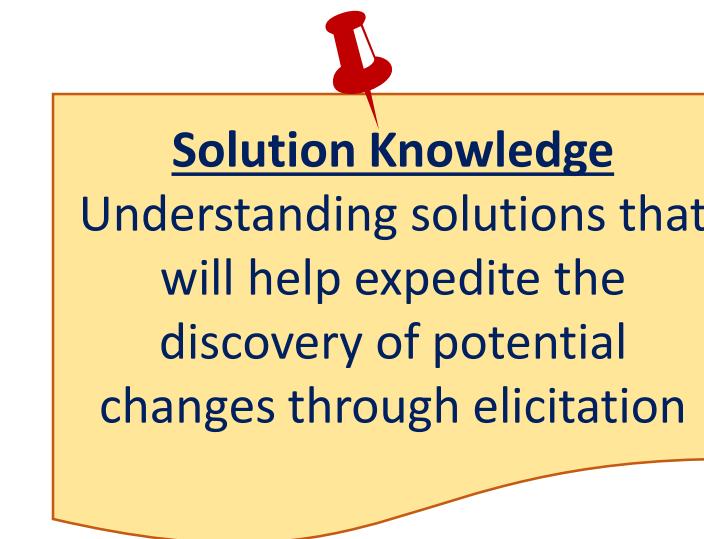
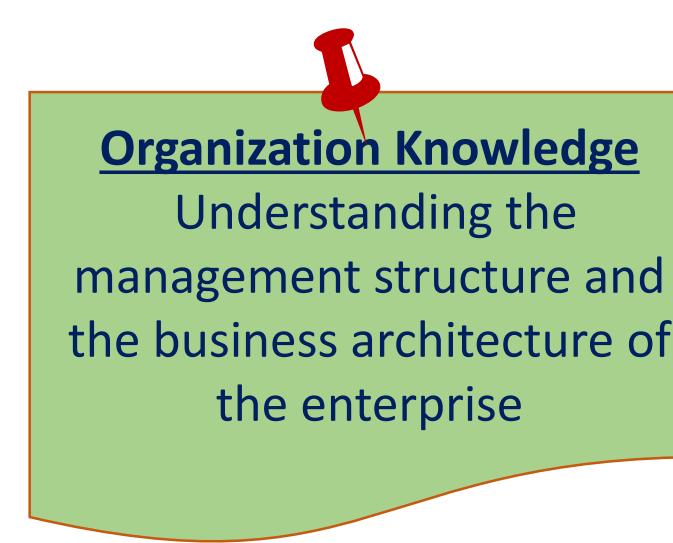
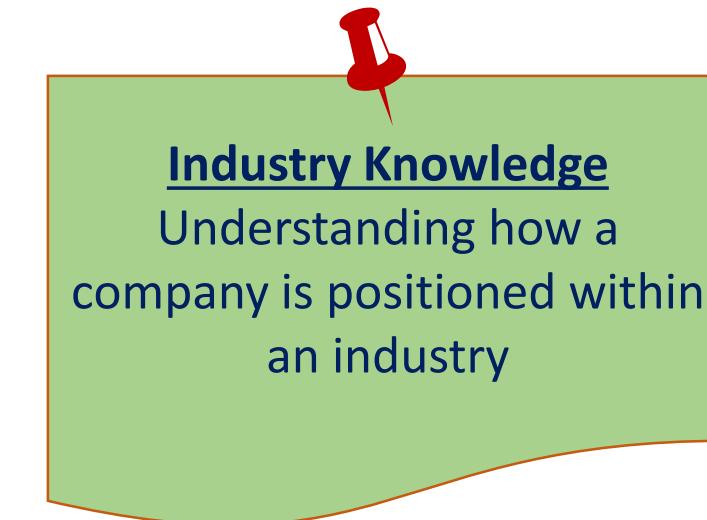
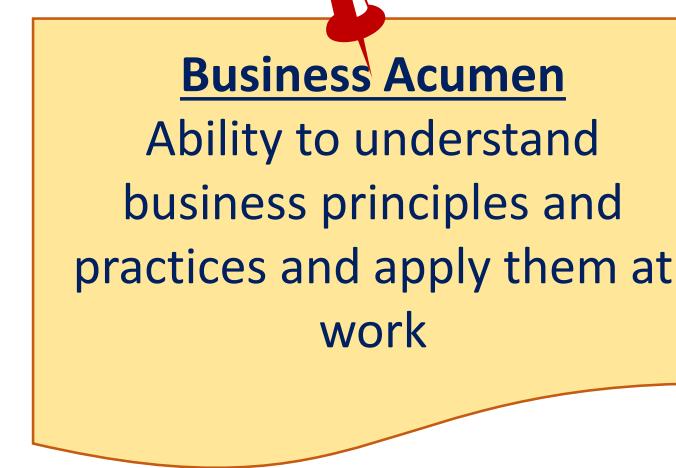
Helps perform tasks effectively and use work time efficiently

Adaptability

Ability to adjust behavioral style, methods, and approach to the environment

COMPETENCIES OF A BUSINESS ANALYST (contd.)

BUSINESS KNOWLEDGE

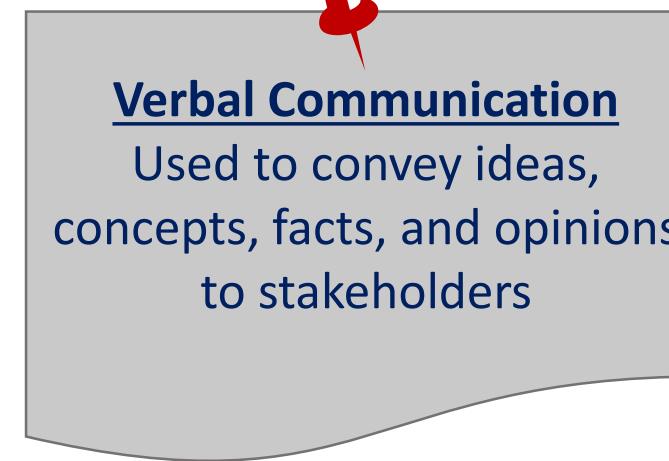


COMPETENCIES OF A BUSINESS ANALYST (contd.)

COMMUNICATION SKILLS



Communication skills refers to the ability to communicate effectively.



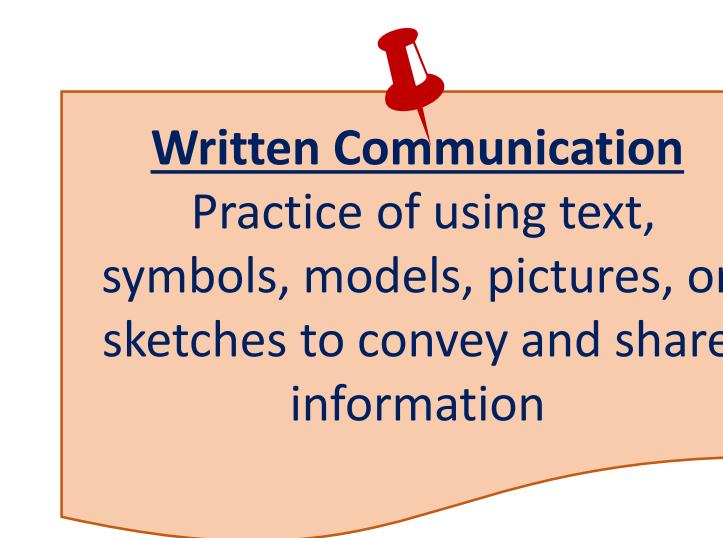
Verbal Communication

Used to convey ideas, concepts, facts, and opinions to stakeholders



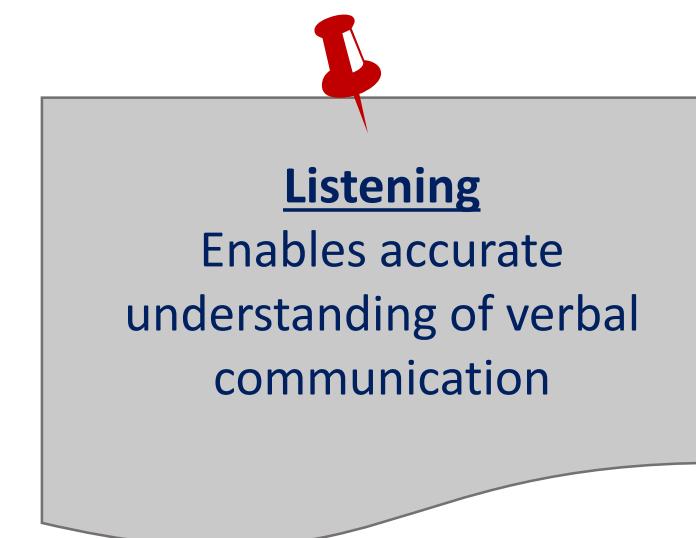
Nonverbal Communication

Enables sending and receiving messages through body movements, postures, facial expressions, gestures, and eye contact



Written Communication

Practice of using text, symbols, models, pictures, or sketches to convey and share information

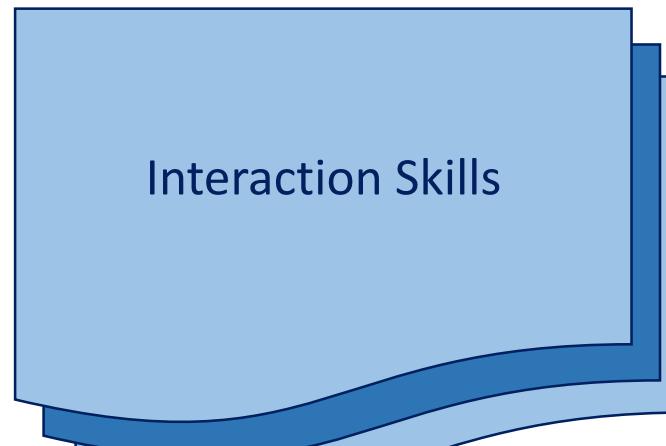


Listening

Enables accurate understanding of verbal communication

COMPETENCIES OF A BUSINESS ANALYST (contd.)

INTERACTION SKILLS



Interaction Skills include the ability to relate to and co-operate and communicate with different kinds of people.

Facilitation
Ability to moderate discussions within a group

Leadership and Influencing
Involves motivating people to act in ways that enable them to work together

Teamwork
Enables working with team members effectively

Negotiation
Involves mediating discussions and resolving differences in teams

Teaching
Enables a business analyst to effectively communicate business information, concepts, ideas, and issues

COMPETENCIES OF A BUSINESS ANALYST (contd.)

TOOLS AND TECHNOLOGY SKILLS

Tools and Technology Skills

Office Productivity

Helps document and track information and artifacts

Business Analysis

Helps model, diagram, document, and manage the output of business analysis activities

Communication

Helps perform business analysis activities, manage teams, and collaborate with stakeholders

A business analyst uses a variety of software to support communication and collaboration, create and maintain requirement artifacts, and increase overall productivity.

Lesson 2: Introduction to BABOK® V3

Topic 2.3: Business Analysis Techniques

✓ Techniques referred to by BABOK V3

BUSINESS ANALYSIS TECHNIQUES

50 TECHNIQUES

10.1 Acceptance and Evaluation Criteria	10.11 Concept Modelling	10.21 Focus Groups	10.31 Observation	10.41 Scope Modelling
10.2 Backlog Management	10.12 Data Dictionary	10.22 Functional Decomposition	10.32 Organizational Modelling	10.42 Sequence Diagrams
10.3 Balanced Scorecard	10.13 Data Flow Diagrams	10.23 Glossary	10.33 Prioritization	10.43 Stakeholder List, Map, or Personas
10.4 Benchmarking and Market Analysis	10.14 Data Mining	10.24 Interface Analysis	10.34 Process Analysis	10.44 State Modelling
10.5 Brainstorming	10.15 Data Modelling	10.25 Interviews	10.35 Process Modelling	10.45 Survey or Questionnaire
10.6 Business Capability Analysis	10.16 Decision Analysis	10.26 Item Tracking	10.36 Prototyping	10.46 SWOT Analysis
10.7 Business Cases	10.17 Decision Modelling	10.27 Lessons Learned	10.37 Reviews	10.47 Use Cases and Scenarios
10.8 Business Model Canvas	10.18 Document Analysis	10.28 Metrics and Key Performance Indicators (KPIs)	10.38 Risk Analysis and Management	10.48 User Stories
10.9 Business Rules Analysis	10.19 Estimation	10.29 Mind Mapping	10.39 Roles and Permissions Matrix	10.49 Vendor Assessment
10.10 Collaborative Games	10.20 Financial Analysis	10.30 Non functional Requirements Analysis	10.40 Root Cause Analysis	10.50 Workshops

Lesson 2: Introduction to BABOK® V3

Topic 2.4: Business Analysis Perspectives

✓ Business Analysis perspectives

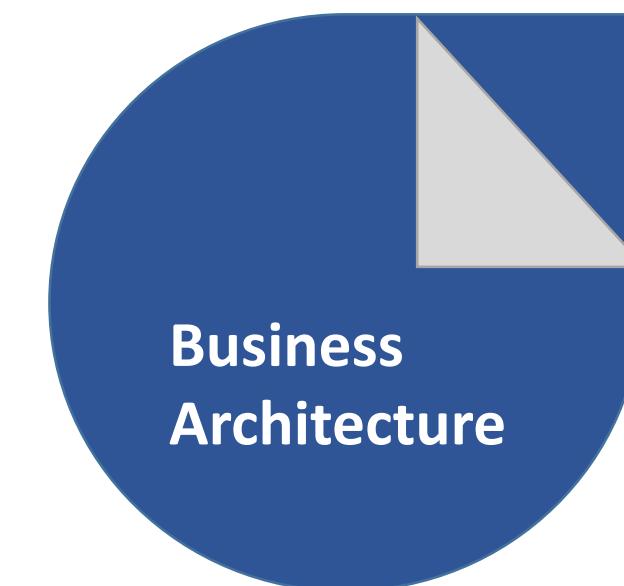
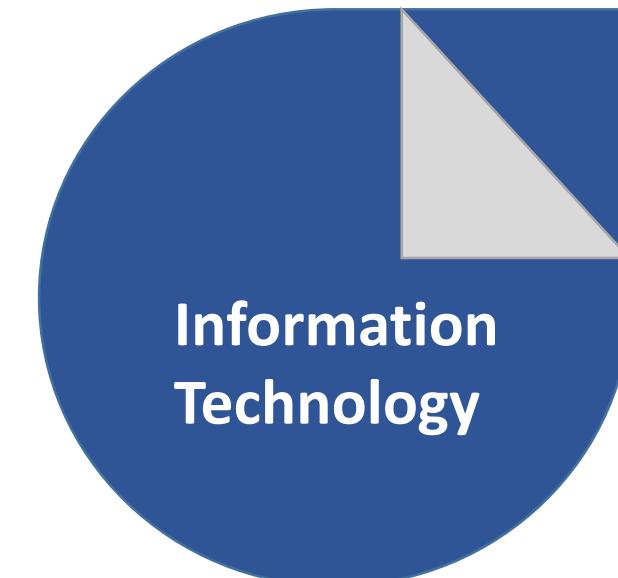
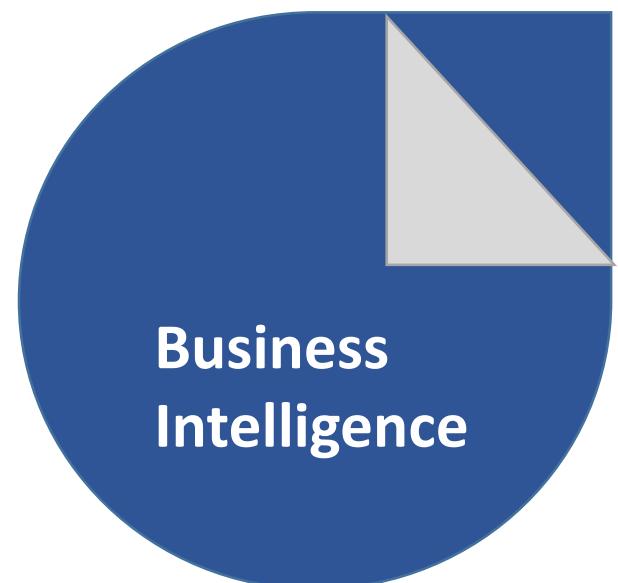
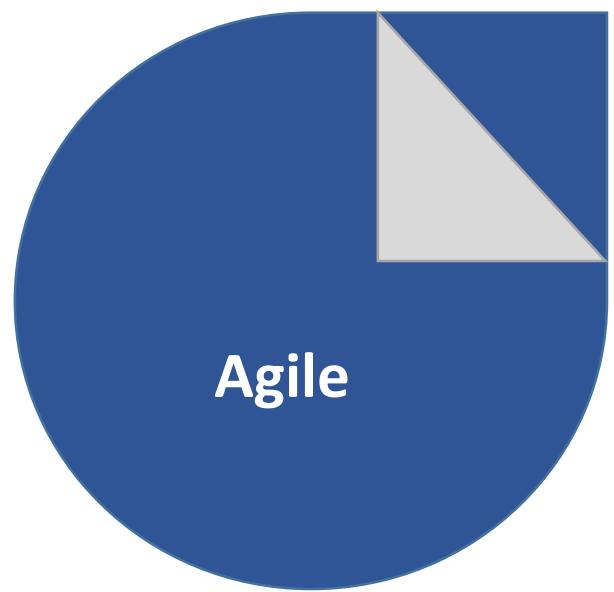
BUSINESS ANALYSIS PERSPECTIVES

FIVE BUSINESS ANALYSIS PERSPECTIVES

Perspectives provide focus to tasks and techniques specific to the context of an initiative.

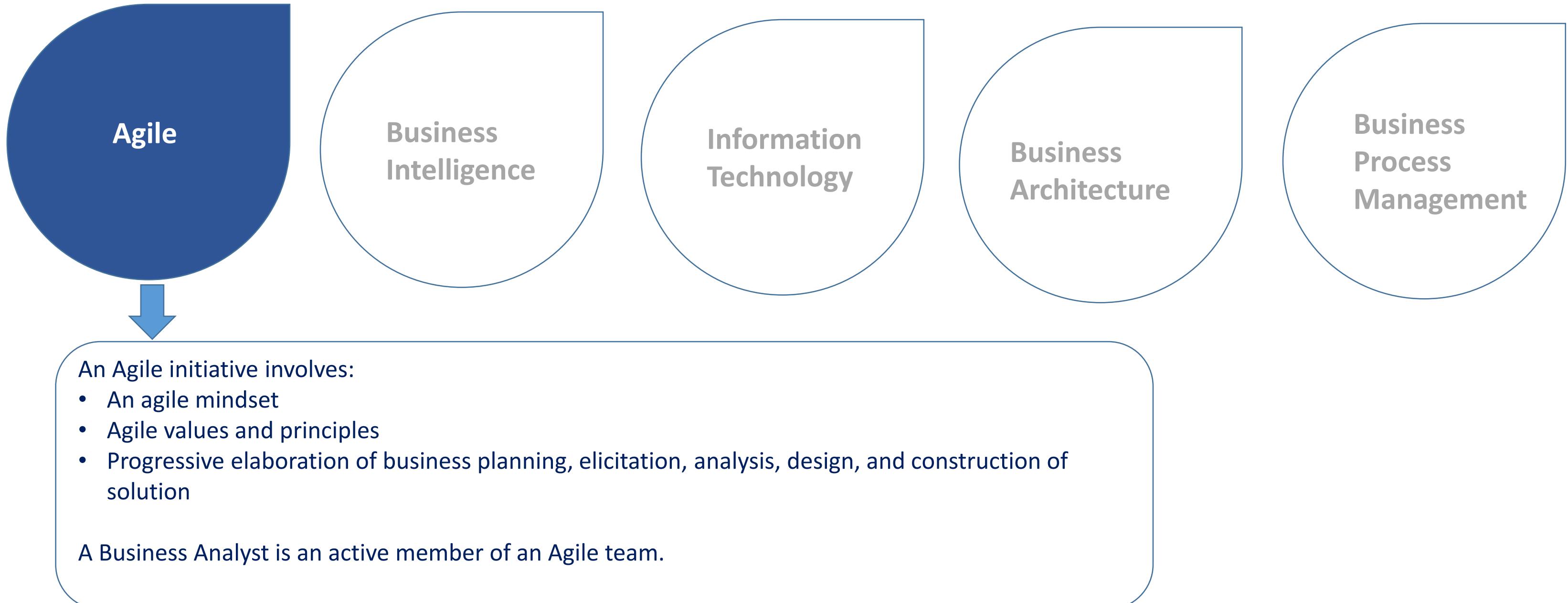
Perspectives are not mutually exclusive. Most initiatives are likely to engage one or more perspectives.

BABOK® includes five perspectives.



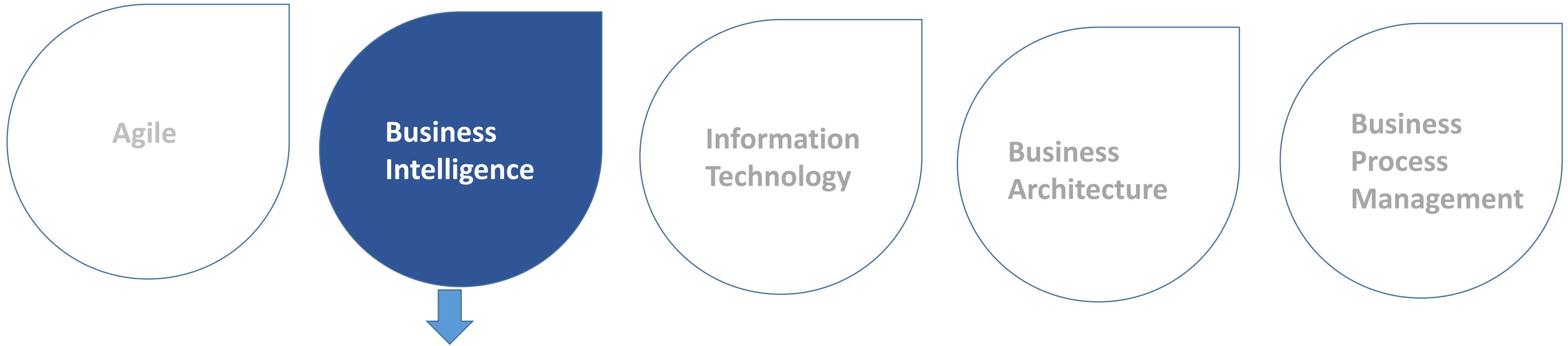
BUSINESS ANALYSIS PERSPECTIVES (contd.)

FIVE BUSINESS ANALYSIS PERSPECTIVES



BUSINESS ANALYSIS PERSPECTIVES (contd.)

FIVE BUSINESS ANALYSIS PERSPECTIVES

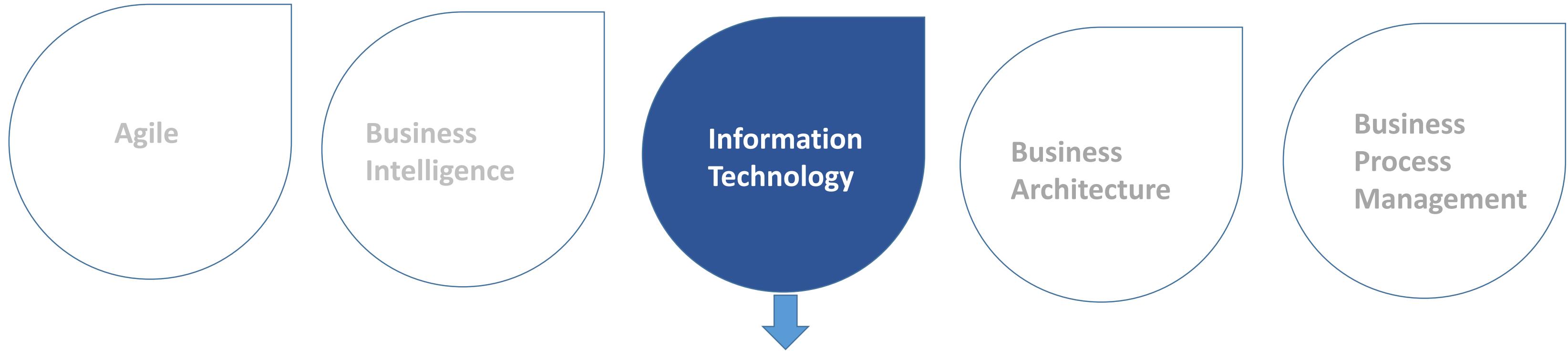


Business Intelligence:

- Highlights the characteristics of business analysis in the context of transformation, integration, and enhancing data
- Is the transformation of data into valuable information
- Helps stakeholders make informed decisions
- Helps stakeholders manage strategic, tactical, and operational performance

BUSINESS ANALYSIS PERSPECTIVES (contd.)

FIVE BUSINESS ANALYSIS PERSPECTIVES

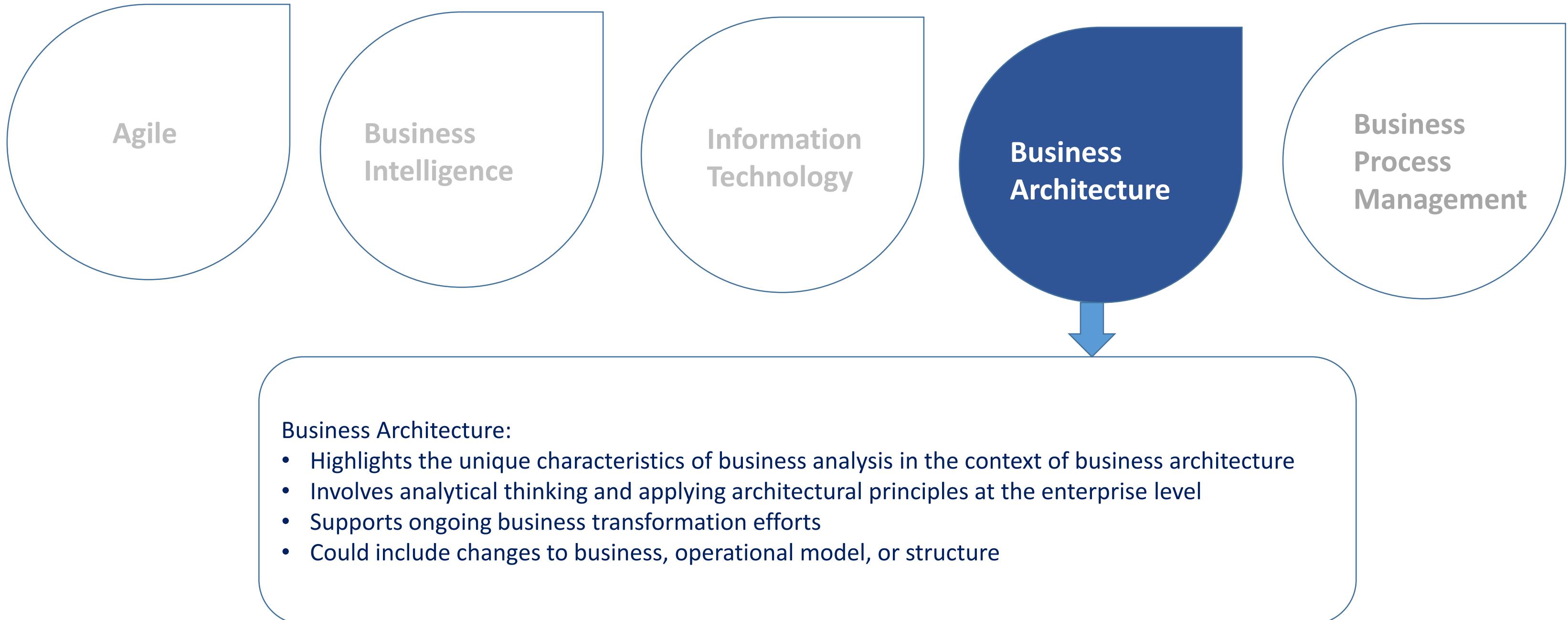


Information Technology:

- This perspective highlights the characteristics of business analysis in the context of the impact of change on IT systems in an organization.
- Organizations need to undertake initiatives to upgrade or replace IT systems.
- A business analyst plays the role of a translator between business and technology teams in the change process.

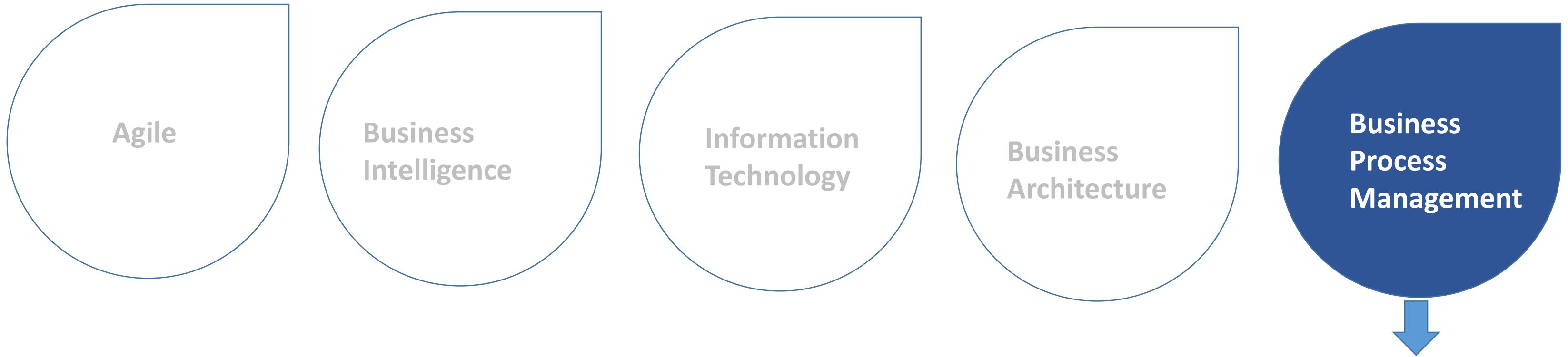
BUSINESS ANALYSIS PERSPECTIVES (contd.)

FIVE BUSINESS ANALYSIS PERSPECTIVES



BUSINESS ANALYSIS PERSPECTIVES (contd.)

FIVE BUSINESS ANALYSIS PERSPECTIVES



Business Process Management:

- Highlights the characteristics of business analysis in the context of developing or improving business processes
- Focuses on how an organization works across multiple functional areas to improve business processes
- Is an integral part of ongoing management and operations of an organization



QUIZ
1

Which of the following is NOT a component of the Business Analysis Core Concept Model™ (BACCM™)?

- a. Change
- b. Solution
- c. Content
- d. Stakeholder



QUIZ
1

Which of the following is NOT a component of the Business Analysis Core Concept Model™ (BACCM™)?

- a. Change
- b. Solution
- c. Content
- d. Stakeholder



The correct answer is **c.**

Explanation: Content is not a component of Business Analysis Core Concept Model™ (BACCM). The components are Change, Need, Solution, Stakeholder, Value, and Context.

QUIZ
2

_____ are focused on the needs, and _____ are focused on the solution.

- a. Problems; Requirements
- b. Requirements; Designs
- c. Solutions; Requirements
- d. Designs; Requirements



QUIZ
2

_____ are focused on the needs, and _____ are focused on the solution.

- a. Problems; Requirements
- b. Requirements; Designs
- c. Solutions; Requirements
- d. Designs; Requirements



The correct answer is **b**.

Explanation: According to the Requirements and Design Cycle, **Requirements** are focused on the needs and **Designs** are focused on the solution.

QUIZ
3

Which of the following is a business analysis knowledge area?

- a. Elicitation and Collaboration
- b. Enterprise Analysis
- c. Solution Assessment and Validation
- d. Requirements Analysis and Management



QUIZ
3

Which of the following is a business analysis knowledge area?

- a. Elicitation and Collaboration
- b. Enterprise Analysis
- c. Solution Assessment and Validation
- d. Requirements Analysis and Management



The correct answer is **a.**

Explanation: *Elicitation and Collaboration* is one of the business analysis knowledge areas.

QUIZ
4

Which of the following is NOT a category of business analyst competencies as defined in BABOK®?

- a. Analytical Thinking and Problem Solving
- b. Communication
- c. Organizational Knowledge
- d. Interaction



QUIZ
4

Which of the following is NOT a category of business analyst competencies as defined in BABOK®?

- a. Analytical Thinking and Problem Solving
- b. Communication
- c. Organizational Knowledge
- d. Interaction



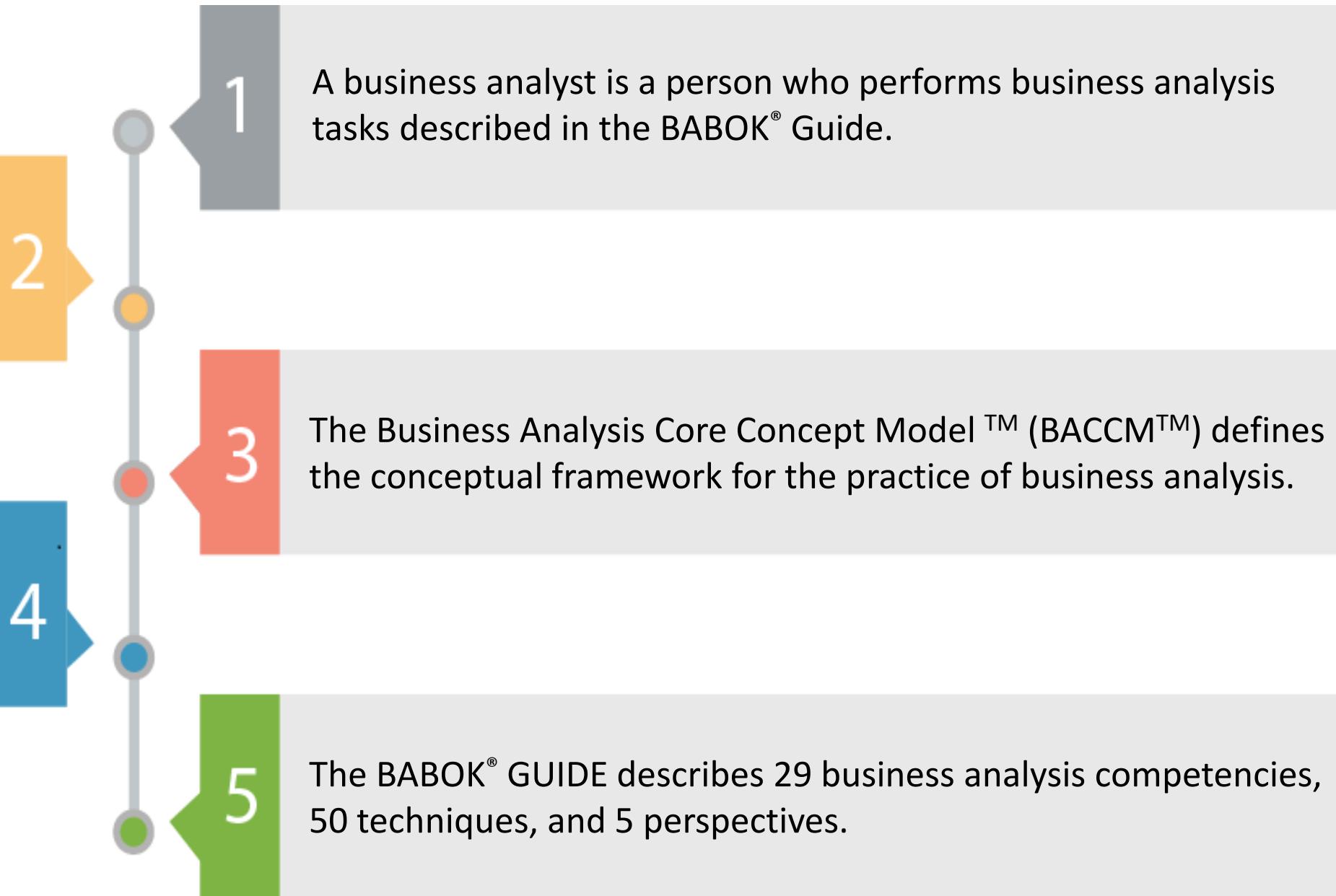
The correct answer is **c.**

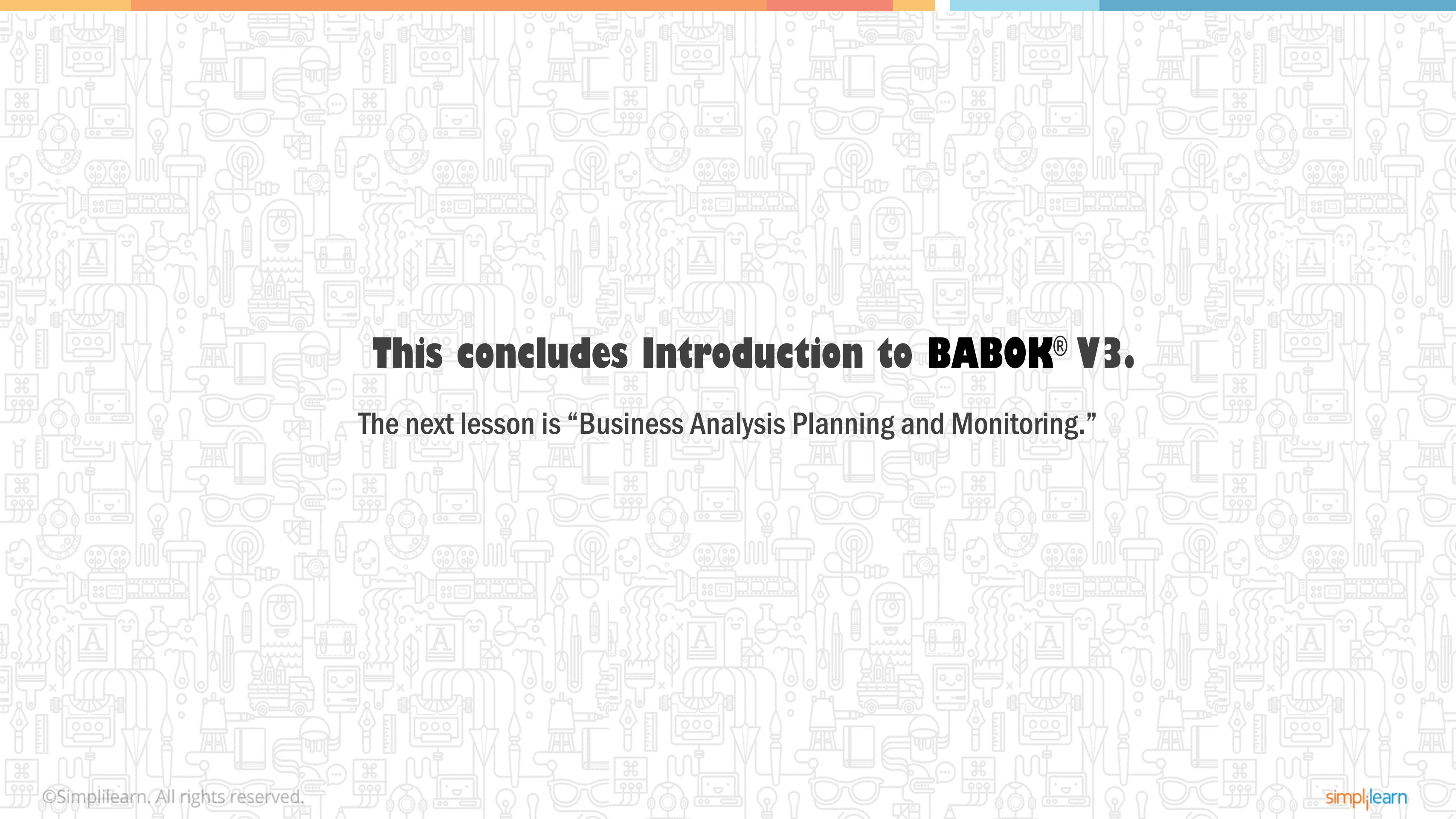
Explanation: Organizational Knowledge is not a category of business analyst competencies. It is, in fact, a core competency of the Business Knowledge category.

KEY TAKEAWAYS

Business analysis is the practice of enabling change in an enterprise by defining needs and recommending solutions that deliver value to stakeholders.

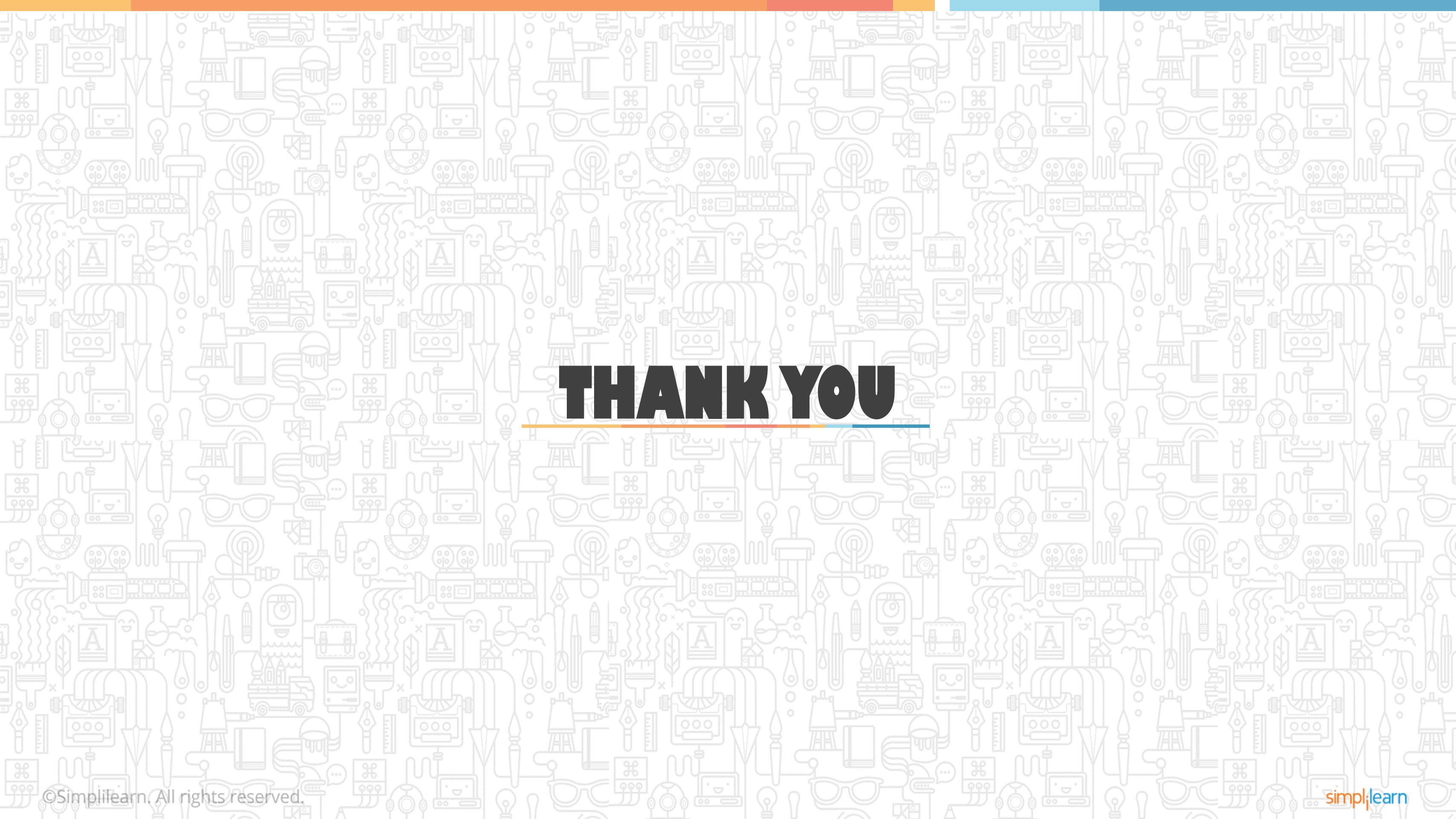
The BABOK® Guide groups business analysis tasks into six knowledge areas.





This concludes Introduction to BABOK® V3.

The next lesson is “Business Analysis Planning and Monitoring.”



THANK YOU

CCBA® Exam Preparation Course

Lesson 3 - Business Analysis Planning and Monitoring



WHAT'S IN IT FOR ME



How to plan the Business Analysis Approach

How to plan Business Analysis Information Management and Governance

Understand tools and techniques used in Business Analysis Planning and Monitoring

How to plan Stakeholder Engagement

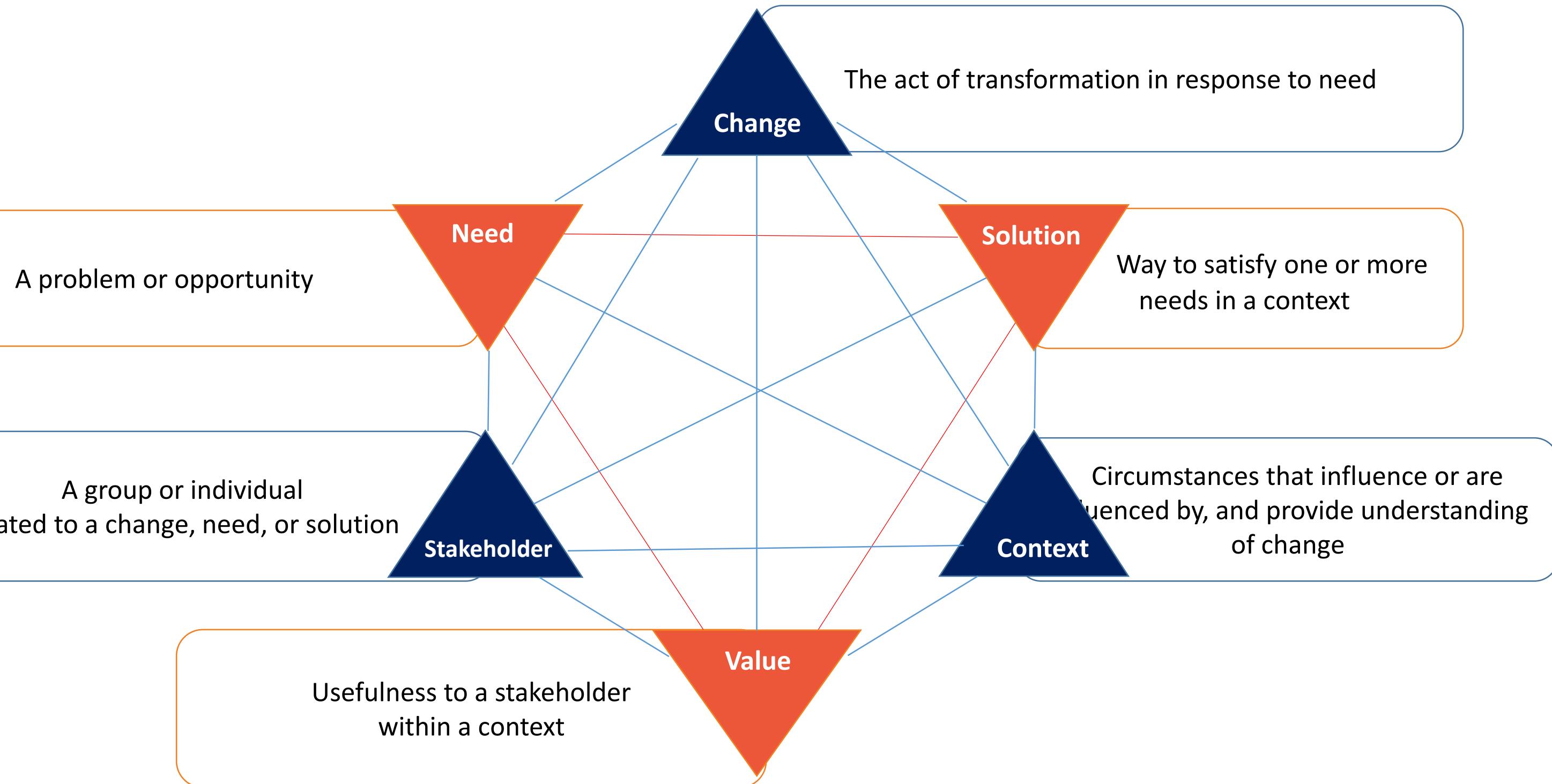
How to identify Business Analysis Performance Improvements

INTRODUCTION



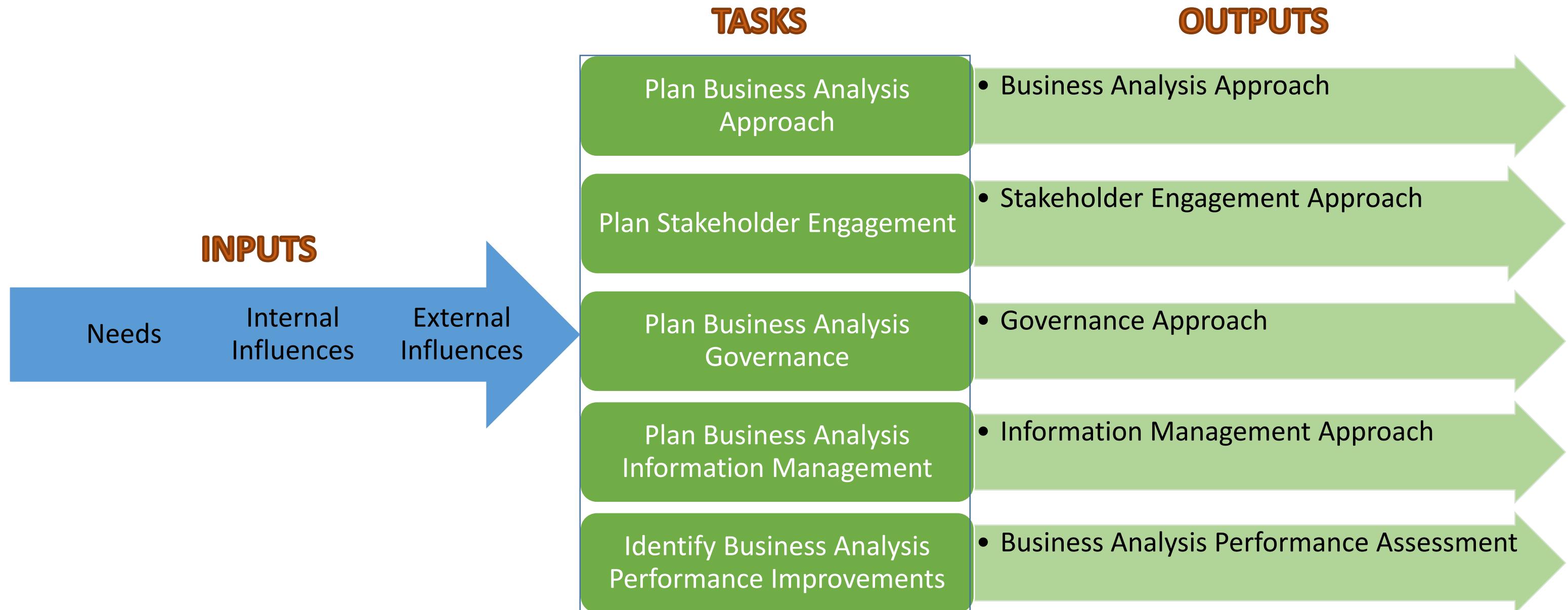
BUSINESS ANALYSIS PLANNING AND MONITORING

INTRODUCTION



BUSINESS ANALYSIS PLANNING AND MONITORING

INPUT, TASKS, AND OUTPUT



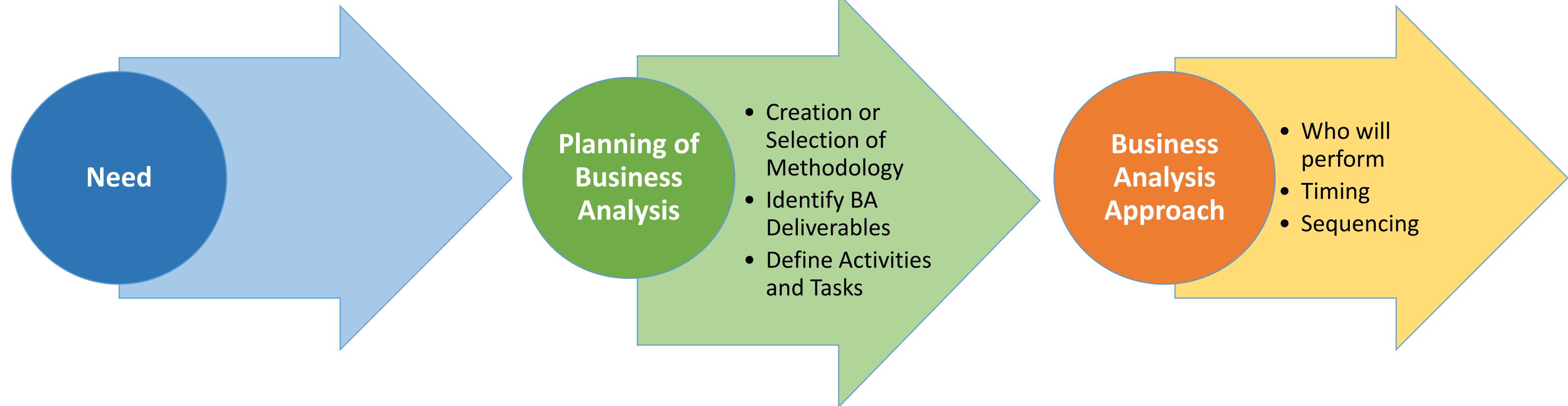
Lesson 3: Business Analysis Planning and Monitoring

Topic 3.1: Plan Business Analysis Approach

✓ *define overall method to conduct **business analysis activities***

PLAN BUSINESS ANALYSIS APPROACH

PURPOSE



PLAN BUSINESS ANALYSIS APPROACH

ELEMENTS

Planning methods falls between Predictive and Adaptive approaches

Formality and level of details of BA deliverables are based on the planning approach

Identify and break down activities into tasks

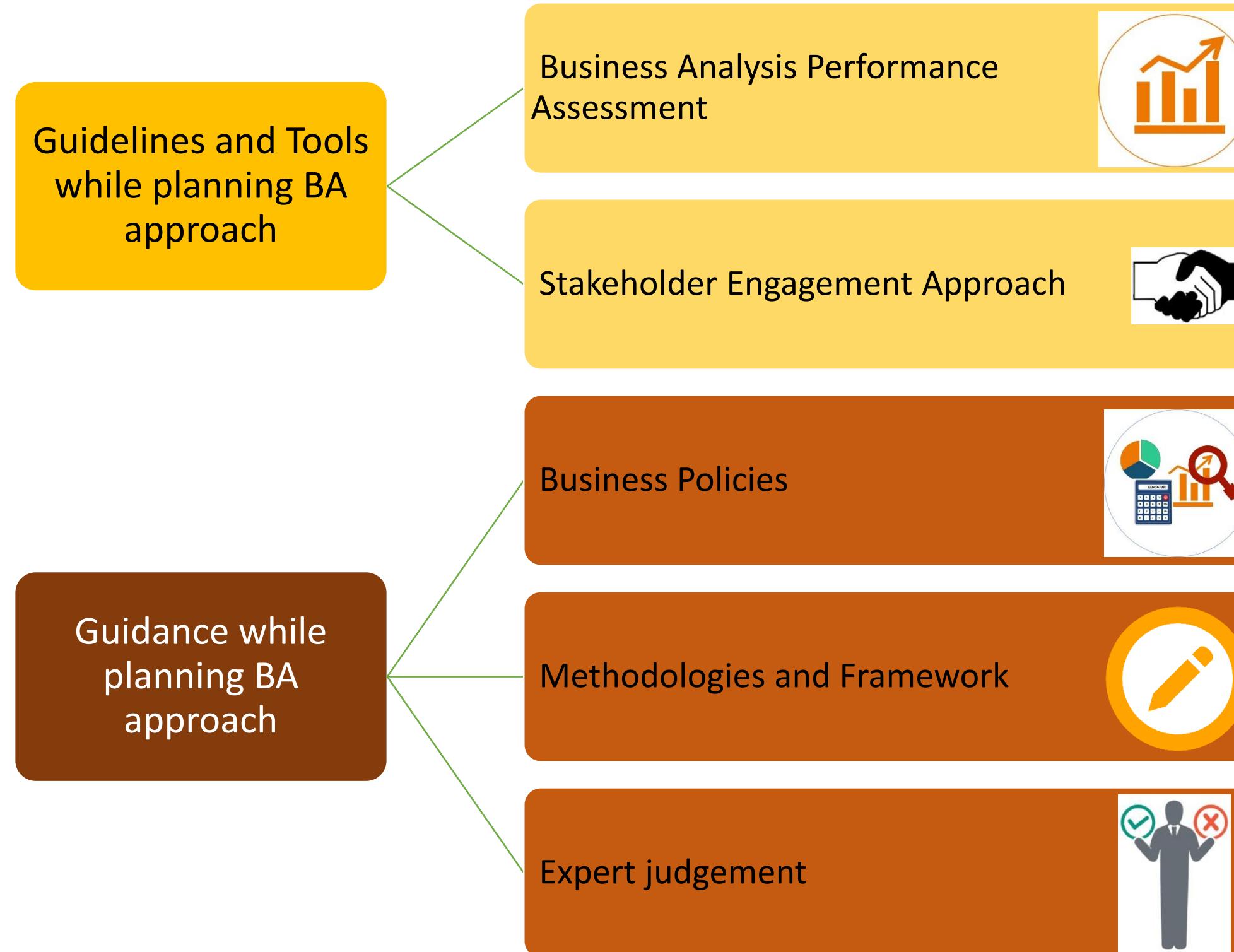
Timing for the business analysis tasks to be performed

Complexity and size of the change, and overall risk

Business analysis approach reviewed and agreed upon by key stakeholders

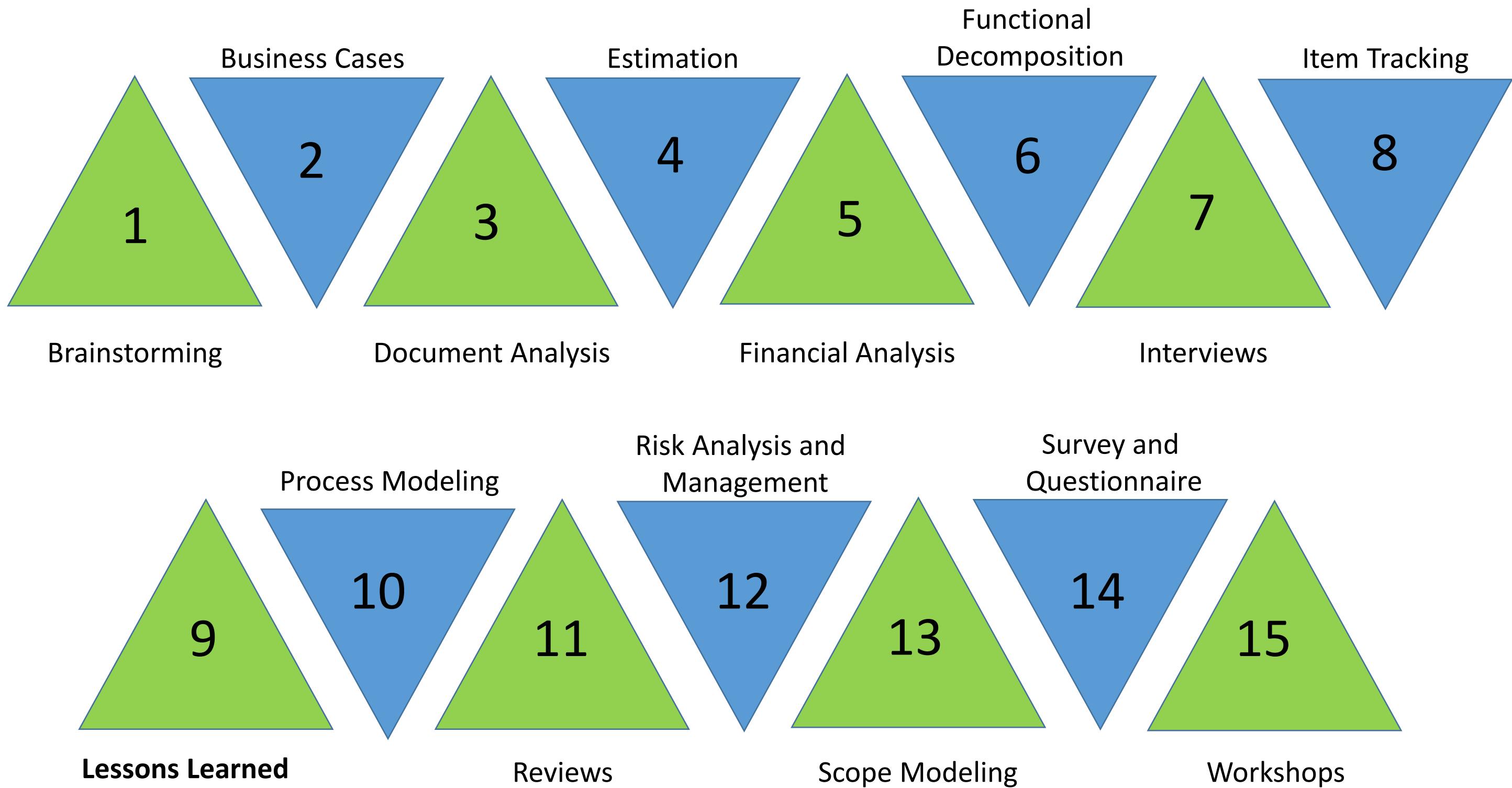
PLAN BUSINESS ANALYSIS APPROACH

GUIDELINES AND TOOLS



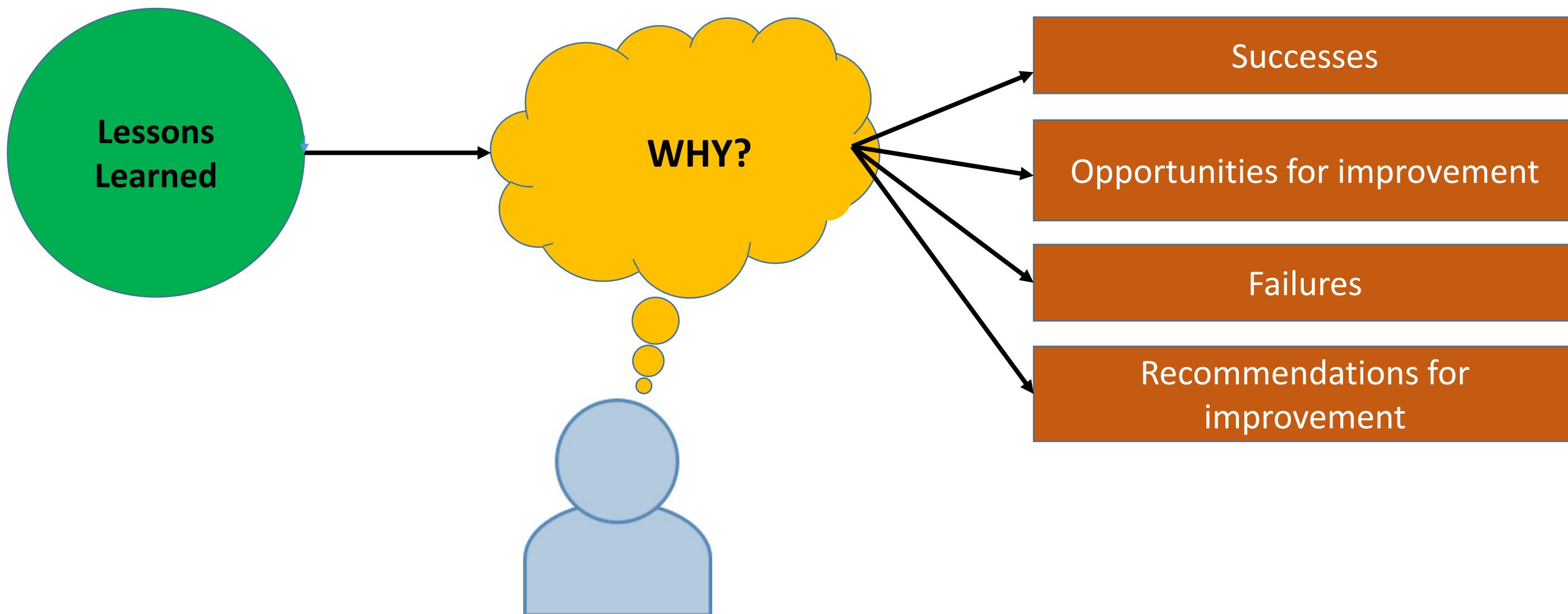
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUES



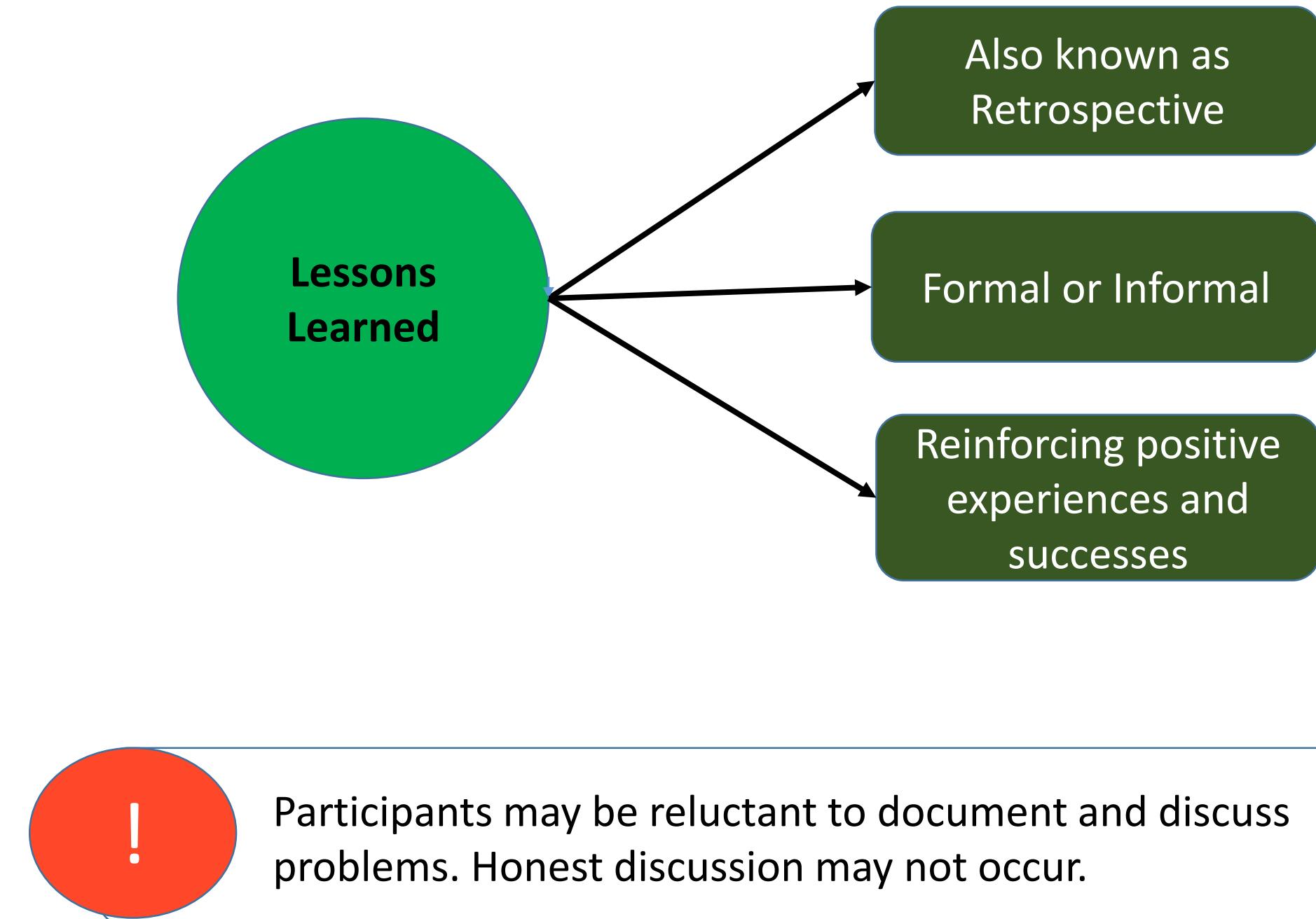
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUE – LESSONS LEARNED – WHY?



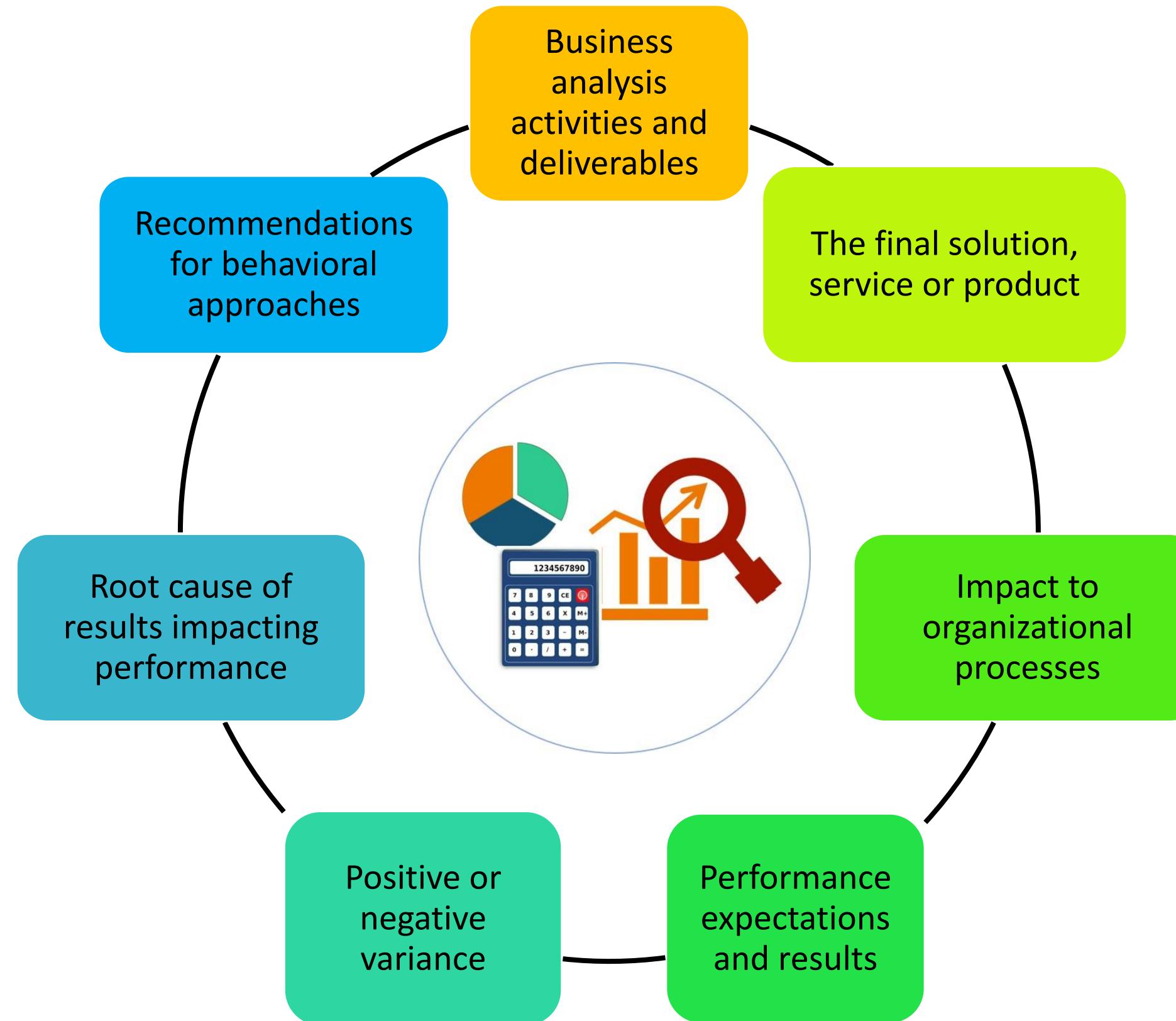
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUE – LESSONS LEARNED - OVERVIEW



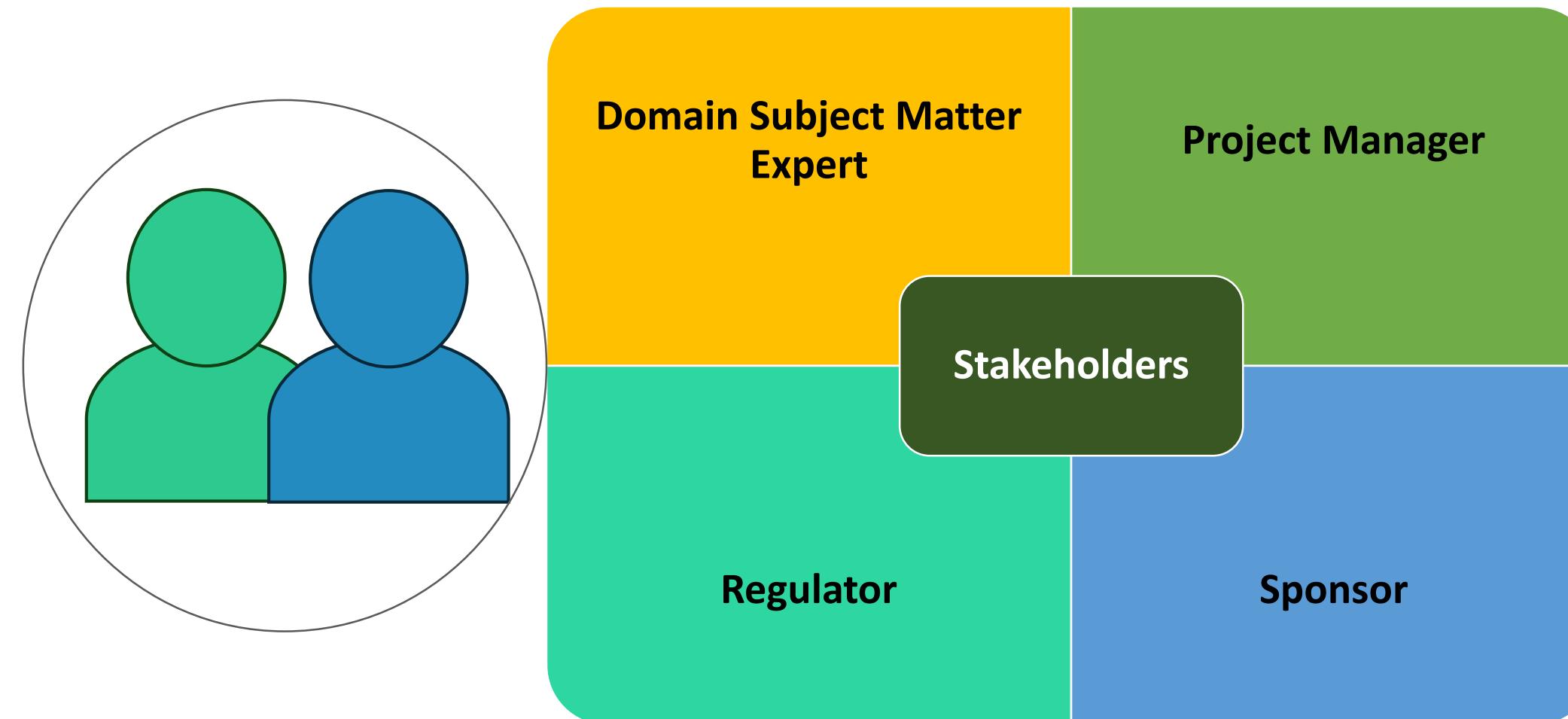
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUE – LESSONS LEARNED - ELEMENTS



PLAN BUSINESS ANALYSIS APPROACH

STAKEHOLDERS



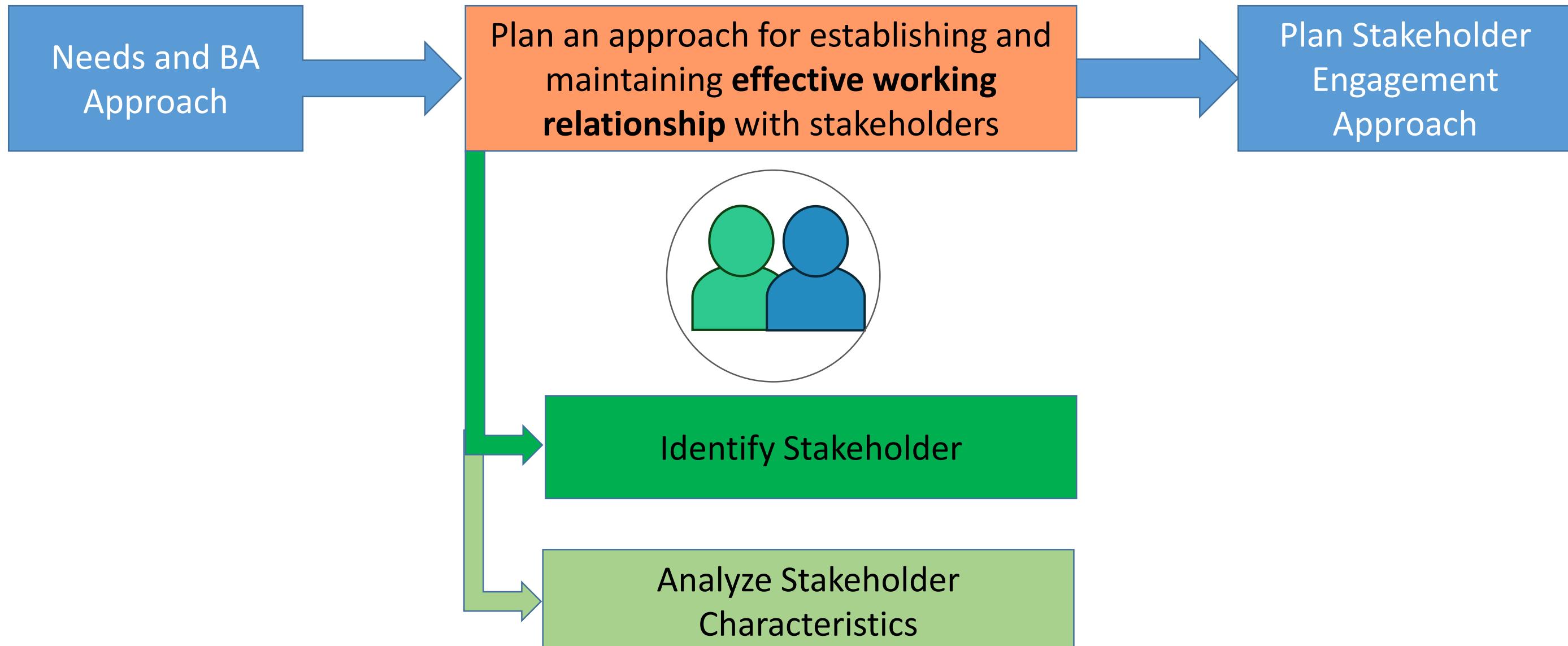
Lesson 3: Business Analysis Planning and Monitoring

Topic 3.2: Plan Stakeholder Engagement

✓ *plan an approach for establishing and maintaining **effective working relationship** with **stakeholders***

PLAN STAKEHOLDER ENGAGEMENT

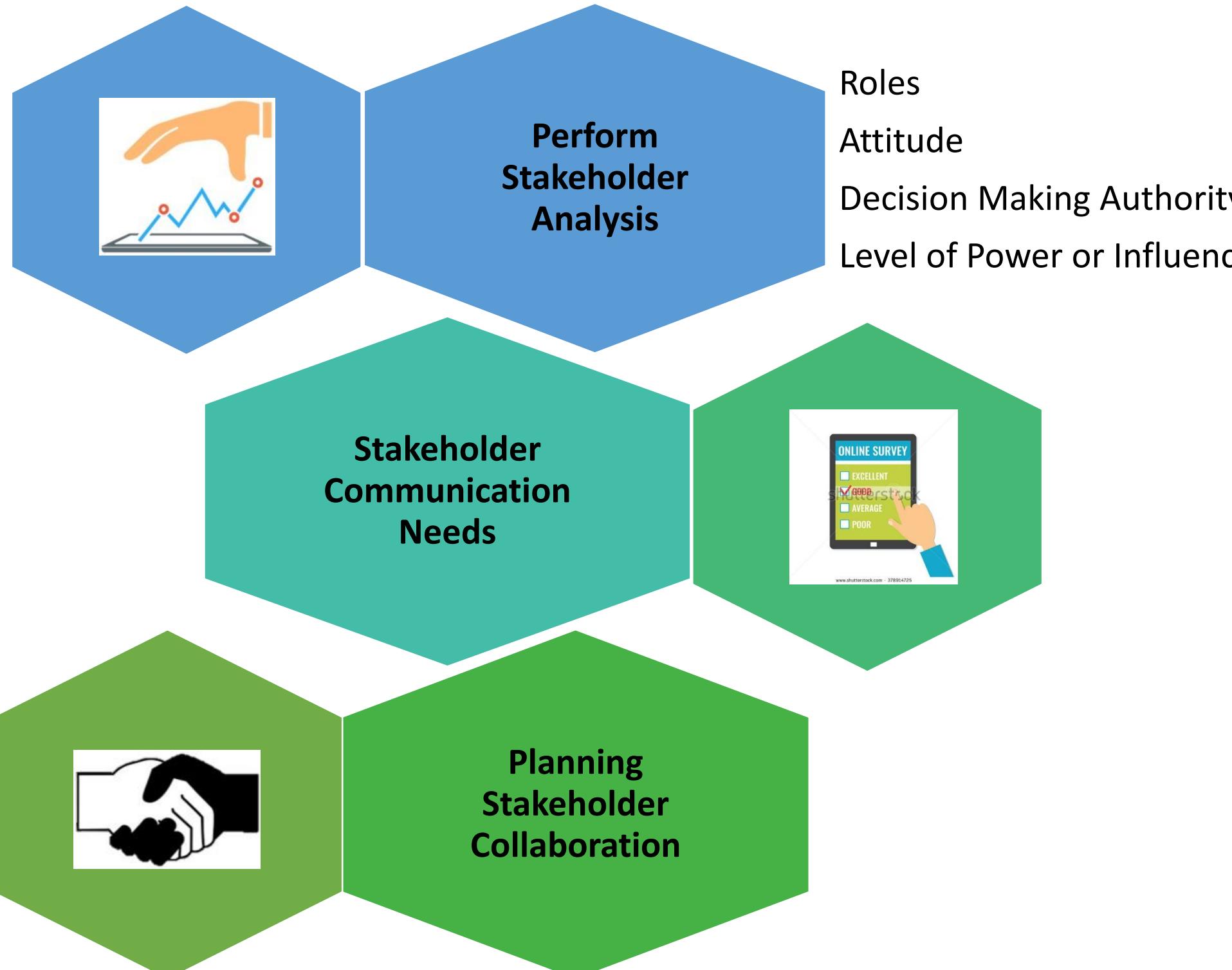
PURPOSE



Consider **Stakeholder complexity** while planning for stakeholder engagement.

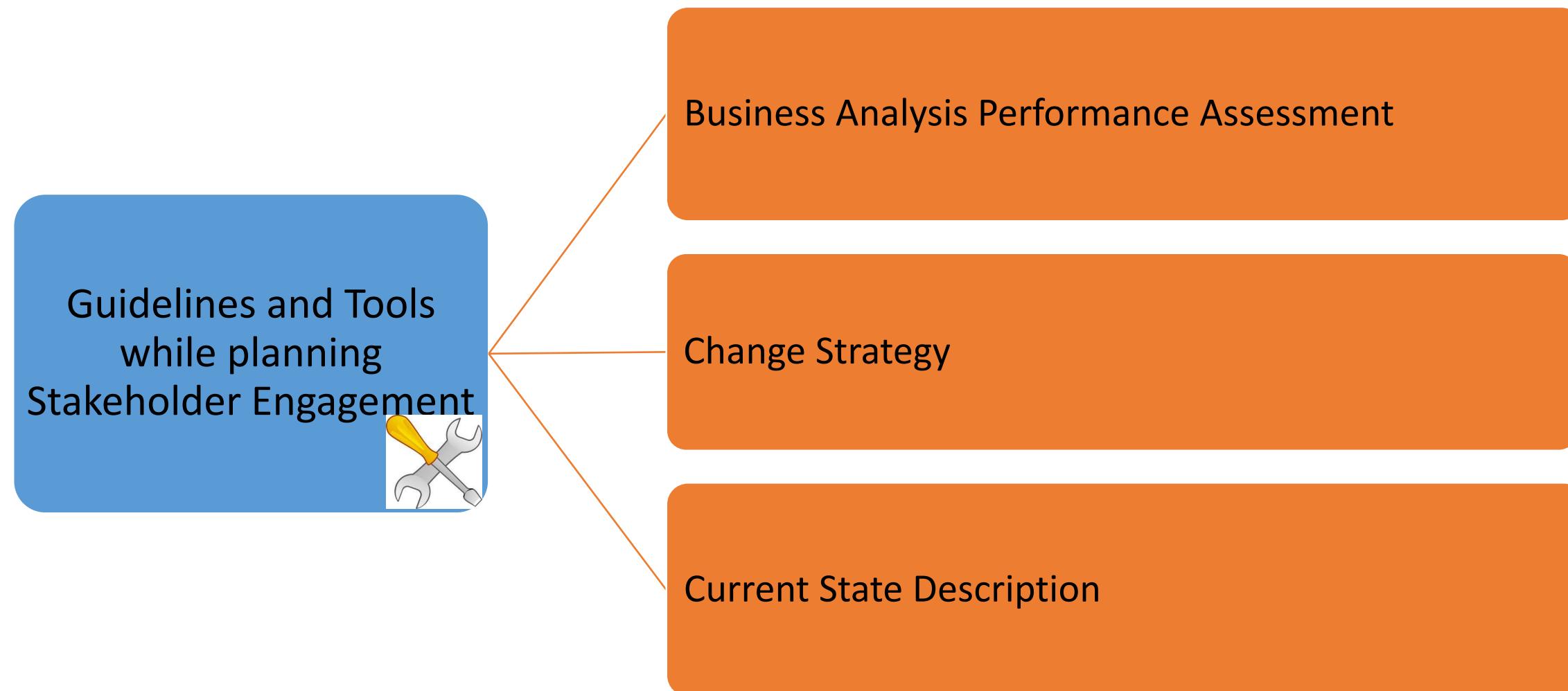
PLAN STAKEHOLDER ENGAGEMENT

ELEMENTS

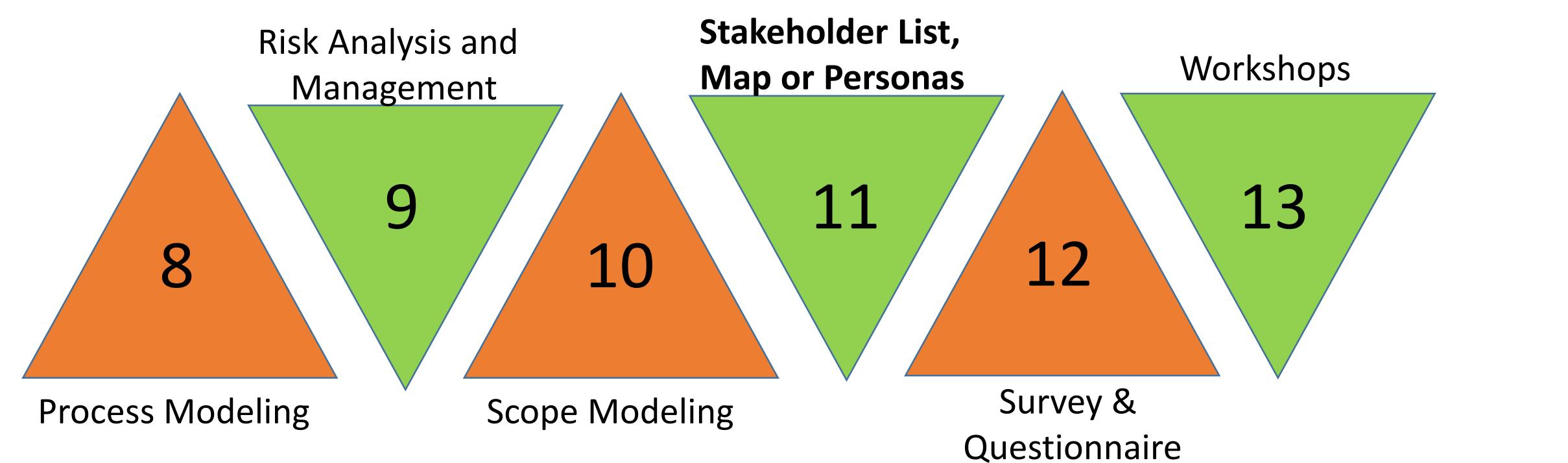
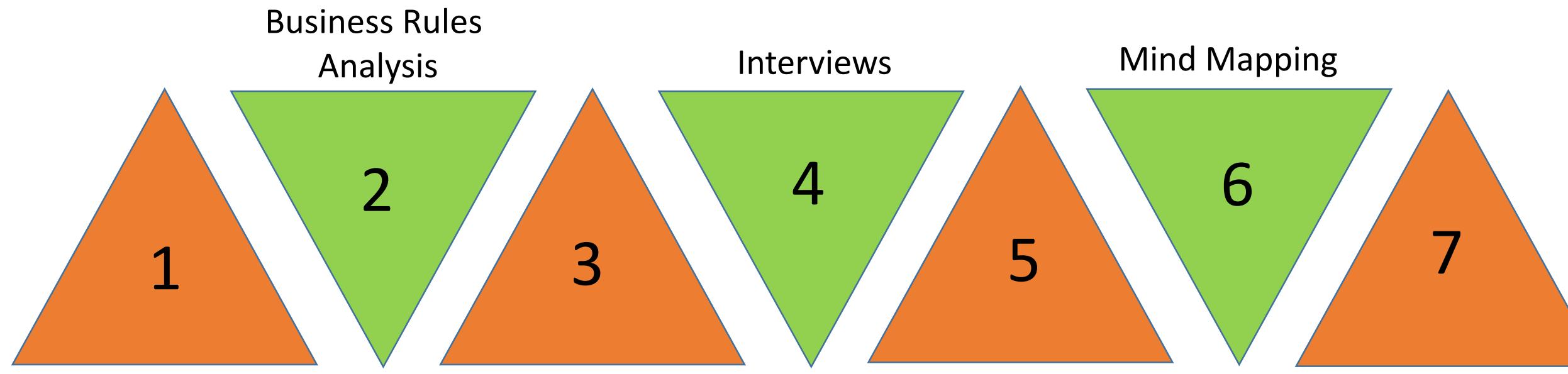


PLAN STAKEHOLDER ENGAGEMENT

GUIDELINES AND TOOLS



PLAN STAKEHOLDER ENGAGEMENT TECHNIQUES



ORGANIZATIONAL MODEL

PURPOSE

Organizational Modeling

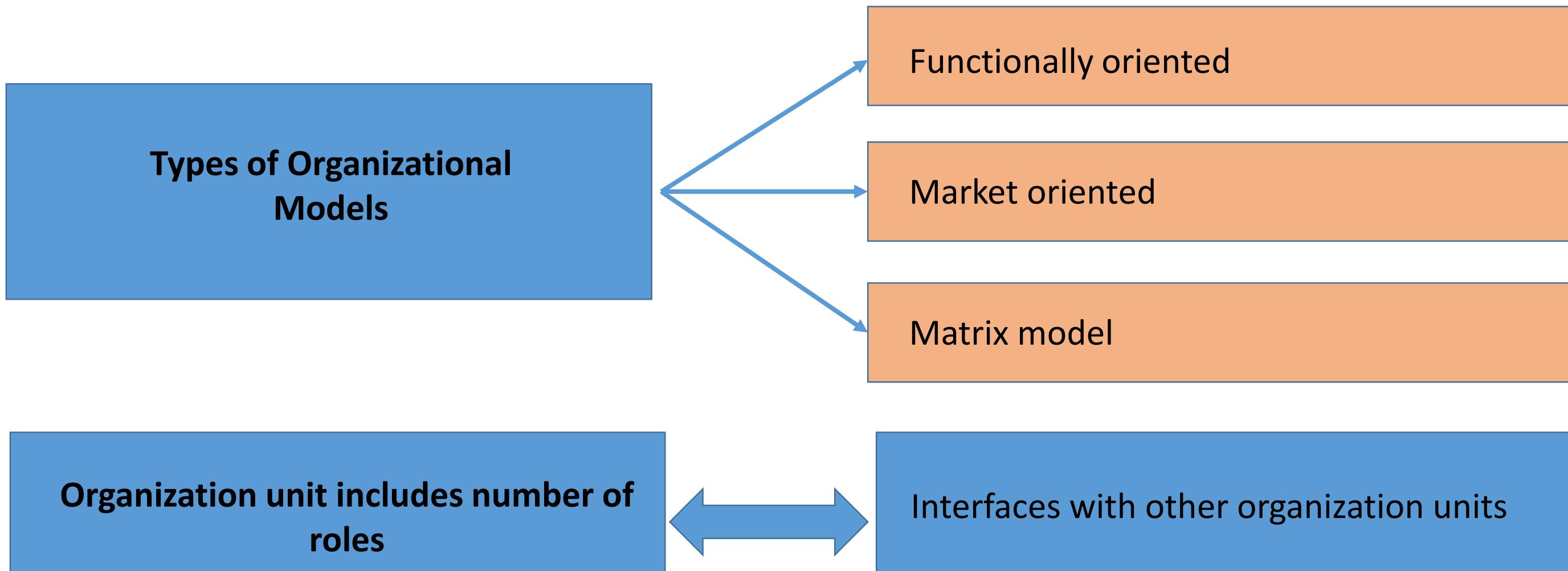
- Describe the roles, responsibilities, and reporting structure
- Align these structures with the organizational goals

Organizational Model

- Boundaries of a group
- Formal relationships between members
- Functional role of each person
- Interfaces between unit or stakeholders
- Common in most organizations

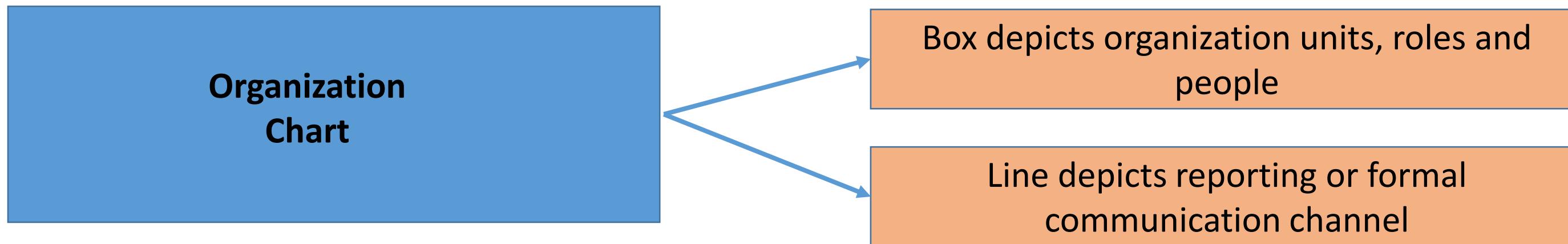
ORGANIZATIONAL MODEL

ELEMENTS (1 of 2)



ORGANIZATIONAL MODEL

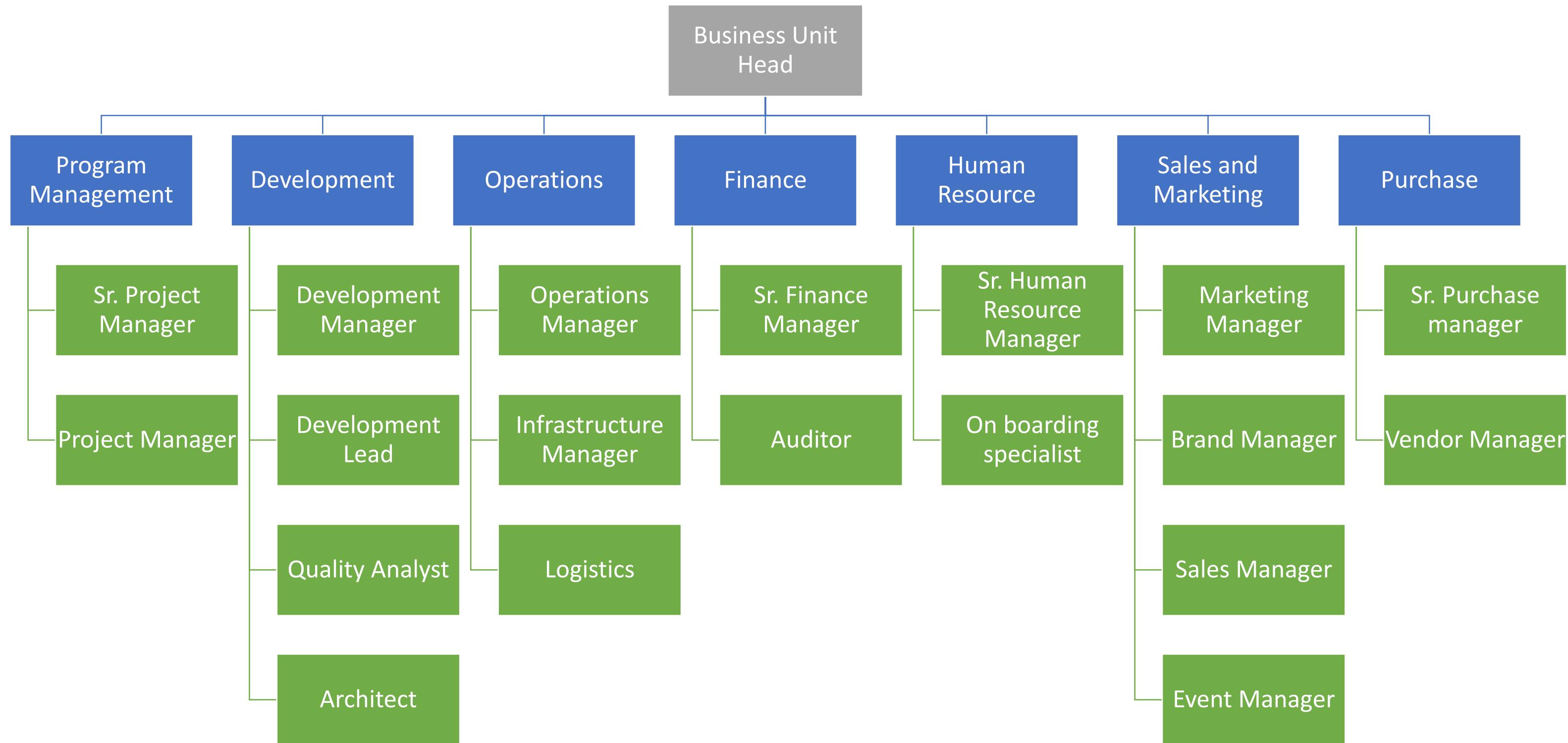
ELEMENTS (2 of 2)



Identify informal lines of communication which can influence business analysis activities

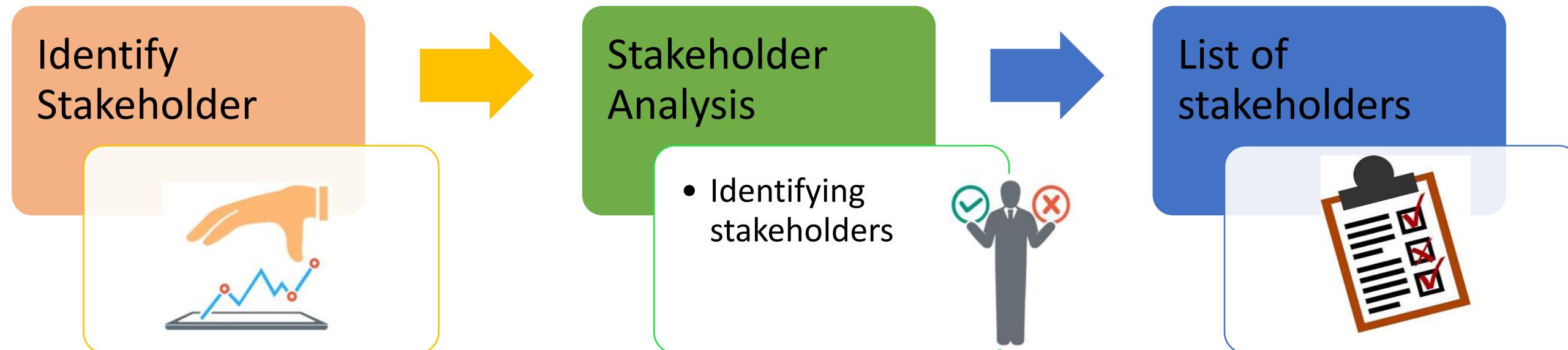
ORGANIZATIONAL MODEL

EXAMPLE



STAKEHOLDER LIST, MAP, OR PERSONAS

OVERVIEW



Stakeholder characteristics

- Level of authority within the domain of change
- Attitude toward or interest in the change
- Attitude toward business analysis activities
- Level of decision-making authority

STAKEHOLDER LIST, MAP OR PERSONAS

ELEMENTS

Stakeholder Map

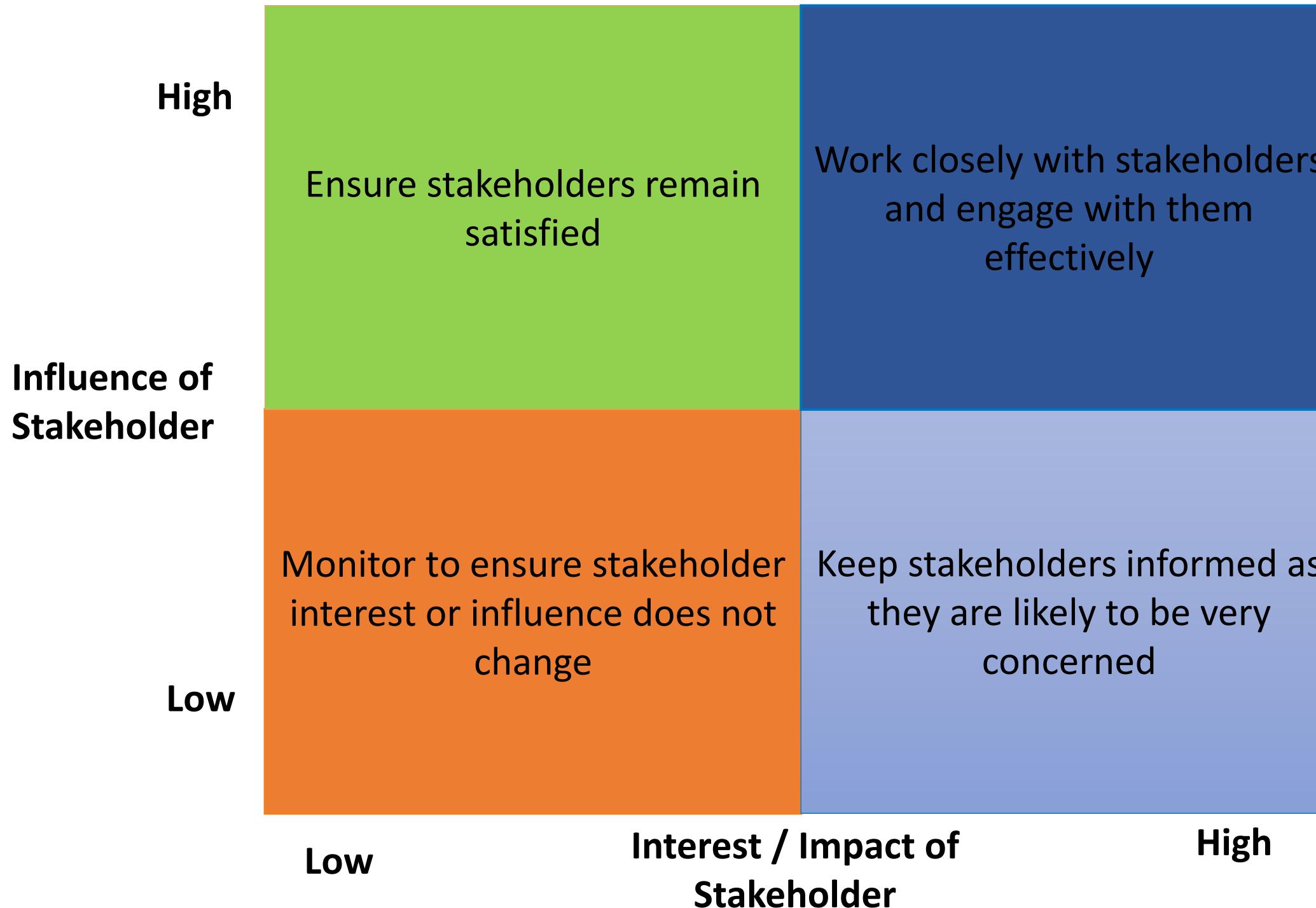
- Stakeholder Matrix
- Stakeholder Onion Diagram

RACI Matrix (Responsible, Accountable, Consulted and Informed)

Personas

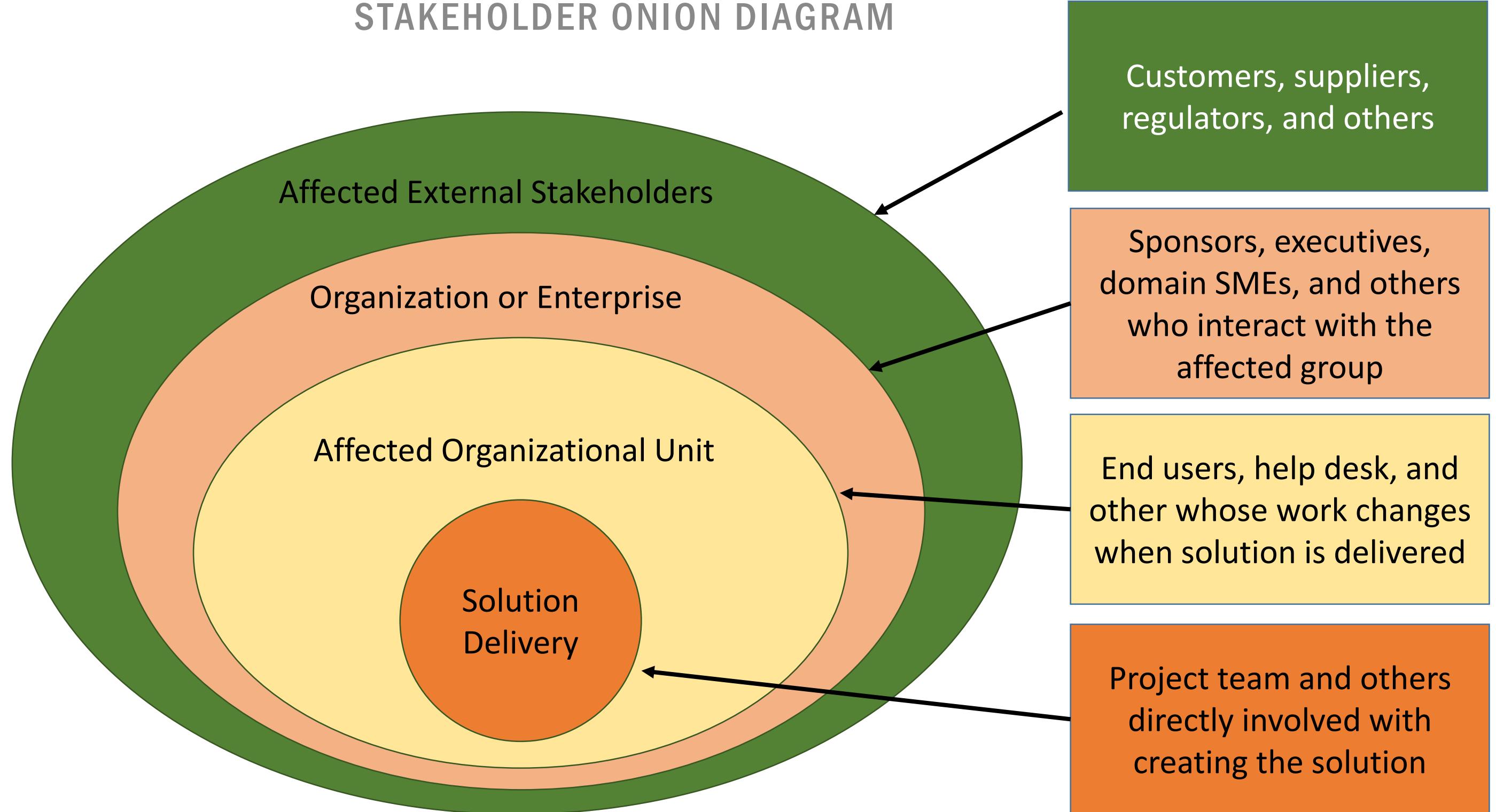
STAKEHOLDER LIST, MAP, OR PERSONAS

EXAMPLE



STAKEHOLDER LIST, MAP OR PERSONAS

STAKEHOLDER ONION DIAGRAM



STAKEHOLDER LIST, MAP OR PERSONAS

RACI – RESPONSIBLE, ACCOUNTABLE, CONSULTED, INFORMED

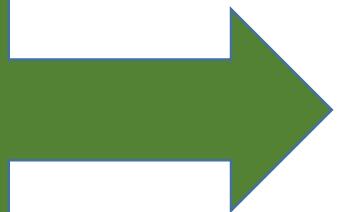
Task	Sponsor	Project Manager	Implementation Team	Operations	Business Analyst	Regulators
Identify problem or opportunity	R	R	C	R	A	I
Identify risk associated with business analysis work	R	R	R	R	A	I
Conduct feasibility study	C	R	R	C	A	
Recommend solution	R	C	R	R	A	I
Approve Business Analysis Deliverables	A	C	C	C	R	I
Analyze Requirements	I	I	C	I	A	
Communicate Requirements and Design	I	C	I	I	A	I
Assess solution performance	C	C	C	A	R	C

STAKEHOLDER LIST, MAP OR PERSONAS

PERSONAS

Fictional and Generalized Character

Paul Atkins,
Marketing Manager
(Health Care)
32 Years,
Married, One Child



Role

What is your job role?
What is a typical day like?
What skills, knowledge, and tools do you require?
Who reports to you and whom do you report to?

Goals

What are you responsible for?

Challenges

What are your biggest challenges in your work?

Company

Which industry does your company work in?

What is the total revenue of your company?

How many employees work in your company?

Personal Background: Age, Family (single, married, children),

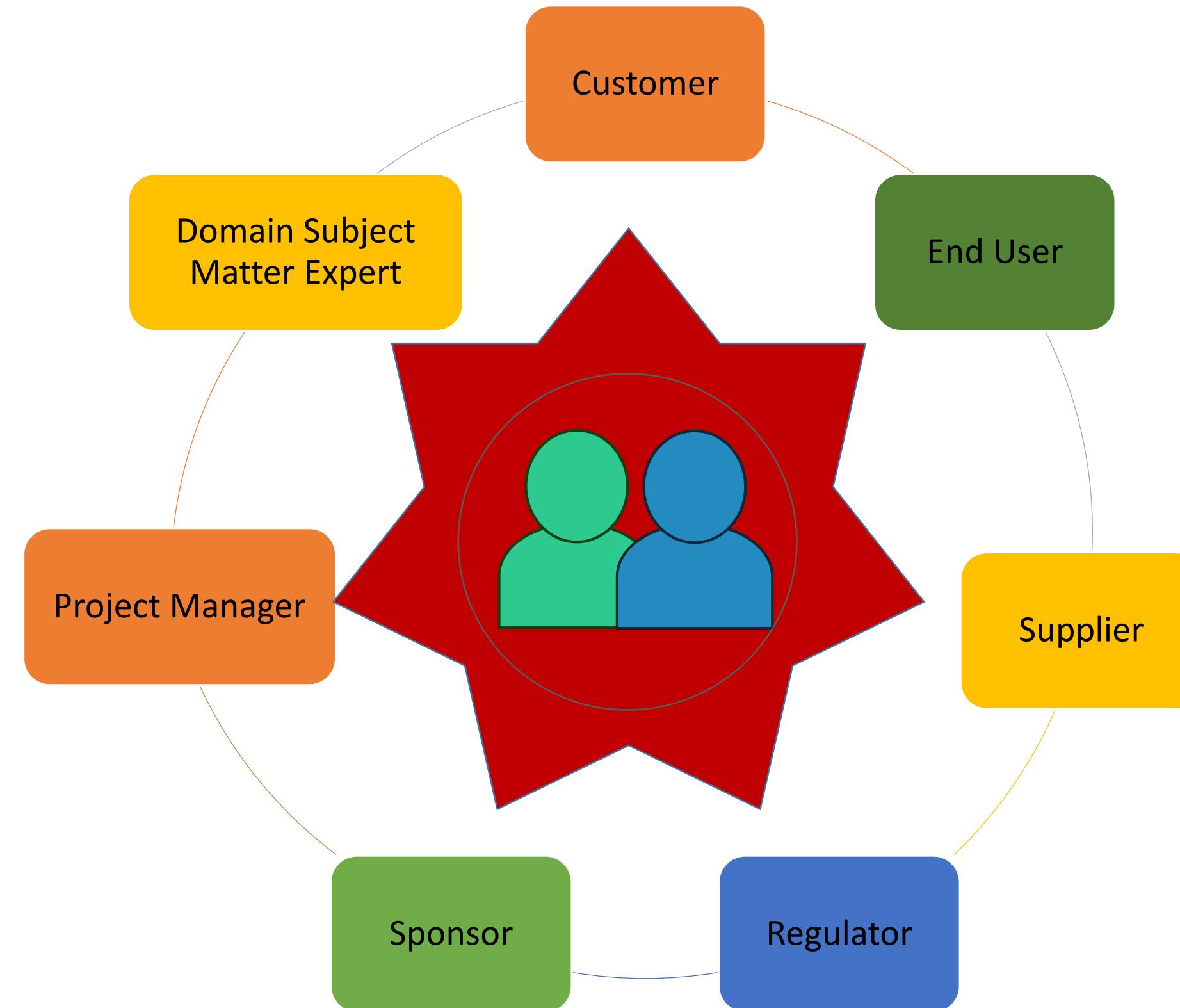
Education

Preferences

How do you prefer to interact (email, phone, in person)?

PLAN STAKEHOLDER ENGAGEMENT

STAKEHOLDERS



Lesson 3: Business Analysis Planning and Monitoring

Topic 3.3: Plan Business Analysis Governance

- ✓ define how decisions are made about requirements and designs, including reviews, change control, approval and prioritization

PLAN BUSINESS ANALYSIS GOVERNANCE

PURPOSE



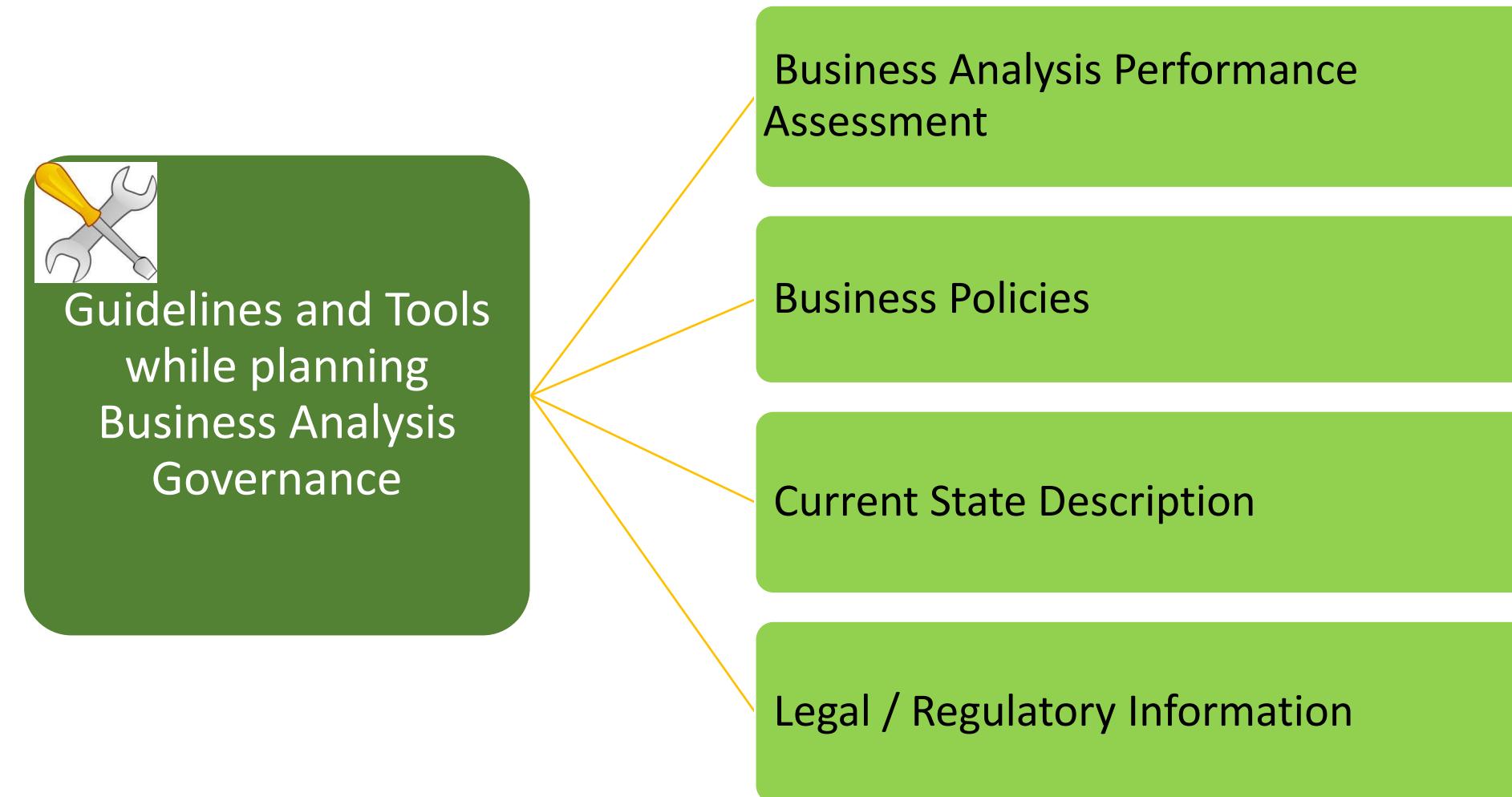
PLAN BUSINESS ANALYSIS GOVERNANCE

ELEMENTS

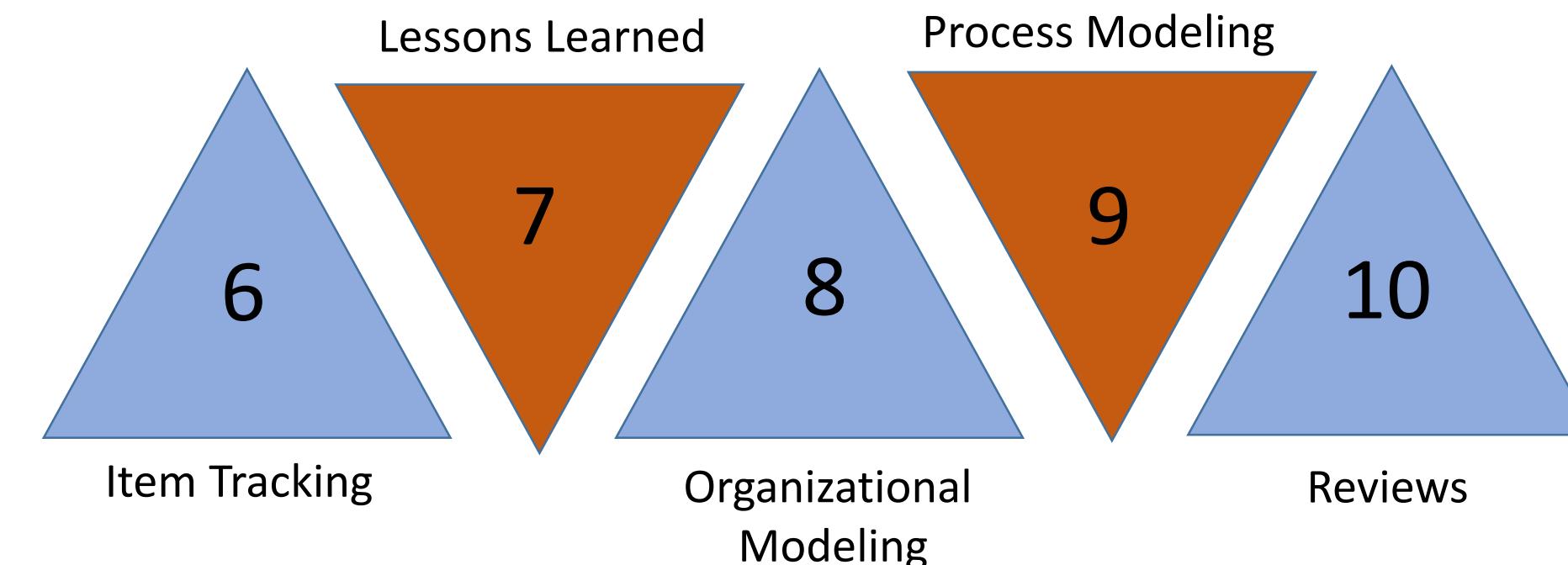
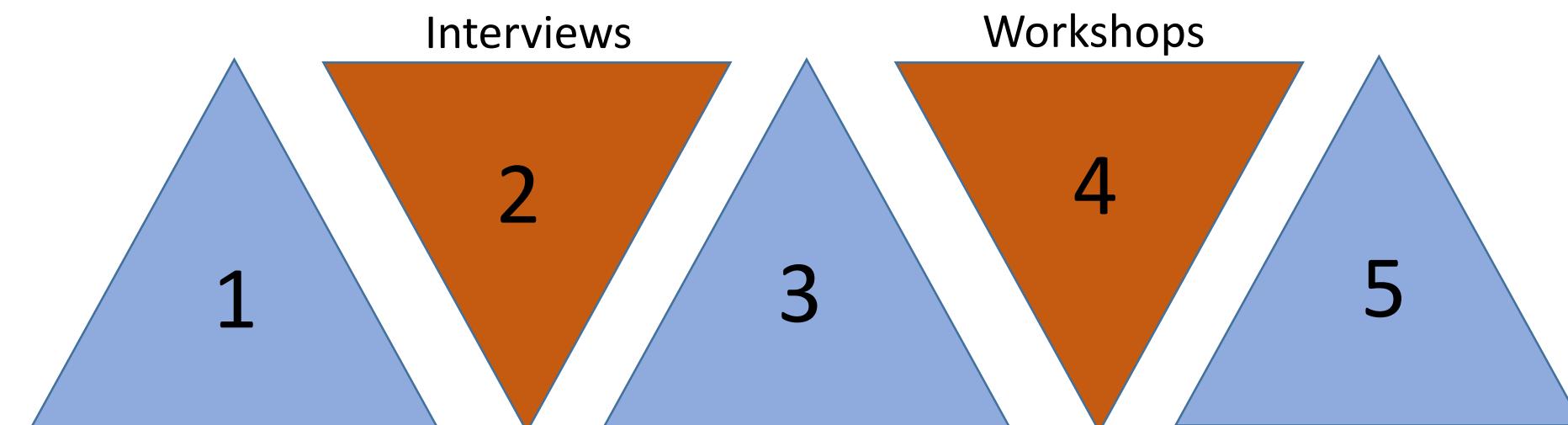


PLAN BUSINESS ANALYSIS GOVERNANCE

GUIDELINES AND TOOLS

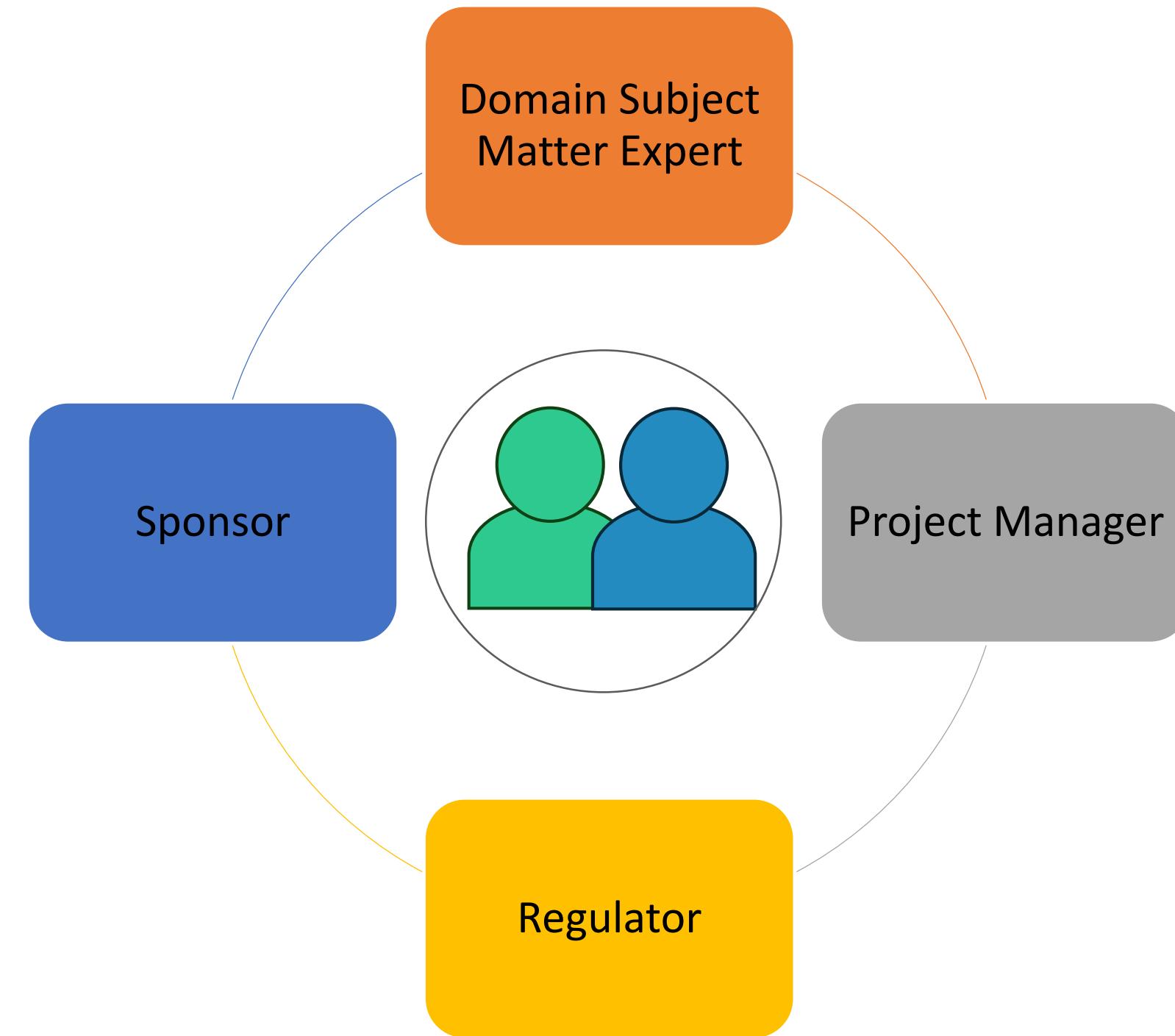


PLAN BUSINESS ANALYSIS GOVERNANCE TECHNIQUES



PLAN BUSINESS ANALYSIS GOVERNANCE

STAKEHOLDERS



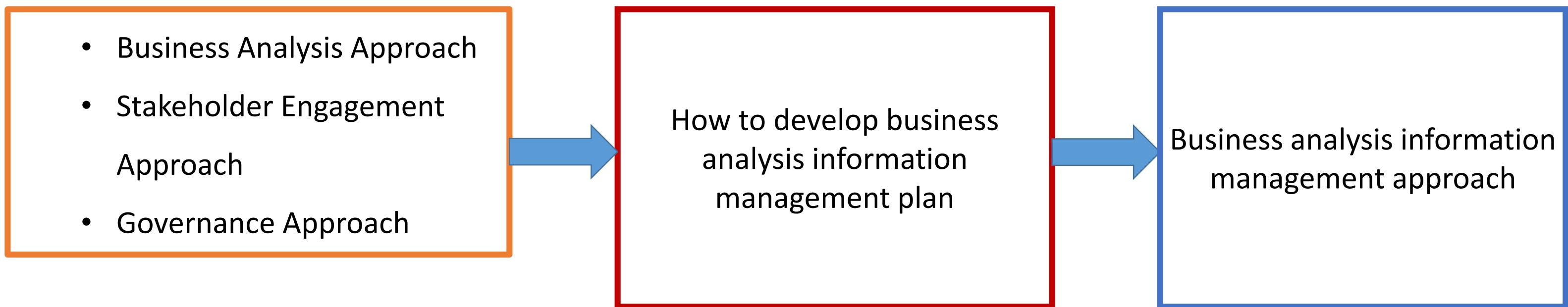
Lesson 3: Business Analysis Planning and Monitoring

Topic 3.4: Plan Business Analysis Information Management

✓ *Storing and accessing business analysis information*

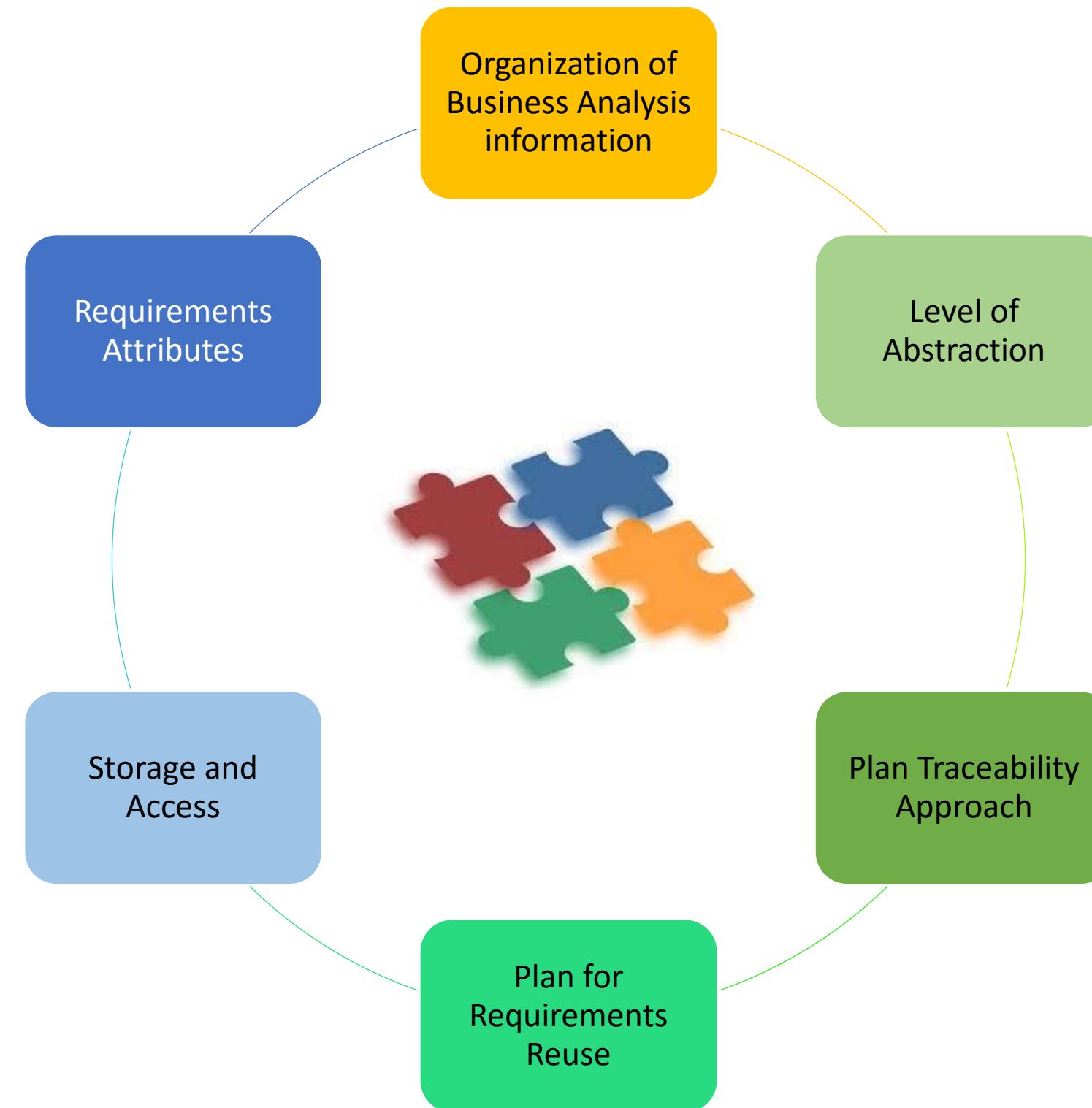
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

PURPOSE



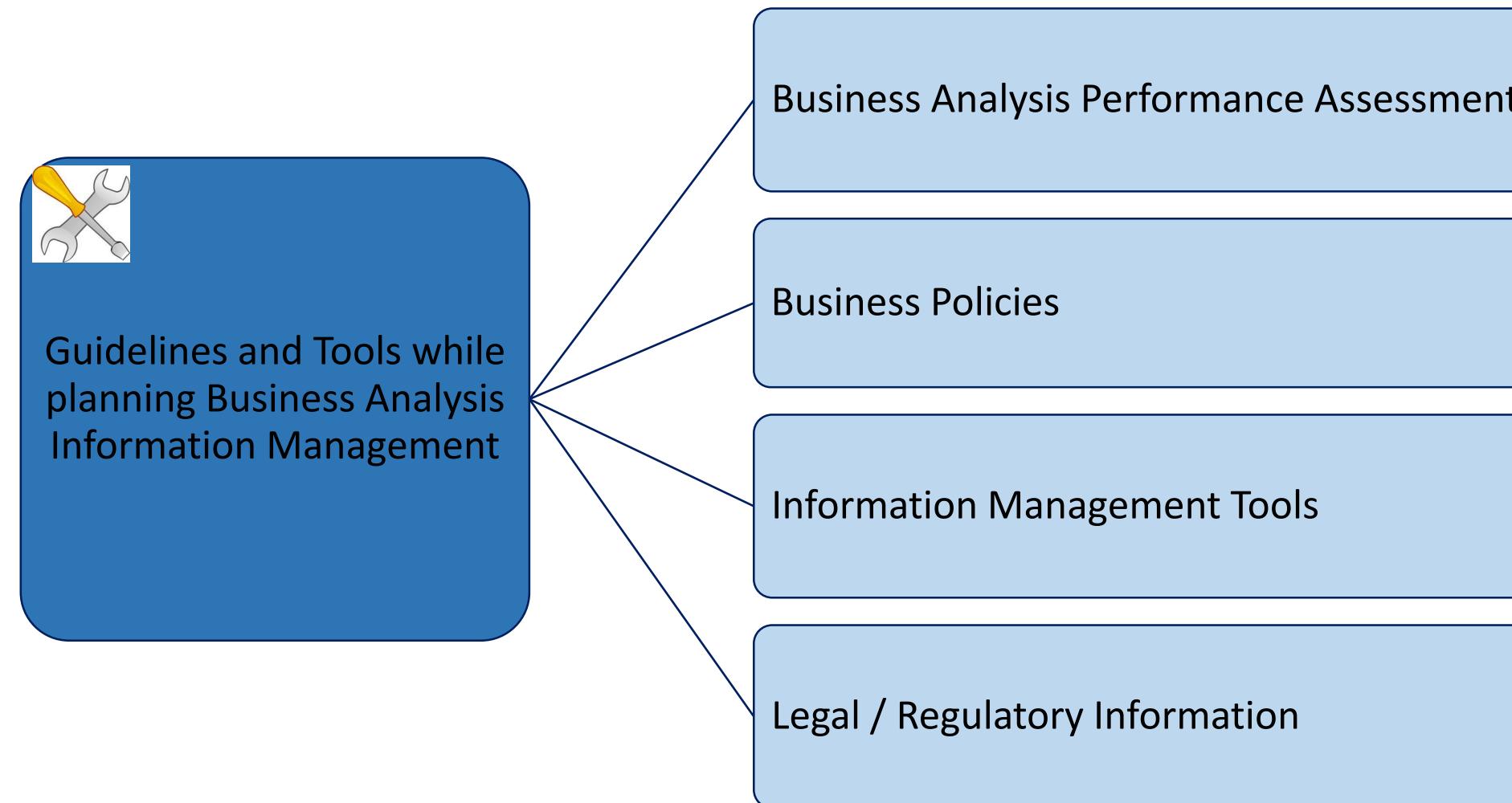
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

ELEMENTS



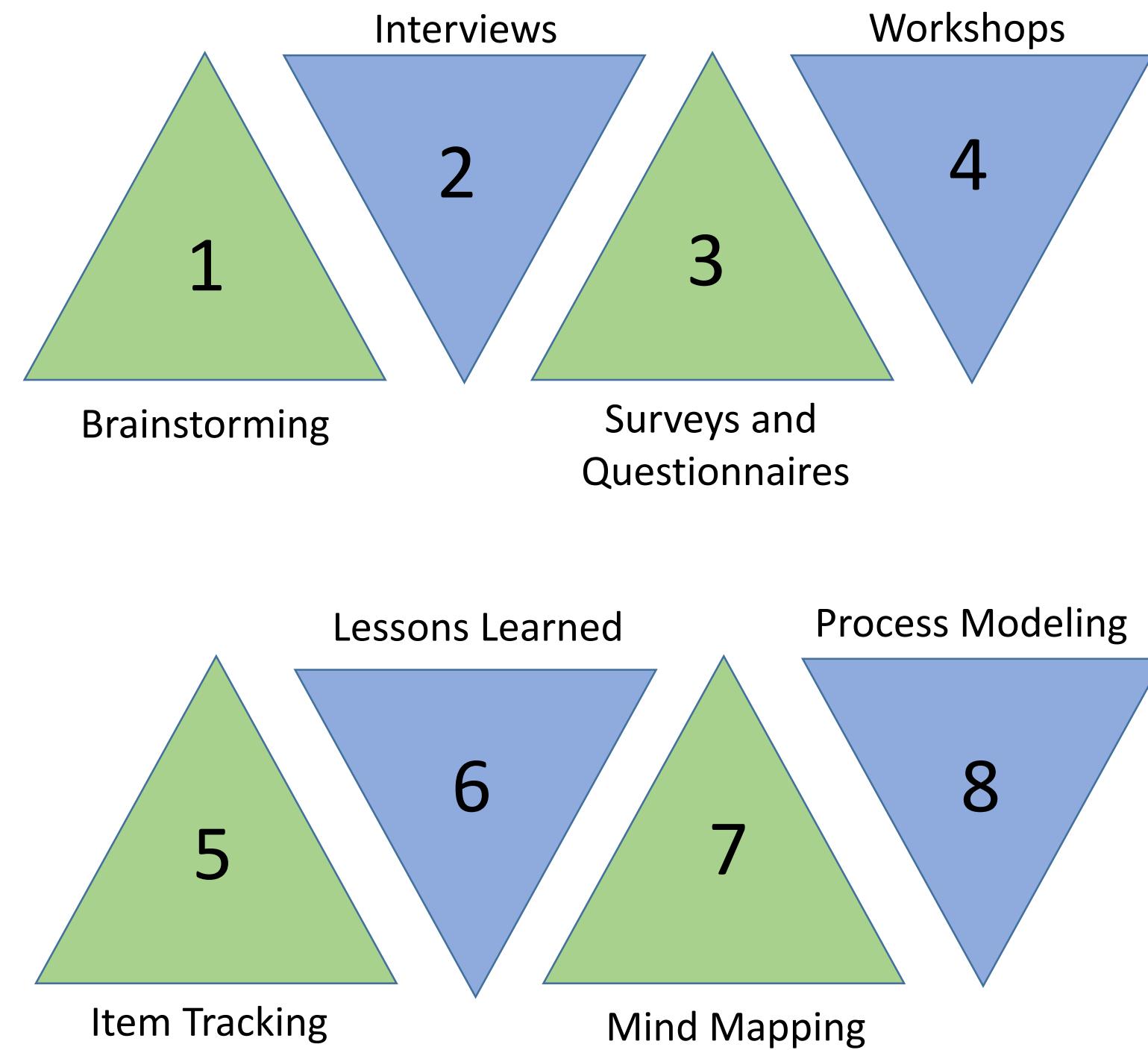
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

GUIDELINES AND TOOLS

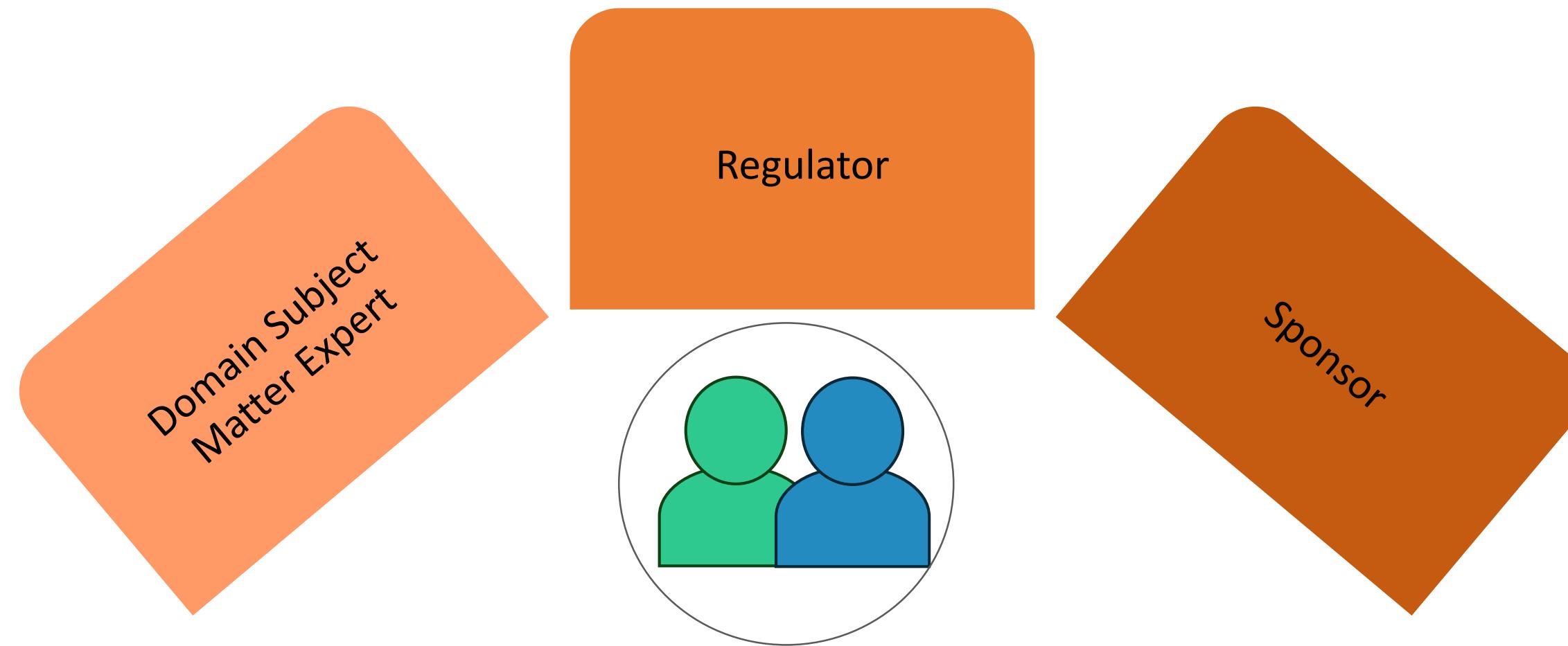


PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

TECHNIQUES



STAKEHOLDERS



Lesson 3: Business Analysis Planning and Monitoring

Topic 3.5: Identify Business Analysis Performance Improvements

✓ *Assess business analysis work and to plan to improve processes where required*

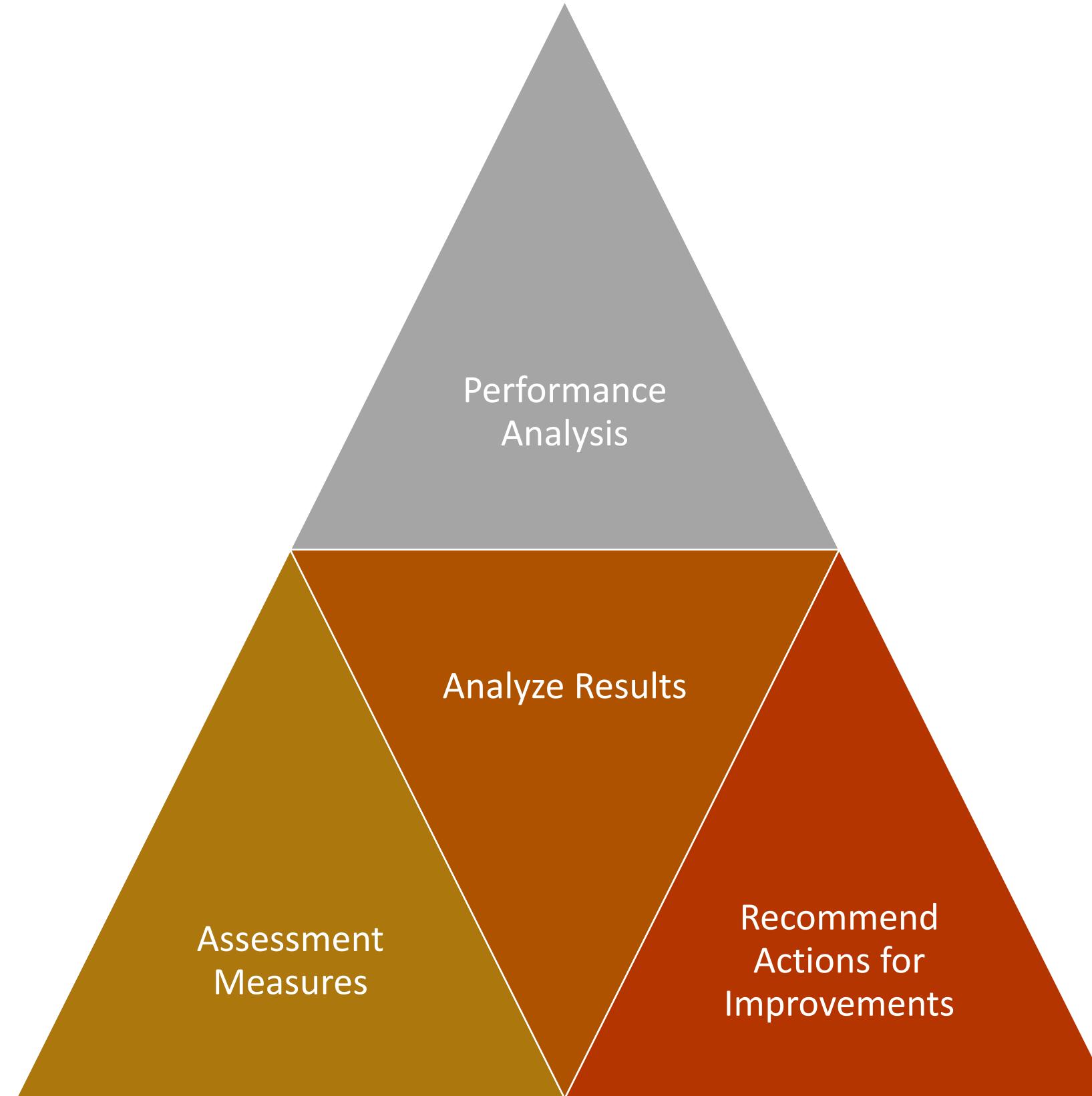
IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

PURPOSE



IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

ELEMENTS



IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

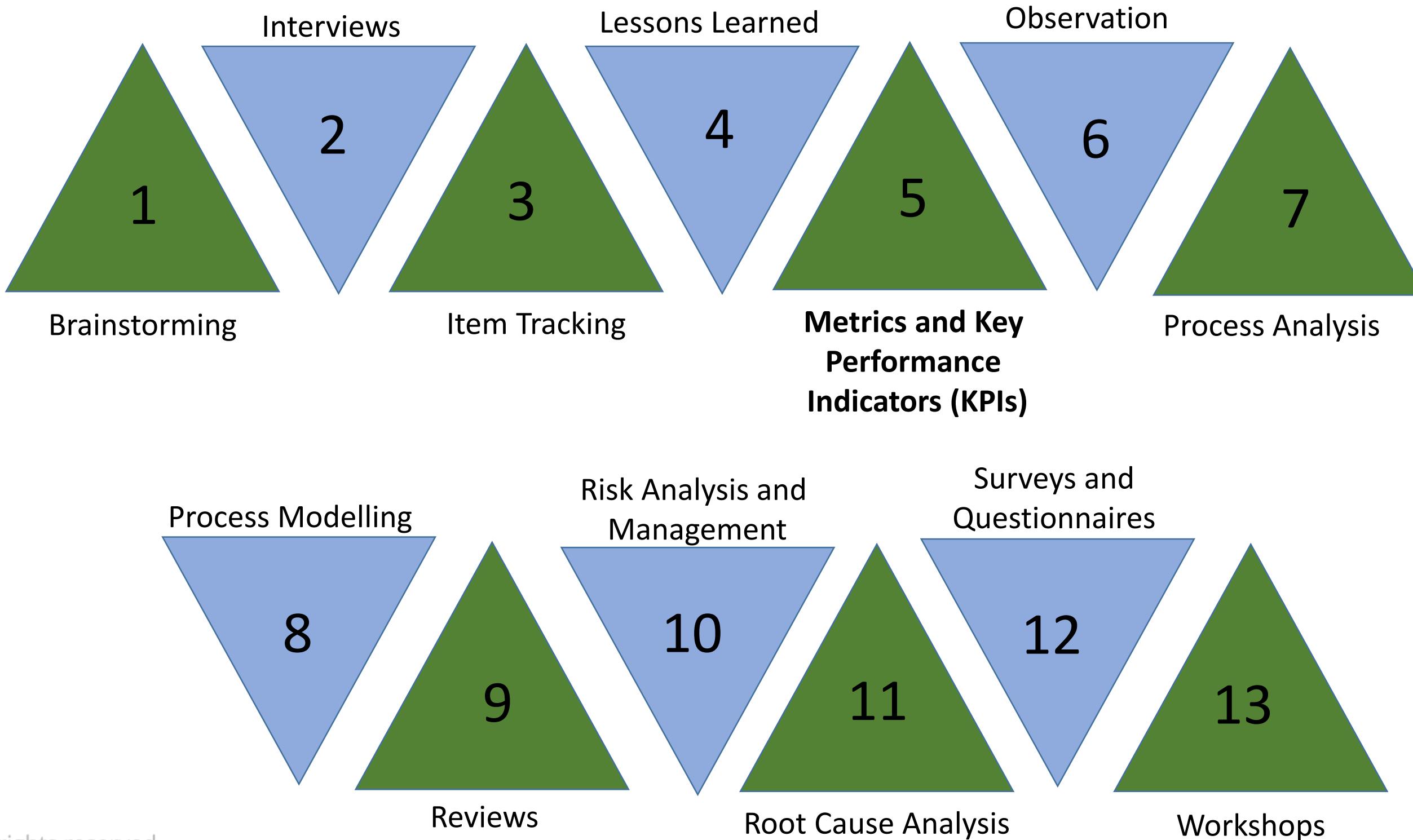
GUIDELINES AND TOOLS



Organizational Performance Standards includes details of performance metrics or expectations for business analysis work mandated by the organization.

IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

TECHNIQUES



METRICS AND KEY PERFORMANCE INDICATORS (KPIs)

OVERVIEW

Metrics and Key Performance Indicators (KPIs) measure the performance of solutions, solution components, and other matters of interest to stakeholders.

A **Metrics** is quantifiable level of an indicator.

A **Key Performance Indicator (KPI)** measures progress towards a strategic goal or objective. KPIs derive from metrics.

KPIs to measure the effectiveness of business analysis.

Reporting is the process of informing stakeholder of metrics or indicators in specified format and specified intervals.

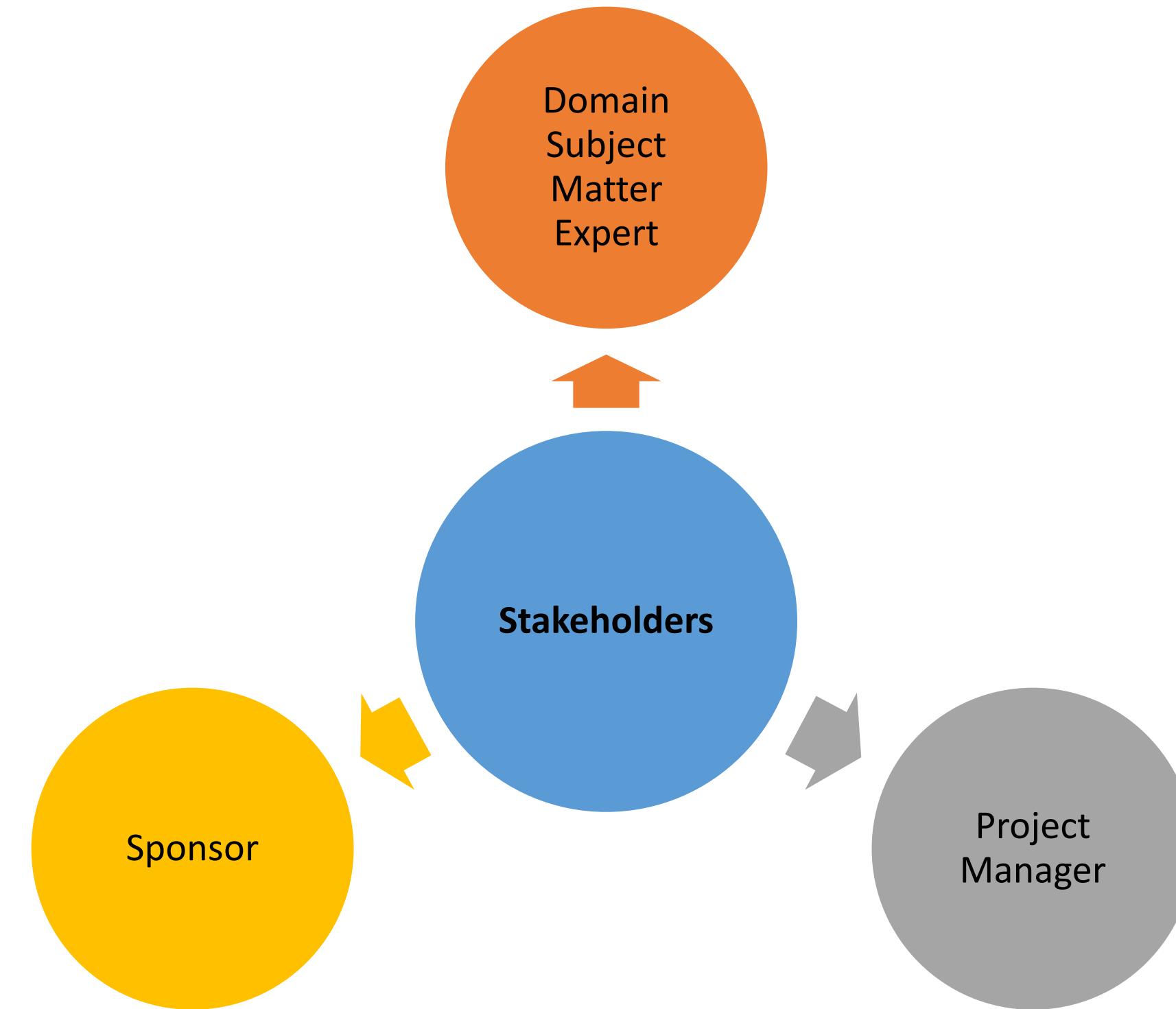
METRICS AND KEY PERFORMANCE INDICATORS (KPIs)

ELEMENTS

Characteristics of Indicator	Metrics	Structure	Reporting	Quality of metrics and KPIs
<ul style="list-style-type: none">• Clear• Relevant• Economical• Adequate• Quantifiable• Trustworthy and Credible	<ul style="list-style-type: none">• Specific point• Threshold• Range	<ul style="list-style-type: none">• Monitoring• Evaluation	<ul style="list-style-type: none">• Baseline• Current and Target metrics	<ul style="list-style-type: none">• Reliability• Validity• Timeliness

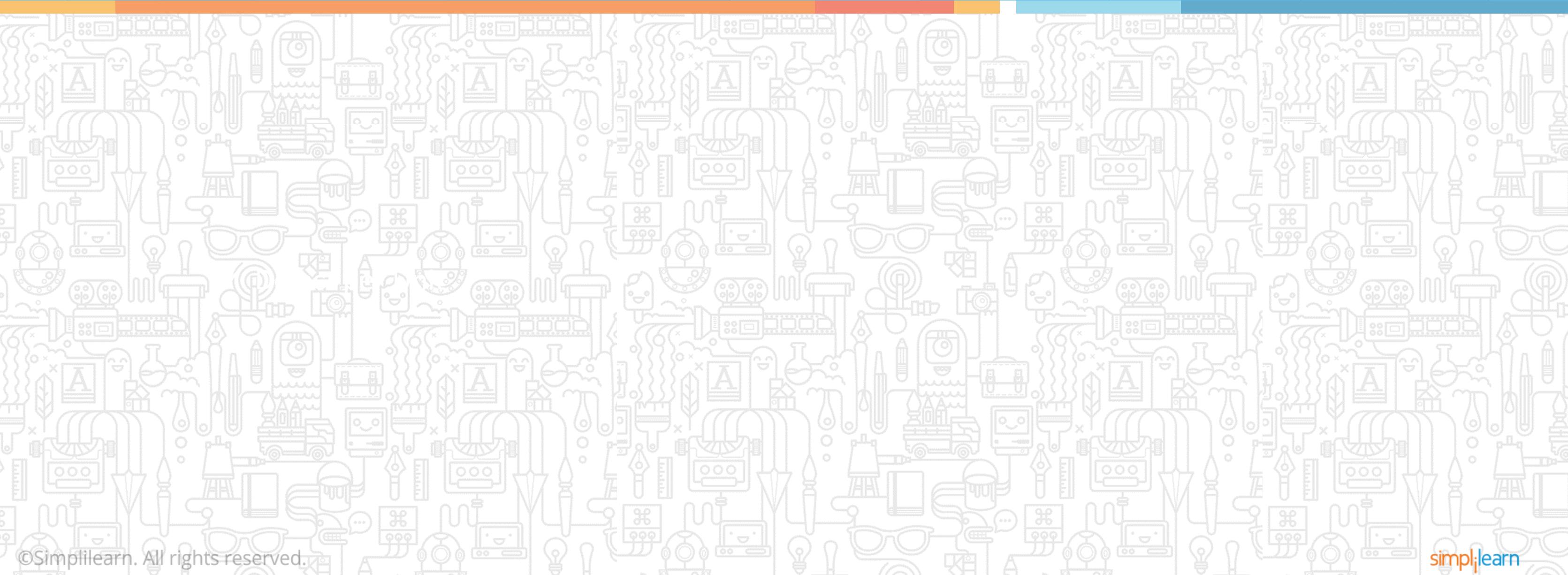
IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

STAKEHOLDERS



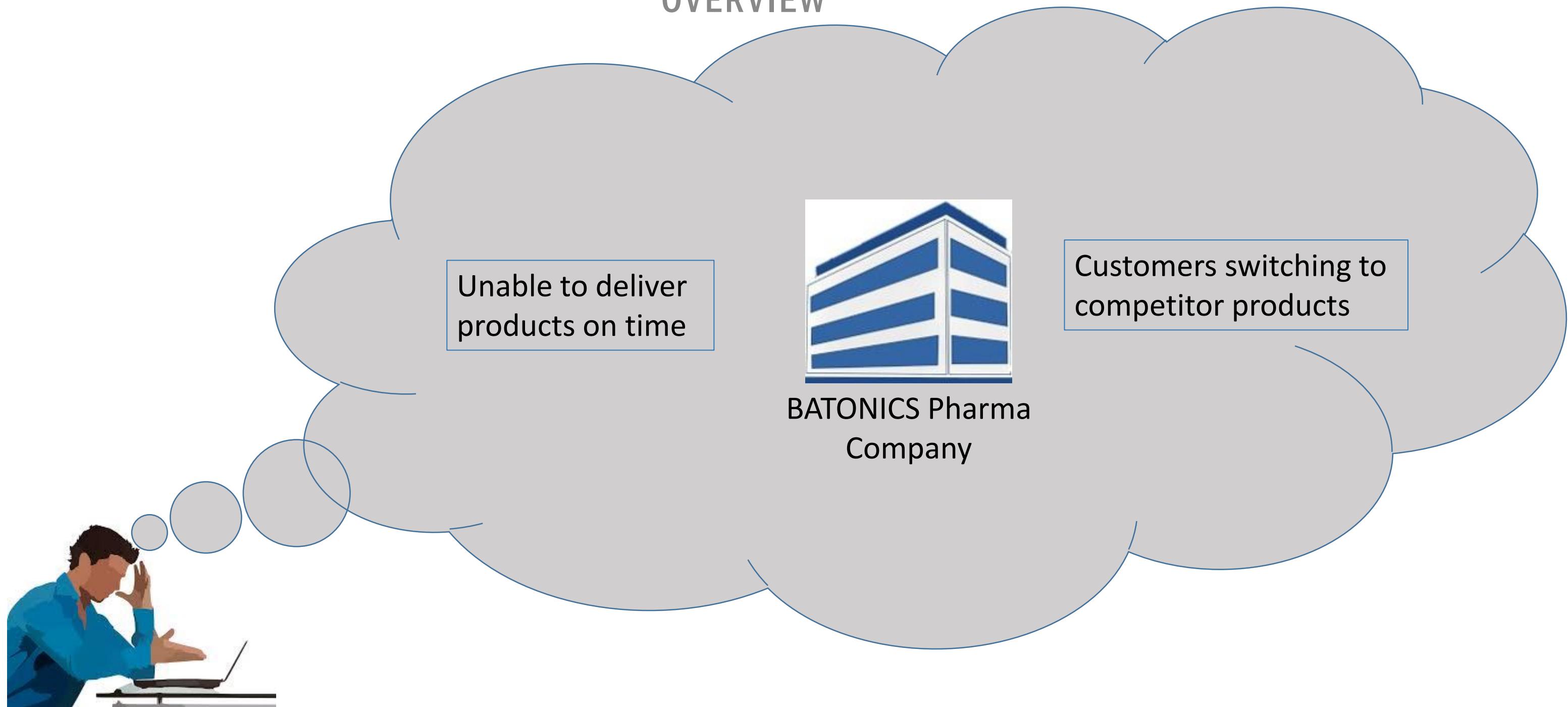
Lesson 3: Business Analysis Planning and Monitoring

CASE STUDY EXERCISE



CASE STUDY

OVERVIEW



CASE STUDY

BUSINESS ANALYSIS ACTIVITIES



Identified the business analysis deliverables:

- Documentation of existing supply chain management process
- Root cause analysis
- Solution options
- Recommendation of tools and technologies
- Recommended optimal solution

CASE STUDY

BUSINESS ANALYSIS ACTIVITIES



You have identified and analyzed the stakeholders involved in the process.



You have gone through existing documents, meetings with subject matter experts and people involved in this process and come up with the activities and task.



You have also estimated the task and who are involved in performing the task.



You have established the process of decision making, change control, prioritization, and approval.



You have determined how you are going to store and retrieve business analysis information.



You have had meetings with the key stakeholders to review and get approval on the business analysis approach.

CASE STUDY

EXERCISE

Questions	Response
1 Which document is created to define decision making, change control, prioritization and approval process?	<input type="radio"/> Information Management Approach <input type="radio"/> BA Governance Approach
2 Which methodology is used to define business analysis approach?	<input type="radio"/> Adaptive <input type="radio"/> Predictive
3 Which document specifies the level of responsibility expected from each stakeholder?	<input type="radio"/> RACI Matrix <input type="radio"/> Stakeholder Matrix
4 Which technique is used to identify roles and responsibilities within the organization?	<input type="radio"/> Organizational Modeling Technique <input type="radio"/> BA Performance Assessment
5 Which document indicates how stakeholder is involved with the solution?	<input type="radio"/> Stakeholder Matrix <input type="radio"/> Stakeholder Onion Diagram
6 Which task is performed to identify and analyze the stakeholders?	<input type="radio"/> Plan Stakeholder Engagement <input type="radio"/> Personas
7 Among stakeholders, who are not likely to get involved in this initiative?	<input type="radio"/> Regulators <input type="radio"/> Domain Subject Matter Expert

CASE STUDY

ANSWERS

Questions	Answers
1 Which document have you created to define decision making, change control, prioritization and approval process?	BA Governance Approach
2 Which methodology is used to define business analysis approach?	Adaptive
3 Which document specifies the level of responsibility expected from each stakeholder?	RACI Matrix
4 Which technique is used to identify roles and responsibilities within organization?	Organizational Modeling
5 Which document indicates how stakeholder is involved with the solution?	Stakeholder Onion Diagram
6 Which task is performed to identify and analyze stakeholders?	Plan Stakeholder Engagement
7 Among stakeholders, who are not likely to get involved in this initiative?	Regulators, Customers



QUIZ
1**What does RACI stand for?**

- a. Responsible, Accountable, Collaborate, Informed
- b. Responsible, Author, Consulted, Informed
- c. Responsible, Accountable, Consulted, Informed
- d. Responsible, Authorized, Consulted, Informed



QUIZ
1**What does RACI stand for?**

- a. Responsible, Accountable, Collaborate, Informed
- b. Responsible, Author, Consulted, Informed
- c. Responsible, Accountable, Consulted, Informed
- d. Responsible, Authorized, Consulted, Informed



The correct answer is **c.**

Explanation: RACI stands for **Responsible, Accountable, Consulted, Informed**

**QUIZ
2**

Which one of the following is not a characteristics of an indicator

- a. Relevant
- b. Economical
- c. Transparent
- d. Adequate



QUIZ
2

Which one of the following is not a characteristics of an indicator

- a. Relevant
- b. Economical
- c. Transparent
- d. Adequate



The correct answer is c

Explanation: Transparent is not a characteristics of an indicator. Characteristics of an indicator are Clear, Relevant, Economical, Adequate, Quantifiable, Trustworthy and Credible

QUIZ
3

Which one of the following is not an input to plan business analysis information management approach?

- a. Business Analysis Governance Approach
- b. Business Analysis Approach
- c. Stakeholder Engagement Approach
- d. Business Analysis Traceability Approach



QUIZ
3

Which one of the following is not an input to plan business analysis information management approach?

- a. Business Analysis Governance Approach
- b. Business Analysis Approach
- c. Stakeholder Engagement Approach
- d. Business Analysis Traceability Approach

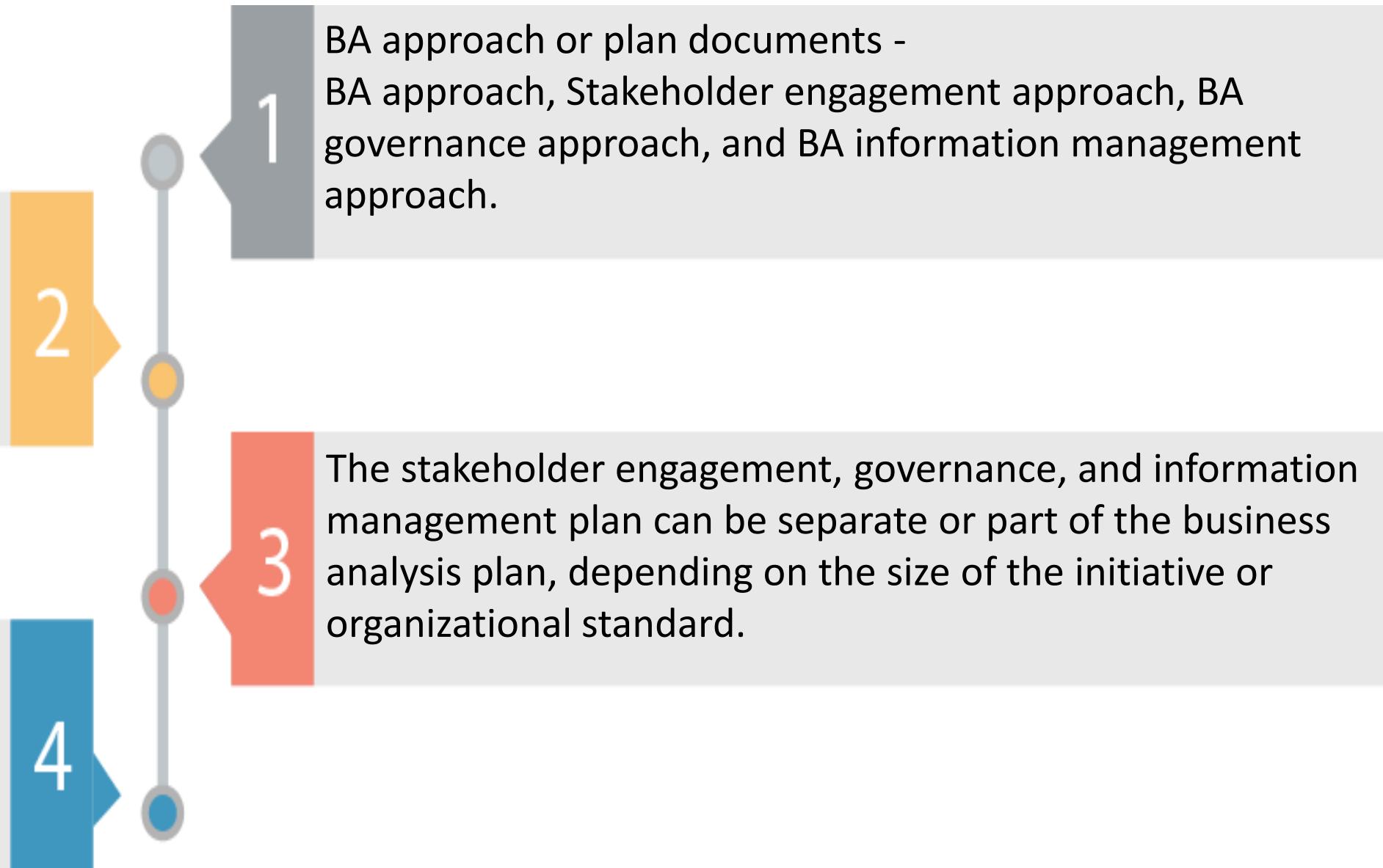


The correct answer is **d**

Explanation: Business Analysis Traceability Approach is not an input to plan business analysis information management approach. Traceability approach is one of the element of Business Analysis Information Management Approach

KEY TAKEAWAYS (1 of 2)

Business Analysis approach or plan is developed based on need, methodology, complexity, size and risk.



KEY TAKEAWAYS (contd.)

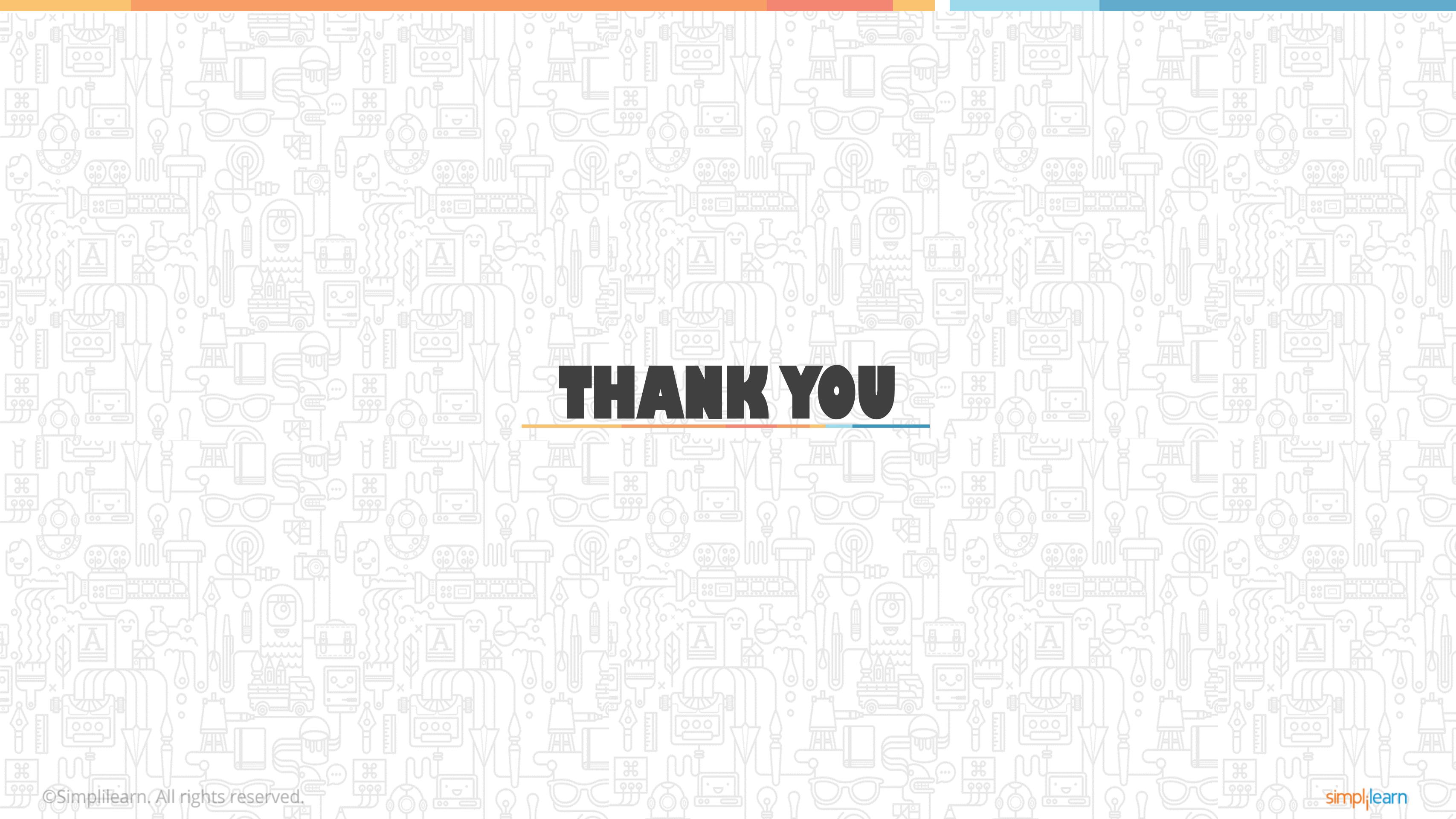
Performance baseline, metrics and KPIs, and the process of monitoring and evaluation are defined to improve performance of business analysis work.





This concludes “Business Analysis Planning and Monitoring.”

The next lesson is “Elicitation and Collaboration.”



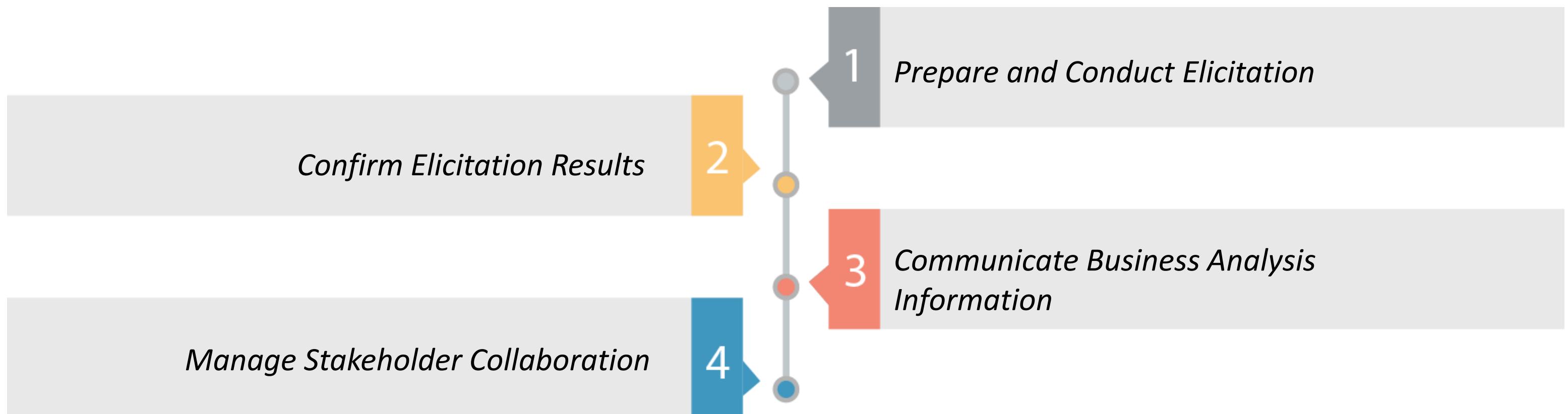
THANK YOU

CCBA® Exam Preparation Course

Elicitation and Collaboration

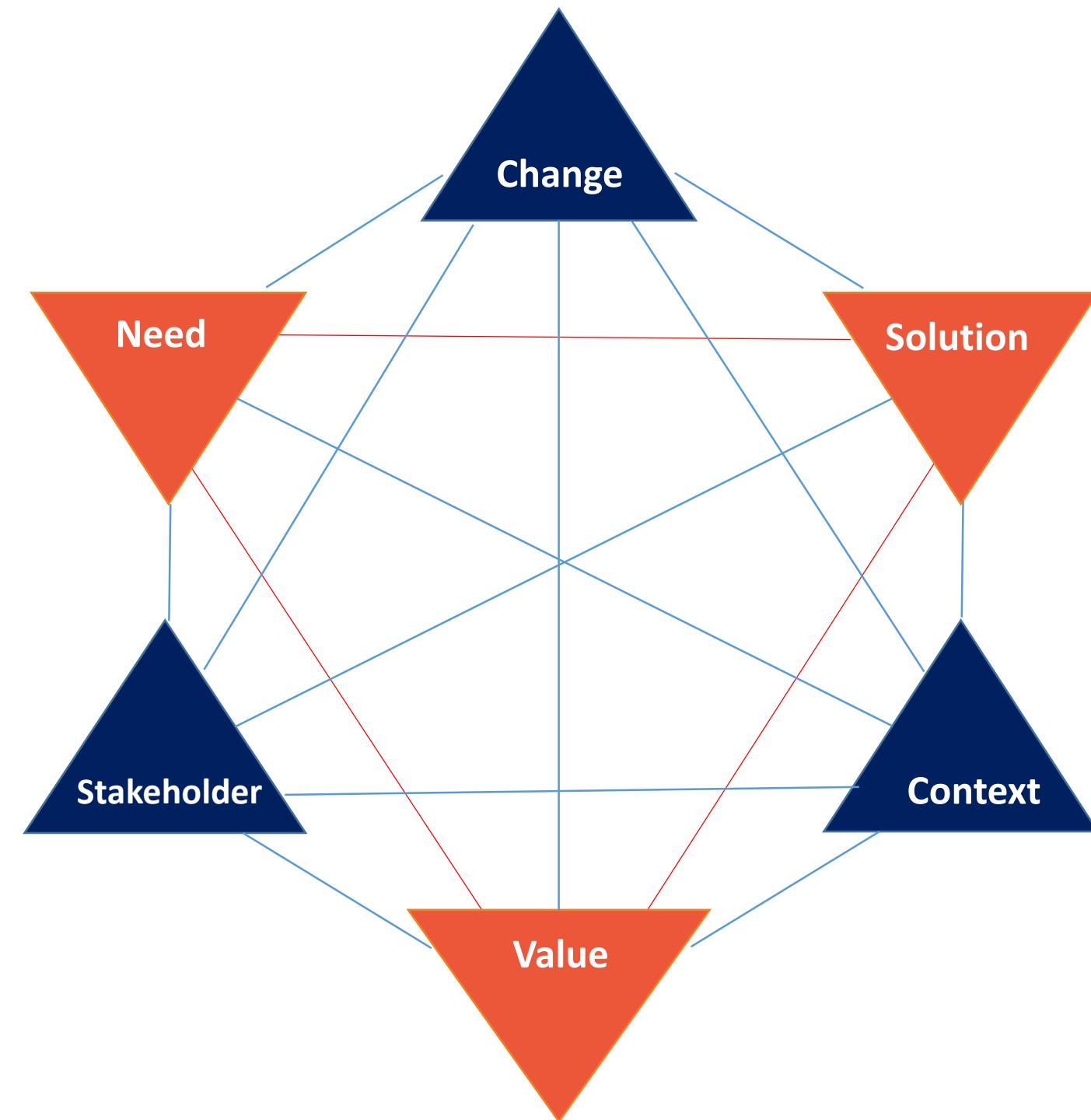


WHAT'S IN IT FOR ME



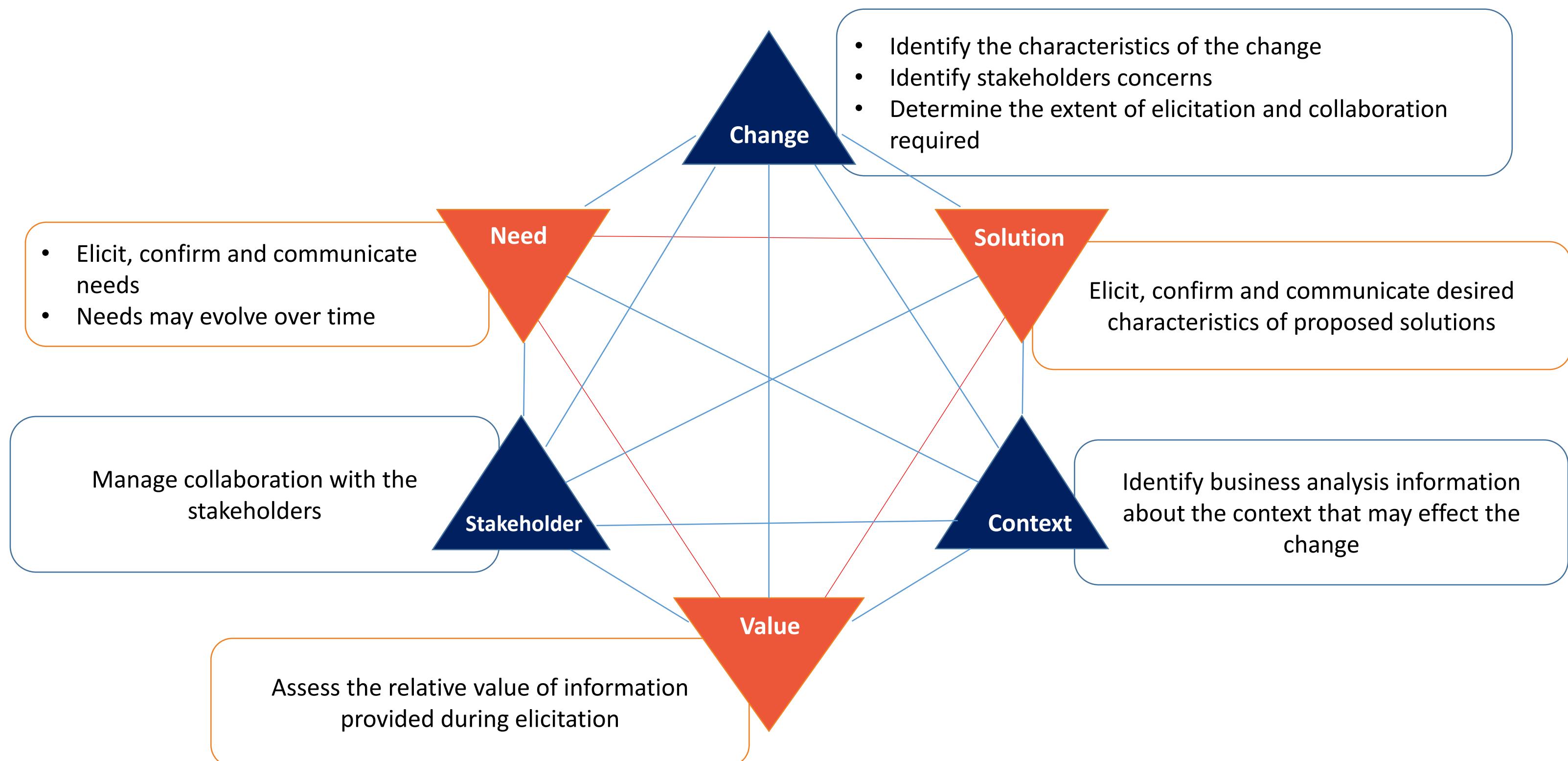
ELICITATION AND COLLABORATION KNOWLEDGE AREA

OVERVIEW



ELICITATION AND COLLABORATION KNOWLEDGE AREA (contd.)

OVERVIEW



ELICITATION AND COLLABORATION KNOWLEDGE AREA

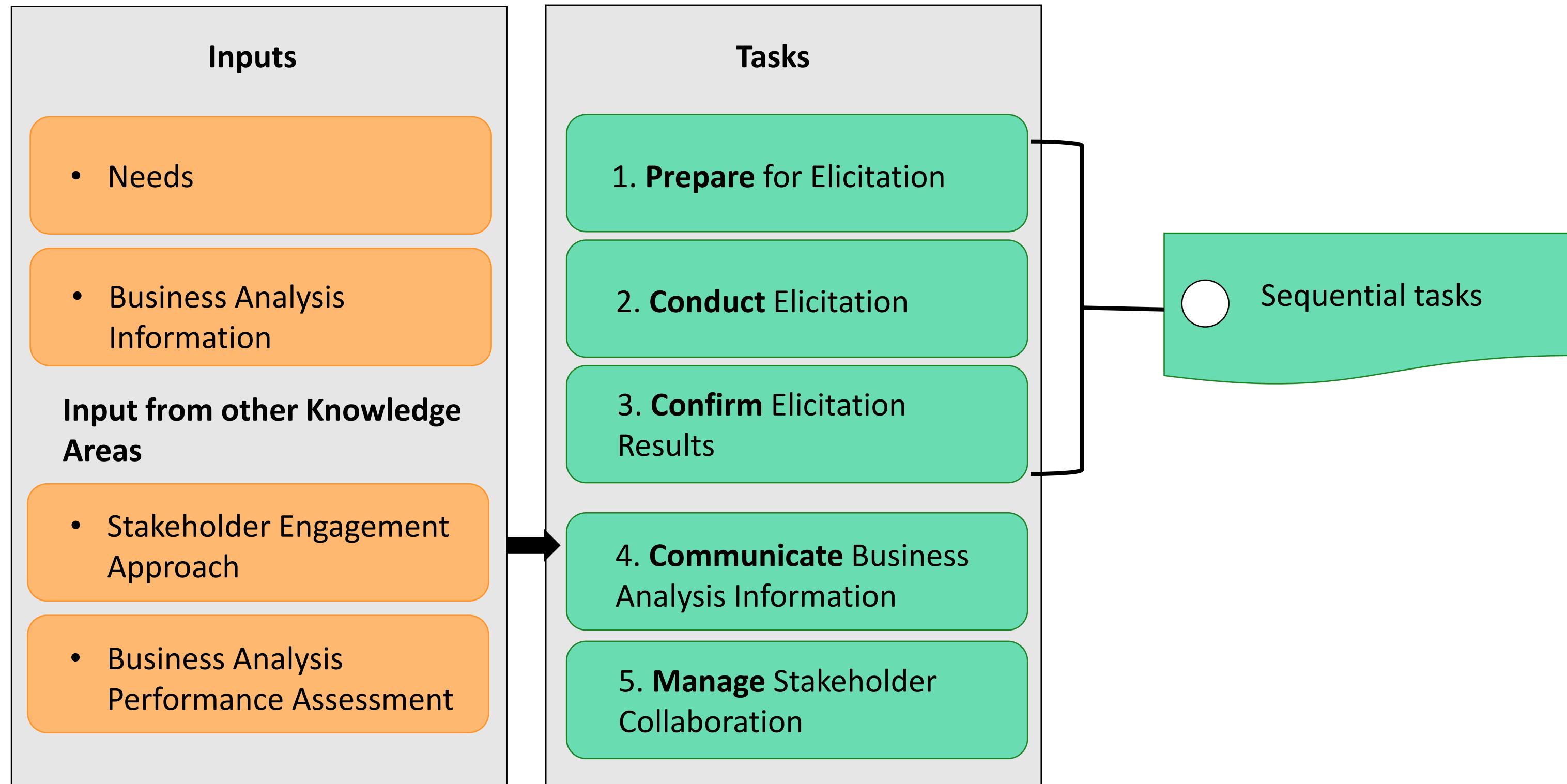
TASKS AND OUTPUT

Tasks

- 1. Prepare for Elicitation**
- 2. Conduct Elicitation**
- 3. Confirm Elicitation Results**
- 4. Communicate Business Analysis Information**
- 5. Manage Stakeholder Collaboration**

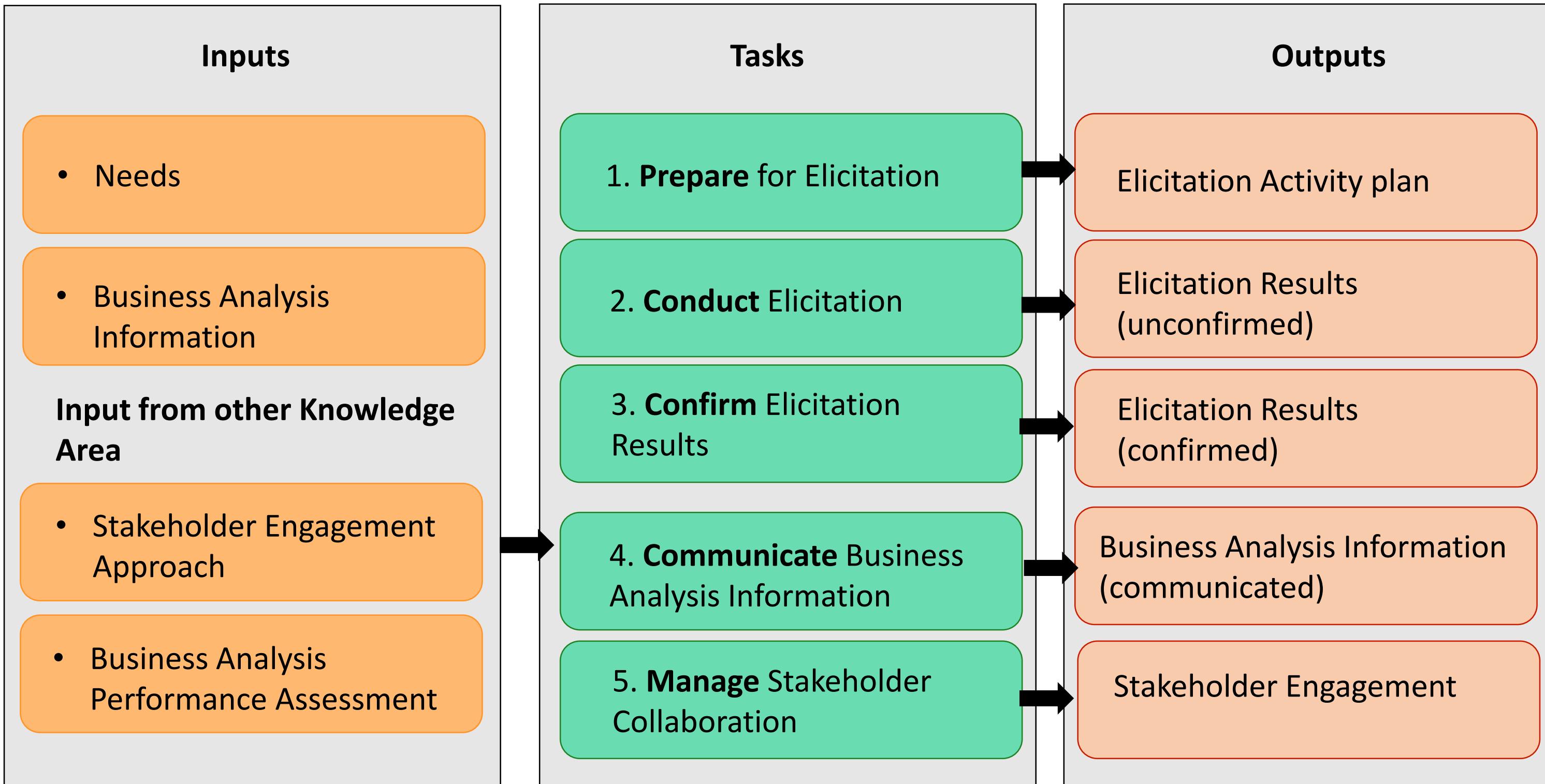
ELICITATION AND COLLABORATION KNOWLEDGE AREA (contd.)

TASKS AND OUTPUT



ELICITATION AND COLLABORATION KNOWLEDGE AREA (contd.)

TASKS AND OUTPUT



Lesson 4: Elicitation and Collaboration

Topic 4.1: Prepare for Elicitation

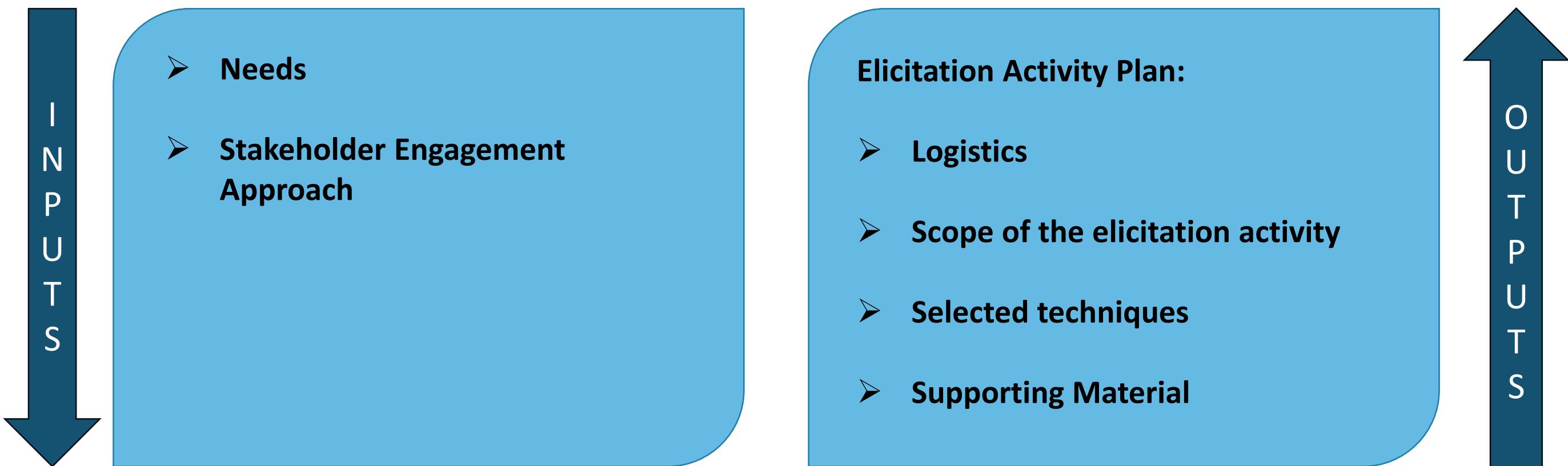
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

PREPARE FOR ELICITATION

OVERVIEW

Purpose

- Understand the scope of elicitation activity
- Select appropriate technique
- Plan for supporting material and resources



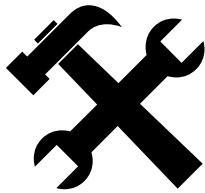
PREPARE FOR ELICITATION

ELEMENTS

Understand Scope



Select Technique



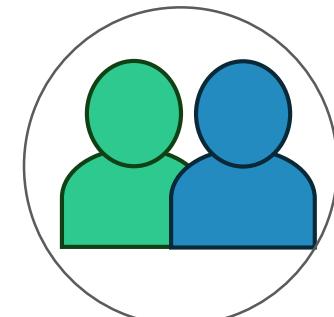
Set up Logistics



Secure Supporting Material

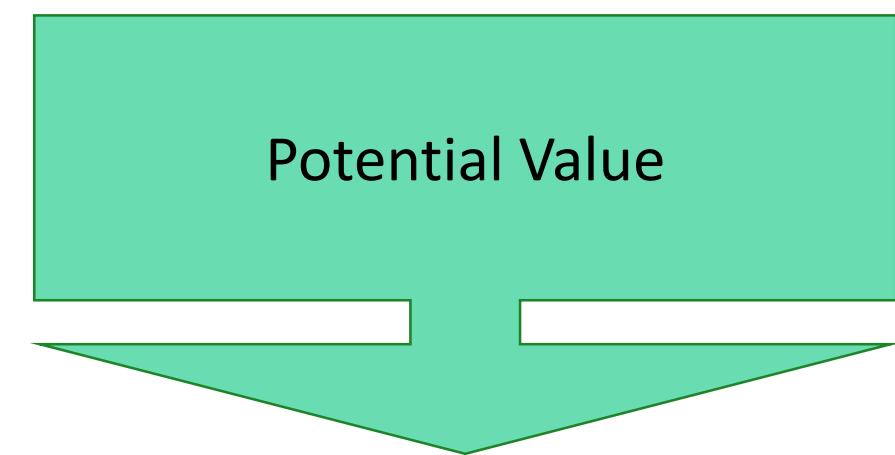


Prepare Stakeholders



PREPARE FOR ELICITATION

GUIDELINES AND TOOLS



PREPARE FOR ELICITATION (contd.)

GUIDELINES AND TOOLS

Business Analysis Approach

Business Objectives

Provides a general strategy to
be used as a guide

Provides directions towards
future state

Existing Business Analysis

Potential Value

Provides better understanding
of scope

Describes the value to be
realized

PREPARE FOR ELICITATION

TECHNIQUES

Stakeholder List, Map, or Personas

Brainstorming

Mind Mapping

Document Analysis

Data Mining

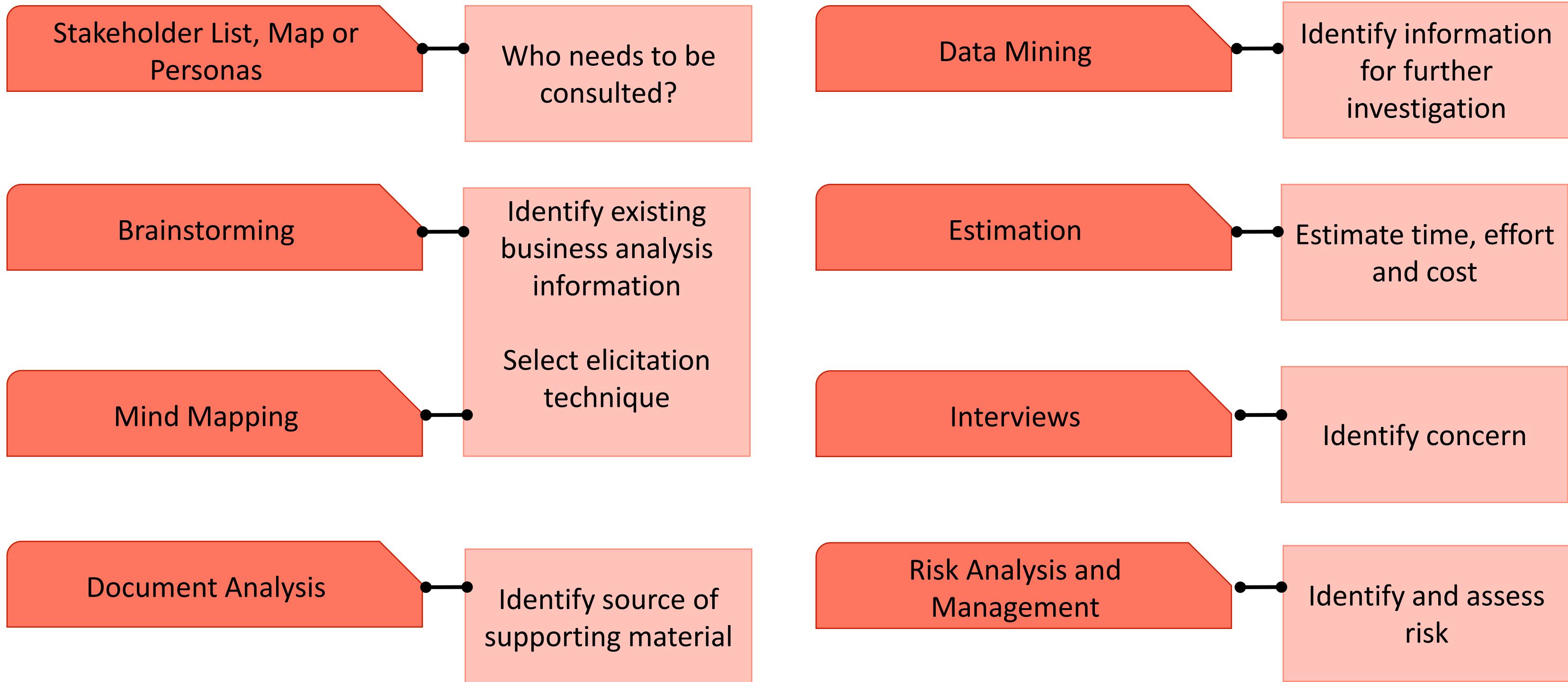
Estimation

Interviews

Risk Analysis and Management

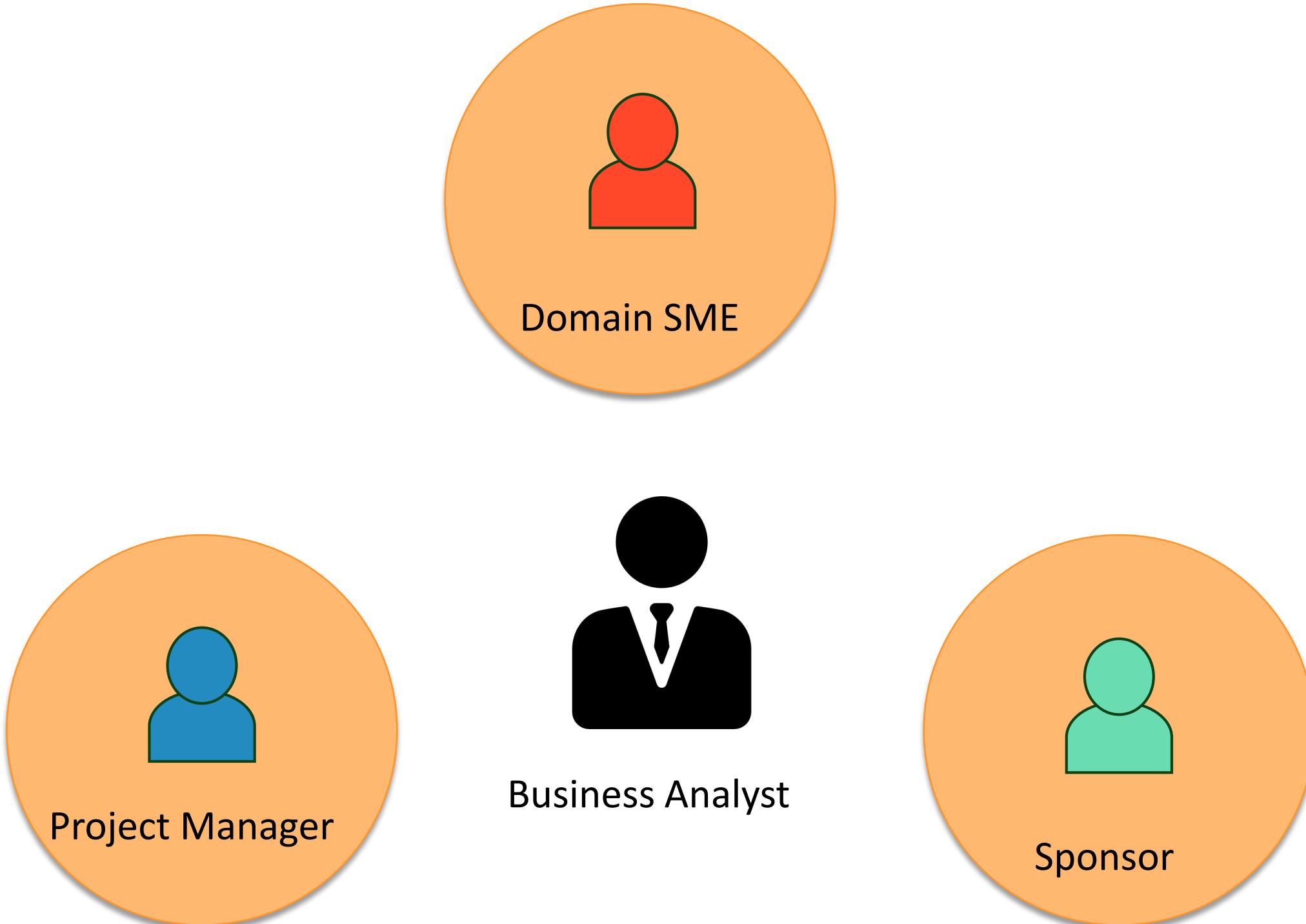
PREPARE FOR ELICITATION (contd.)

TECHNIQUES



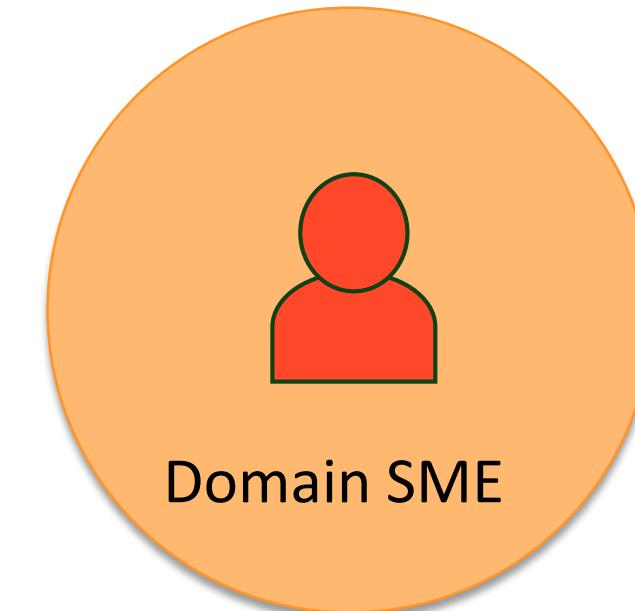
PREPARE FOR ELICITATION

STAKEHOLDERS



PREPARE FOR ELICITATION (contd.)

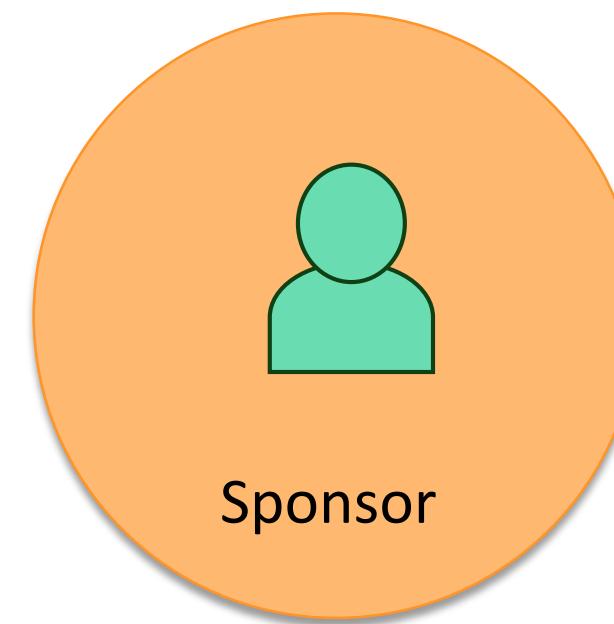
STAKEHOLDERS



Provides supporting material and guidance.



Business Analyst



Lesson 4: Elicitation and Collaboration

Topic 4.2: Conduct Elicitation

- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

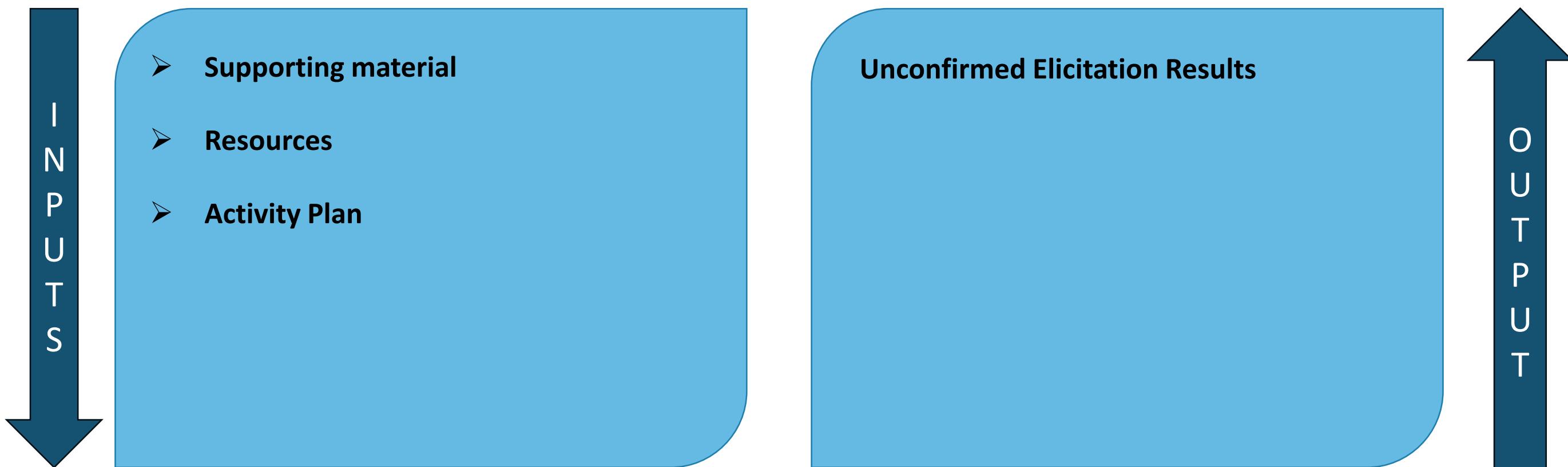
CONDUCT ELICITATION

OVERVIEW

Purpose

Information relevant to change:

- Draw out
- Explore
- Identify



CONDUCT ELICITATION (contd.)

OVERVIEW

Collaborative



- Interacts with the stakeholder
- Relies on the stakeholders' experience

Research



- Discovers information from documents
- Stakeholders may not know about this information

Experiments



- Discovers information without stakeholders or documents
- Prototyping or Proof of concept

CONDUCT ELICITATION

ELEMENTS



Guide the elicitation session

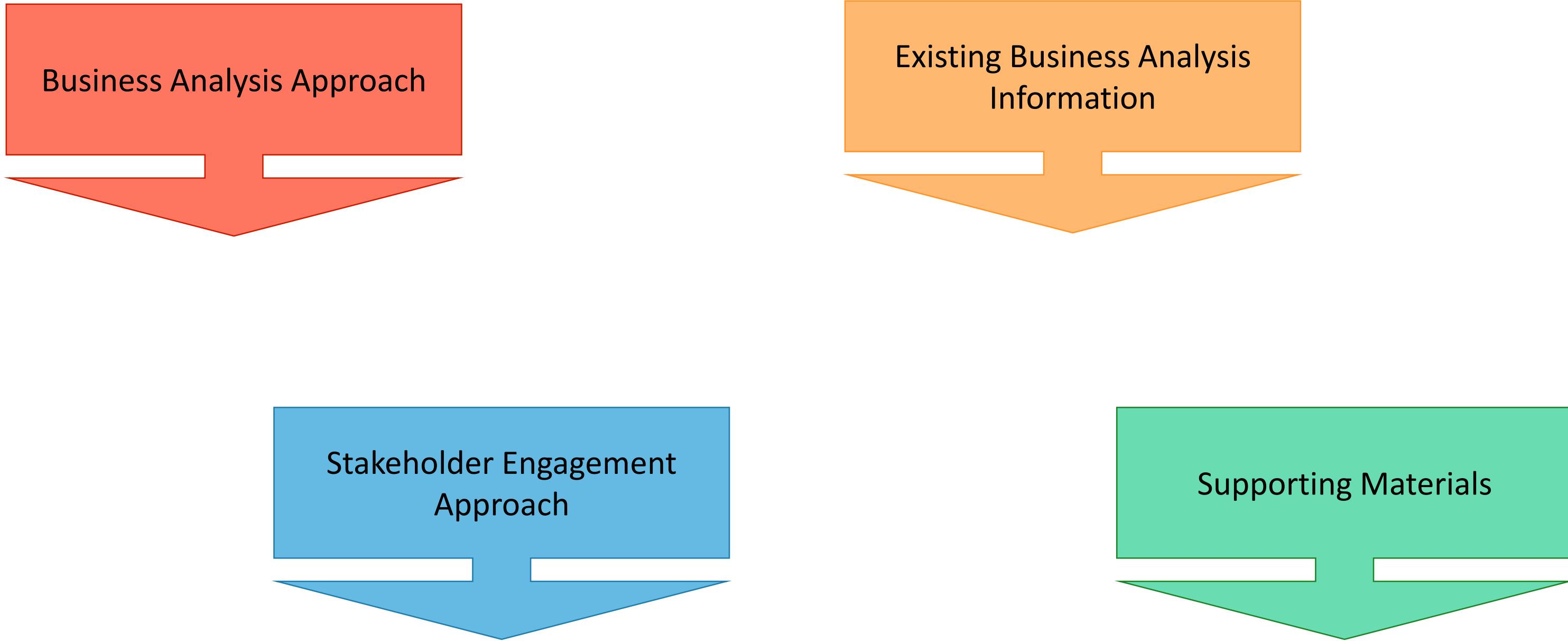


Capture elicitation results



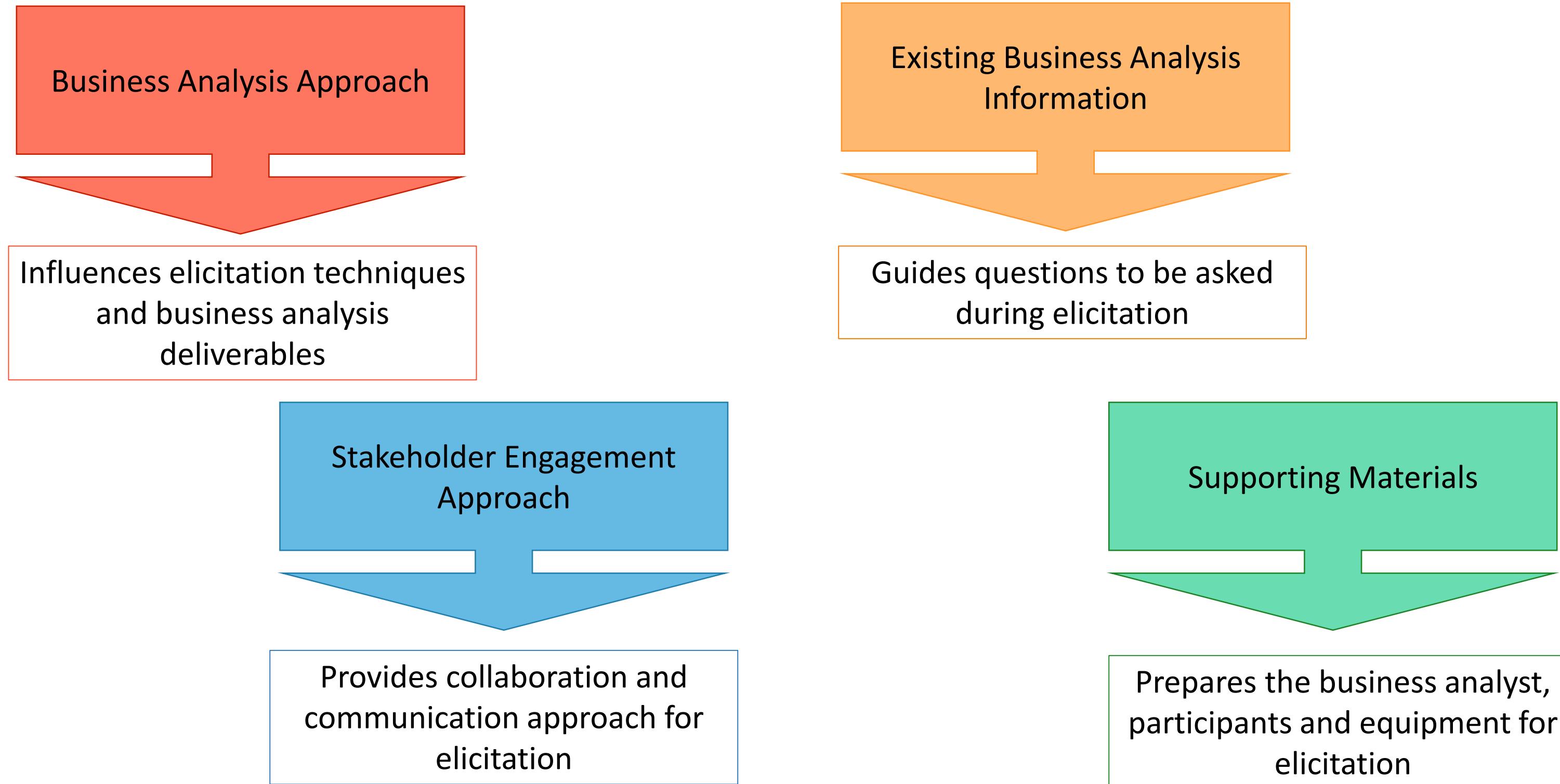
Engage someone else to
scribe

CONDUCT ELICITATION GUIDELINES AND TOOLS



CONDUCT ELICITATION (contd.)

GUIDELINES AND TOOLS



CONDUCT ELICITATION TECHNIQUES

Benchmarking
and Market
Analysis

Collaborative
Games

Prototyping

Data Mining

Business Rules
Analysis

Document
Analysis

Workshops

Interface
Analysis

Concept
Modeling

Process Analysis

Observation

Focus Groups

Interviews

Process
Modeling

Brainstorming

Survey and
Questionnaire

Mind Mapping

Data Modeling

CONDUCT ELICITATION

DOCUMENT ANALYSIS - OVERVIEW

Strengths



- Elicit business analysis information
- Understand the context of a business need
- Understand the solution currently being implemented
- Validate findings from other elicitation efforts
- Engage effectively with stakeholders

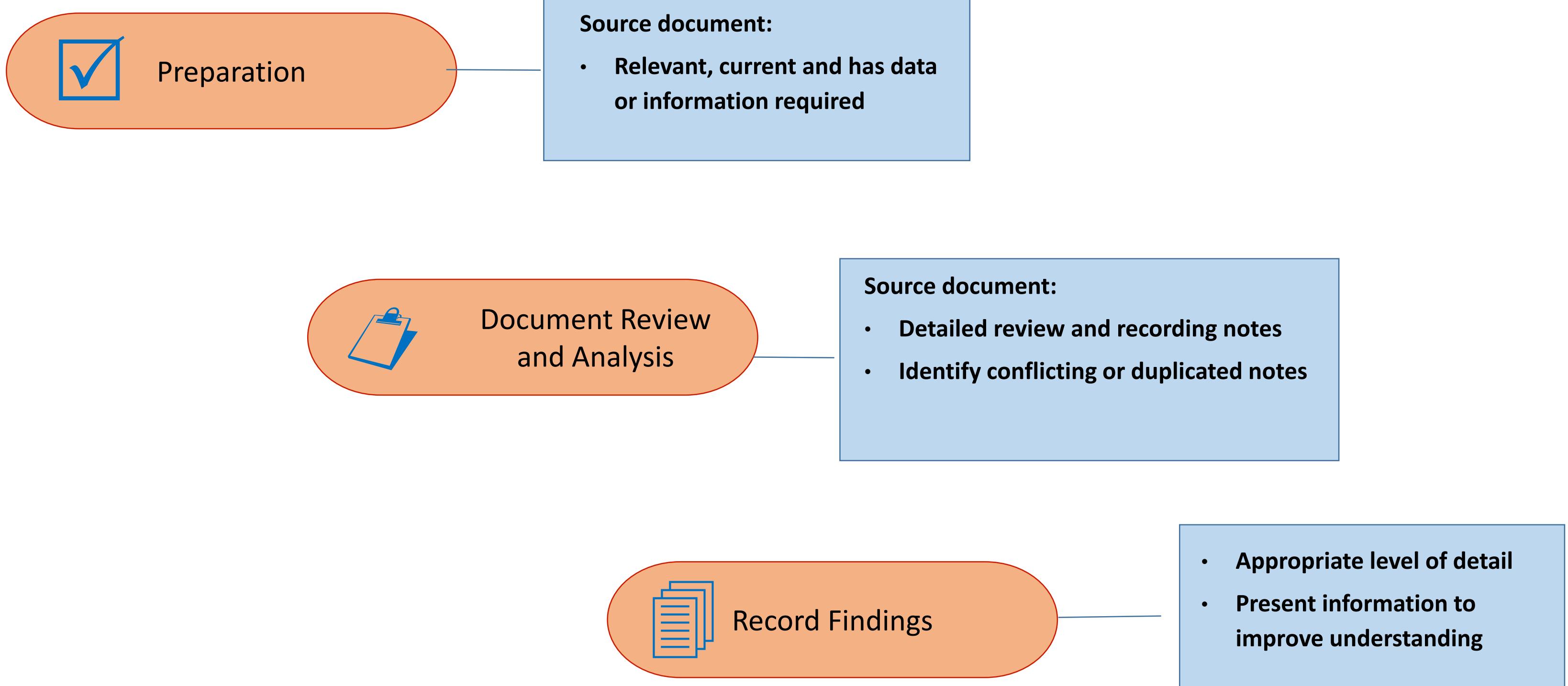
Limitations



- Wide range of sources make it time consuming
- Outdated documents may cause confusion

CONDUCT ELICITATION

DOCUMENT ANALYSIS - ELEMENTS



CONDUCT ELICITATION

OBSERVATION - OVERVIEW

Strengths



- View and understand activities
- Job shadowing
- Approaches:
 - Active / Noticeable
 - Passive / Unnoticeable
- Gain Realistic and practical insights

Limitations



- May be disruptive to the day-to-day operations
- Participants may alter their work practices
- Unsuitable for knowledge based activities

CONDUCT ELICITATION OBSERVATION - ELEMENTS

Define the objectives of the observation



Prepare for observation



Conduct observation session



Confirm and present observation session findings



CONDUCT ELICITATION

BRAINSTORMING - OVERVIEW

Strengths



- Produce numerous ideas and a diverse set of options in a short span of time
- Focus on the topic or problem
- Encourage participants to use new ways
- Foster creativity with a non-judgmental environment

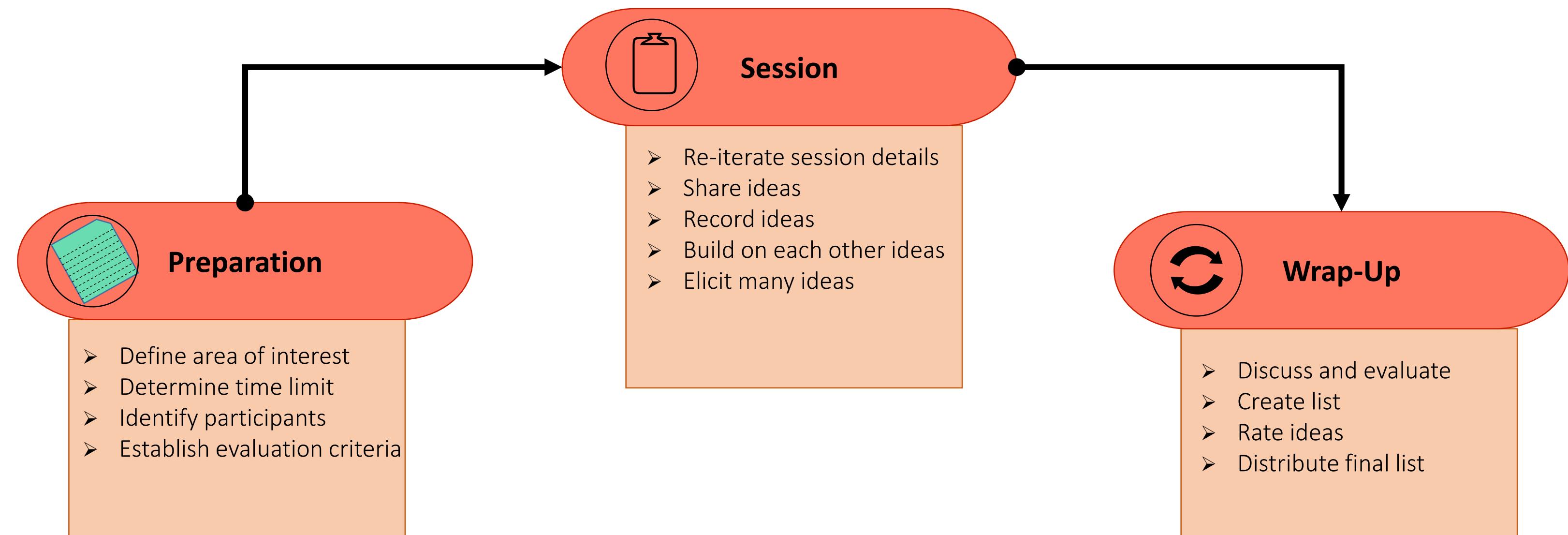
Limitations



- Effectiveness depends on:
 - Individual creativity
 - Willingness to participate

CONDUCT ELICITATION

BRAINSTORMING - ELEMENTS



CONDUCT ELICITATION

COLLABORATIVE GAMES - OVERVIEW

Strengths



- Encourages collaboration in building common understanding
- Follows adaptive or agile methodology
- Sets rules to focus on objectives

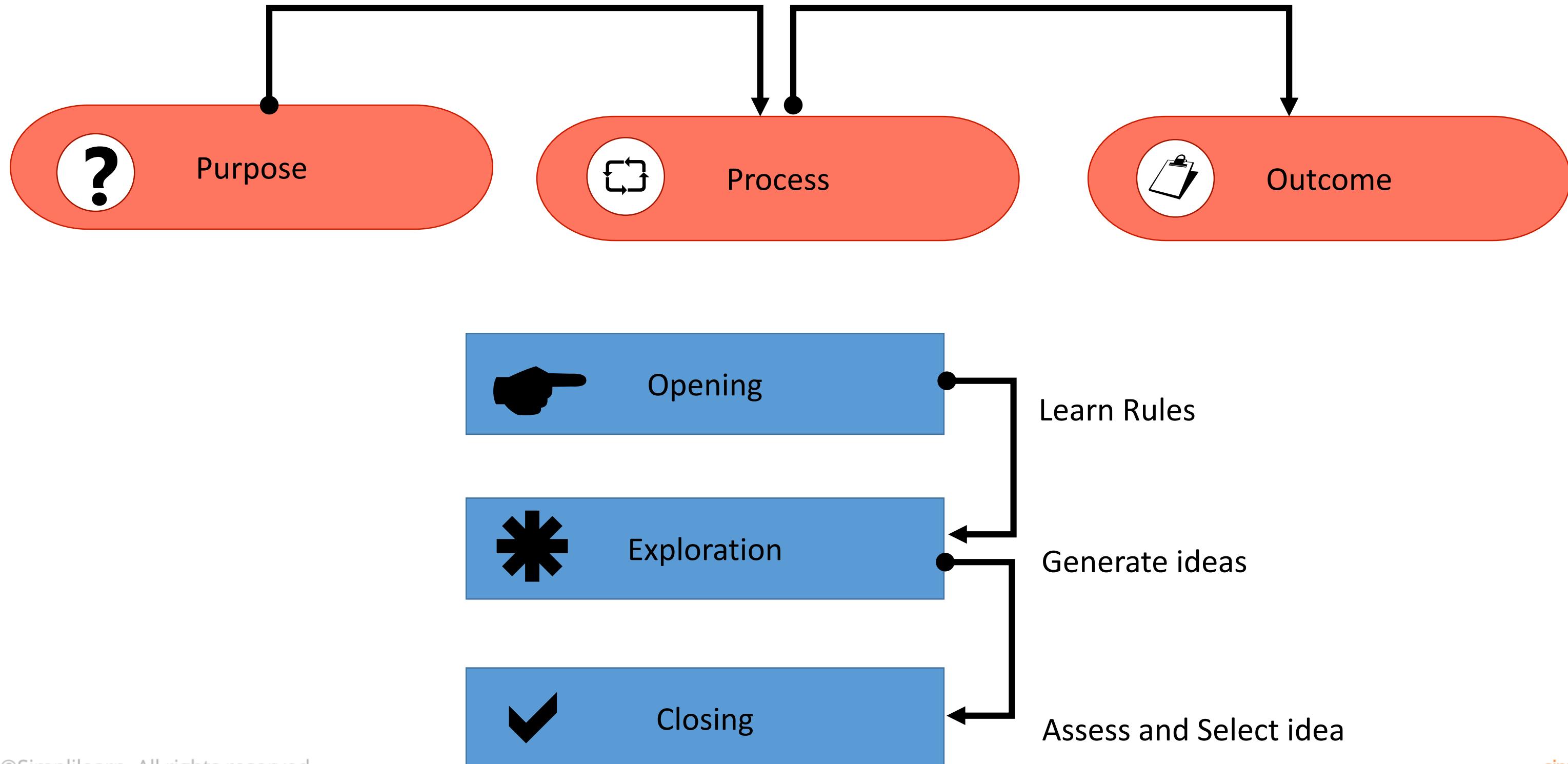
Limitations



- Game environment may make some participants uncomfortable
- Time consuming
- Unproductive if objectives are unclear

CONDUCT ELICITATION

COLLABORATIVE GAMES - ELEMENTS



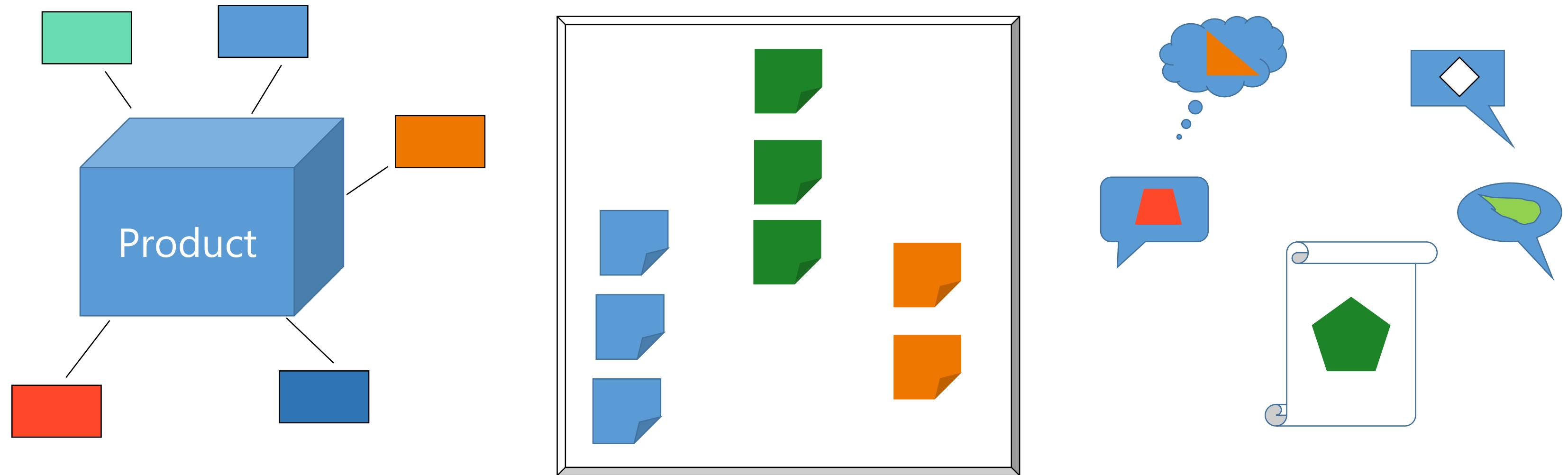
CONDUCT ELICITATION (contd.)

COLLABORATIVE GAMES - ELEMENTS

Product Box
Identify features of a product

Affinity Map
Identify related or similar features

Fishbowl
Identify hidden assumptions



CONDUCT ELICITATION WORKSHOPS - OVERVIEW

Strengths



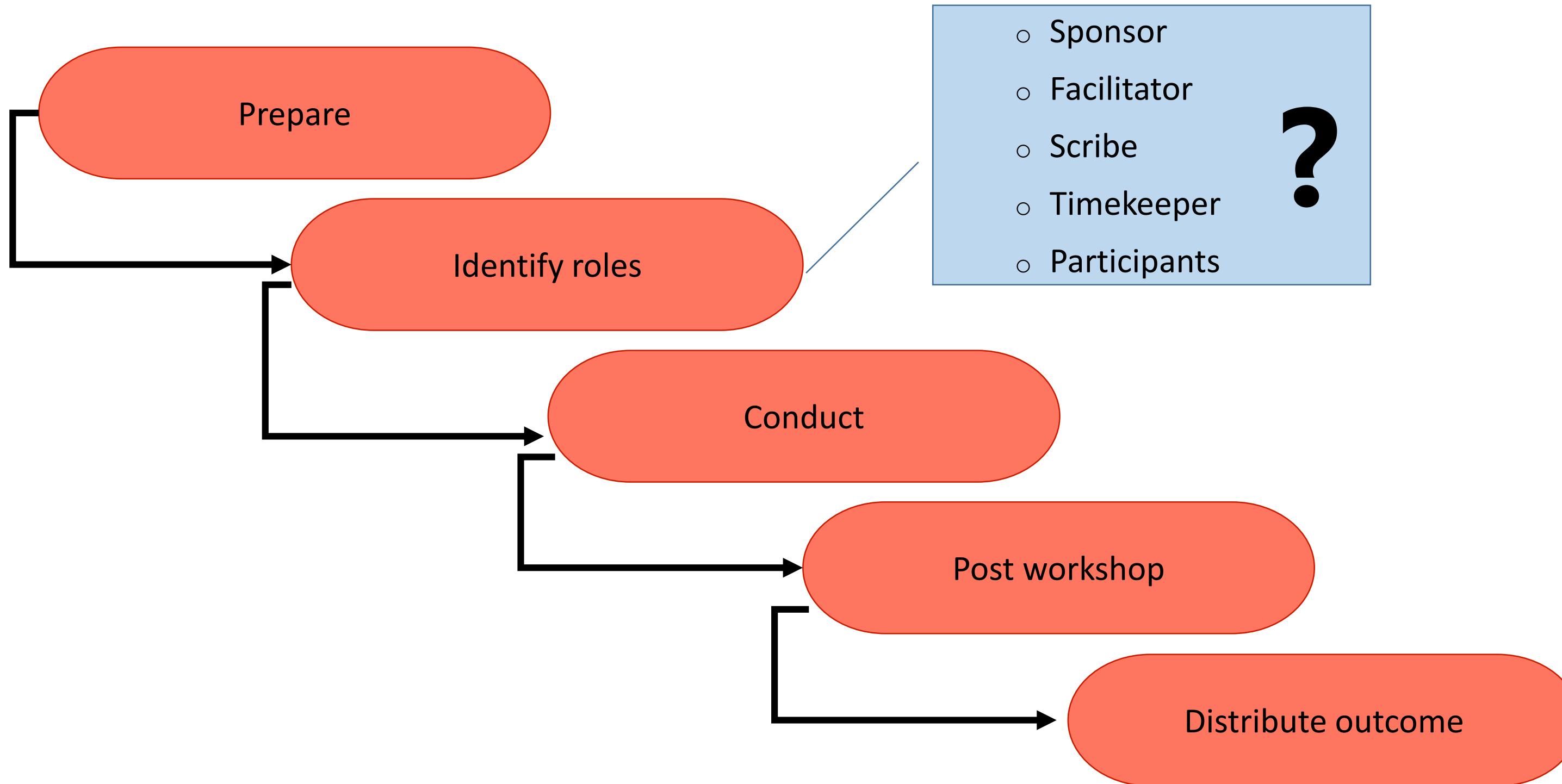
- Most common technique
- Focused event
- Collaboration to achieve predefined goals
- Make decisions and gain mutual understanding
- Requires short period of time
- Requires low cost

Limitations



- Availability of stakeholders difficult
- Success depends on facilitator's knowledge of participants
- Too many participants slows down the process
- Too few participants can lead to overlooking of needs

CONDUCT ELICITATION WORKSHOPS - ELEMENTS



CONDUCT ELICITATION

FOCUS GROUPS - OVERVIEW

Strengths



- Interactive group environment
- Pre-qualified participants
- Homogenous or Heterogeneous group
- Qualitative research
- Cost effective

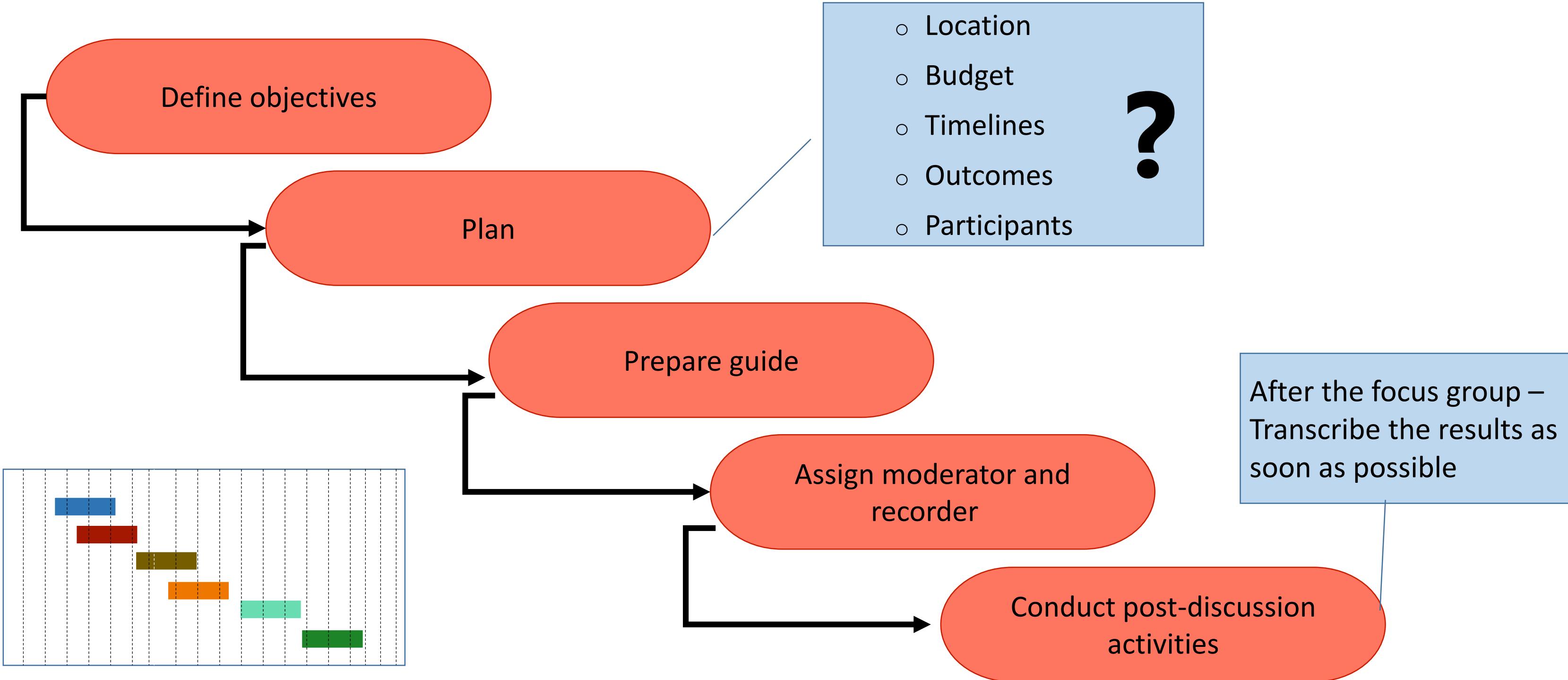
Limitations



- Trust issues in participants
- More vocal participants may influence the result

CONDUCT ELICITATION

FOCUS GROUPS- ELEMENTS



CONDUCT ELICITATION

SURVEY AND QUESTIONNAIRE - OVERVIEW

Strengths



- Distribution, collection and analysis
- Elicit business information about customer, product, work practices and attitudes in a structured way and in a short period of time
- Quick and relatively inexpensive to administer
- Effective and efficient across geographies
- Closed and open ended questions

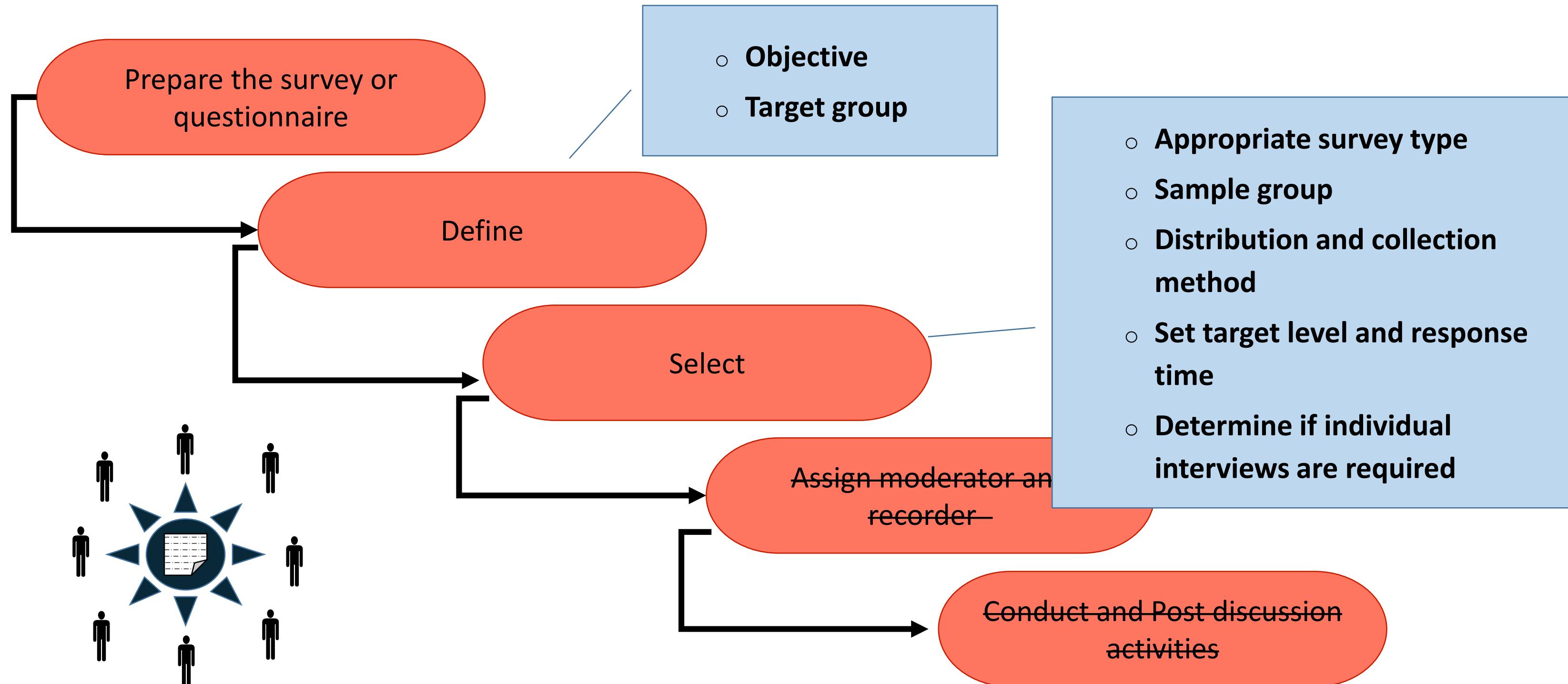
Limitations



- Response may be low for statistical significance
- Ambiguous questions not answered
- Open-ended questions need more analysis

CONDUCT ELICITATION

SURVEYS AND QUESTIONNAIRES - ELEMENTS



CONDUCT ELICITATION

PROTOTYPING - OVERVIEW

Strengths



- Iterative process
- Creation of a model or design requirements
- Optimizes user experience to evaluate design options
- Basis of the final business solution
- Identifies missing and incorrect requirements
- Early inputs and feedback

Limitations



- Stakeholders may develop unrealistic expectations
- Stakeholder may focus on the design of the solution
- Focus of discussions may be on how are we going to build rather than what
- Underlying technology needs to be understood

CONDUCT ELICITATION

PROTOTYPING - ELEMENTS

Determine Approach

Throw-away prototypes are discarded once the learning from the developed prototype and purpose are achieved.

Evolutionary prototype is incrementally built to the final solution.

Examples

Proof of Concept

Usability prototype

Visual prototype

Functional prototype

Methods

Storyboarding

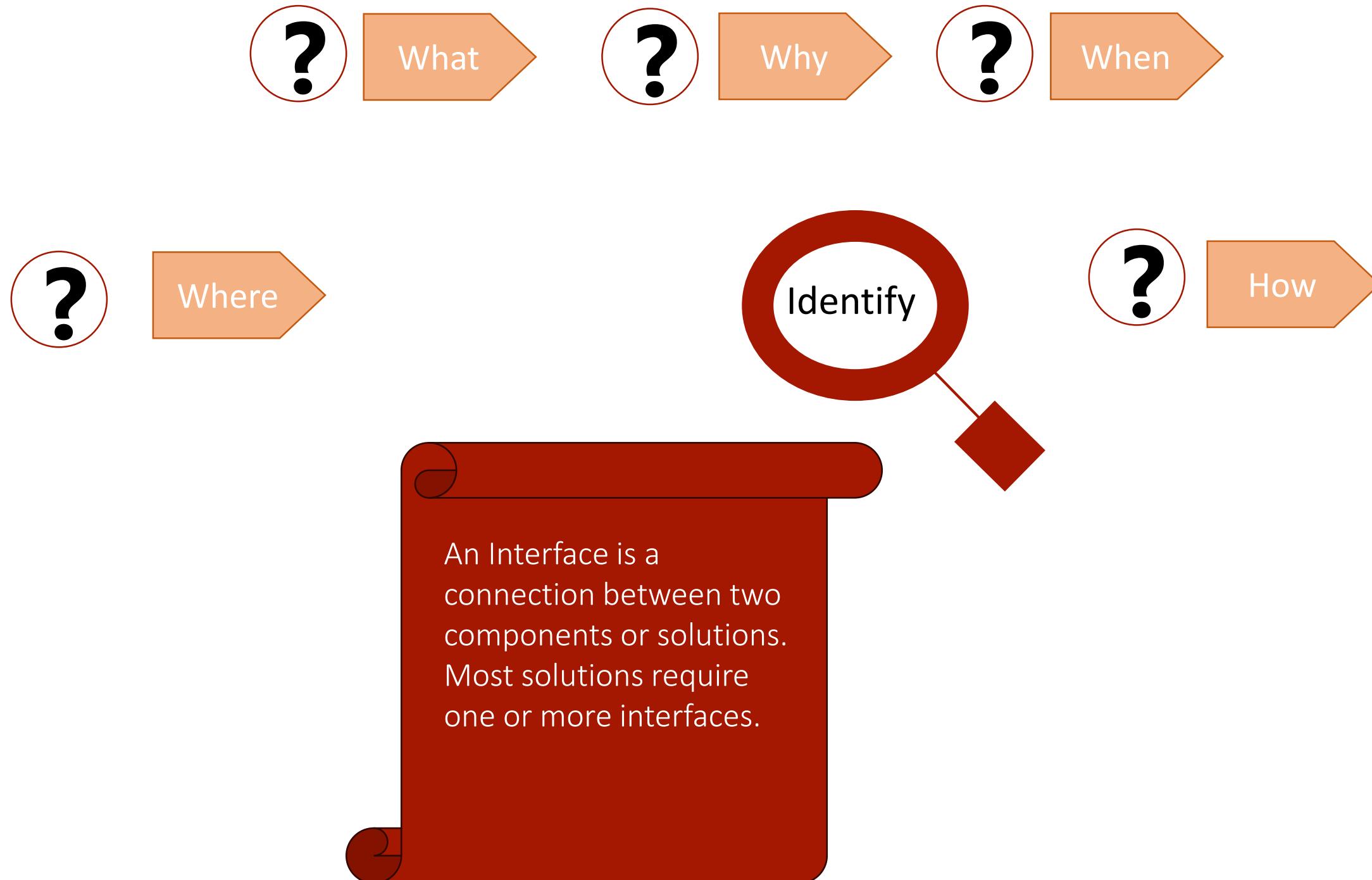
Paper prototyping

Workflow modeling

Simulation

CONDUCT ELICITATION

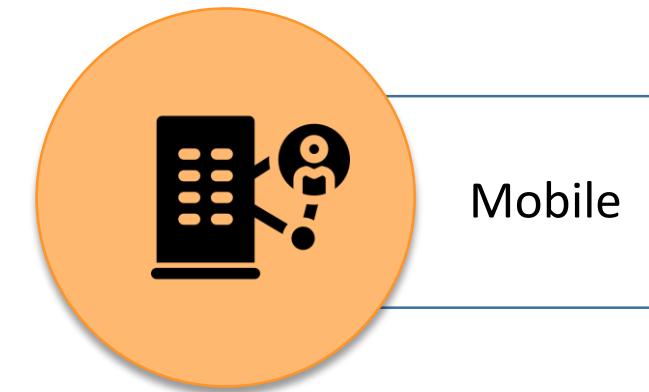
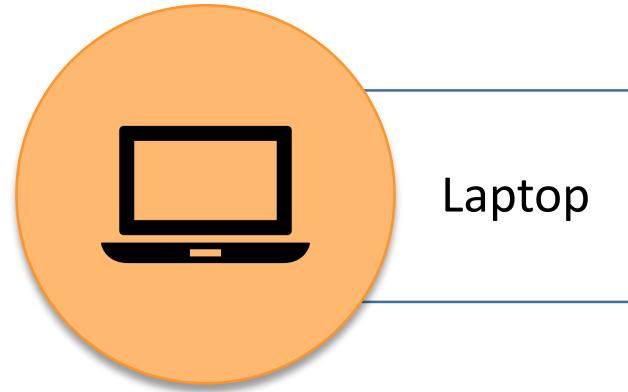
INTERFACE ANALYSIS - OVERVIEW



CONDUCT ELICITATION (contd.)

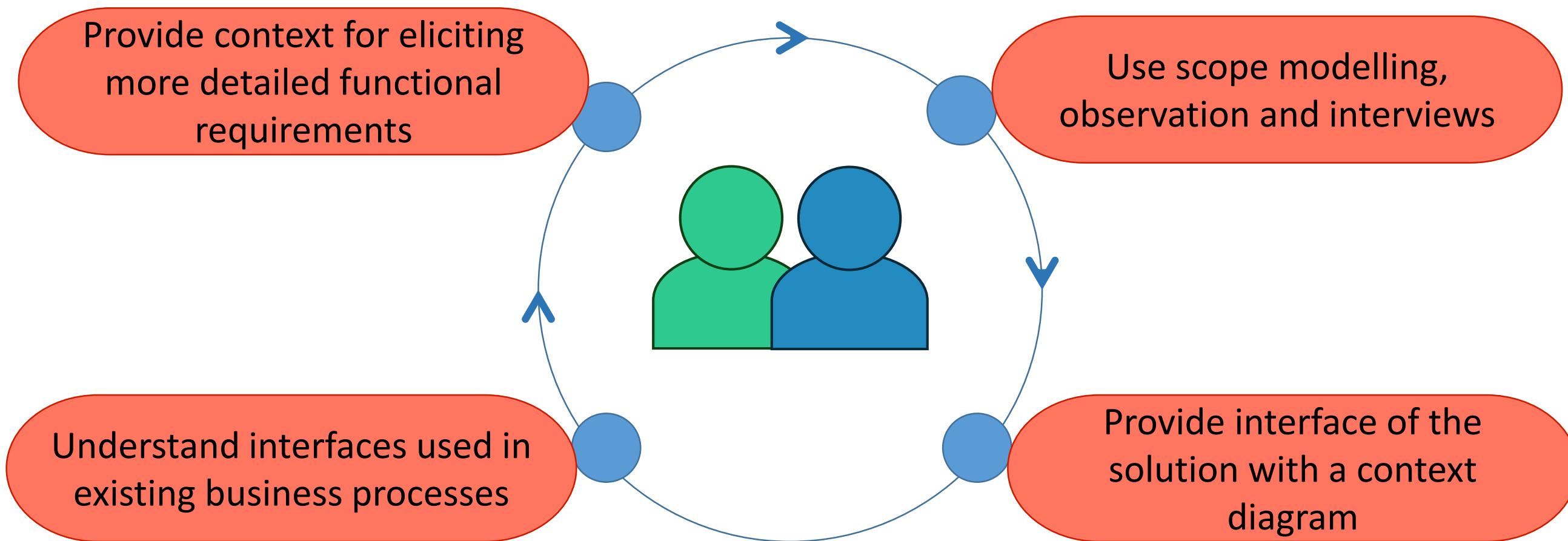
INTERFACE ANALYSIS - OVERVIEW

- External interface to the solution
- Business processes
- Data interface between systems
- Application Programming Interfaces (APIs)
- Hardware devices



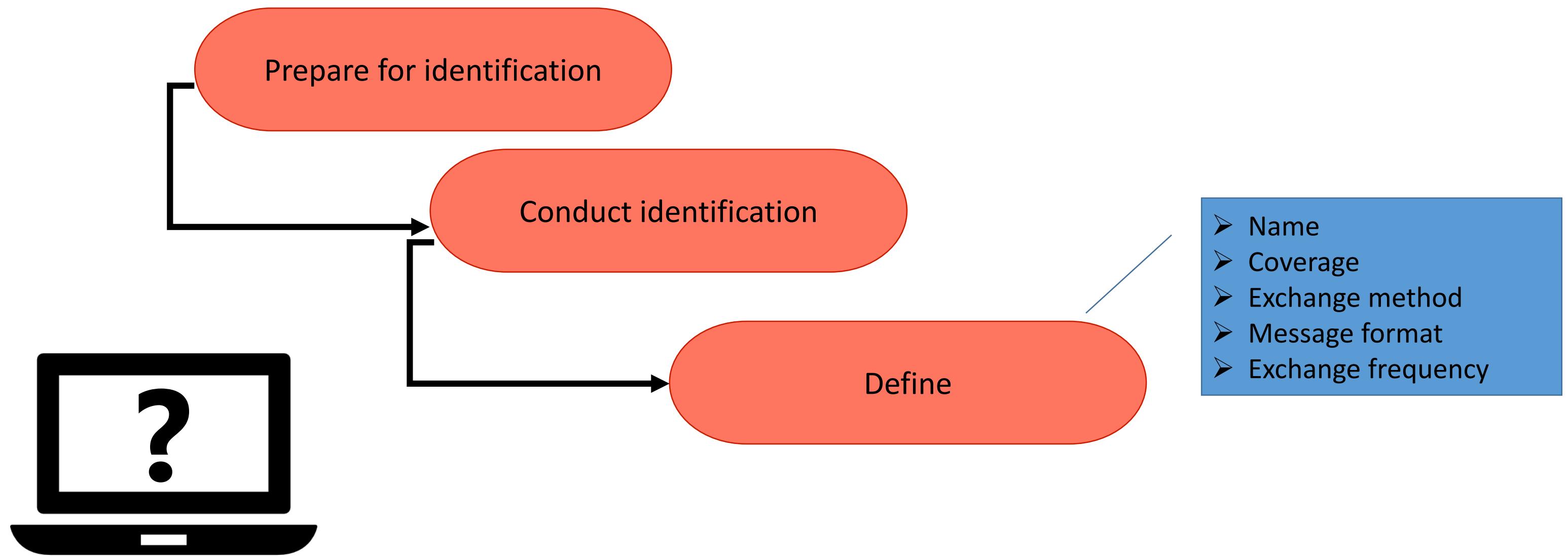
CONDUCT ELICITATION (contd.)

INTERFACE ANALYSIS - OVERVIEW



CONDUCT ELICITATION (contd.)

INTERFACE ANALYSIS - ELEMENTS



CONDUCT ELICITATION INTERVIEWS - OVERVIEW

Definition

A systematic approach to elicit business analysis information by asking relevant questions and documenting the responses from a person or a group of people. One-on-one interviews are the most common. Interviews can be synchronous, asynchronous, conducted face-to-face or through video conferencing.

Types

- Structured interview - Questions are pre-defined
- Unstructured interview - Questions may vary based on the interviewee response

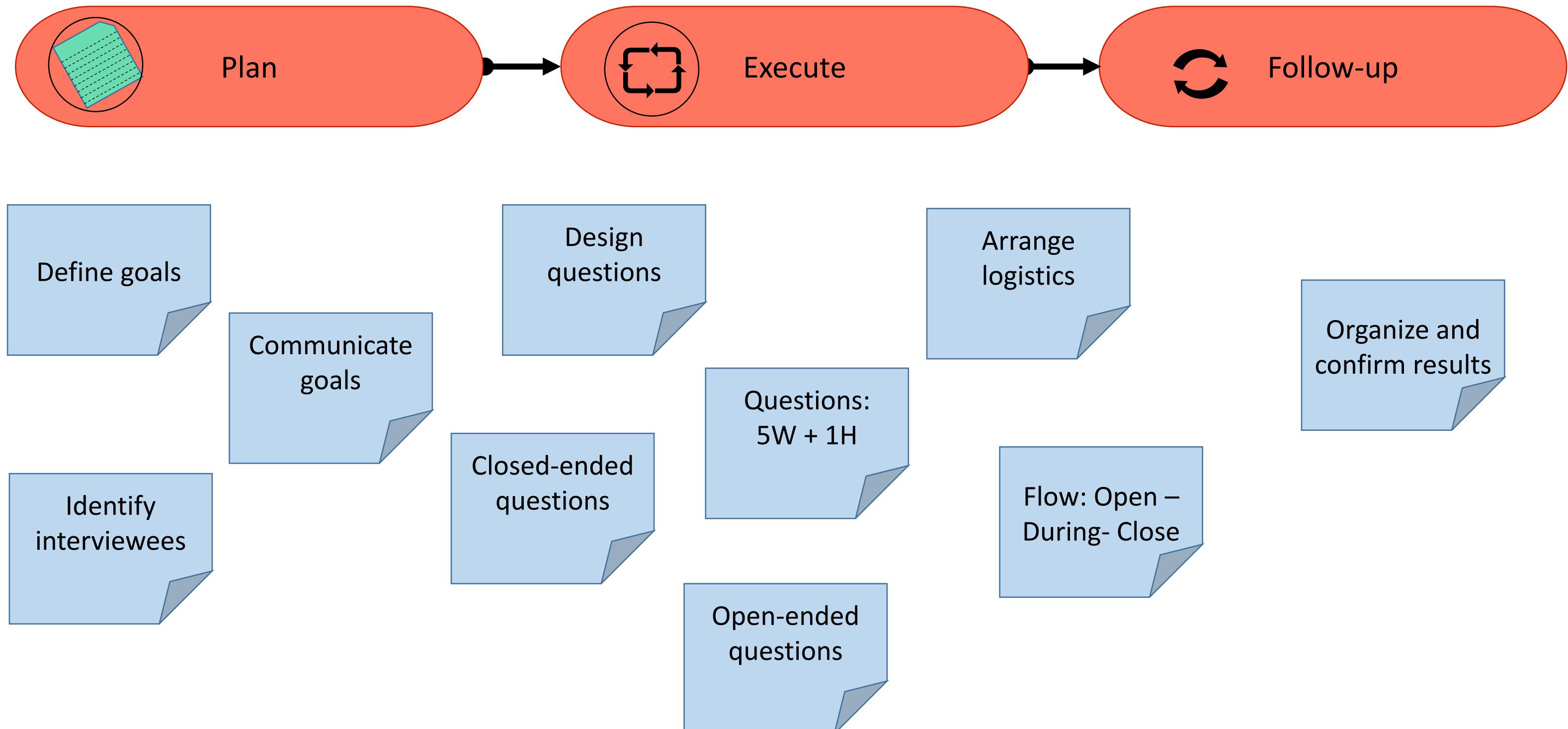
Success

- Interviewers - Domain knowledge, experience and skills for documenting the discussion
- Interviewees - Readiness, degree of clarity about the goal of the interview
- Rapport of the interviewer with the interviewee

Constraint

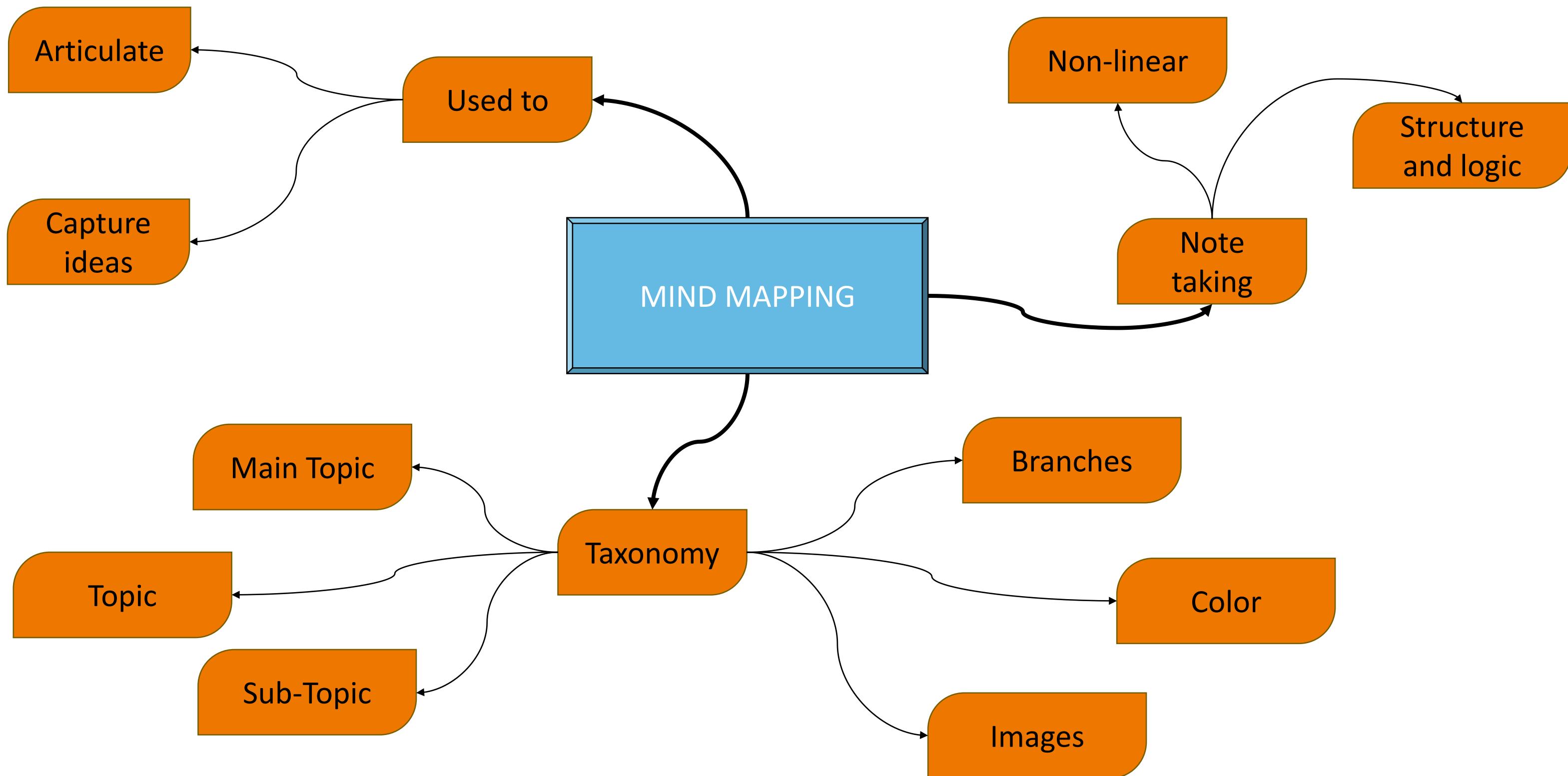
Significant time is required to plan and conduct interviews.

CONDUCT ELICITATION INTERVIEWS - ELEMENTS



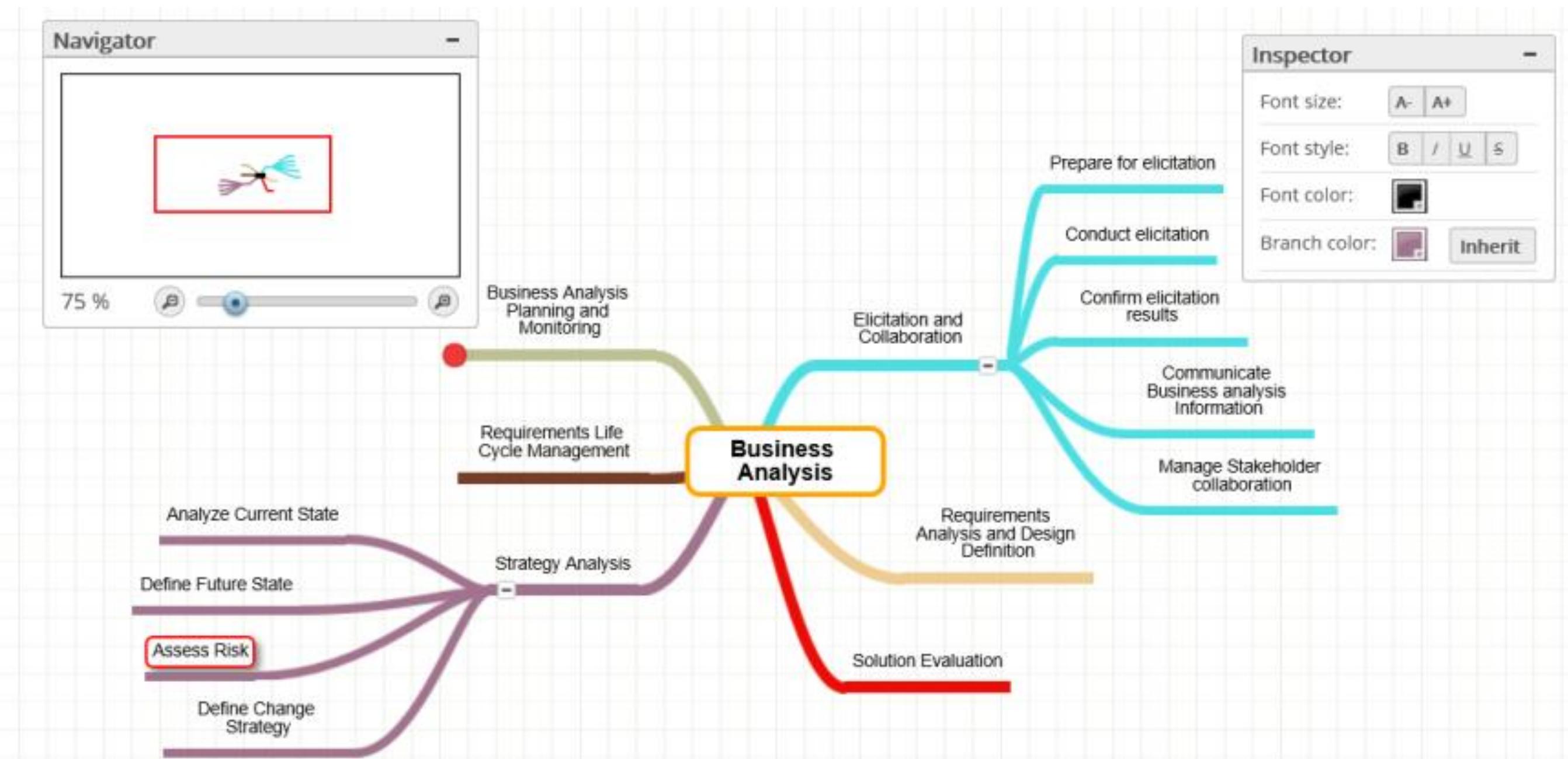
CONDUCT ELICITATION

MIND MAPPING - OVERVIEW



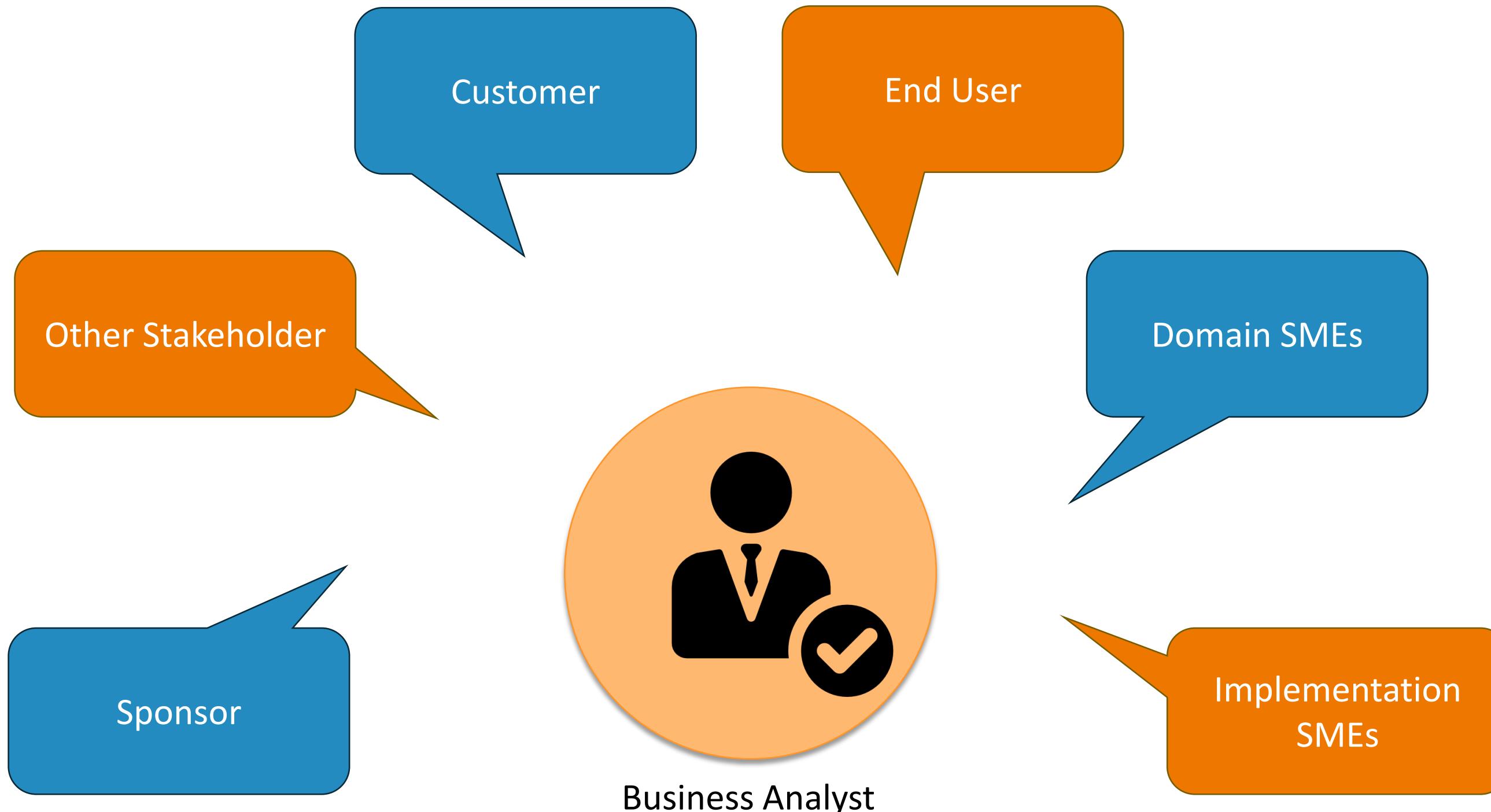
CONDUCT ELICITATION

MIND MAPPING - ELEMENTS



CONDUCT ELICITATION

STAKEHOLDERS



Lesson 4: Elicitation and Collaboration

Topic 4.3: Confirm Elicitation Results

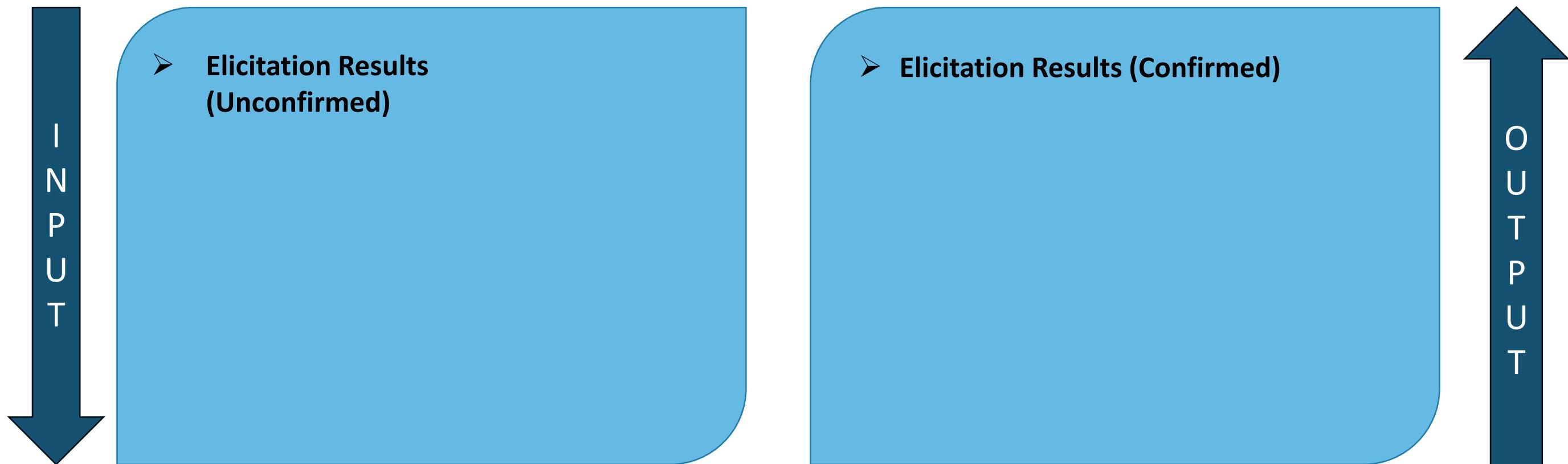
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

CONFIRM ELICITATION RESULTS

OVERVIEW

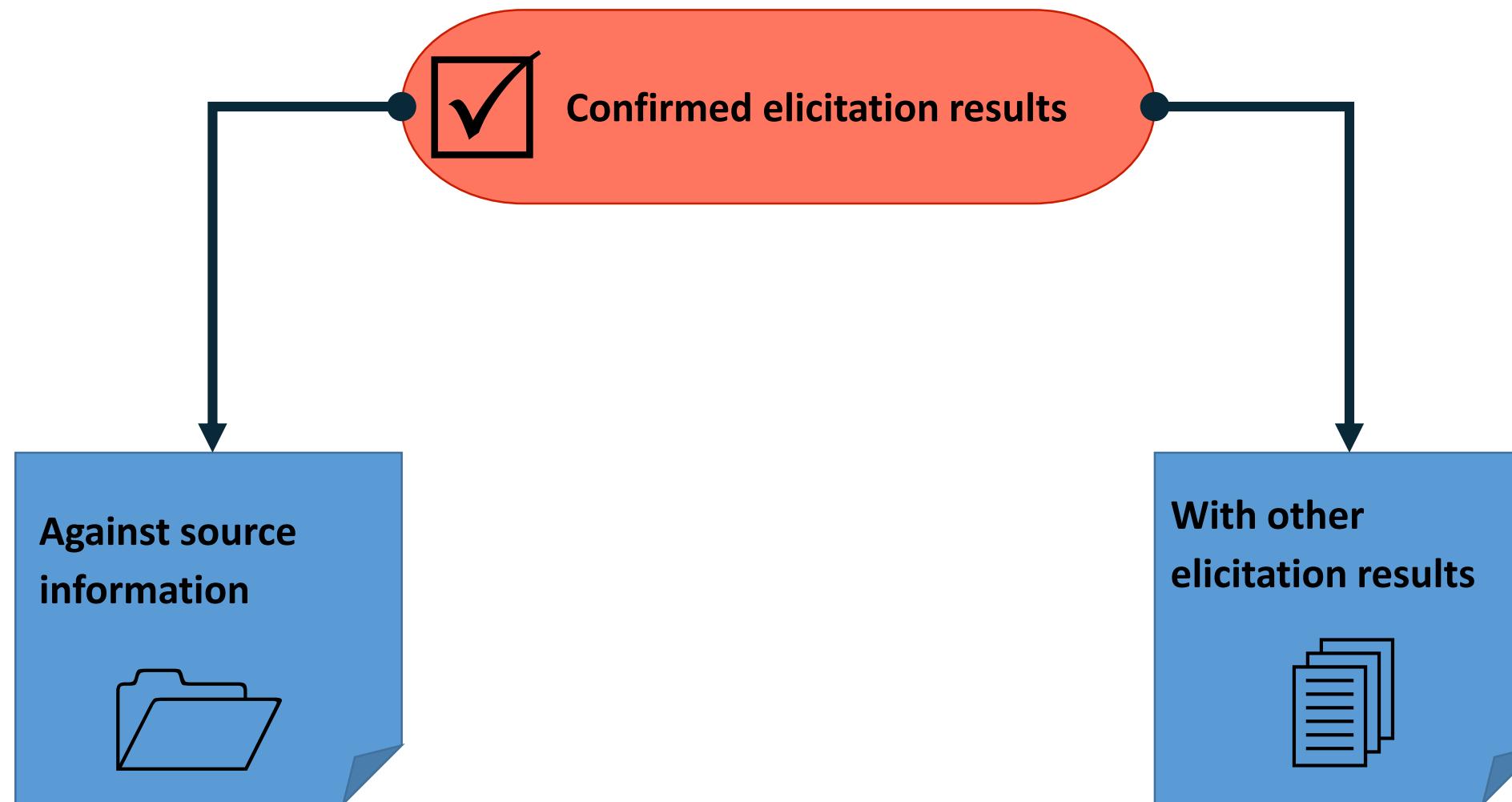
Purpose

- Check gathered information
- Confirm accuracy and consistency with other information



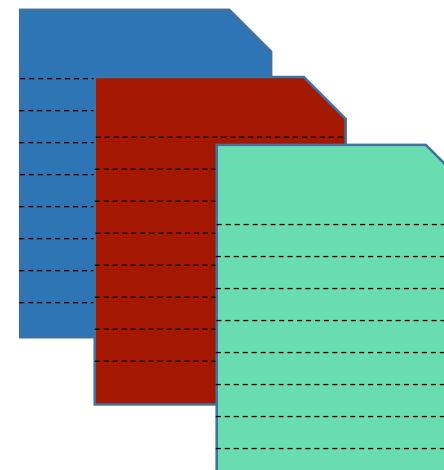
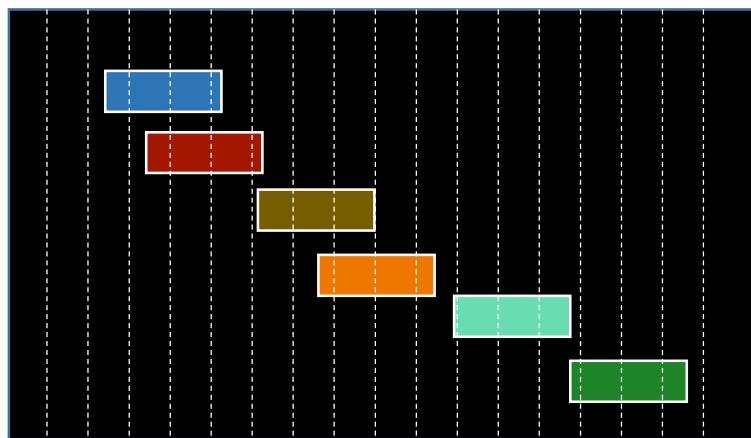
CONFIRM ELICITATION RESULTS

ELEMENTS



CONFIRM ELICITATION RESULTS

GUIDELINES AND TOOLS



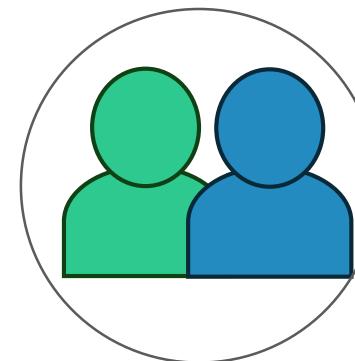
CONFIRM ELICITATION RESULTS

TECHNIQUES

Document Analysis



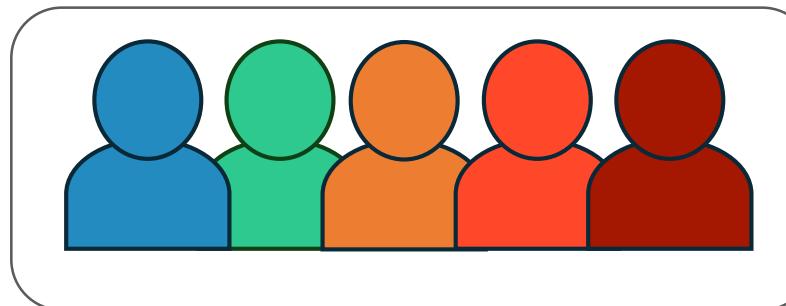
Interviews



Reviews



Workshops



CONFIRM ELICITATION RESULTS (contd.)

TECHNIQUES

Document Analysis

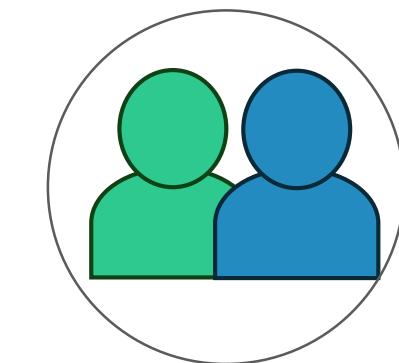


- Confirm elicitation results with existing documents
- Conduct review of elicitation results and solicit feedback

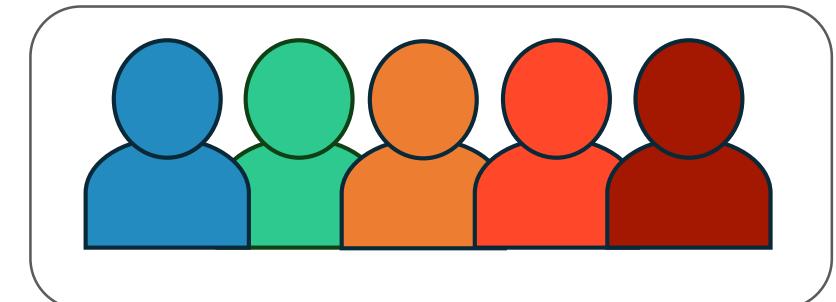
Reviews



Interviews

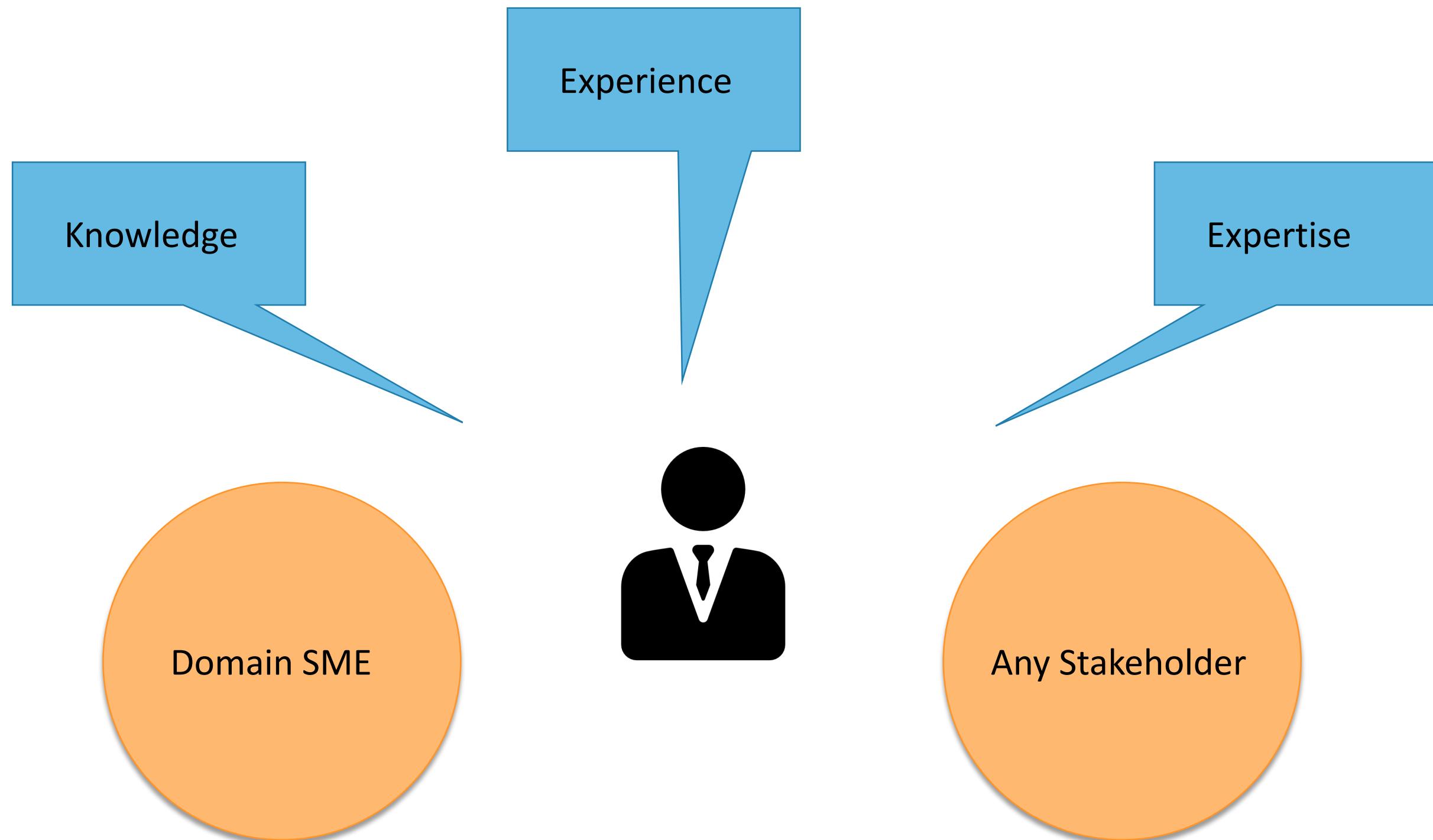


Workshops



CONFIRM ELICITATION RESULTS

STAKEHOLDERS



Lesson 4: Elicitation and Collaboration

Topic 4.4: Communicate Business Analysis Information

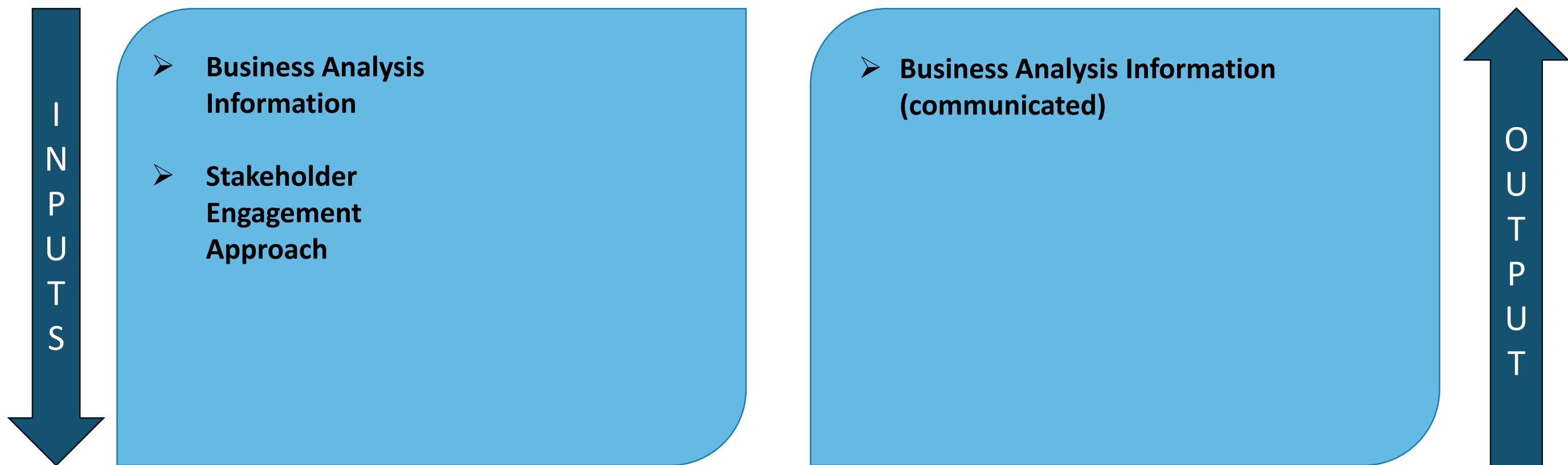
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

COMMUNICATE BUSINESS ANALYSIS INFORMATION

OVERVIEW

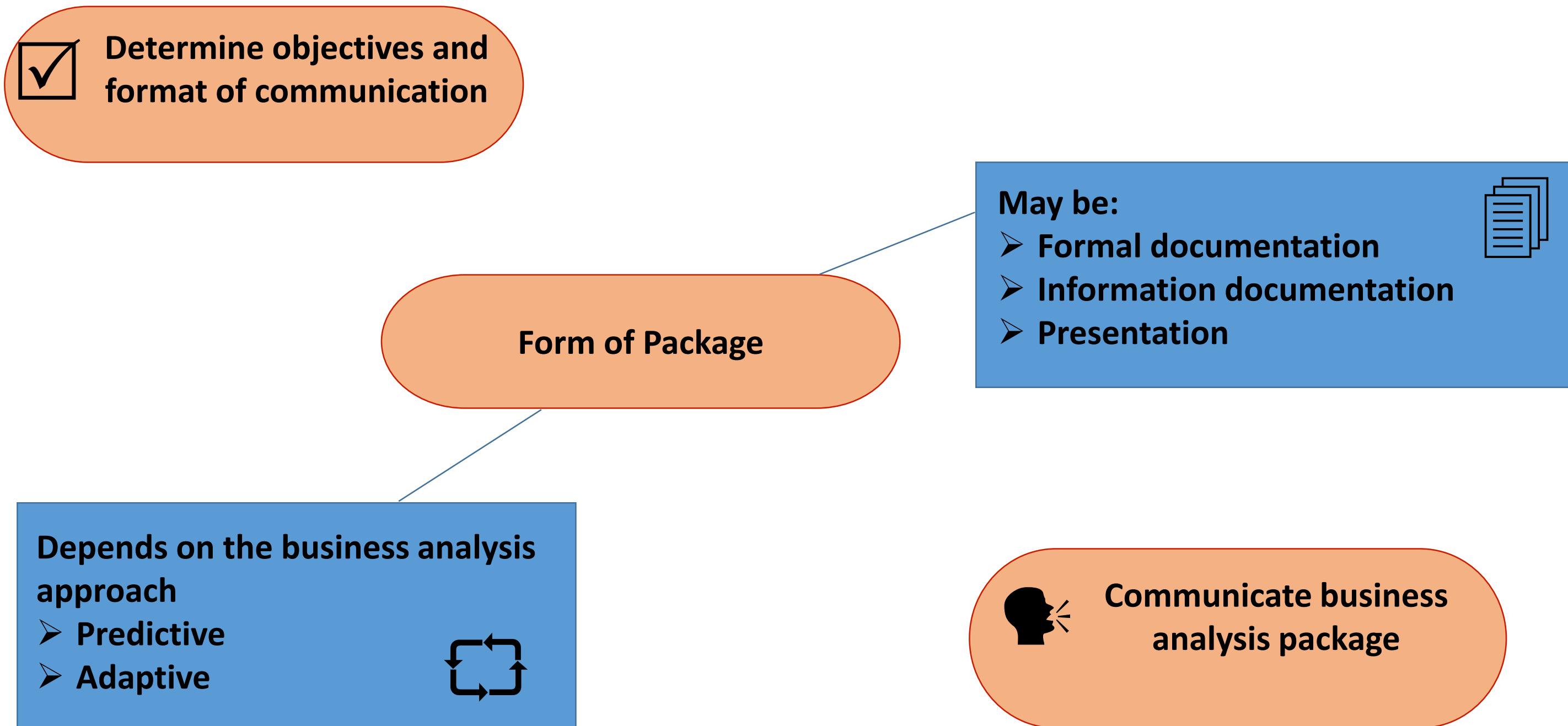
Purpose

- Stakeholders have a shared understanding of business analysis information



COMMUNICATE BUSINESS ANALYSIS INFORMATION

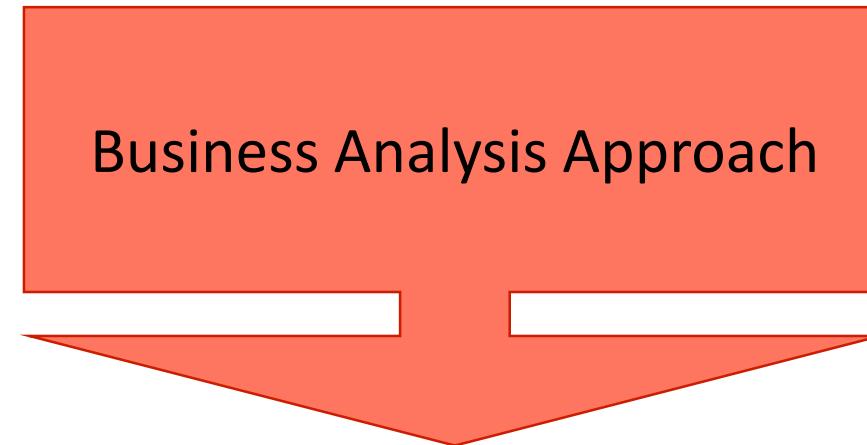
ELEMENTS



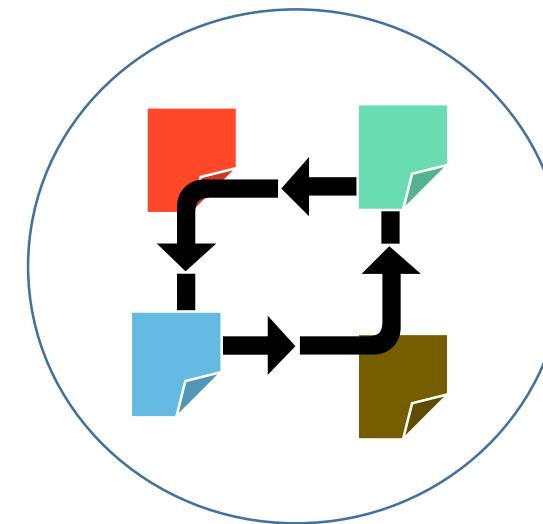
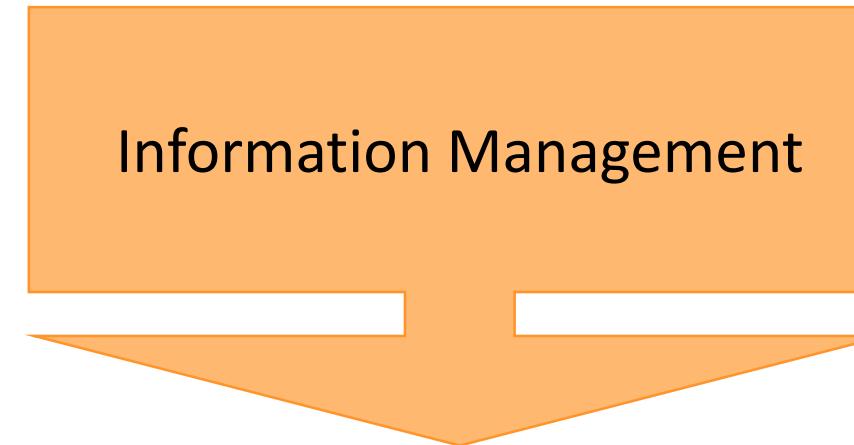
COMMUNICATE BUSINESS ANALYSIS INFORMATION

GUIDELINES AND TOOLS

Business Analysis Approach



Information Management



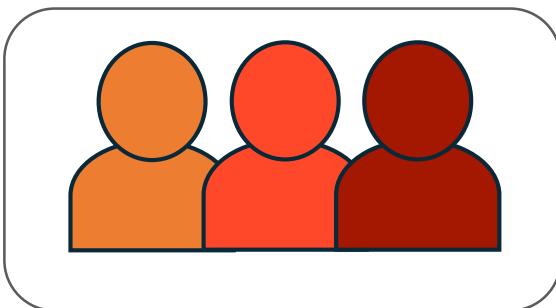
COMMUNICATE BUSINESS ANALYSIS INFORMATION TECHNIQUES



Interviews



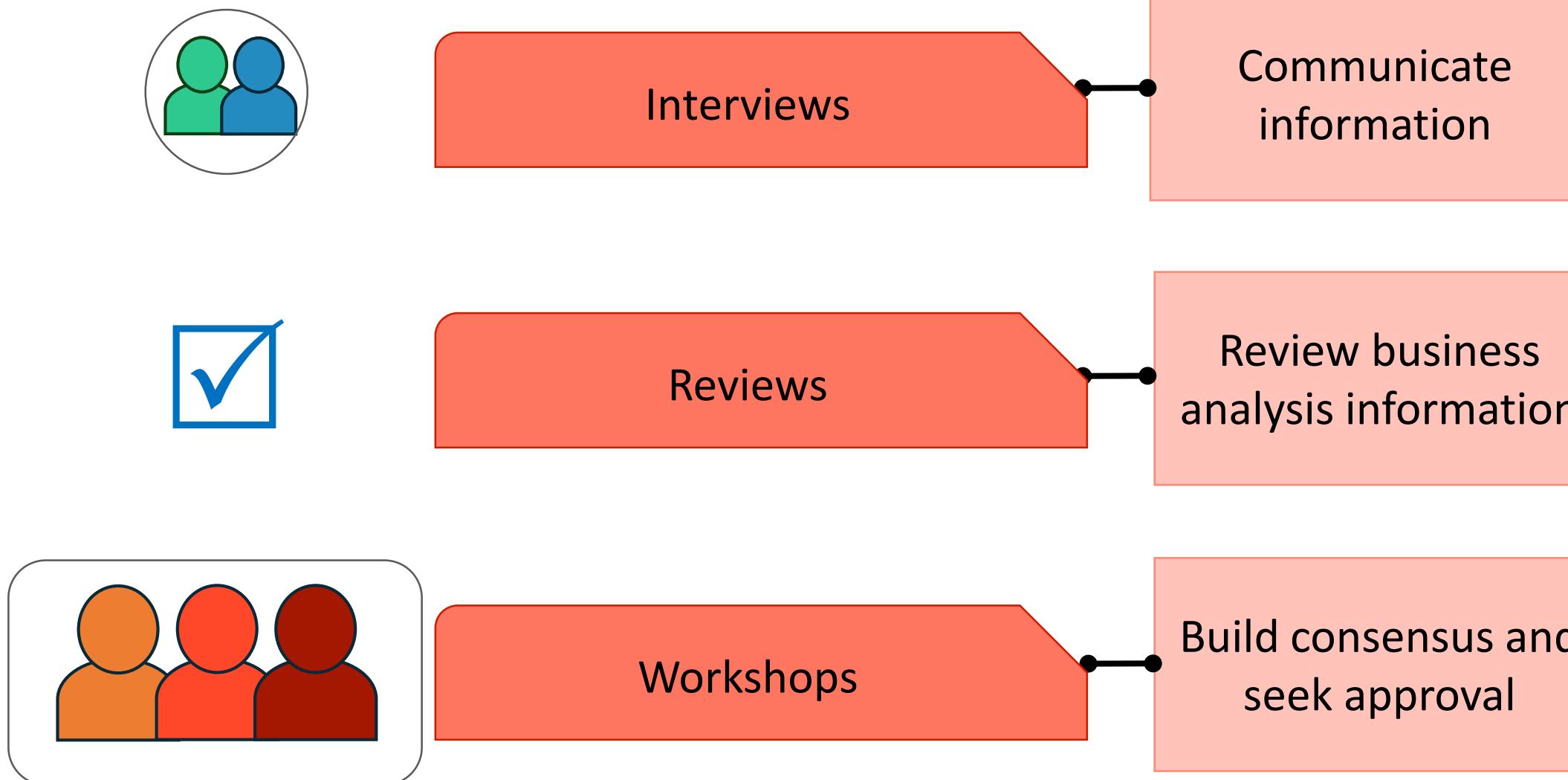
Reviews



Workshops

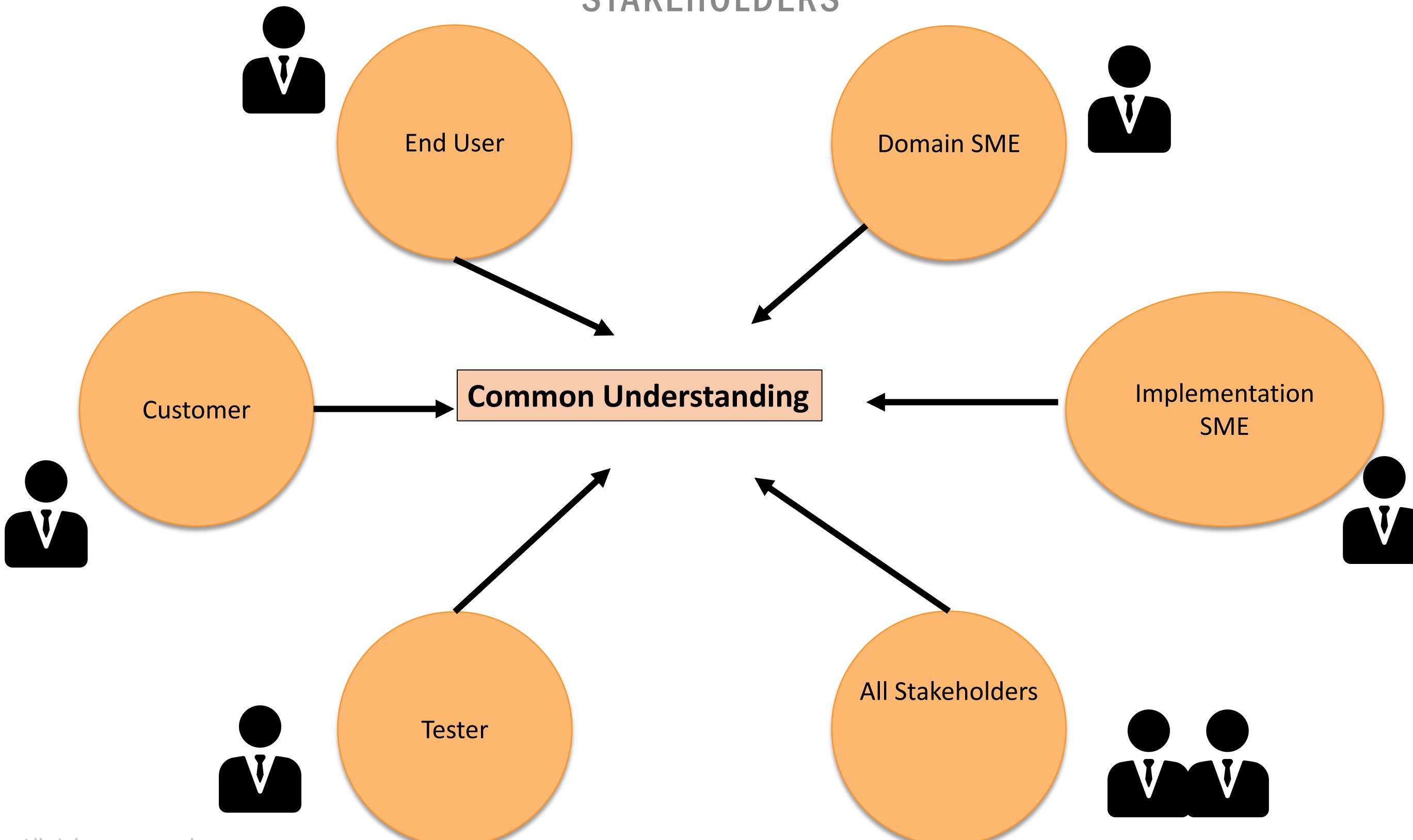
COMMUNICATE BUSINESS ANALYSIS INFORMATION (contd.)

TECHNIQUES



COMMUNICATE BUSINESS ANALYSIS INFORMATION

STAKEHOLDERS



Lesson 4: Elicitation and Collaboration

Topic 4.5: Manage Stakeholder Collaboration

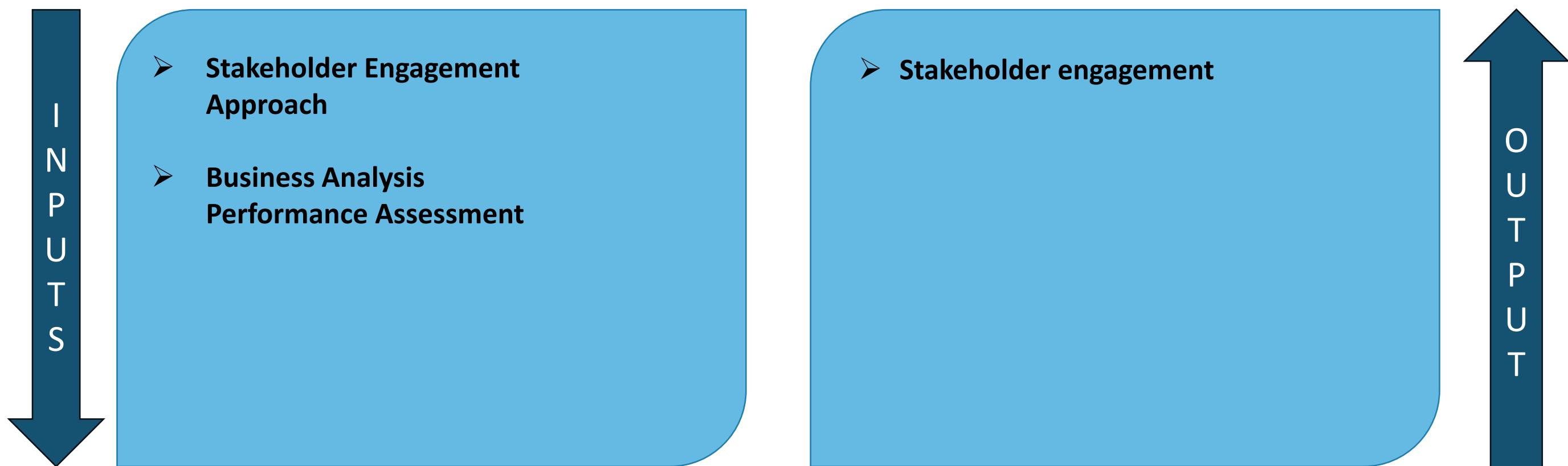
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

MANAGE STAKEHOLDER COLLABORATION

OVERVIEW

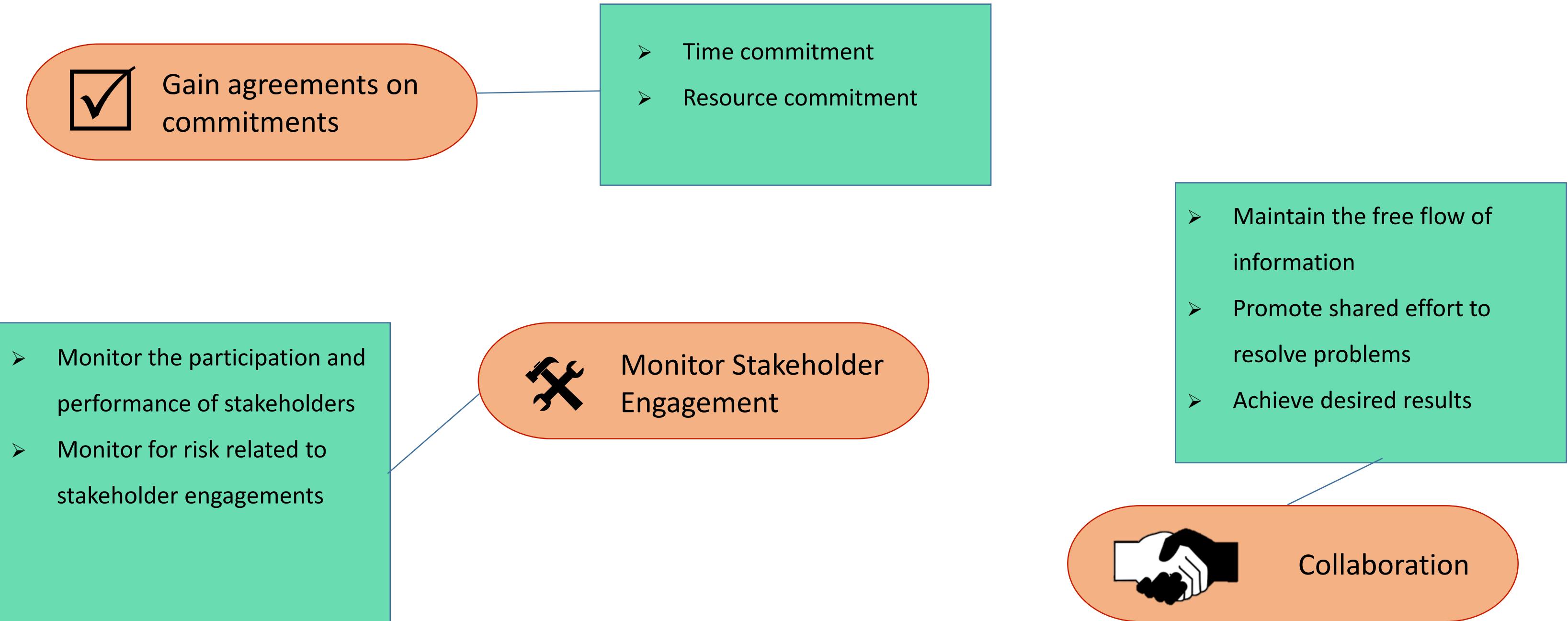
Purpose

- Encourage stakeholders to work towards a common goal



MANAGE STAKEHOLDER COLLABORATION

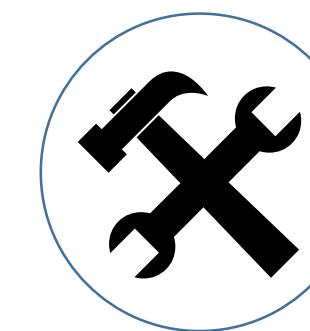
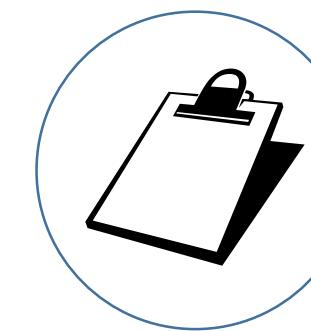
ELEMENTS



MANAGE STAKEHOLDER COLLABORATION

GUIDELINES AND TOOLS

Business Analysis Approach



Business Objectives

Future State Description

Recommended Actions

Risk Analysis

MANAGE STAKEHOLDER COLLABORATION (contd.)

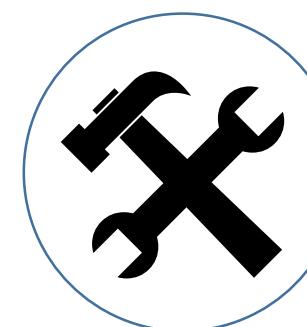
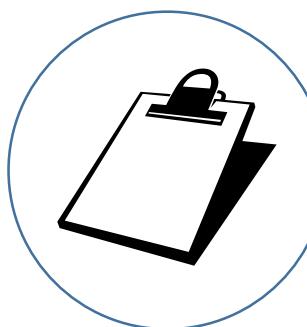
GUIDELINES AND TOOLS

Business Analysis Approach

Describes the level of engagement

Future State Description

Defines the desired future state and expected value



Recommended Actions

Provides action to earn the support and focus of stakeholder

Business Objectives

Provides directions towards future state

Risk Analysis

Provides action to ensure stakeholder collaboration

MANAGE STAKEHOLDER COLLABORATION TECHNIQUES



Collaborative Games



Lessons Learned



Risk Analysis and
Management



Stakeholder list, Map or
Personas

MANAGE STAKEHOLDER COLLABORATION (contd.)

TECHNIQUES



Collaborative Games

Teamwork and
collaboration



Lessons Learned

Stakeholder satisfaction
or dissatisfaction



Risk Analysis and
Management

Stakeholder participation
and engagement risk

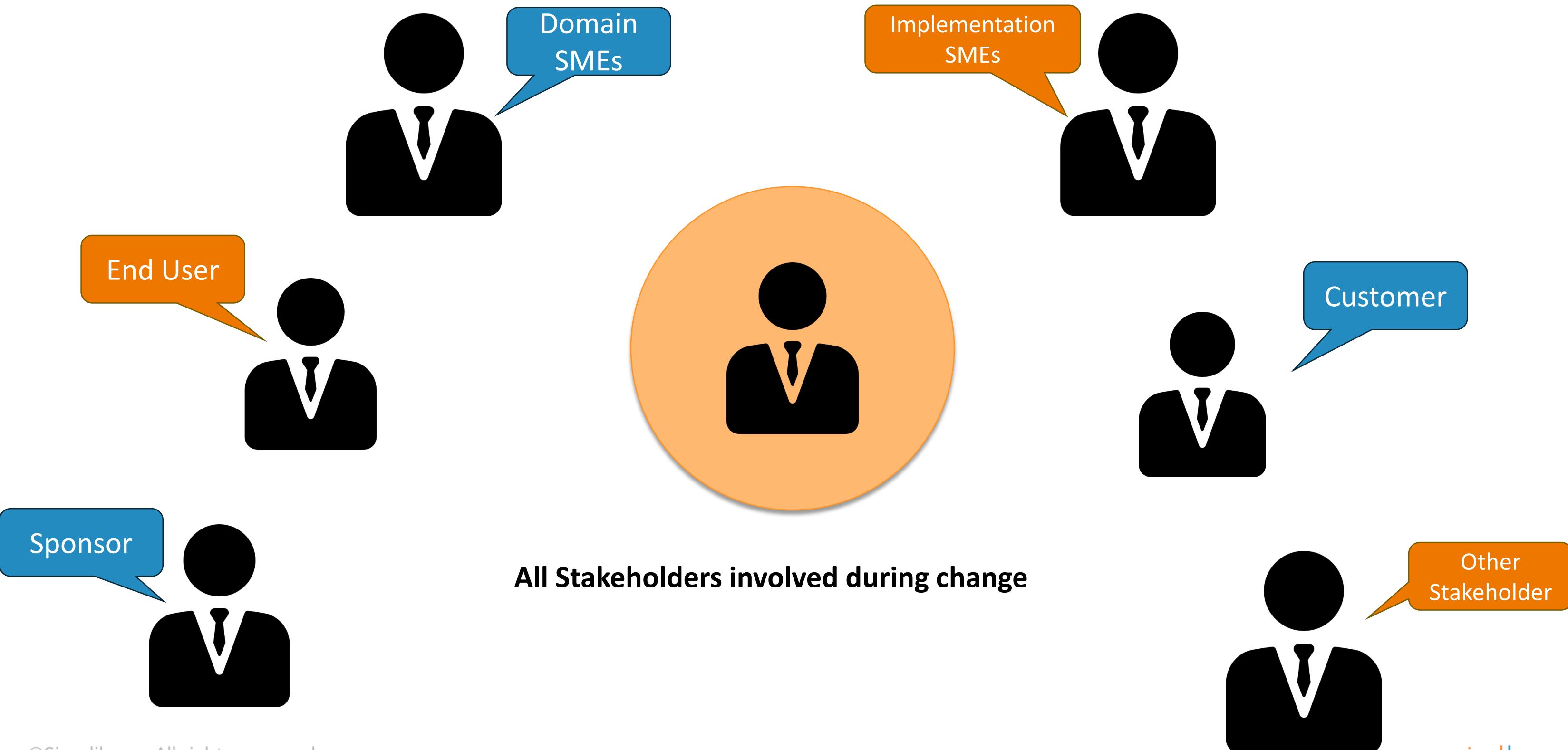


Stakeholder list, Map or
Personas

Who needs to be
involved?

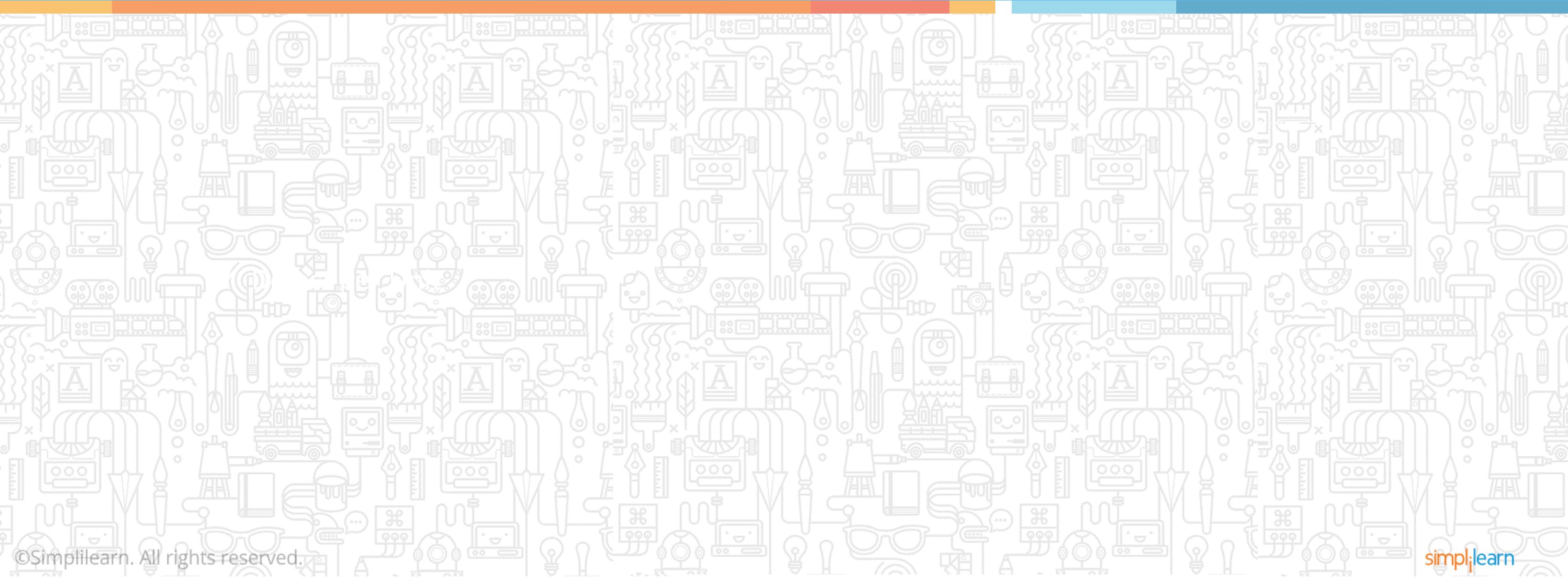
MANAGE STAKEHOLDER COLLABORATION

STAKEHOLDERS



Lesson 4: ELICITATION AND COLLABORATION

CASE STUDY EXERCISE



CASE STUDY

PROBLEM STATEMENT



BATONICS Pharma
Company

Unable to deliver
products on time

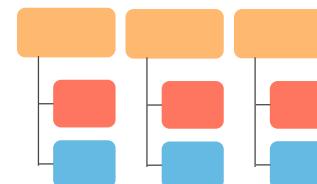
Customers switching to
competitor products

CASE STUDY ACTIVITIES

The business analyst performed the following activities:



Spent some time going through existing documents



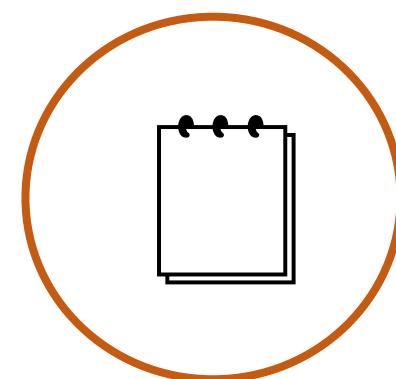
Created a high level context diagram



Created a list of questions for stakeholders to understand their needs



Scheduled a couple of meetings with stakeholders



Documented all the collected information and organized and analyzed the information

CASE STUDY

EXERCISE

	Questions	Response
1	Which technique has Paul used to create supporting material like a list of questions, As-Is process or any other?	<ul style="list-style-type: none"><input type="radio"/> Document Analysis<input type="radio"/> Interviews
2	What Business Analysis Approach is used to build the proposed system?	<ul style="list-style-type: none"><input type="radio"/> Adaptive<input type="radio"/> Restrictive
3	Which elicitation technique is used to design screens to capture customer information?	<ul style="list-style-type: none"><input type="radio"/> Prototyping<input type="radio"/> Group Discussion
4	Which elicitation technique is used to understand the flow of information between systems and users?	<ul style="list-style-type: none"><input type="radio"/> Interface Analysis<input type="radio"/> Workshops

CASE STUDY

EXERCISE

	Questions	Response
5	Who is the end user of the proposed system?	<ul style="list-style-type: none"><input type="radio"/> Field Sales Agents<input type="radio"/> Underwriters
6	Which technique is used to understand how stakeholders are interacting in the process to complete their tasks or achieve goals?	<ul style="list-style-type: none"><input type="radio"/> Process Analysis<input type="radio"/> Customer Analysis
7	Who will be using the saved information of the customer and the quote?	<ul style="list-style-type: none"><input type="radio"/> Underwriters<input type="radio"/> Stakeholder

CASE STUDY

ANSWERS

Questions	Answers
1 Which technique has Paul used to create supporting material like a list of questions, As-Is process or any other etc.?	Document Analysis
2 What Business Analysis Approach is used to build the a proposed system?	Adaptive
3 Which elicitation technique is used to design screens to capture customer information?	Prototyping
4 Which elicitation technique is used to understand the flow of information between systems and users?	Interface Analysis
5 Who is the end user of the proposed system?	Field Sales Agents
6 Which technique is used to understand how stakeholders are interacting in the process to complete their tasks or achieve goals?	Process Analysis
7 Who will be using the saved information of the customer and the quote?	Underwriters

KEY TAKEAWAYS

There are 3 tasks associated with Elicitation, 1 task with Communicate Business Analysis Information, and 1 task with Manage Stakeholder Collaboration.

Select the appropriate technique or set of techniques based on the need and Business Analysis Approach.

Measure performance of Elicitation activities throughout the project.

-
- ```
graph TD; 1[1] --> 2[2]; 2 --> 3[3]; 3 --> 4[4]; 4 --> 5[5]; 5 --> 6[6]; 6 --> 7[7]
```
- 1 Elicitation is defined as “to draw forth or bring out” information.
  - 2 There are 18 commonly used Elicitation techniques.
  - 3 Each Elicitation technique has the following tasks - prepare, execute or conduct, and wrap-up or close tasks.
  - 4 Frequently communicate Business Analysis Information and Manage Stakeholder Collaboration and communication during Elicitation activities.



QUIZ  
1

In which elicitation technique is Discussion Guide used?

- a. Interviews
- b. Focus Groups
- c. Brainstorming
- d. Workshops



QUIZ  
1

In which elicitation technique is Discussion Guide used?

- a. Interviews
- b. Focus Groups
- c. Brainstorming
- d. Workshops



The correct answer is **b**.

**Explanation:** Discussion Guide is used in Focus Group Sessions. Discussion Guide contains session objectives, topics for discussion, and scripts of specific questions.

QUIZ  
2

Which of the following elicitation techniques uses survey distribution and response collection?

- a. Workshop
- b. Concept Modeling
- c. Surveys and Questionnaires
- d. Interviews



QUIZ  
2

Which of the following elicitation technique uses survey distribution and response collection?

- a. Workshop
- b. Concept Modeling
- c. Surveys and Questionnaires
- d. Interviews



The correct answer is **c.**

Surveys and Questionnaires is a technique in which first the surveys are distributed and then responses are collected for further analysis.

QUIZ  
3

Which one of the following is not an output element of the task ‘Prepare for elicitation’?

- a. Supporting material
- b. Participant list
- c. Elicitation technique
- d. Elicitation results



QUIZ  
3

Which one of the following is not an output element of the task ‘Prepare for elicitation’?

- a. Supporting material
- b. Participant list
- c. Elicitation technique
- d. Elicitation results



The correct answer is **d**.

**Explanation:** Elicitation results is not an output element of the task ‘Prepare for elicitation’.

QUIZ  
4

Which one of the following is not a common type of elicitation?

- a. Collaborative
- b. Research
- c. Experiments
- d. Exploratory



QUIZ  
4

Which one of the following is not a common type of elicitation?

- a. Collaborative
- b. Research
- c. Experiments
- d. Exploratory



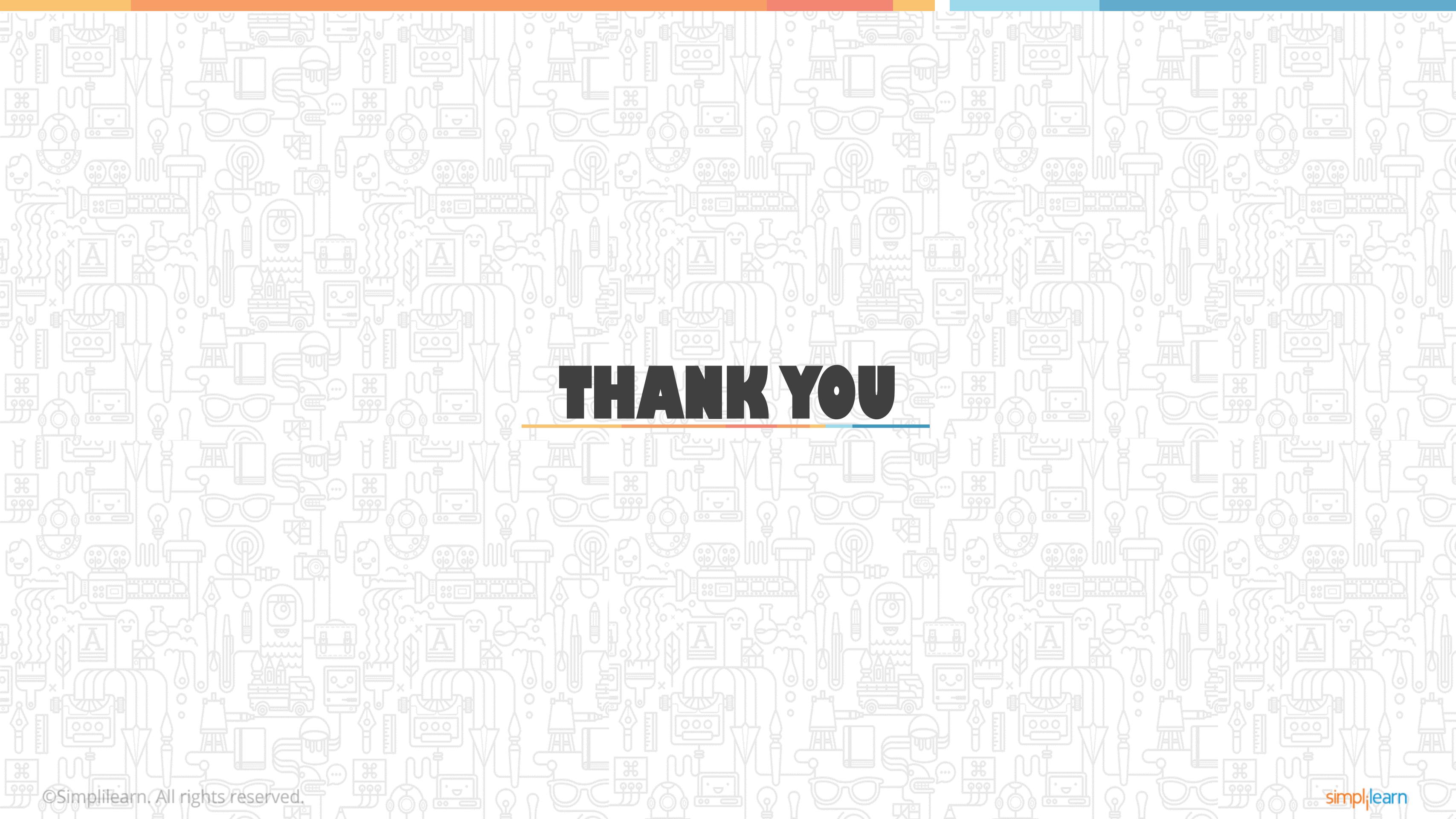
The correct answer is **d**.

**Explanation:** Exploratory is not a common type of elicitation. As per BABOK™, there are three common types of elicitation – Collaborative, Research, and Experiments.



**This concludes “Elicitation and Collaboration”**

The next lesson is “Requirements Life Cycle Management”



# THANK YOU

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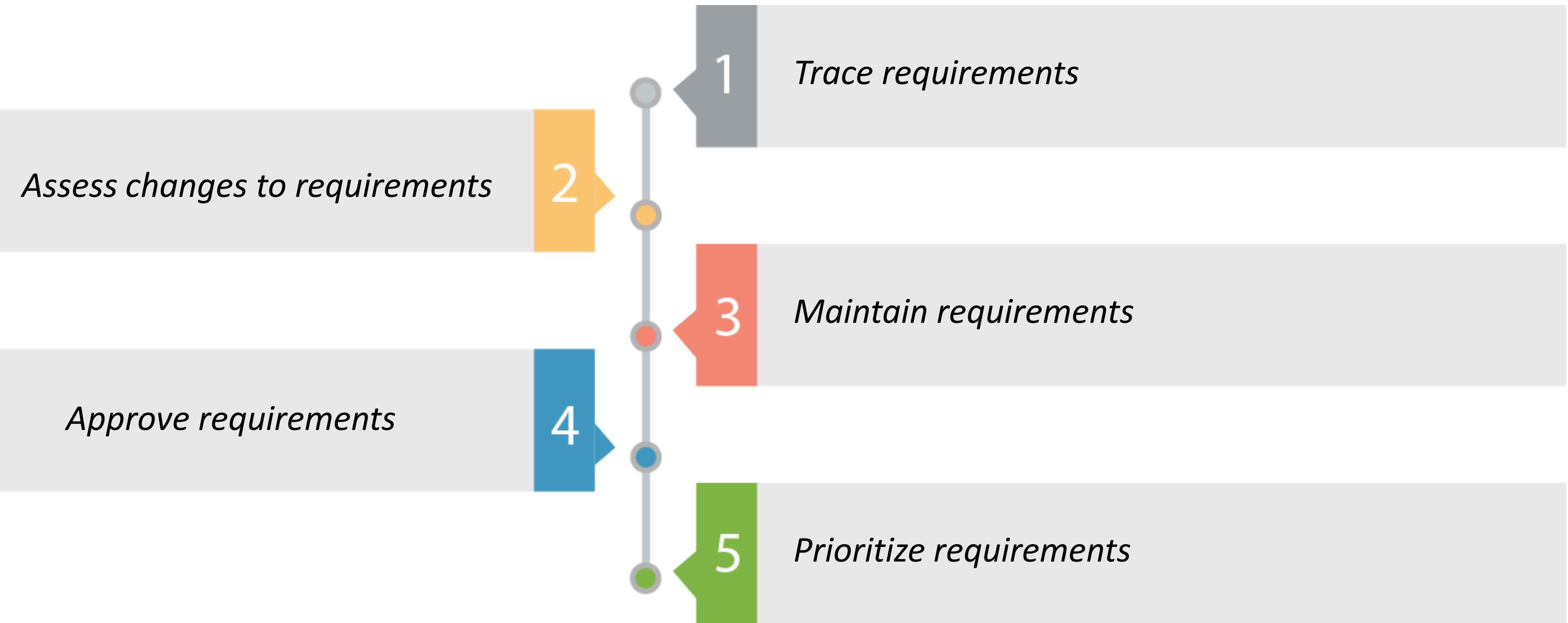
# CCBA® Exam Preparation Course

## Requirements Life Cycle Management



## WHAT'S IN IT FOR ME

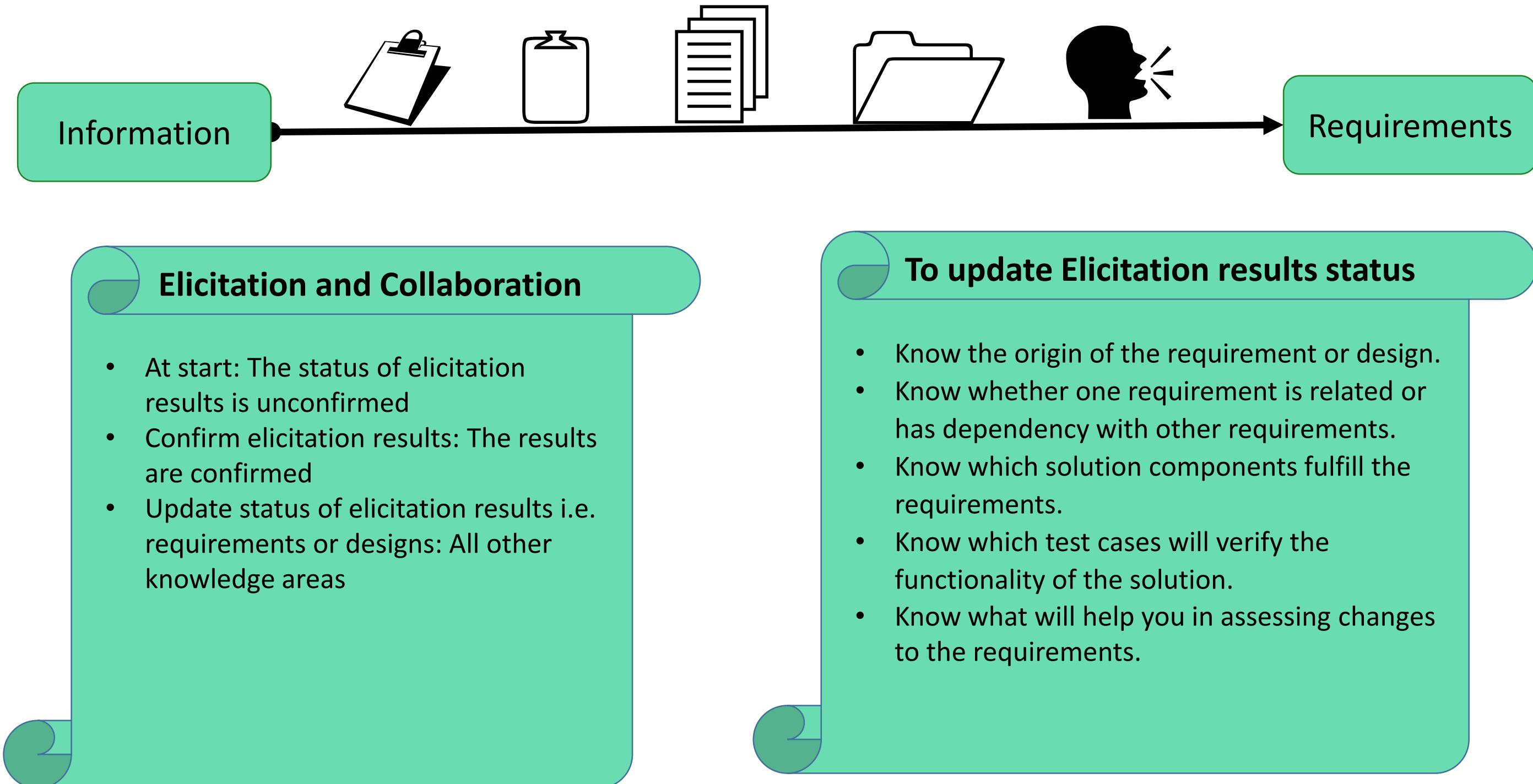
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# INTRODUCTION



Business Analyst



# INTRODUCTION



Business Analyst

Trace requirements

Prioritize requirements

Reuse requirements

Assess requirements

Approve requirements

Allocate requirements



- The requirements need to be maintained throughout the project life cycles. Changes are inevitable, hence you need to assess changes to the requirements and design, and recommend appropriate actions
- Changes to the requirements and the approval process depend upon the project methodology

# INTRODUCTION

Trace requirements

Prioritize requirements

The Requirements Life Cycle Management knowledge area describes the tasks that the business analysts performs in order to manage and maintain the requirements and design information from the point of inception till retirement.



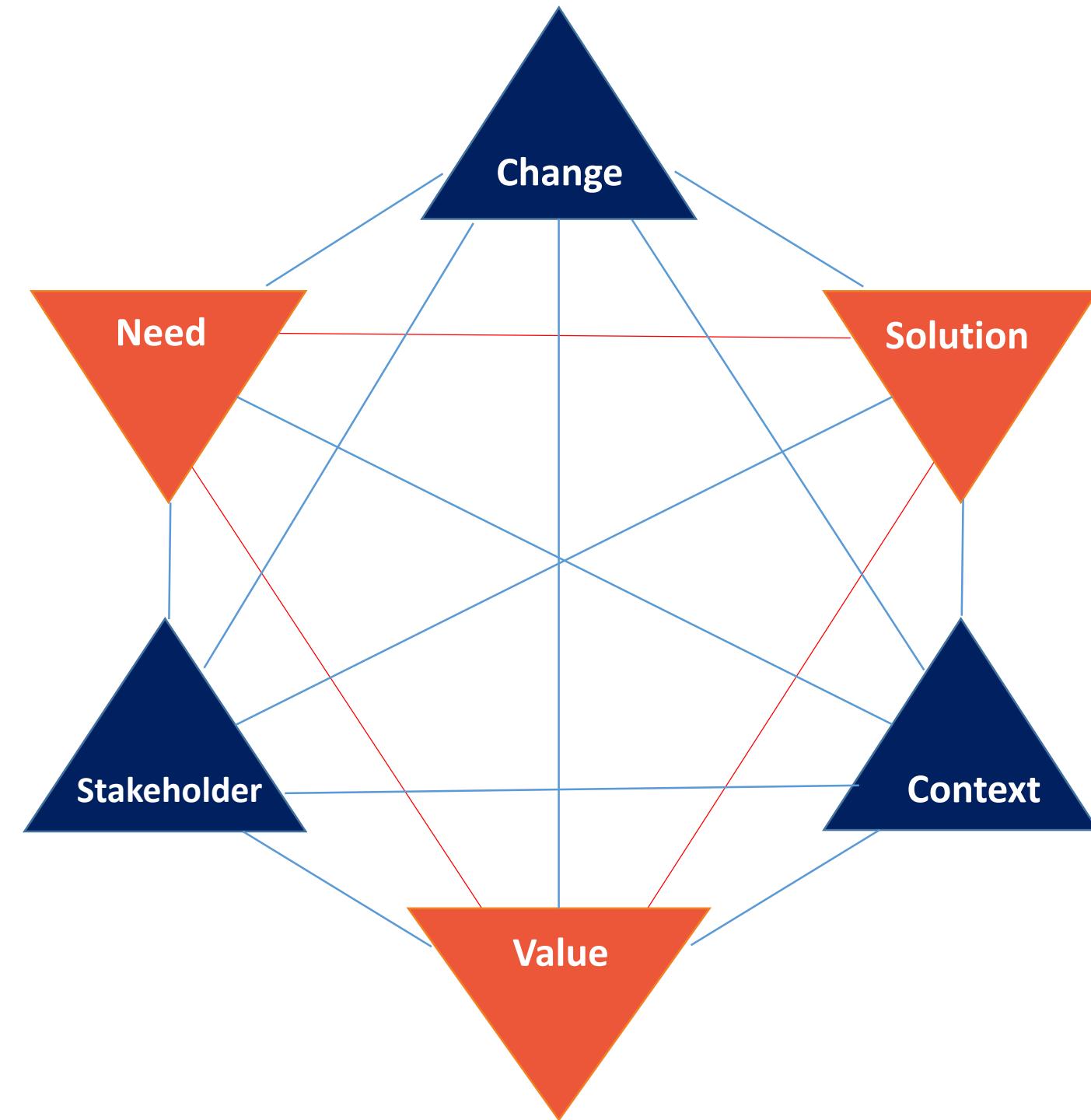
Business Analyst

Maintain requirements

Approve requirements

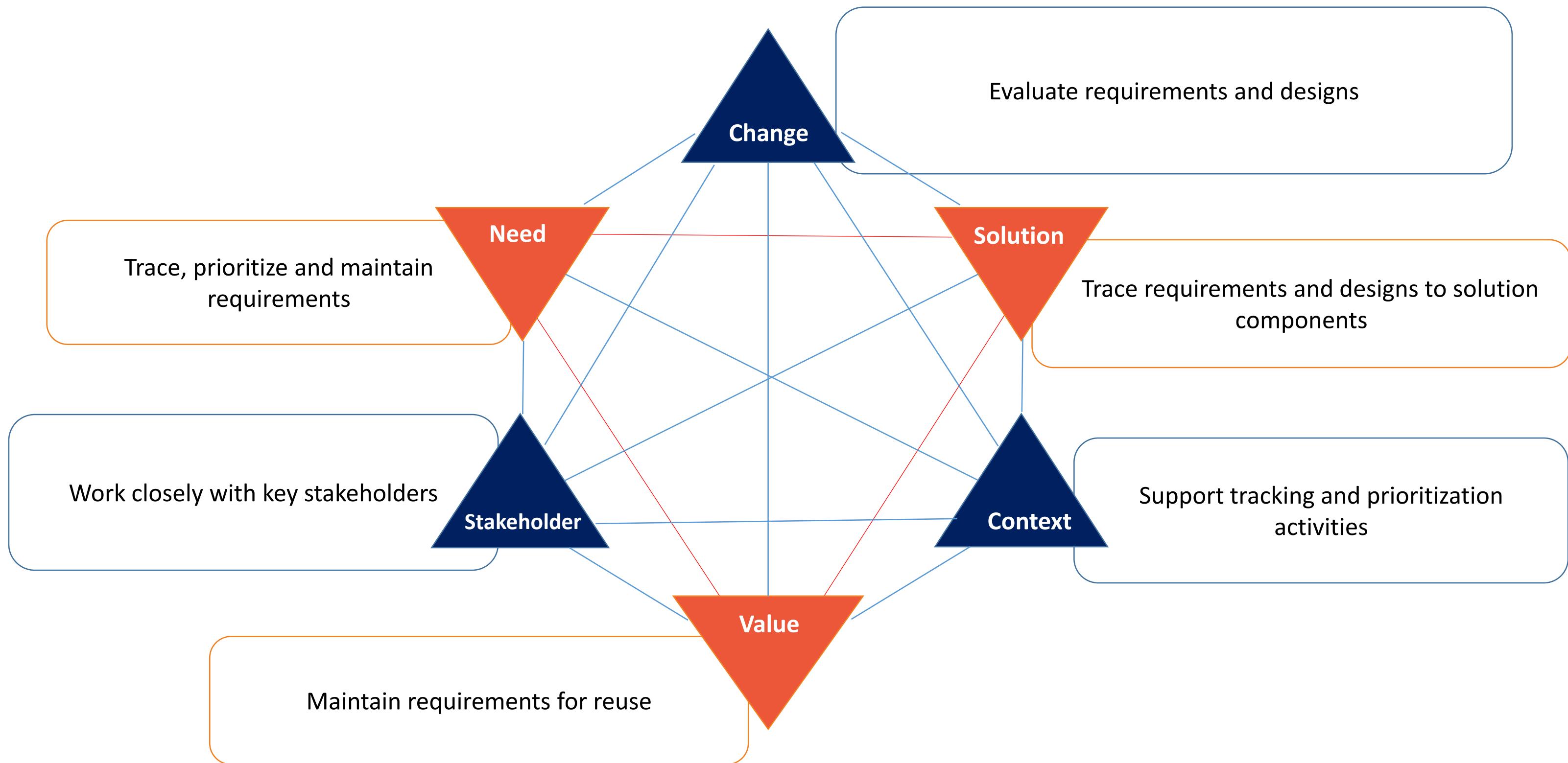
# REQUIREMENTS LIFE CYCLE MANAGEMENT

## OVERVIEW



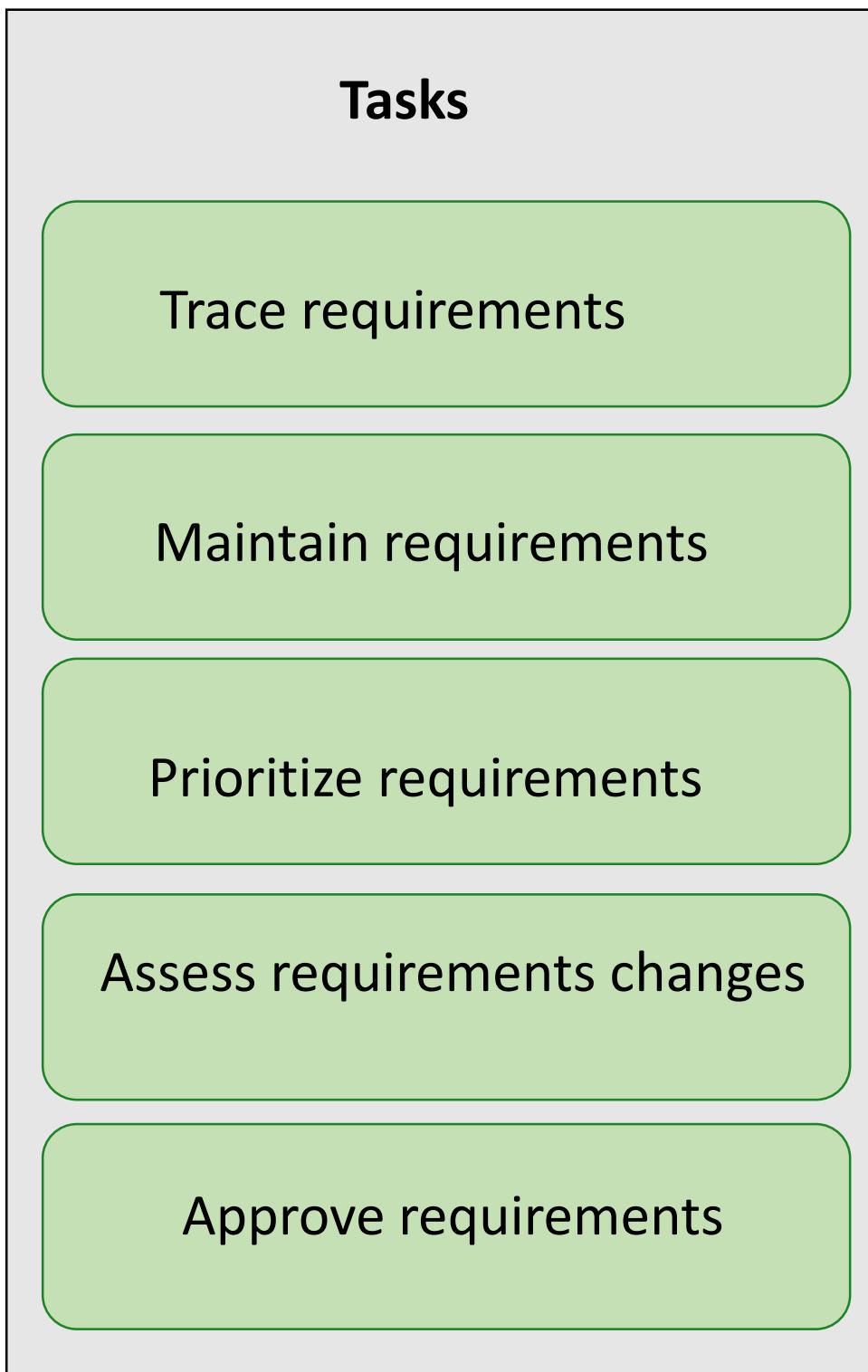
# REQUIREMENTS LIFE CYCLE MANAGEMENT

## OVERVIEW



# REQUIREMENTS LIFE CYCLE MANAGEMENT

## TASKS AND OUTPUT



# ELICITATION AND COLLABORATION KNOWLEDGE AREA

## TASKS AND OUTPUT

### Inputs

- Requirements
- Designs

### Tasks

- Trace requirements
- Maintain requirements
- Prioritize requirements
- Assess requirements changes
- Approve requirements

### Outputs

- Requirements
  - Traced, maintained, and prioritized
- Designs
  - Traced, maintained, and prioritized

# ELICITATION AND COLLABORATION KNOWLEDGE AREA

## TASKS AND OUTPUT

### Inputs

- Requirements
- Business Analysis Information
- Proposed changes

### Tasks

- Trace requirements
- Maintain requirements
- Prioritize requirements
- Assess requirements changes
- Approve requirements

### Outputs

- Requirements
  - Traced, maintained, and prioritized
- Designs
  - Traced, maintained, and prioritized
- Requirements Change Assessment
- Design Change Assessment

# ELICITATION AND COLLABORATION KNOWLEDGE AREA

## TASKS AND OUTPUT

### Inputs

- Requirements
- Business Analysis Information
- Proposed changes

### Input from other Knowledge Areas

- Requirements (verified)

### Tasks

- Trace requirements
- Maintain requirements
- Prioritize requirements
- Assess requirements changes
- Approve requirements

### Outputs

- Requirements
  - Traced, maintained, and prioritized
- Designs
  - Traced, maintained, and prioritized
- Requirements Change Assessment
- Design Change Assessment
- Requirements approved
- Design approved

# Lesson 5: Requirements Life Cycle Management

## Topic 5.1: Trace Requirements

What is traceability?

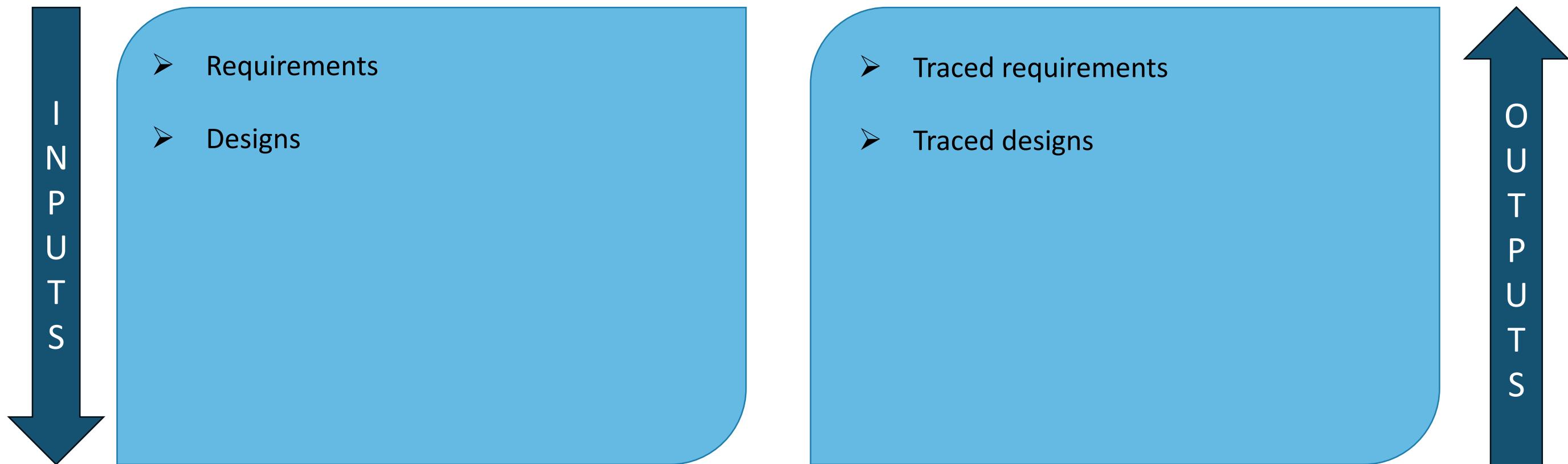
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# TRACE REQUIREMENTS

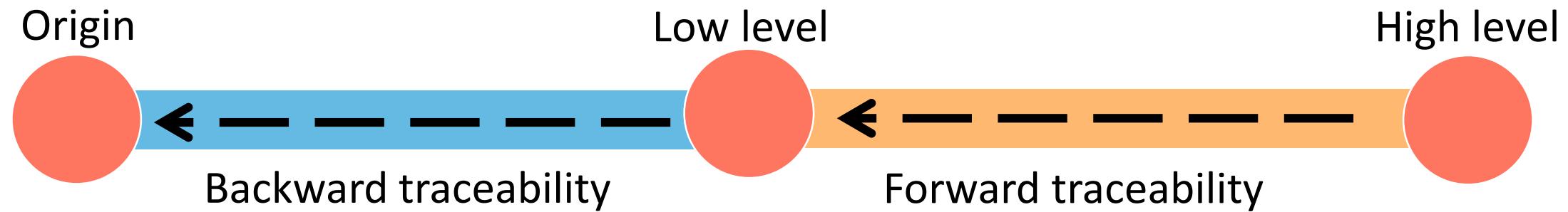
## OVERVIEW

### Purpose

- Ensure requirements and designs at different levels are aligned to one another
- Manage effects of change



## TRACE REQUIREMENTS ELEMENTS



Consider:

- Value that each traceability link delivers
- Use of specific relationship created

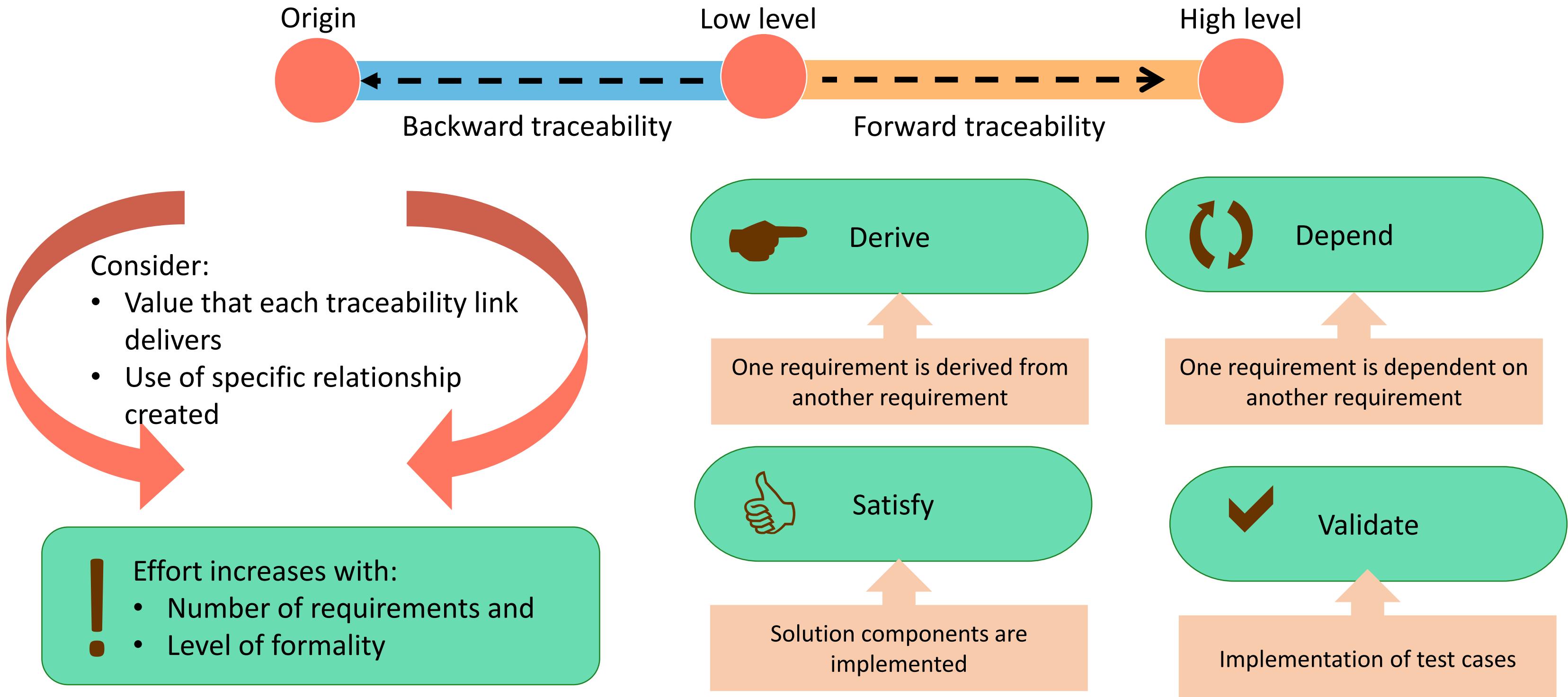


Effort increases with:

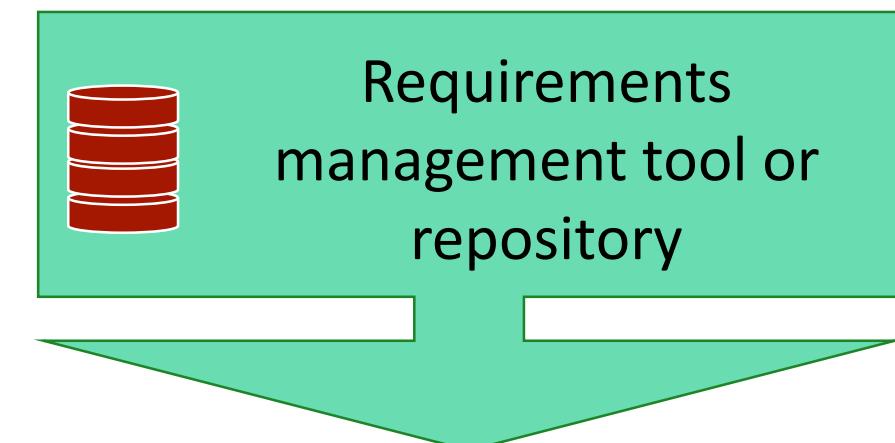
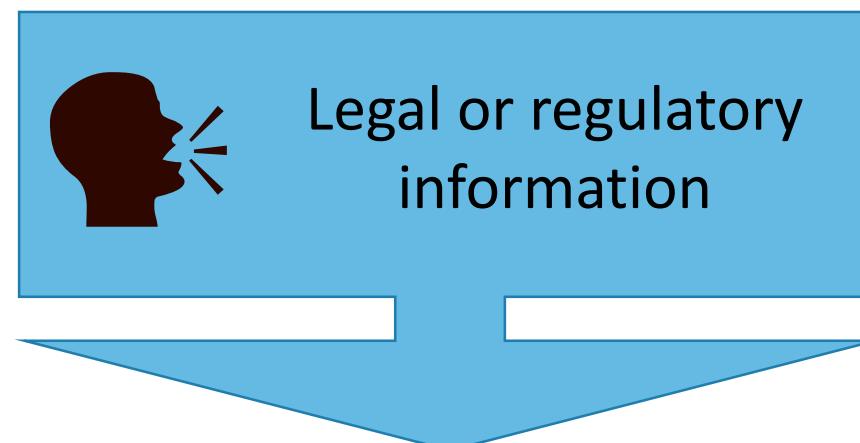
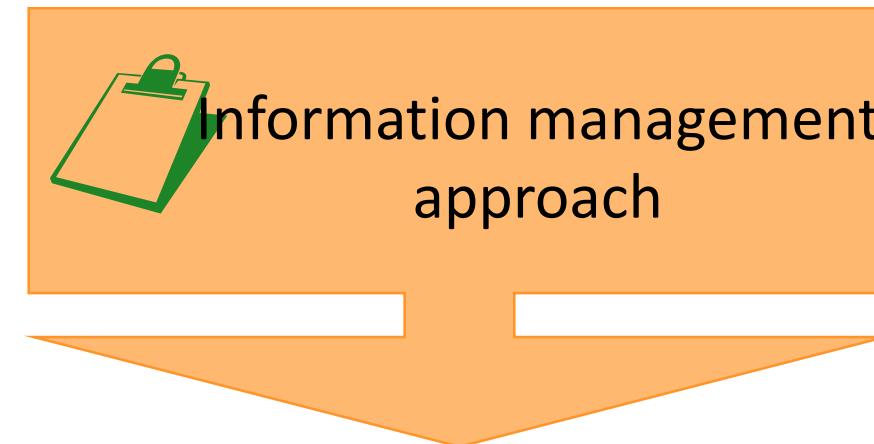
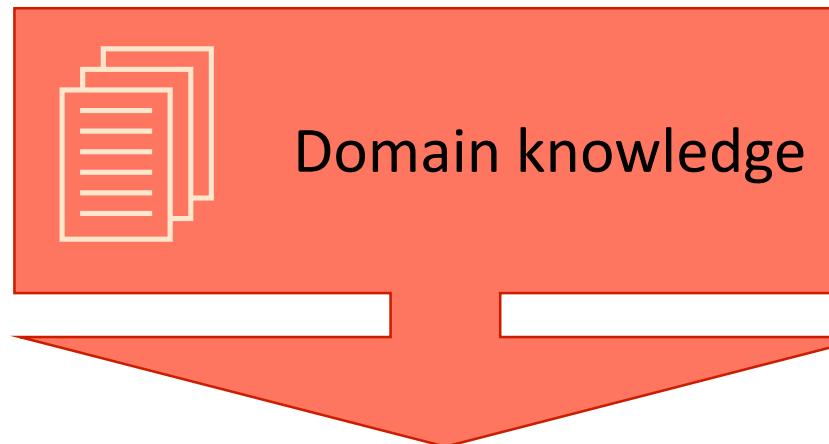
- Number of requirements and
- Level of formality

# TRACE REQUIREMENTS

## ELEMENTS



# TRACE REQUIREMENTS GUIDELINES AND TOOLS



# TRACE REQUIREMENTS TECHNIQUES

Business rules analysis

Functional decomposition

Process modelling

Scope modelling

# TRACE REQUIREMENTS TECHNIQUES

Business rules analysis

Trace the requirements to  
the business rules

Functional decomposition

Decompose solution scope  
into smaller components

Process modelling

Show requirements tracing  
to future state process

Scope modelling

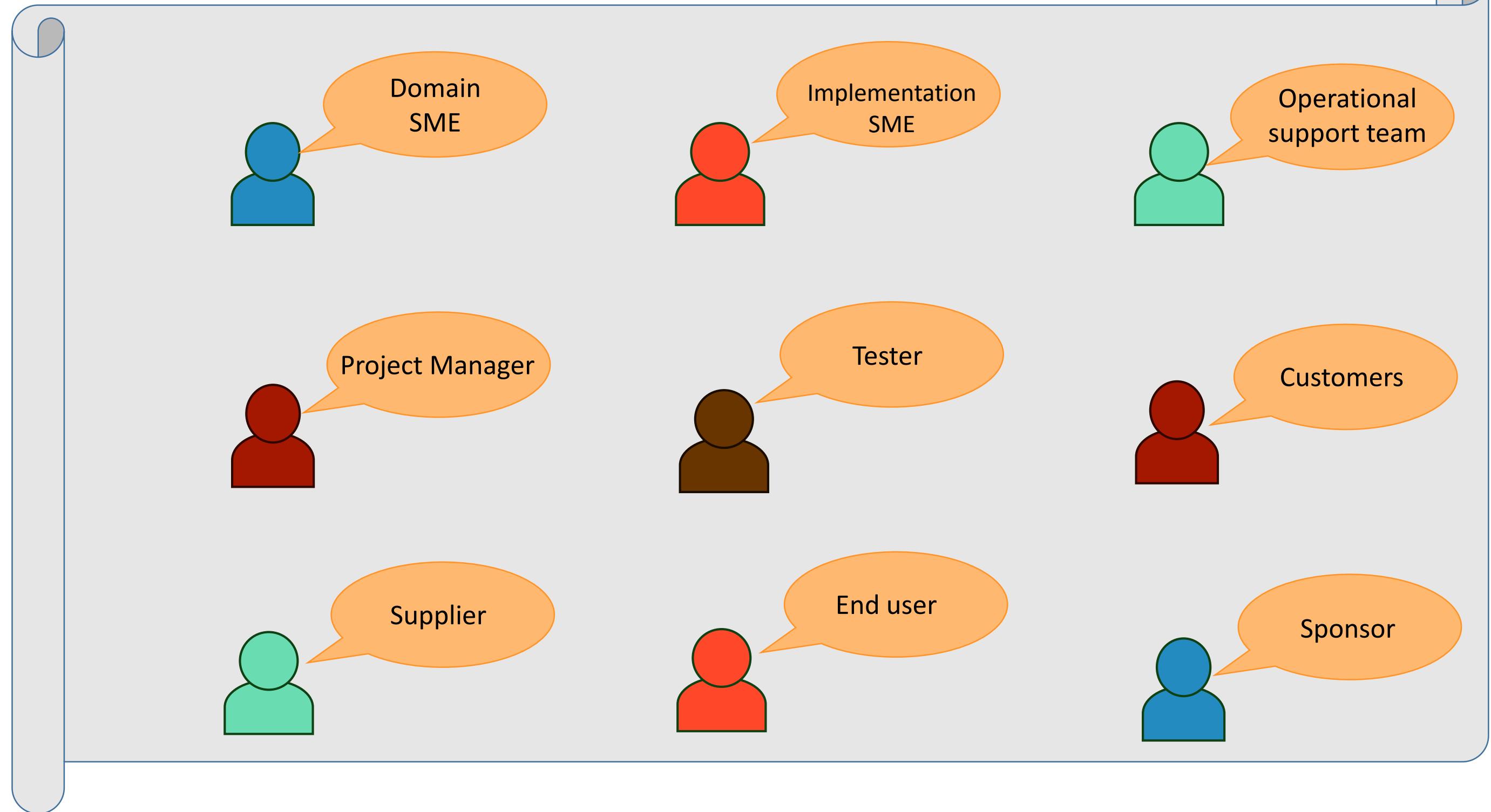
Show the scope of the  
business analysis work

# TRACE REQUIREMENTS

## STAKEHOLDERS



Business Analyst



# Lesson 5: Requirements Life Cycle Management

## Topic 5.2: Maintain Requirements

What is requirements maintenance?

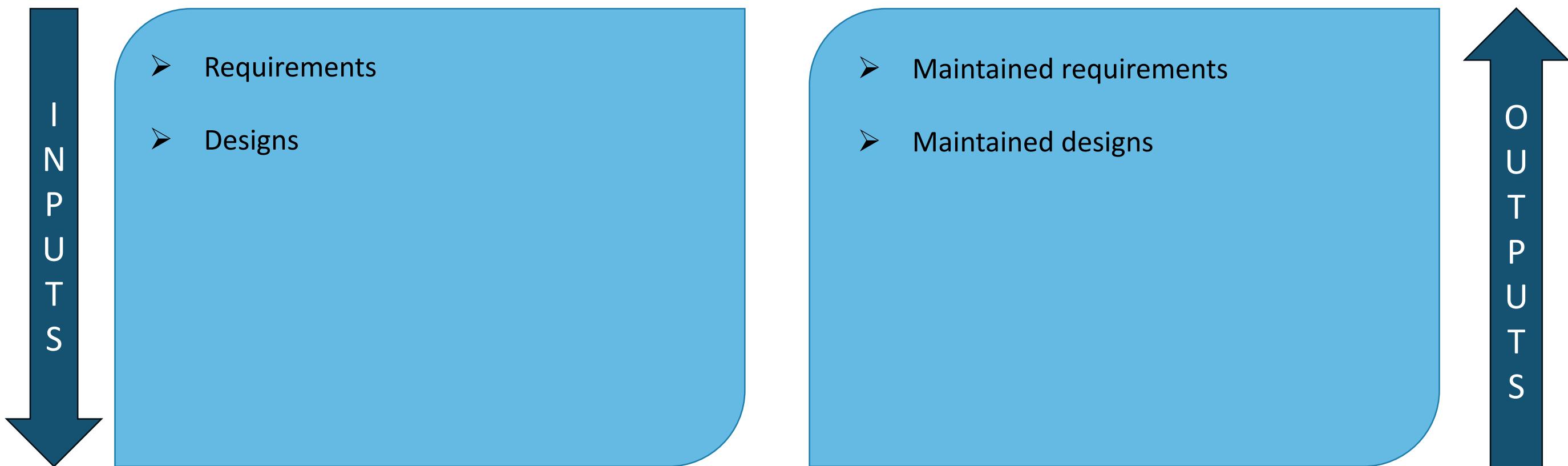
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# MAINTAIN REQUIREMENTS

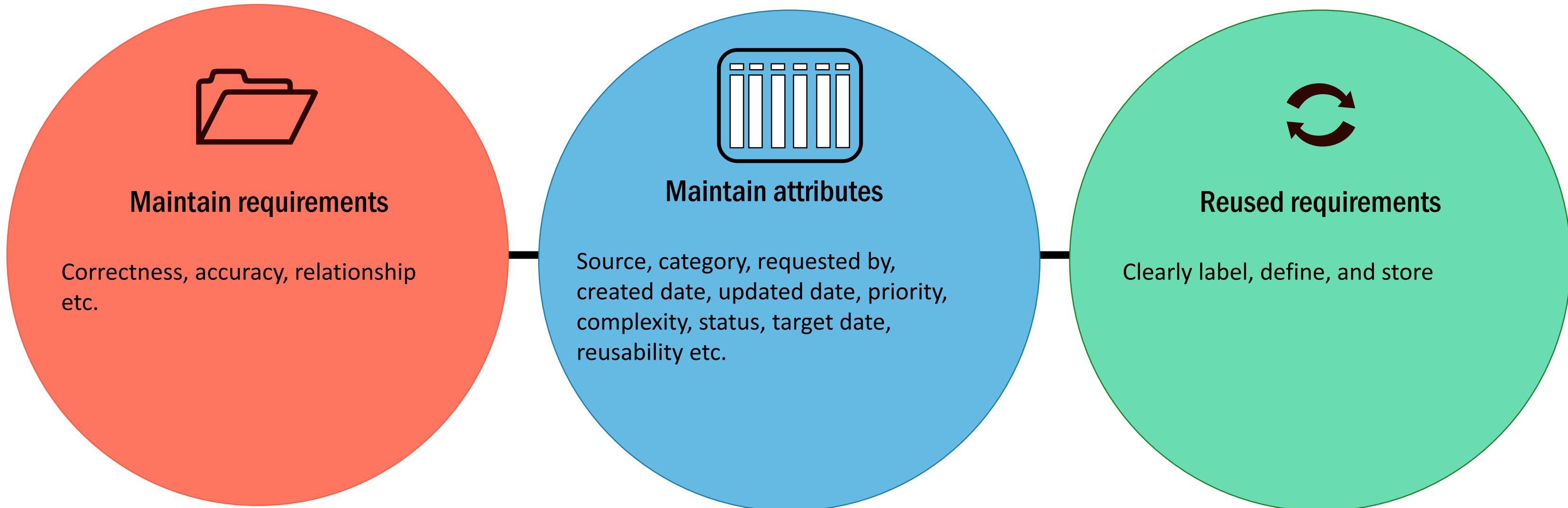
## OVERVIEW

### Purpose

- Maintain accuracy and consistency of requirements
- Support reuse of requirements



## MAINTAIN REQUIREMENTS ELEMENTS



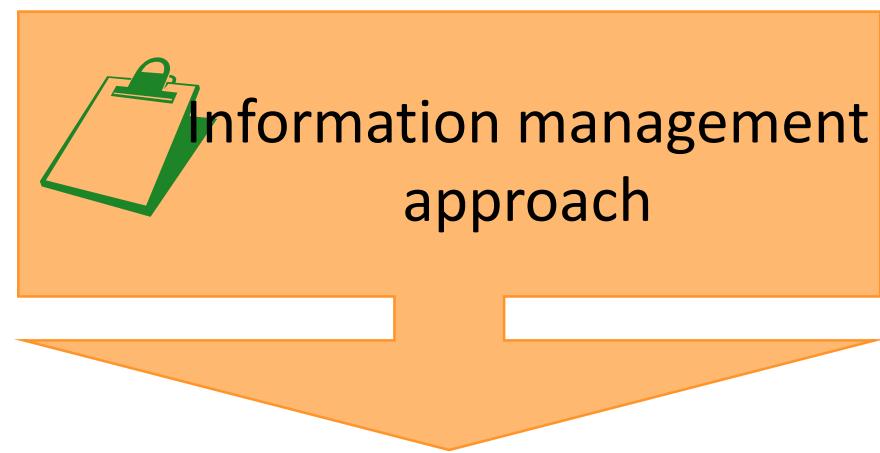
# MAINTAIN REQUIREMENTS

---

## GUIDELINES AND TOOLS



Business Analyst



# MAINTAIN REQUIREMENTS TECHNIQUES

Business rules analysis

Use cases and scenarios

Data flow diagrams

User stories

Data modeling

Document analysis

Process modeling

Functional decomposition

# MAINTAIN REQUIREMENTS TECHNIQUES

Business rules analysis

Use cases and scenarios

Data flow diagrams

User stories

Data modeling

Process modeling

Identify which business rules, information flows, data structures, processes and requirements are reusable.

Document analysis

Analyze existing document to provide a basis for maintaining and reusing requirements

Functional decomposition

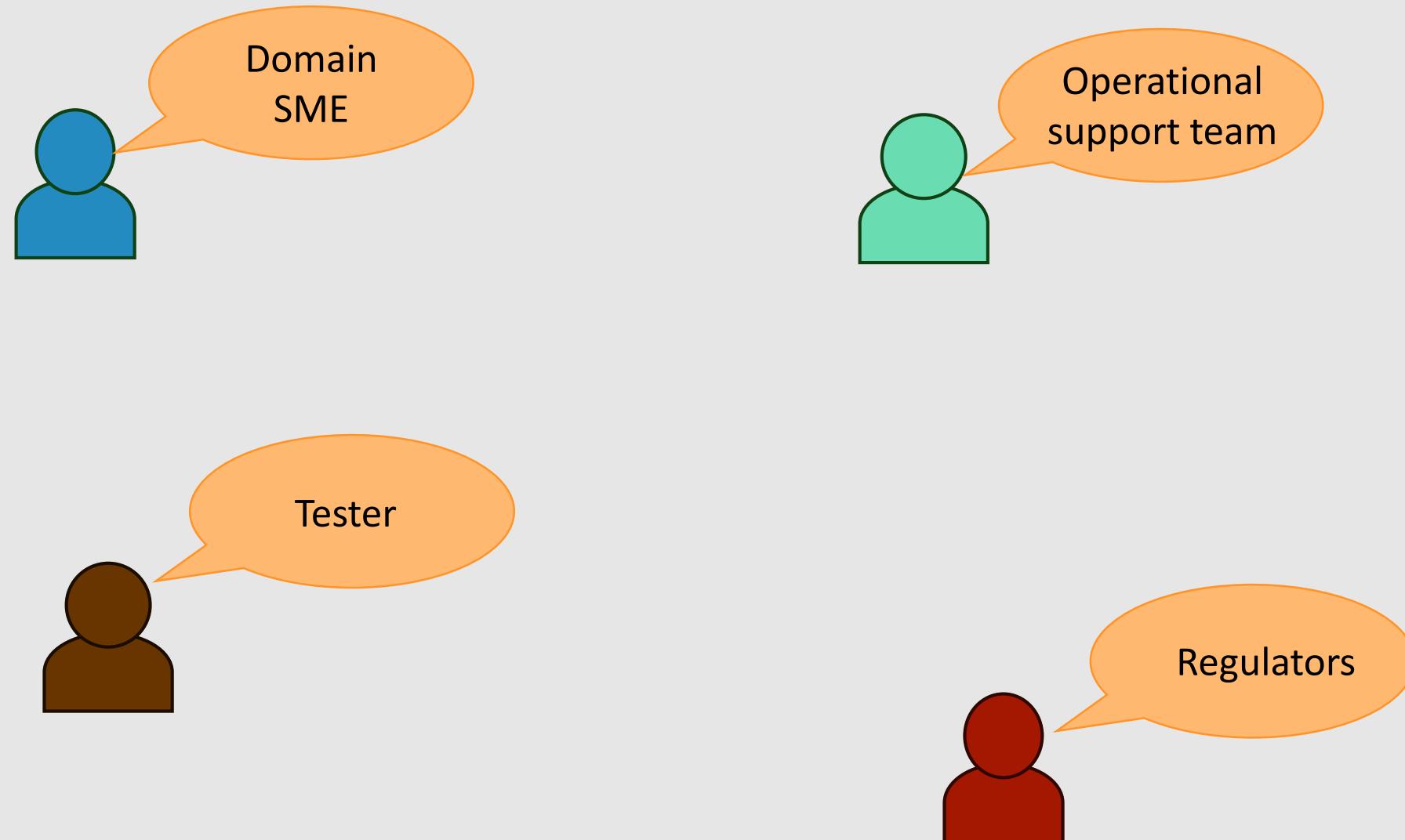
Identify requirements associated with components and available for reuse

# MAINTAIN REQUIREMENTS

## STAKEHOLDERS



Business Analyst



# Lesson 5: Requirements Life Cycle Management

## Topic 5.3: Prioritize Requirements

What is prioritizing requirements?

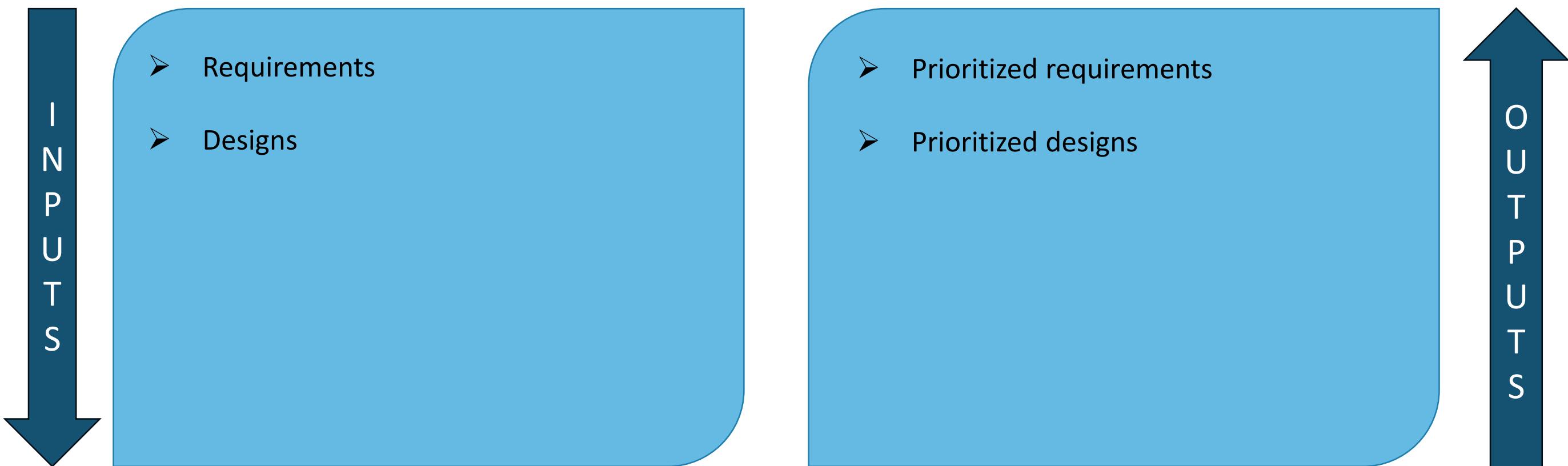
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# PRIORITIZE REQUIREMENTS

## OVERVIEW

### Purpose

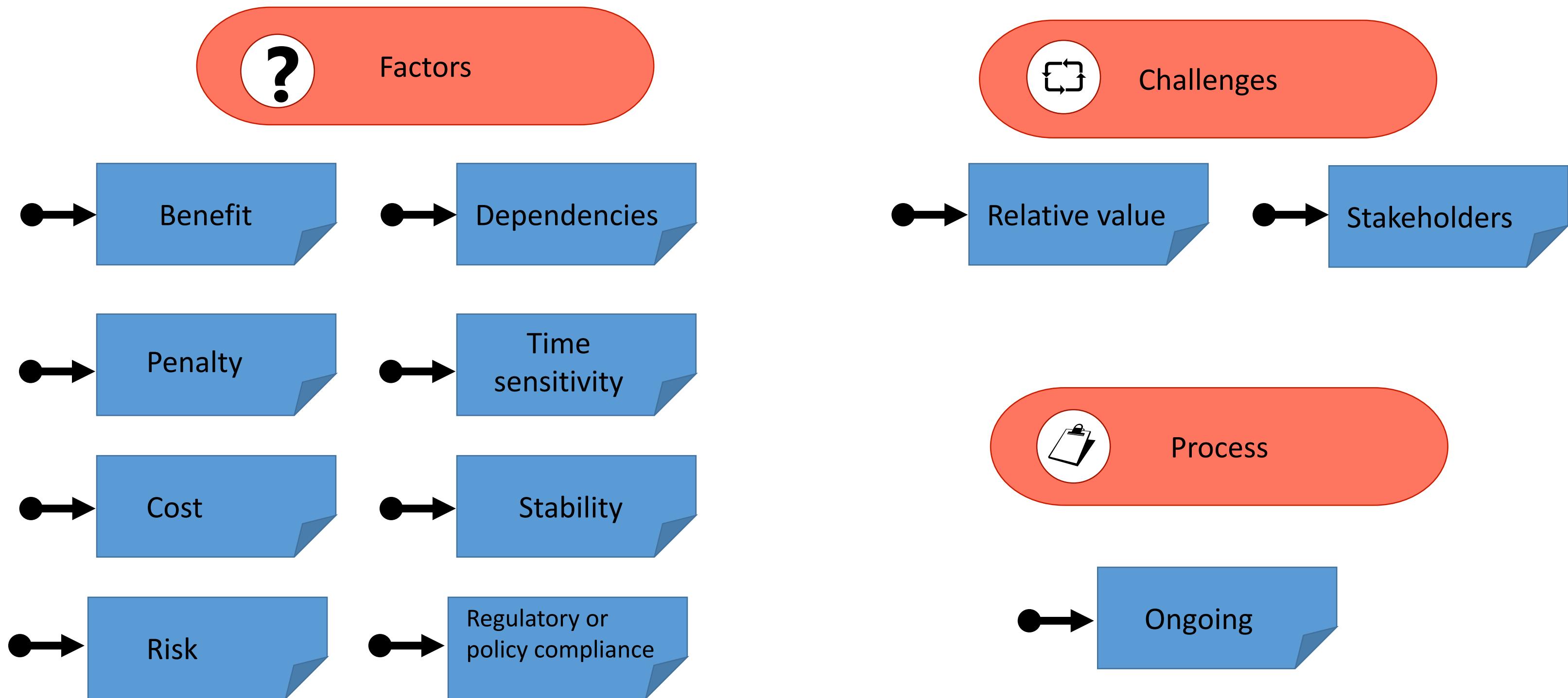
- To rank requirements in the order of relative importance to maximize value delivery



# PRIORITIZE REQUIREMENTS

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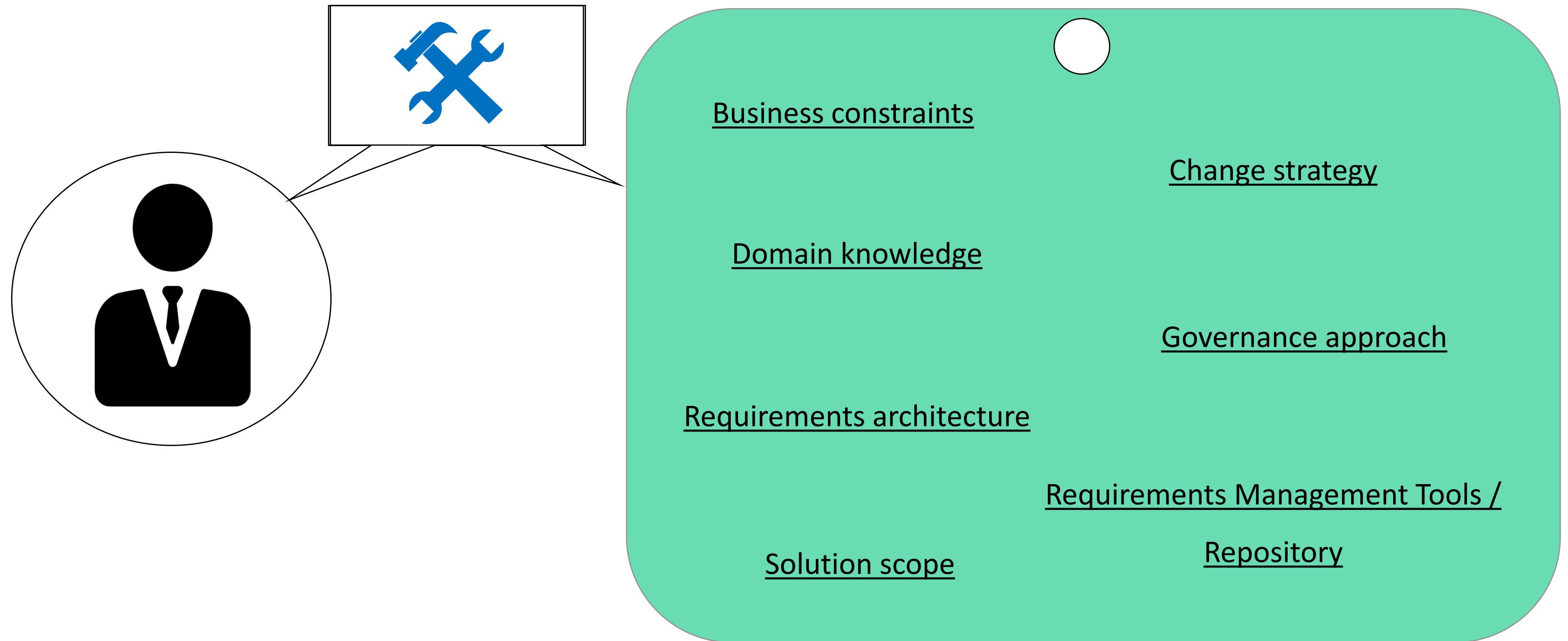
## ELEMENTS



# PRIORITIZE REQUIREMENTS

---

## GUIDELINES AND TOOLS



# PRIORITIZE REQUIREMENTS TECHNIQUES

Backlog management



Business cases

Interviews

Workshops

Decision analysis



Risk analysis and  
management



Estimation



Item tracking

Financial analysis



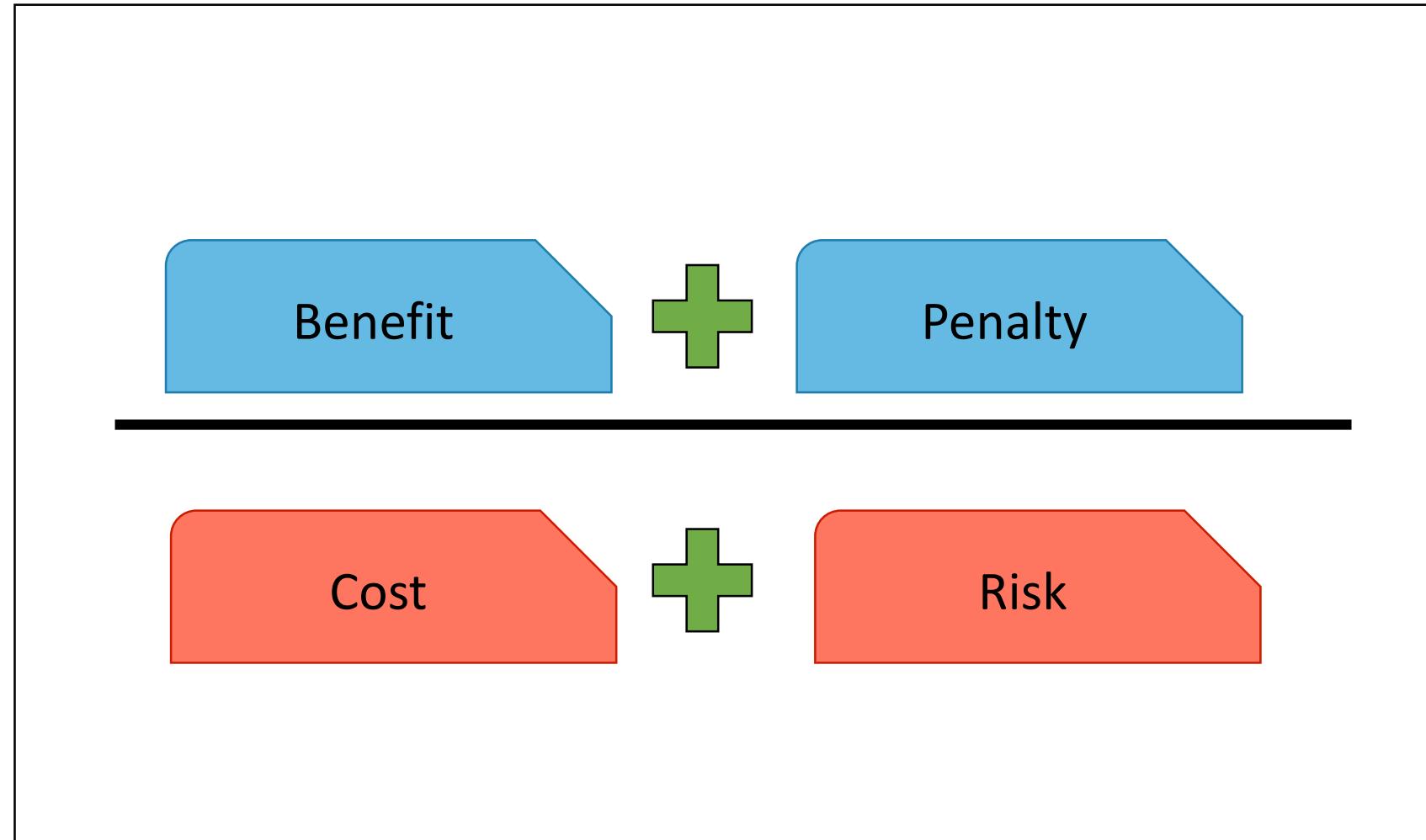
Prioritization



# PRIORITIZE REQUIREMENTS

## TECHNIQUES

Assign weights (1 to 9) to factors benefit, penalty, cost and risk associated to a feature. Derive the total value using the formula as defined by Karl Weigers in relative weighting process.



# PRIORITIZE REQUIREMENTS

## BACKLOG MANAGEMENT - OVERVIEW

### Backlog

- Record
- Track
- Prioritize remaining work items

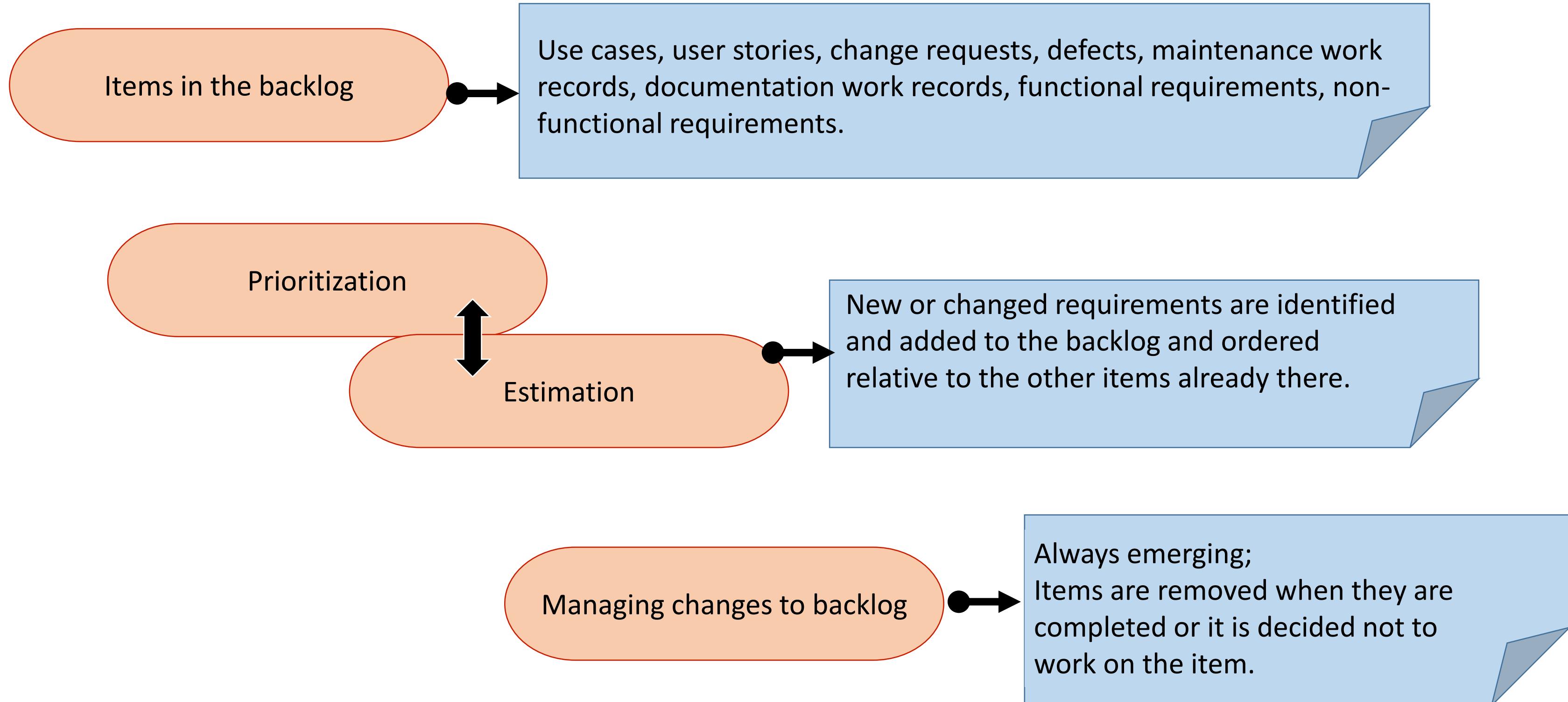
Items at the top have the highest business value and priority

### Backlog management

- What work should be formally included
- How to describe the work item
- How to track the work items
- How to periodically review and prioritize the work items in relation to all other items
- How to select the work items to work on
- How to remove the work items

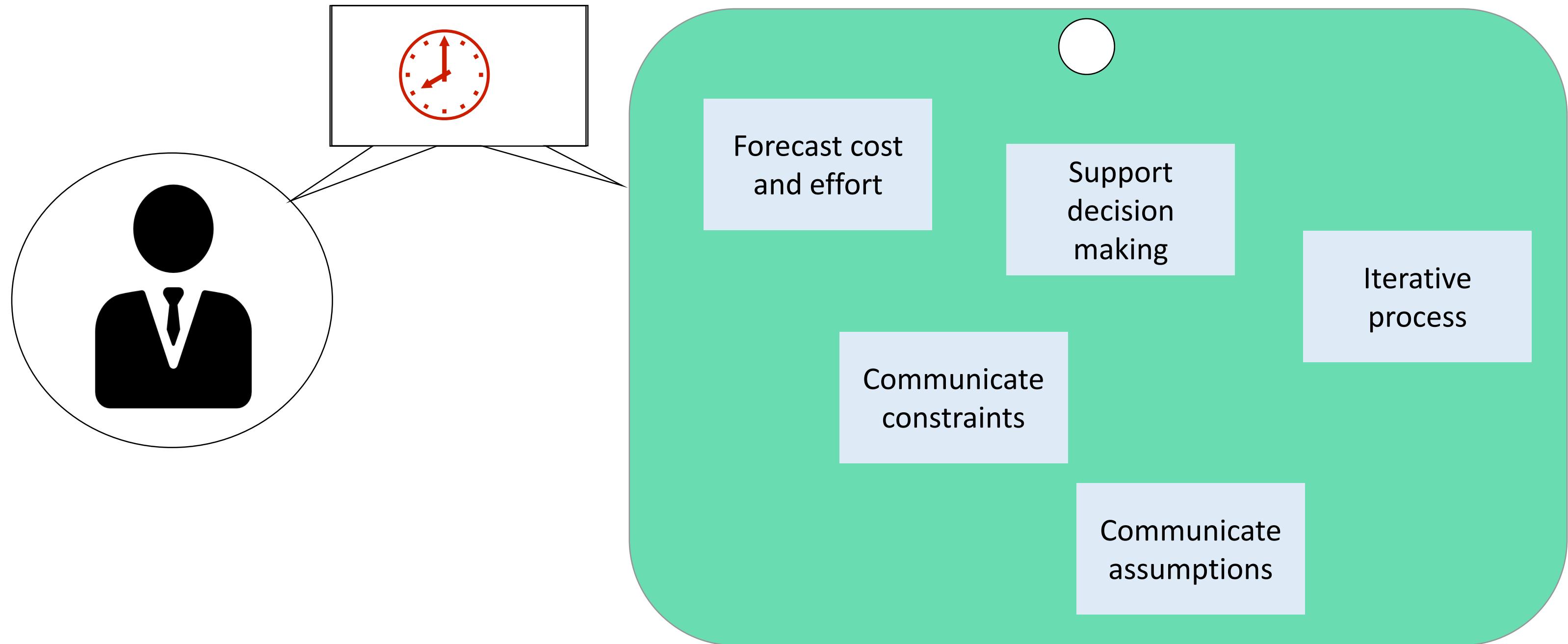
# PRIORITIZE REQUIREMENTS

## BACKLOG MANAGEMENT - ELEMENTS



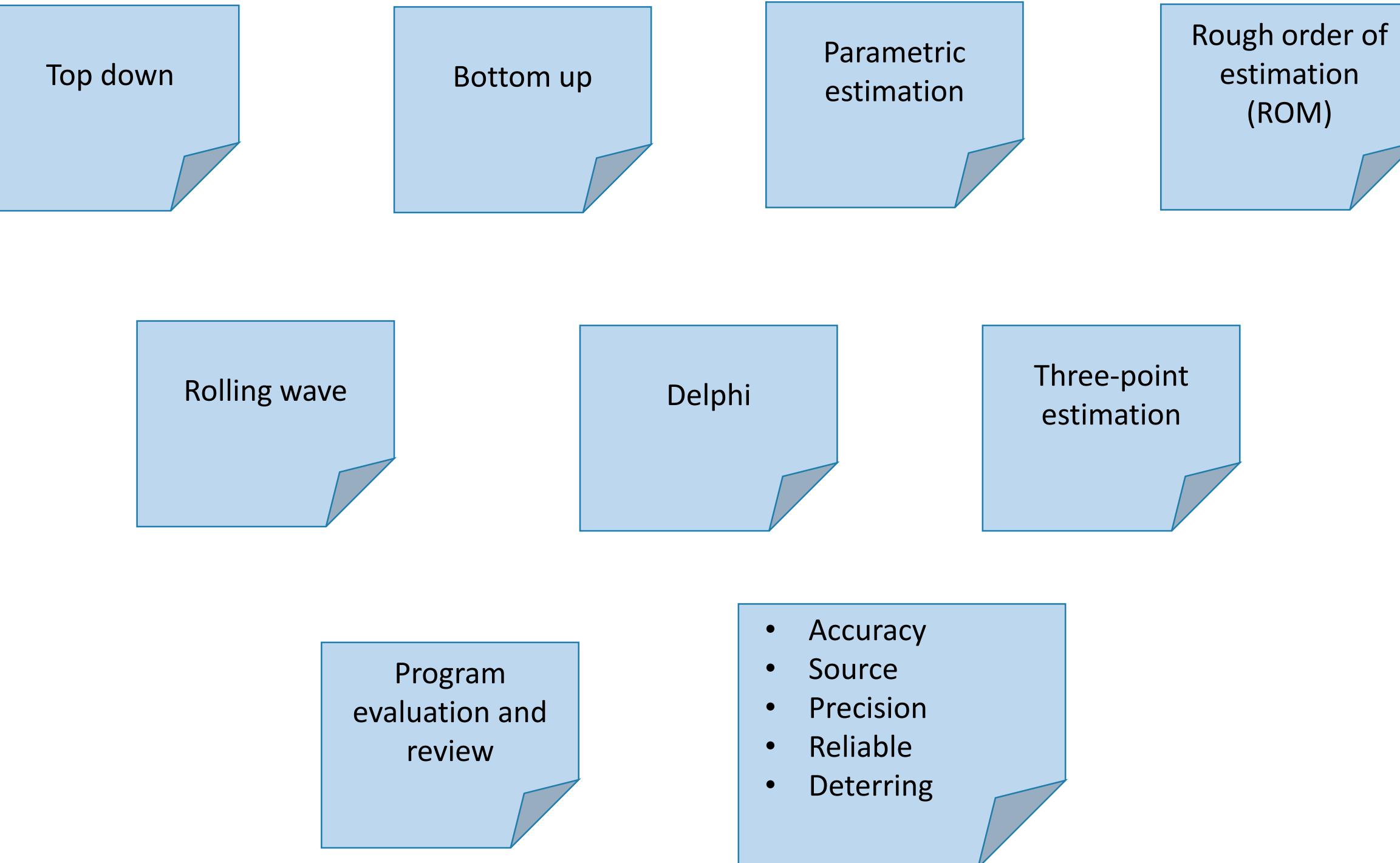
# PRIORITIZE REQUIREMENTS

## ESTIMATION - OVERVIEW



# PRIORITIZE REQUIREMENTS

## ESTIMATION - ELEMENTS



# PRIORITIZE REQUIREMENTS

## TOP DOWN Vs BOTTOM UP



Analogous estimation and expert judgment

Used when quick estimates are required with low level of accuracy



Fast

No need to decompose work in greater detail

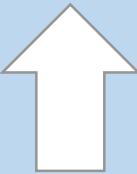
Less costly to create and

Good for similar projects



Low level of accuracy

Requires expertise and historical data



Three point, Parametric or Analogous estimation

Estimate require higher level of accuracy

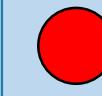


Higher level of accuracy

Better team buy-in and commitment

Best for complex projects

Provides more accurate baseline to track.



Takes more time and incurs more expenses

Work needs to be defined in great detail

# PRIORITIZE REQUIREMENTS

## THREE POINT AVERAGE AND PERT ESTIMATION

Optimistic – Most likely – Pessimistic

Optimistic – Best case

Pessimistic – Worst case

Triangular distribution:



Estimate based on the three points, optimistic, most likely and pessimistic

Final estimate is the average of all three estimates

PERT = Program (or Project) Evaluation and Review Technique

Uses weighted average of three points

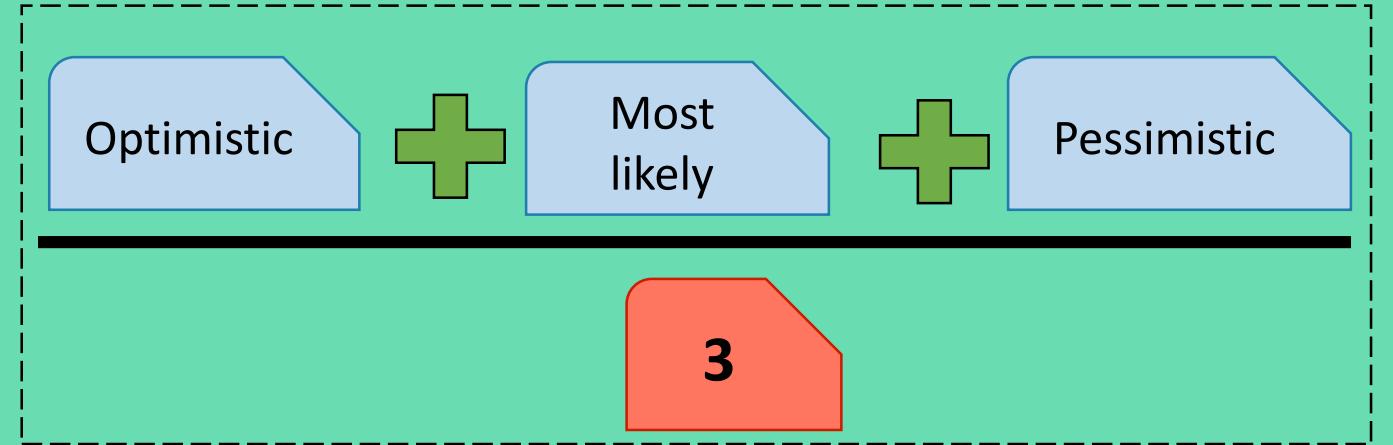
It's more accurate than 3-point average

PERT is also referred as a “Beta Distribution” OR “Double Triangular Distribution”

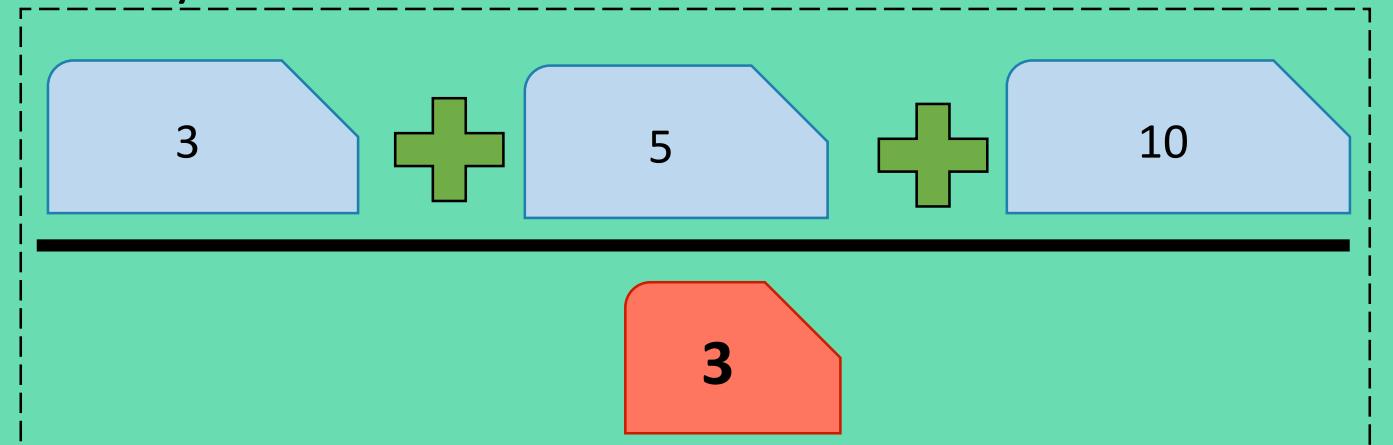
# PRIORITIZE REQUIREMENTS

## THREE POINT AVERAGE AND PERT ESTIMATION

### THREE POINT AVERAGE

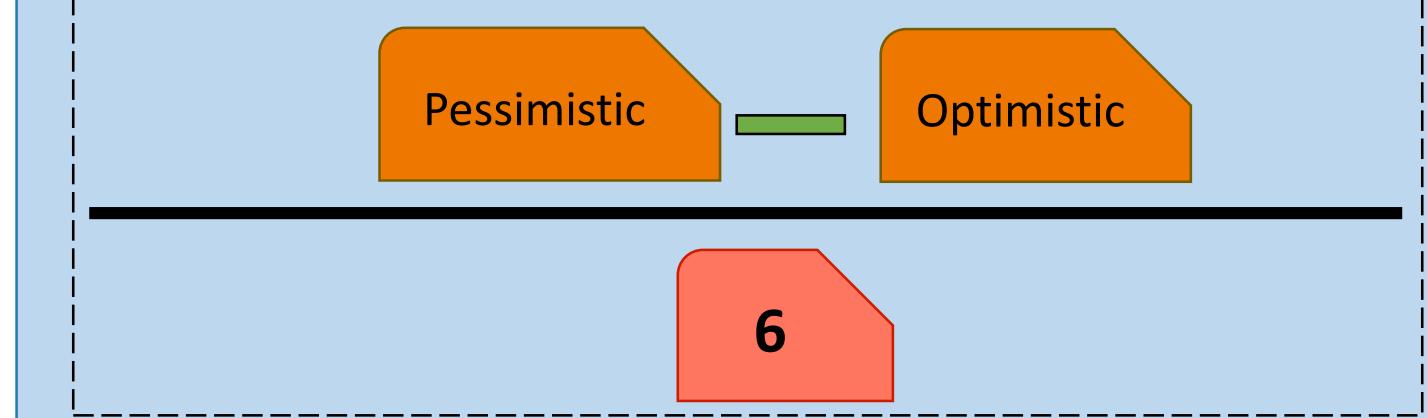
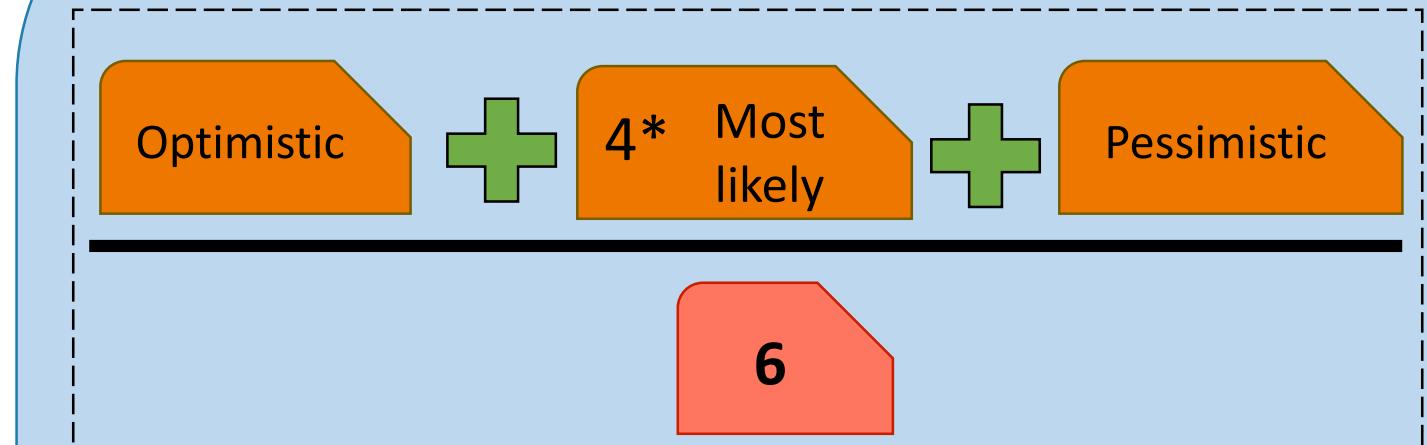


Optimistic: 3 days, Most Likely: 5 days and Pessimistic:  
10 days



Then the final estimate, with averaging formula is 6  
days

### PERT ESTIMATION



Applying weighted average formula the final  
estimate = 5.5 days  
Standard deviation = 1.167

# PRIORITIZE REQUIREMENTS

## PARAMETRIC AND ROLLING WAVE ESTIMATION

Uses a mathematical model.

● Extremely accurate

Reduces overall risk

Based on historical information

● Takes time,

Requires expensive tools,

Requires considerable experience

Difficult for calculating “soft” costs

Difficult for broadly defined projects

Iterative estimation

Rough Order of Magnitude (ROM) estimate  
for overall initiative or project.

● High level of accuracy - Activities performed  
are in the near term  
Low level of accuracy – Activities performed  
are in the longer duration

This estimation approach is used in change  
driven plans or adaptive or agile plans, also  
when planning is iterative, and hence is  
referred to as rolling wave planning.

# PRIORITIZE REQUIREMENTS

## PRIORITIZATION - OVERVIEW

Provides a framework for the Business Analyst:

- To facilitate stakeholder decisions
- To understand the relative importance of business analysis information

Importance of business analysis information is based on:

Value, Risk, Difficulty of implementation

Business analyst revisit priorities when changes occur in the business environment, stakeholder needs

# PRIORITIZE REQUIREMENTS

## PRIORITIZATION - APPROACHES



Business analysis information is classified into categories such as, high, medium and low priority.



Business analysis information is ordered based on relative importance.



Business analysis information is prioritized based on the amount of work a project team can deliver in given time or budget.



Requirements are prioritized based on the consensus among stakeholders.

# PRIORITIZE REQUIREMENTS

## ITEM TRACKING - OVERVIEW

- Item tracking is used to capture and assign responsibility for issues and stakeholder concerns
- Viable stakeholder concern is classified into specific item types
- Item types are Actions, Assumptions, Constraints, Dependencies, Defects, Enhancements, and Issues
- Items are assigned to one or more stakeholders who are responsible for its resolution
- Item tracking may be shared with stakeholders to ensure transparency and visibility into the status

# PRIORITIZE REQUIREMENTS

## ITEM TRACKING - ELEMENTS

- Item-identifier

- Summary or Description

- Category

- Type

- Date identified

- Identified by

- Impact

- Priority

- Resolution date

- Owner

- Resolver or assigned to

- Agreed strategy

- Status

- Resolution updates

- Escalation matrix

# PRIORITIZE REQUIREMENTS

## STAKEHOLDERS



# Lesson 5: Requirements Life Cycle Management

## Topic 5.4: Assess Requirements Changes

How changes to the requirements are assessed?

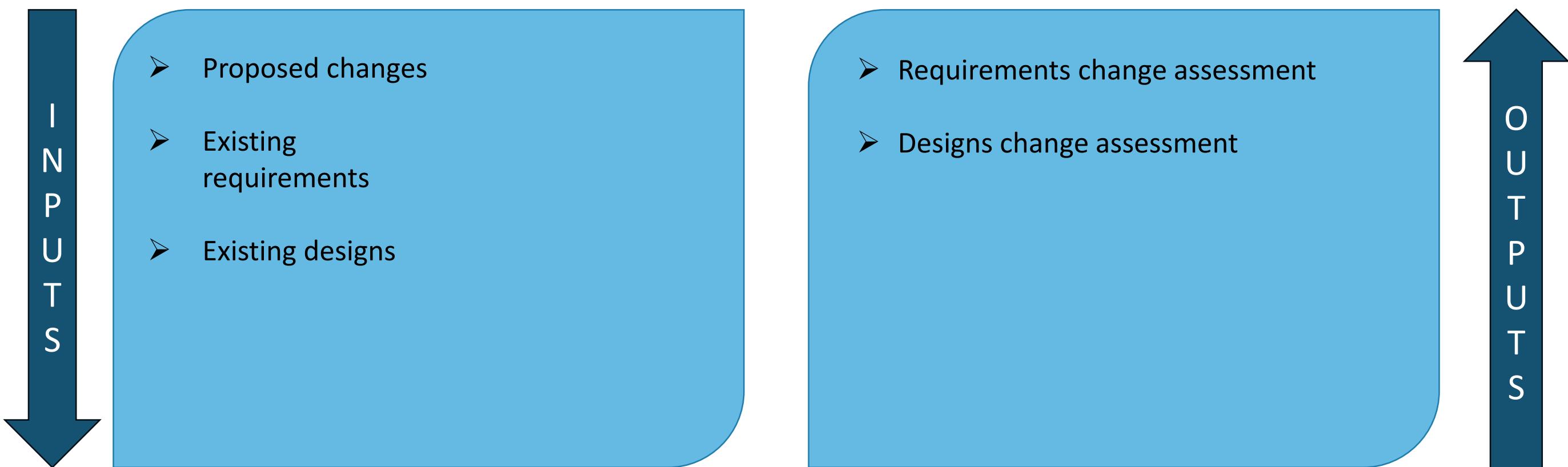
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# ASSESS REQUIREMENTS CHANGES

## OVERVIEW

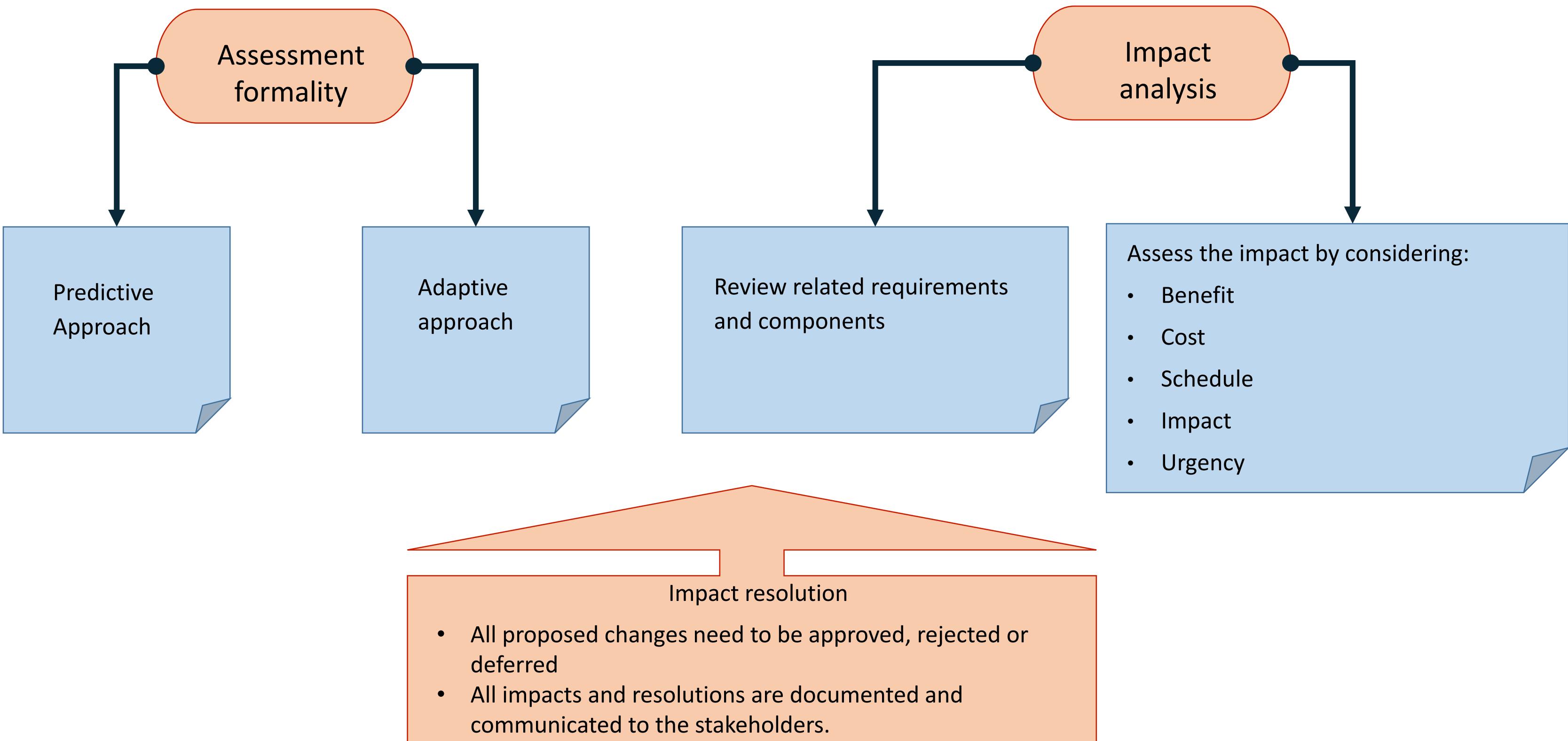
### Purpose

- Evaluate the implications of proposed changes to requirements and designs



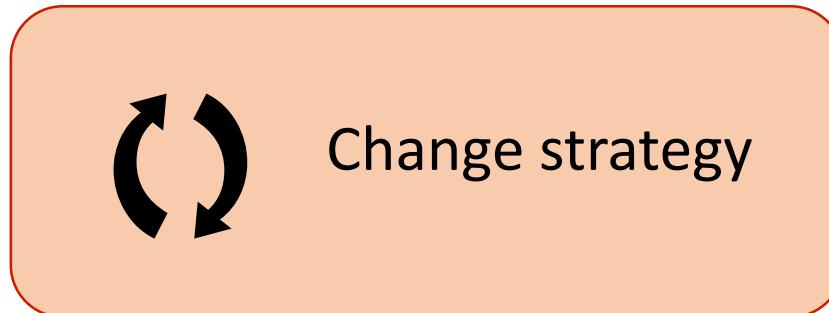
# ASSESS REQUIREMENTS CHANGES

## ELEMENTS

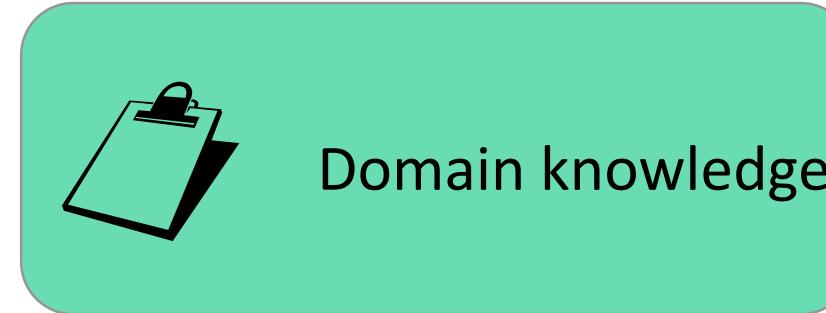


# ASSESS REQUIREMENTS CHANGES

## GUIDELINES AND TOOLS



Change strategy



Domain knowledge



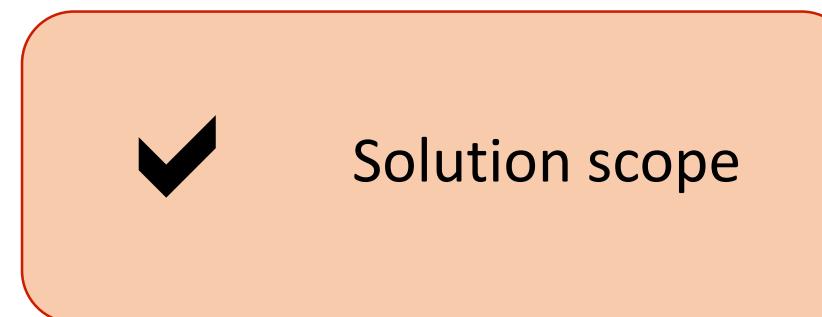
Governance approach



Legal or regulatory  
information



Requirements  
architecture



Solution scope

# ASSESS REQUIREMENTS CHANGES

## TECHNIQUES



Business case



Document analysis



Estimation



Interface analysis



Financial analysis

Business rules analysis



Risk analysis and management



Item tracking

Workshops and interviews

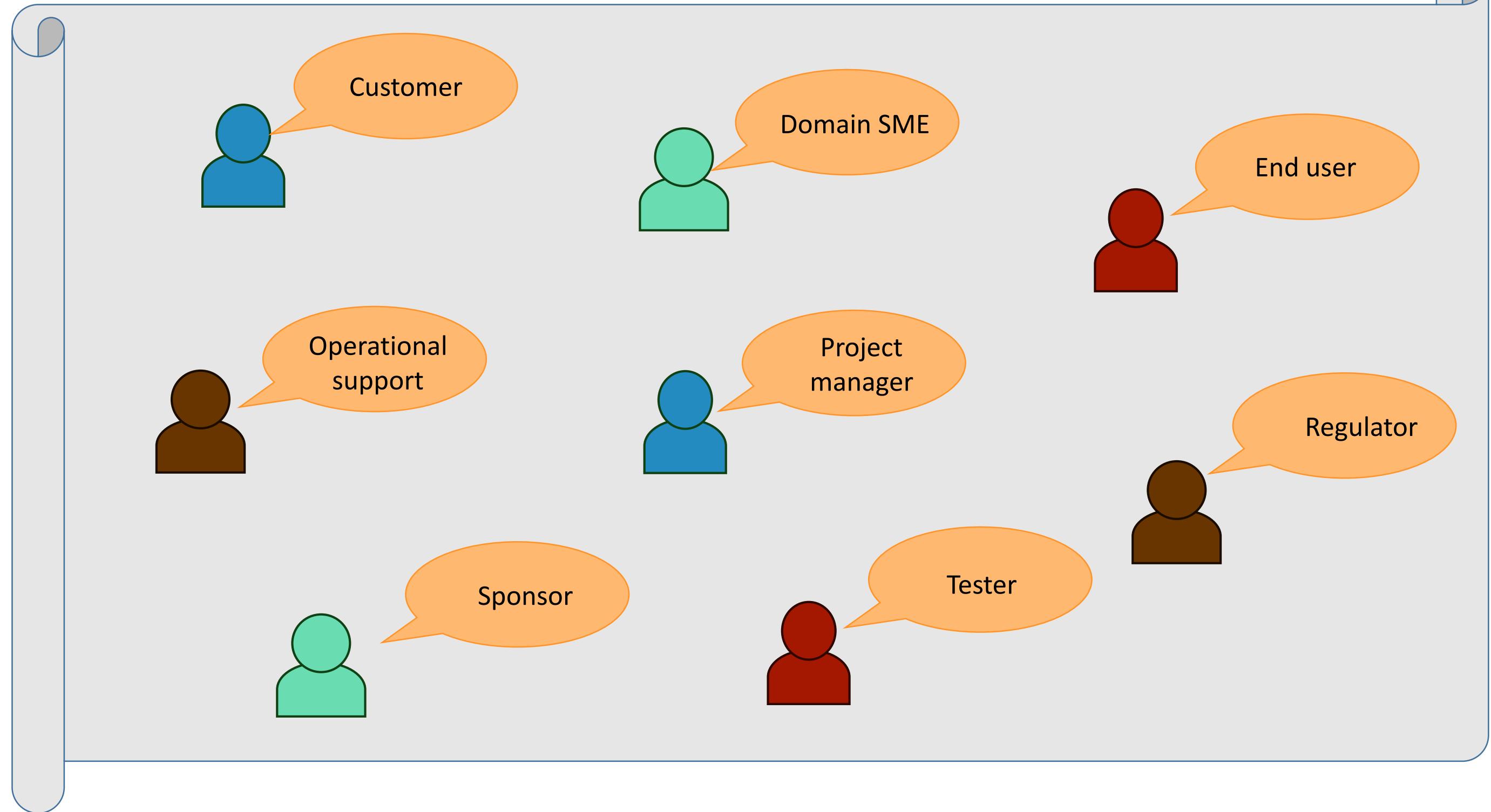
Decision analysis

# ASSESS REQUIREMENTS CHANGES

## STAKEHOLDERS



Business Analyst



# Lesson 5: Requirements Life Cycle Management

## Topic 5.5: Approve Requirements

How are requirements approved?

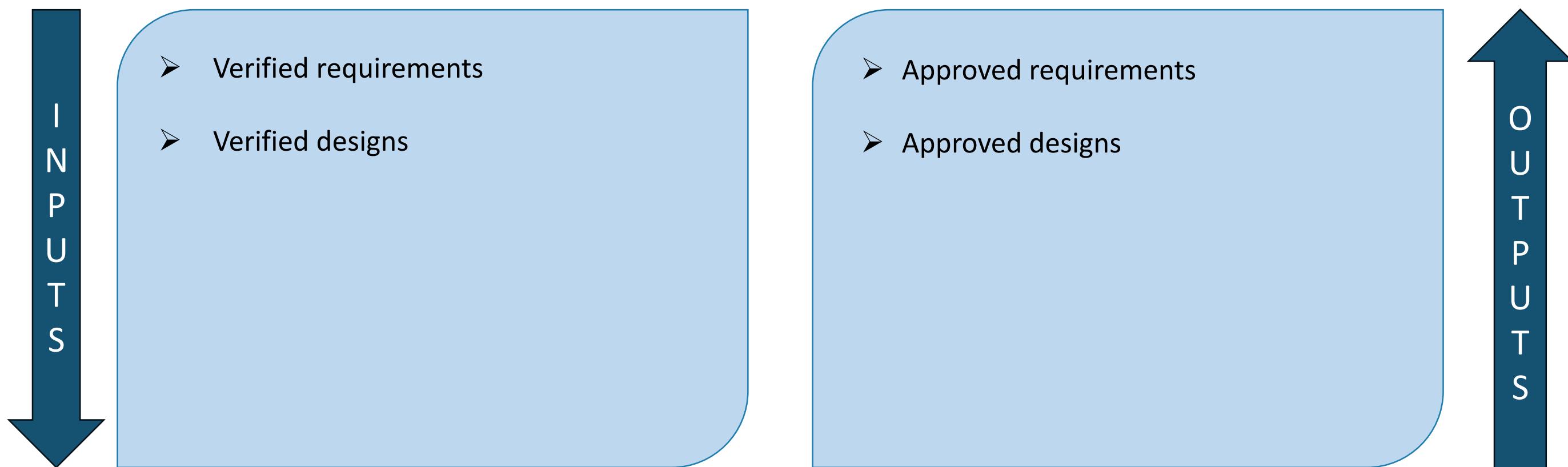
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# APPROVE REQUIREMENTS

## OVERVIEW

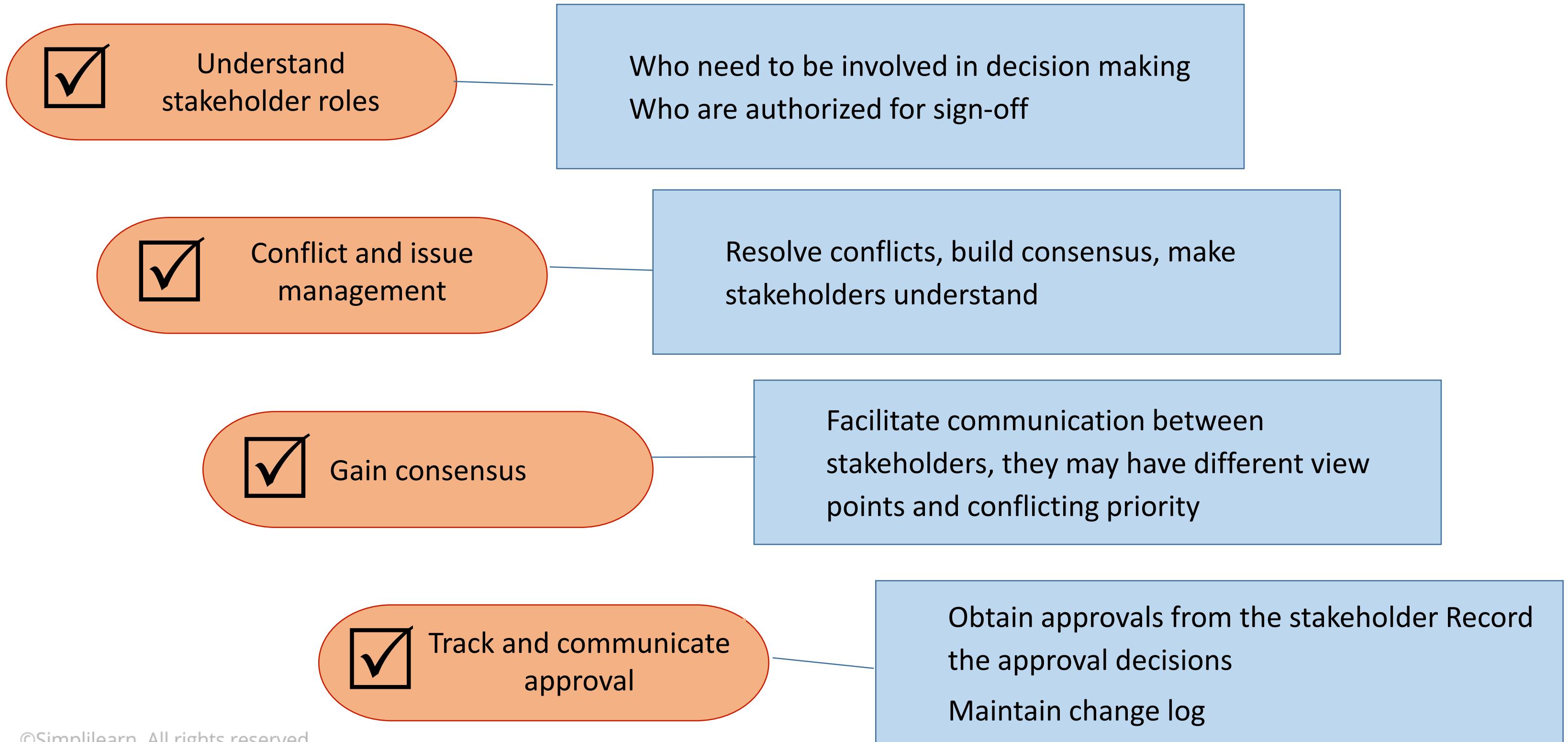
### Purpose

- To obtain agreement on requirements and designs
- To obtain approval on requirements and designs



# APPROVE REQUIREMENTS

## ELEMENTS



# APPROVE REQUIREMENTS

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## GUIDELINES AND TOOLS



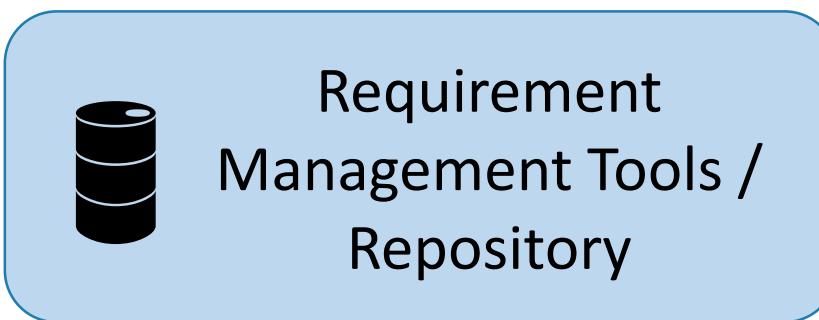
Governance approach



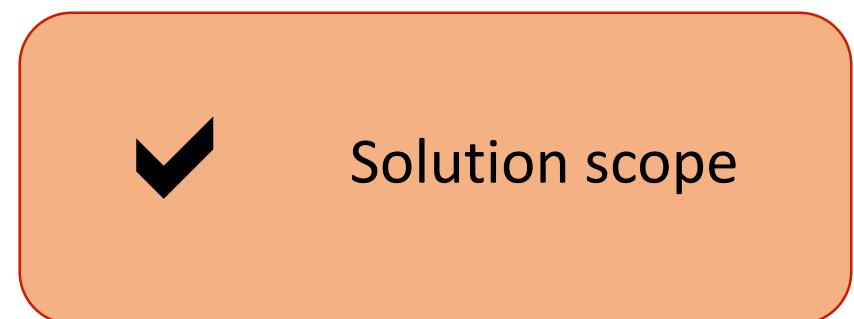
Change Strategy



Legal or Regulatory  
information



Requirement  
Management Tools /  
Repository



Solution scope

# APPROVE REQUIREMENTS TECHNIQUES

Acceptance and evaluation criteria



Decision analysis

Item tracking



Reviews

Workshops



# APPROVE REQUIREMENTS

## ACCEPTANCE AND EVALUATION CRITERIA - OVERVIEW

### Acceptance criteria –

- Used to define the requirements, outcome or conditions that must be met in order to consider solution to be acceptable to the key stakeholders.
- Minimum set of requirements that must be met. It's typically used when only one possible solution is being evaluated.

### Evaluation criteria –

- Used to assess a set of requirements in order to choose between **multiple solutions**.
- May be cost, performance, usability, performance etc.

# APPROVE REQUIREMENTS

## ACCEPTANCE AND EVALUATION CRITERIA - OVERVIEW

Strengths



Limitations

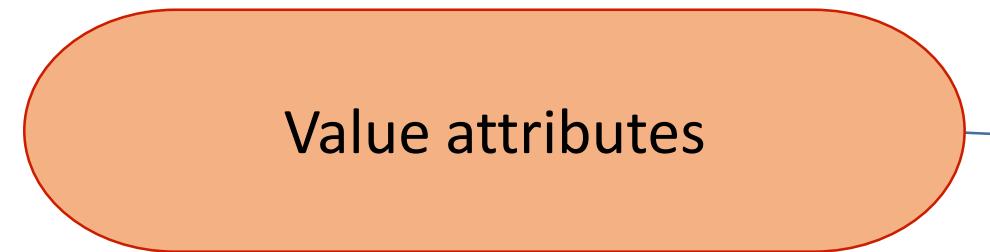
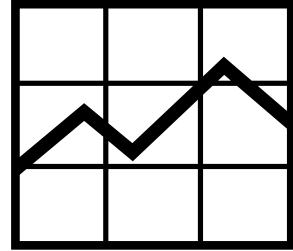


- All requirements with testable acceptance criteria
- Agreement upon acceptance criteria required
- Acceptance criteria is necessary in case of contractual obligations
- Evaluation criteria assist in the delivery of potential value
- Evaluation criteria helps in defining priorities

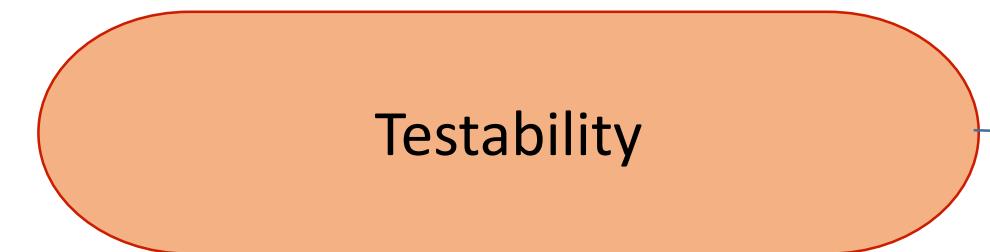
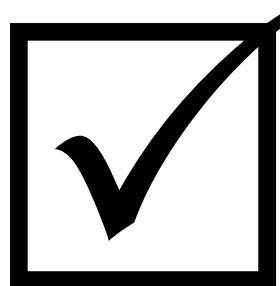
- Acceptance criteria may express contractual obligation
- Achieving agreement on evaluation criteria for different needs can be challenging

# APPROVE REQUIREMENTS

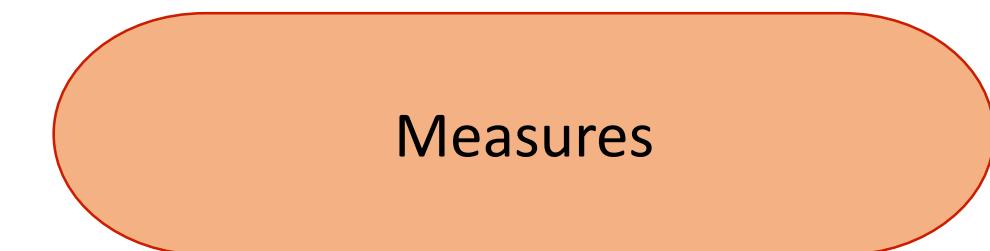
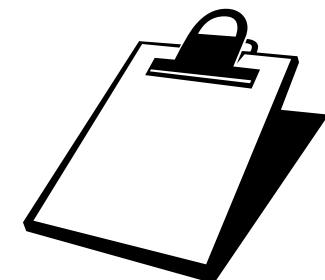
## ACCEPTANCE AND EVALUATION CRITERIA - ELEMENTS



Usability, security, reliability, scalability, performance, availability of specific feature, ability to perform specific operations etc.



User acceptance testing



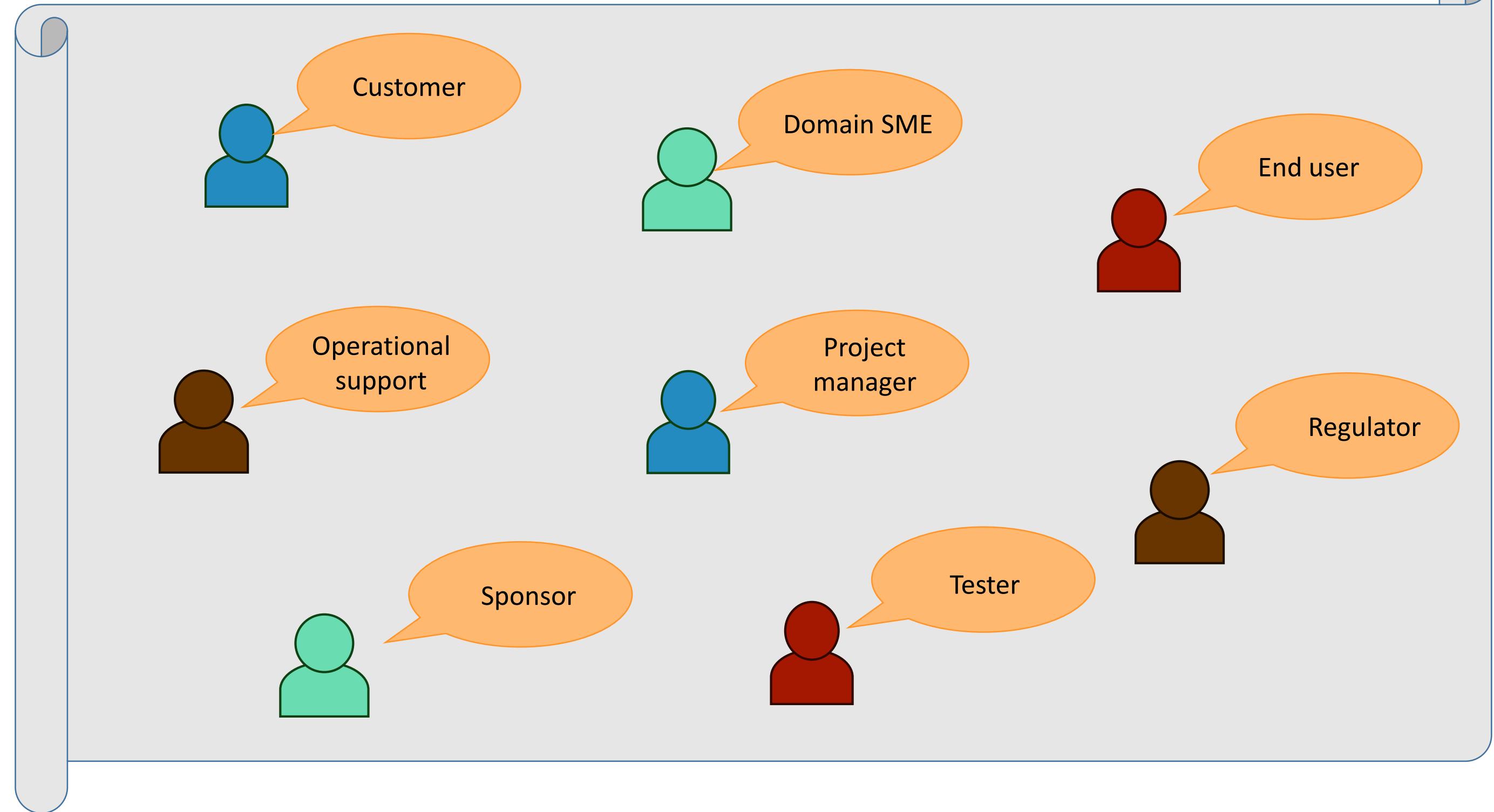
Continuous or discrete scale

# APPROVE REQUIREMENTS

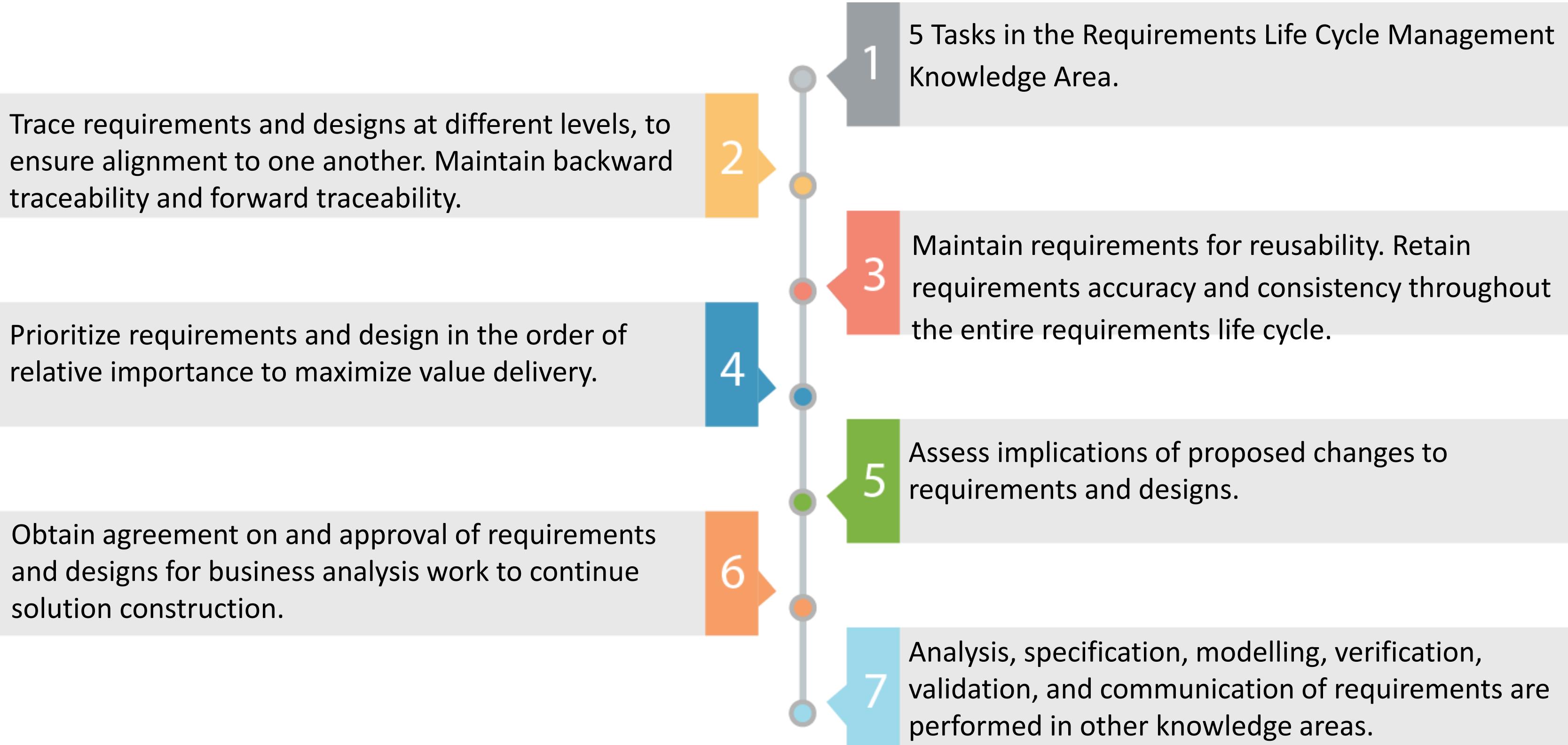
## STAKEHOLDERS



Business Analyst



## KEY TAKEAWAYS



# **Lesson 5: Requirements Life Cycle Management**

## **CASE STUDY EXERCISE**

## CASE STUDY

### PROBLEM STATEMENT



**To deliver a solution for improving 'customer connect' that:**

- ✓ Reduces the time between the customers search for a policy and the field agent's response
- ✓ Ensures that the customer's questions are clarified as they are searching for the policy actively (Hot Lead).

# CASE STUDY

## PROBLEM STATEMENT



The out of scope requirements were allocated to the solution component.



Implementation has taken more time.



There were conflicts among the stakeholders on the prioritization process.

Key stakeholders were not invited for the prioritization meeting.



Unable to implement one of the approved requirements.

## CASE STUDY ACTIVITIES

---



The key stakeholder has decided to design, develop, and implement the solution incrementally.



The high level scope and release plan are in place.



Requirements are progressively elaborated.



Requirements that can be used in future projects have been identified.

## CASE STUDY

### EXERCISE

|   | Questions                                                                                                                                    | Response                                                                                                                                                                                                                           |
|---|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | In the given case study, what is the approach for business analysis?                                                                         | <input type="radio"/> Iterative Approach<br><input type="radio"/> Incremental Approach<br><input type="radio"/> Predictive<br><input type="radio"/> Adaptive                                                                       |
| 2 | What should Paul do when he identifies a couple of requirements, which can be used in future projects?                                       | <input type="radio"/> Hold for the next projects<br><input type="radio"/> Label and store for reusability<br><input type="radio"/> Out of scope as it is general requirement<br><input type="radio"/> None of the above            |
| 3 | What can be reason for the requirements, which are not in scope have been approved and allocated to a solution component for implementation? | <input type="radio"/> Change control process was not effectively implemented<br><input type="radio"/> Impact Analysis was not performed<br><input type="radio"/> Missing traceability<br><input type="radio"/> Stakeholder urgency |

## CASE STUDY

### EXERCISE

|   | Questions                                                                                                                                     | Response                                                                                                                                                                                                                                                                                                                                                                                                           |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | What can be the reason for missing to invite key stakeholders for the prioritization meeting, when they are required for providing approvals? | <input type="radio"/> Forgot to invite<br><input type="radio"/> Prioritization approach was not adequately defined in the business analysis approach<br><input type="radio"/> Prioritization approach was not adequately defined in the business analysis governance approach<br><input type="radio"/> Prioritization approach was not adequately defined in the business analysis information management approach |
| 5 | When requirements are prioritized based on only value, what flaw does the approach have?                                                      | <input type="radio"/> No impact<br><input type="radio"/> Must prioritize high value requirements<br><input type="radio"/> Missed considering relationship with other requirements<br><input type="radio"/> None of the above                                                                                                                                                                                       |

## CASE STUDY

### ANSWERS

| Questions                                                                                                                                   | Answers                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 1 In the given case study, what is the approach for business analysis?                                                                      | Adaptive                                                                                         |
| 2 What should Paul do when he identifies a couple of requirements, which can be used in future projects?                                    | Label and store for reusability                                                                  |
| 3 What can be reason for the requirements, which are not in scope has been approved and allocated to solution component for implementation? | Missing traceability                                                                             |
| 4 What can be the reason for missing to invite a key stakeholder, who is required for an approval into prioritization meeting?              | Prioritization approach was not adequately defined in the business analysis governance approach. |
| 5 When requirements are prioritized based on only value, what flaw does the approach has?                                                   | Missed considering relationship with other requirements.                                         |



**QUIZ  
1**

Which one of the following business analysis technique is not used when prioritizing requirements?

- a. Decision Analysis
- b. Item Tracking
- c. Brainstorming
- d. Workshops



QUIZ  
1

Which one of the following business analysis techniques is used when prioritizing requirements?

- a. Decision Analysis
- b. Item Tracking
- c. Brainstorming
- d. Workshops



The correct answer is **a, b and d.**

**Explanation:** Decision analysis, item tracking and workshops are the techniques used to prioritize requirements.

QUIZ  
2

What is Double Triangular Distribution? If most likely is 9, best case is 5 and worst case estimate is 11.

- a. 8
- b. 8.66
- c. 8.33
- d. 1



QUIZ  
2

What is Double Triangular Distribution? If most likely is 9, best case is 5 and worst case estimate is 11.

- a. 8
- b. 8.66
- c. 8.33
- d. 1



The correct answer is **b**.

**Explanation:** Double Triangular Distribution or PERT uses weighted average of three points.

$$(O + 4 * M + P) / 6 = (5 + 4 * 9 + 11) / 6 = 8.66$$

QUIZ  
3

Which one of the following is not a basis for prioritization?

- a. Value
- b. Penalty
- c. Stability
- d. Necessity



QUIZ  
3

Which one of the following is not a basis for prioritization?

- a. Value
- b. Penalty
- c. Stability
- d. Necessity



The correct answer is **d**.

**Explanation:** Necessity is not a basis for prioritization. Basis for prioritization are Benefit, Penalty, Cost, Risk, Dependencies, Time Sensitivity, Stability, Regulatory or Policy Compliance

QUIZ  
4

Which one of the following is an input to the approve requirements task?

- a. Requirements (Verified)
- b. Requirements (Communicated)
- c. Requirements (Prioritized)
- d. Requirements (Validated)



QUIZ  
4

Which one of the following is an input to the approve requirements task?

- a. Requirements (Verified)
- b. Requirements (Communicated)
- c. Requirements (Prioritized)
- d. Requirements (Validated)



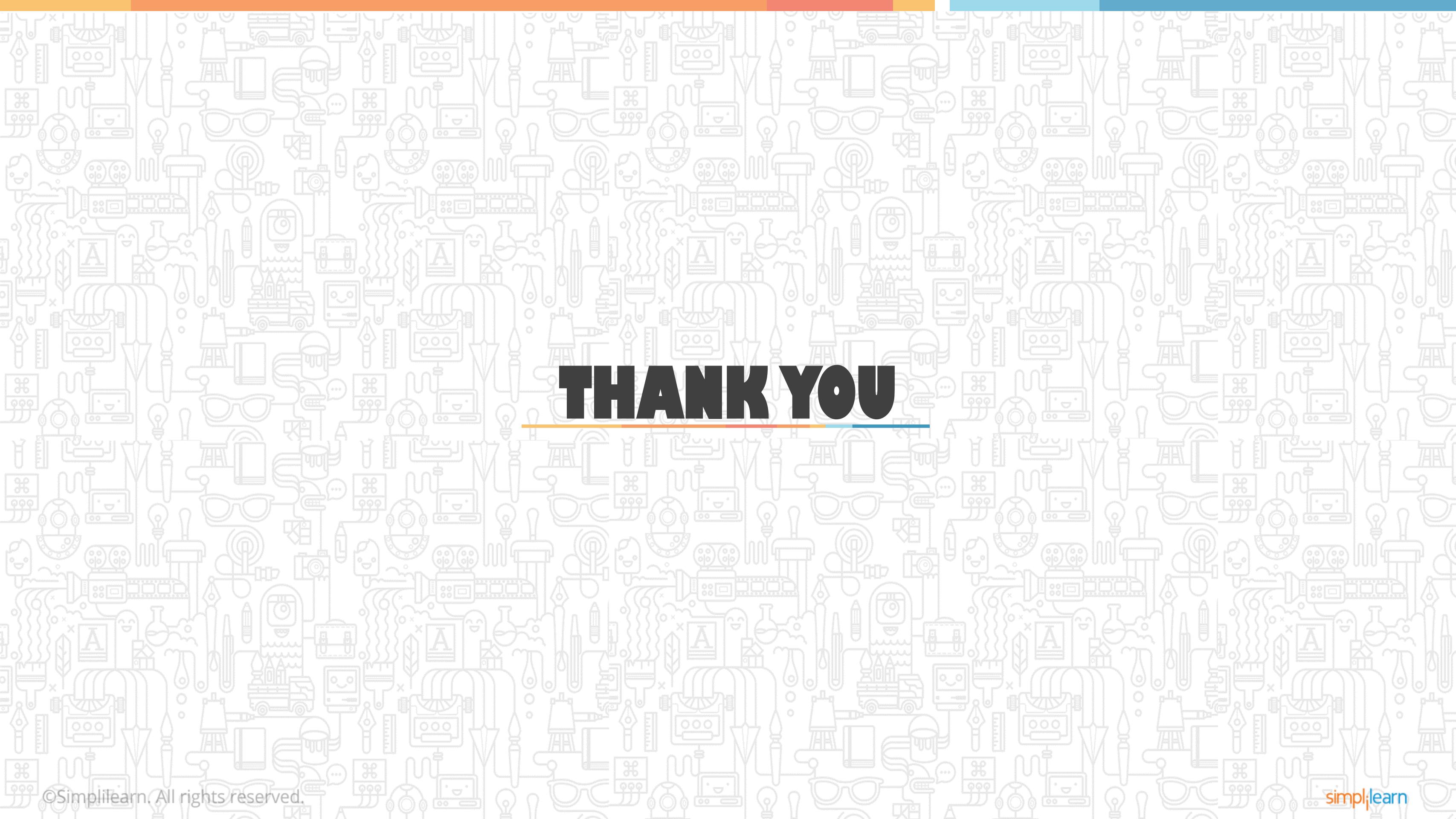
The correct answer is **a.**

**Explanation:** Requirements (Verified) is an input to the approve requirements task.



**This concludes “Requirements Life Cycle Management”**

The next lesson is “Strategy Analysis”

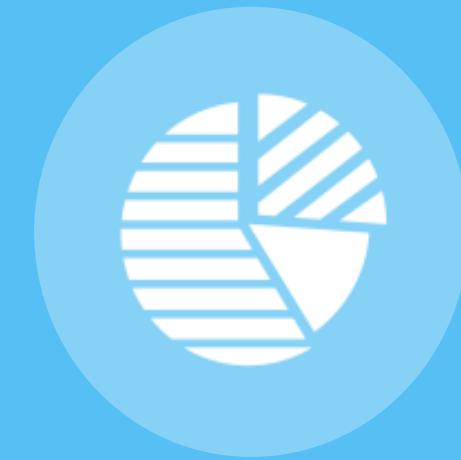


# THANK YOU

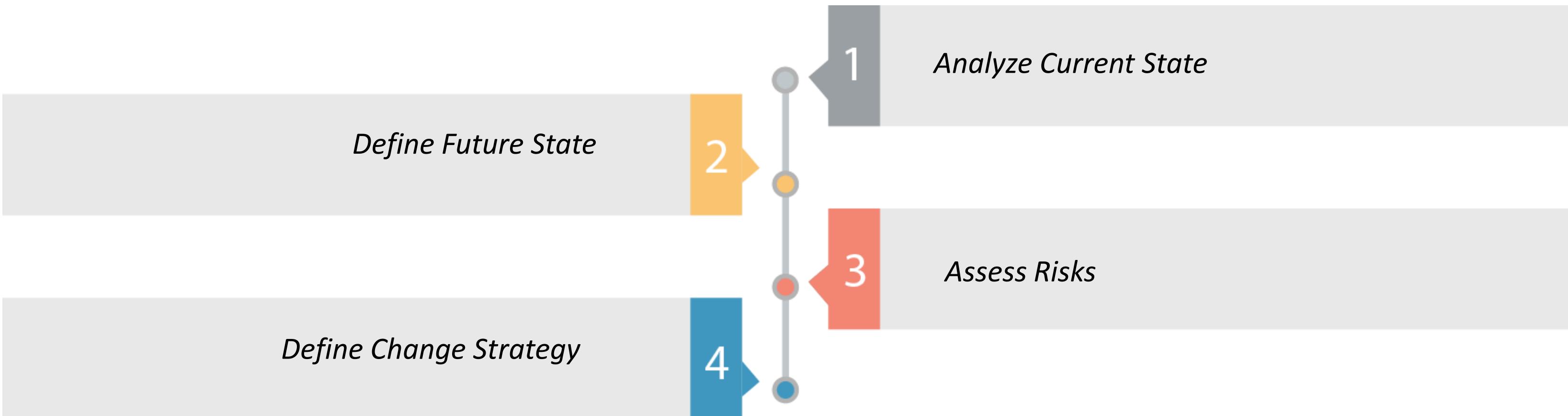
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# CCBA® Exam Preparation Course

## Lesson 6 – Strategy Analysis



# WHAT'S IN IT FOR ME



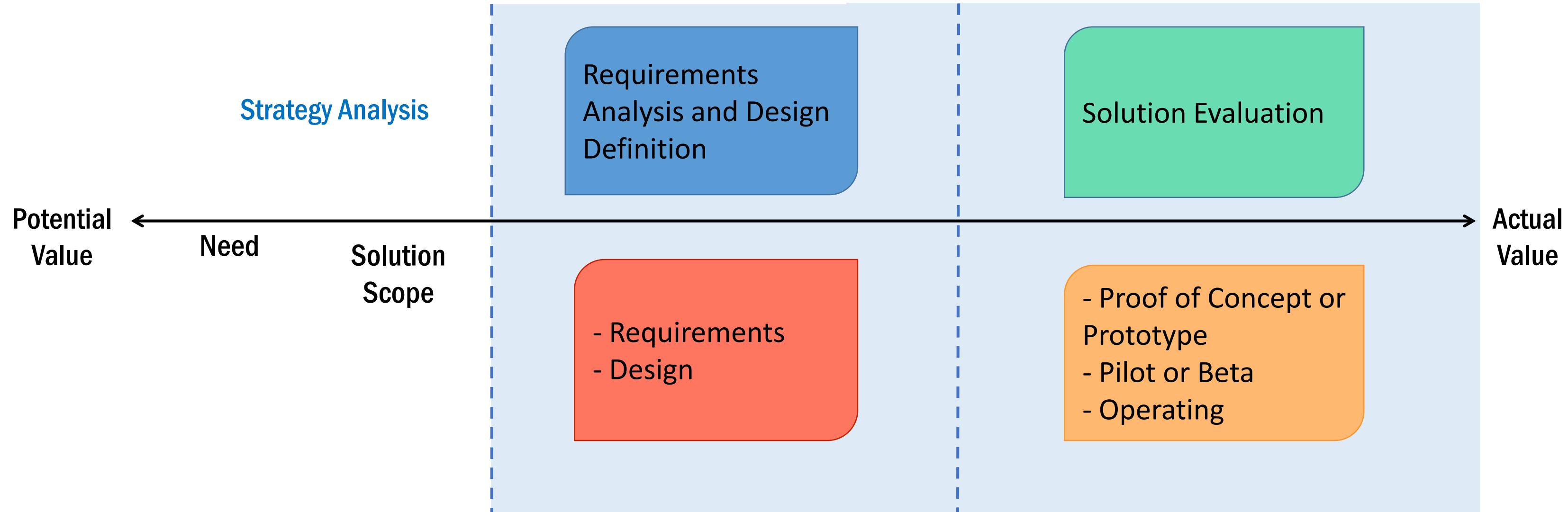
## INTRODUCTION



*The Strategic Analysis knowledge area describes the business analysis work that must be performed to collaborate with stakeholders in order to:*

- *identify a need of strategic or tactical importance (the business need)*
- *enable the enterprise to address that need, and*
- *align the resulting strategy for the change with higher and lower level strategies.*

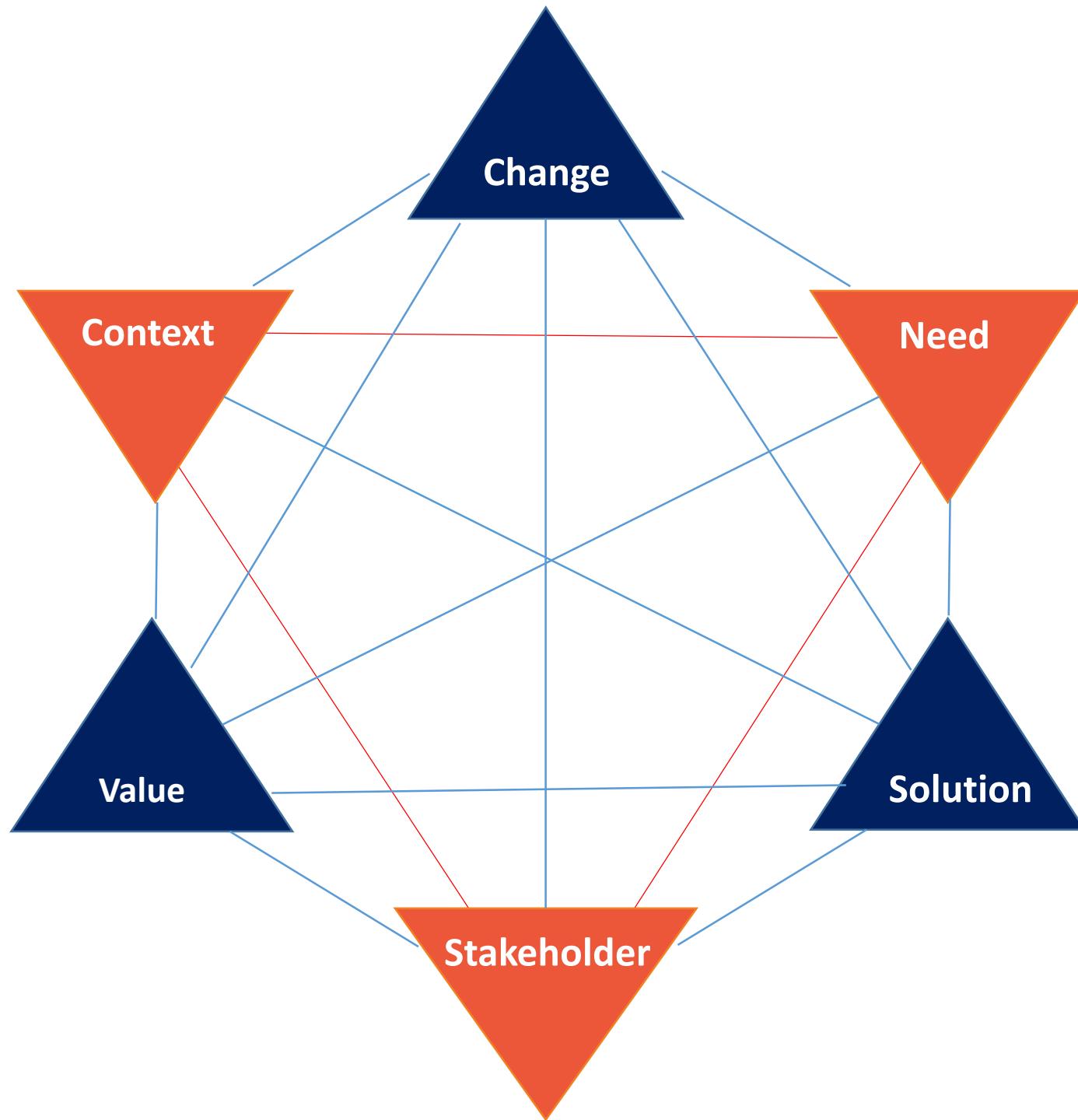
# BUSINESS ANALYSIS VALUE SPECTRUM



# STRATEGY ANALYSIS

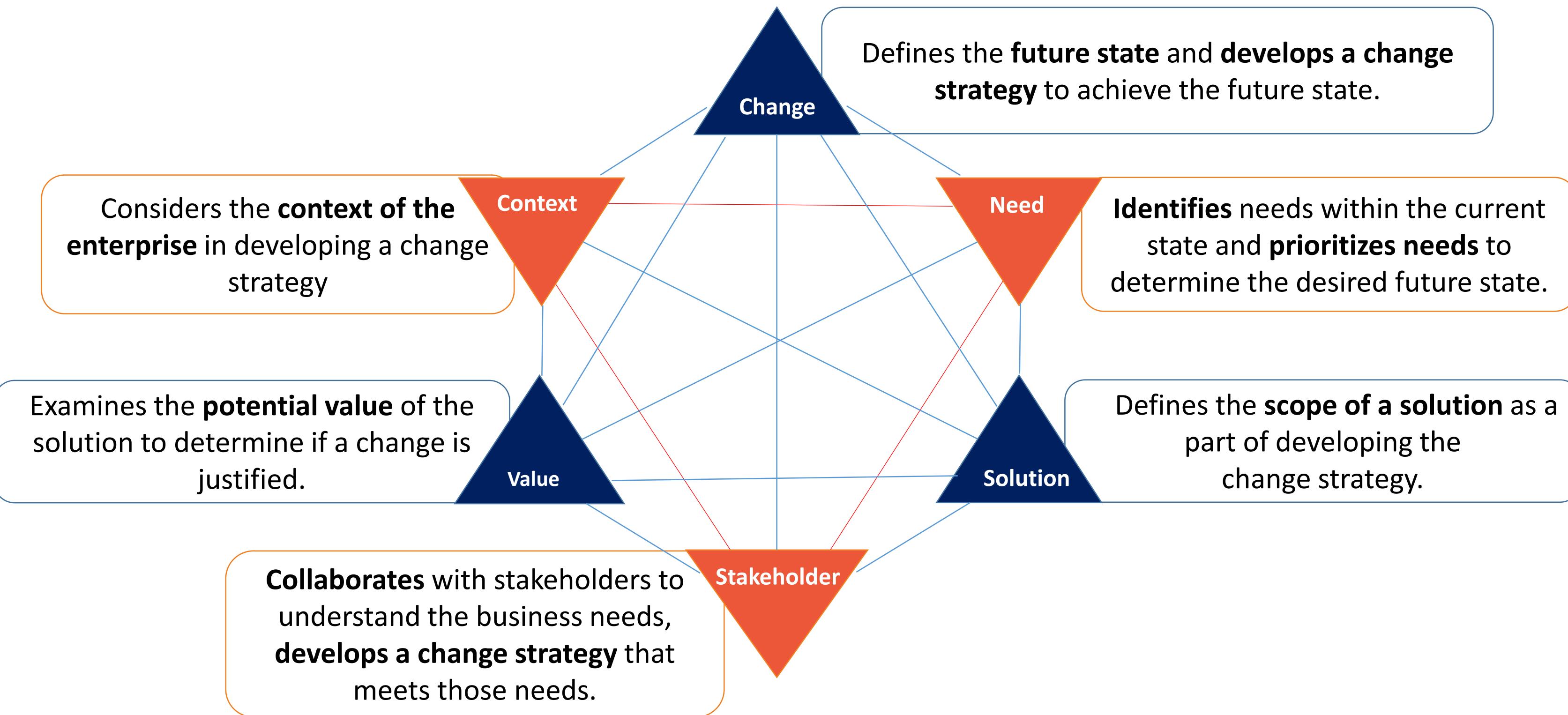
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## OVERVIEW



# STRATEGY ANALYSIS

## OVERVIEW



# STRATEGY ANALYSIS

## INPUT, TASKS, AND OUTPUT

### Tasks

**1. Analyze:** Current State

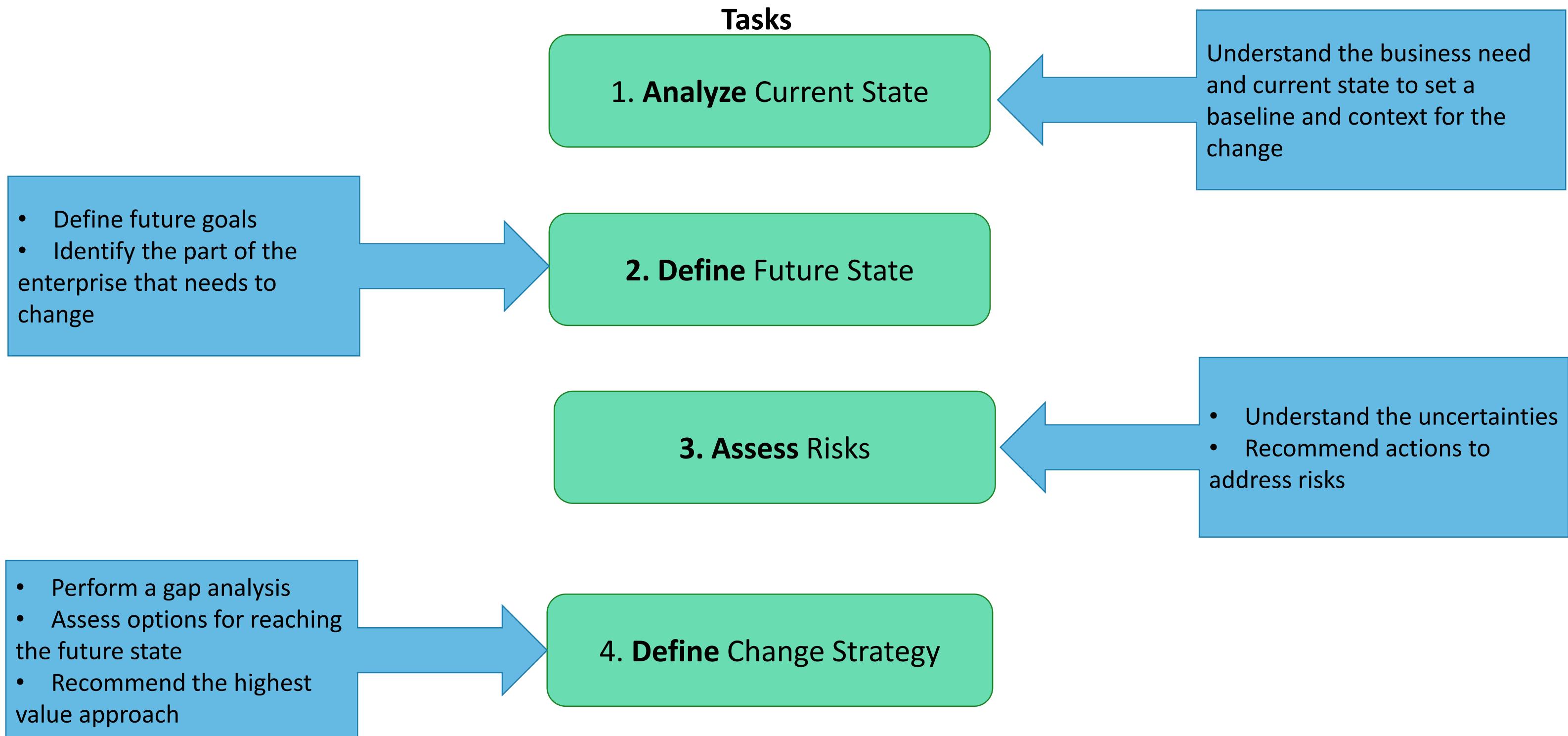
**2. Define:** Future State

**3. Assess:** Risks

**4. Define:** Change Strategy

## STRATEGY ANALYSIS (contd.)

### INPUT, TASKS, AND OUTPUT



## STRATEGY ANALYSIS (contd.)

### INPUT, TASKS, AND OUTPUT

#### Tasks

#### Input

- Needs
- Elicitation Results (confirmed)

#### 1. Analyze Current State

#### Output

- Current State Description
- Business Requirements

- Business Requirements

#### 2. Define Future State

- Business Objectives
- Future State Description
- Potential Value

- Business Objectives
- Elicitation Results (confirmed)
- Influence (Internal & External)
- Potential Value
- Requirements (prioritized)

#### 3. Assess Risks

- Risk Analysis Results

- Current State Description
- Future State Description
- Risk Analysis Results
- Stakeholder Engagement Approach

#### 4. Define Change Strategy

- Change Strategy
- Solution Scope

## ANALYZE CURRENT STATE

### PURPOSE

The purpose of this task is to understand:

- Why an enterprise needs to change
- How it operates
- What would be affected by the change

Context for change:

- Existing stakeholders
- Processes
- Technologies
- Policies
- Market conditions

INPUT

- Needs
- Elicitation Results (Confirmed)

- Current State Description
- Business Requirements

OUTPUT

# ANALYZE CURRENT STATE (contd.)

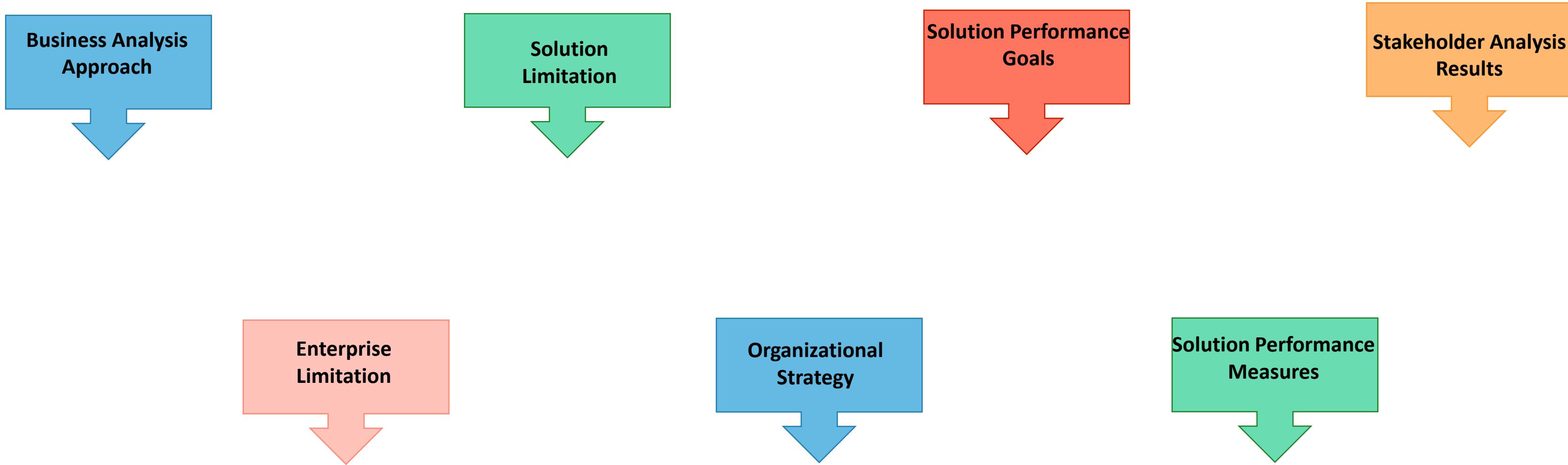
## ELEMENTS

| Business Needs                                                                                                                                                                                                                                                                      | Org. Structure and Culture                                                                                                                                               | Capabilities and Processes                                                                                                                               | Technology and Infrastructure                                                                                                                                          | Policies                                                                                                                                                          | Business Architecture                                                                | Internal Assets                                          | External Influences                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Problems of strategic relevance.</li><li>• Identified at following levels:<ul style="list-style-type: none"><li>- Top Down</li><li>- Bottom Down</li><li>- Middle Management</li><li>- External</li><li>- Other sources</li></ul></li></ul> | <ul style="list-style-type: none"><li>• Org. Structure represents the lines of communication</li><li>• Org. Culture is the value structure and operating norms</li></ul> | <ul style="list-style-type: none"><li>• Capabilities are essential functions of an organization</li><li>• Processes support business functions</li></ul> | <ul style="list-style-type: none"><li>• The Information Systems used for executing processes.</li><li>• Infrastructure comprises of the physical components.</li></ul> | <p>Principles to:</p> <ul style="list-style-type: none"><li>- guide decision making,</li><li>- support governance,</li><li>- guide behavior and actions</li></ul> | <p>Different elements of the current state support each other in an organization</p> | <p>Tangible and intangible assets of an organization</p> | <p>Influences outside the organization imposing constraints on the current state</p> |

# ANALYZE CURRENT STATE

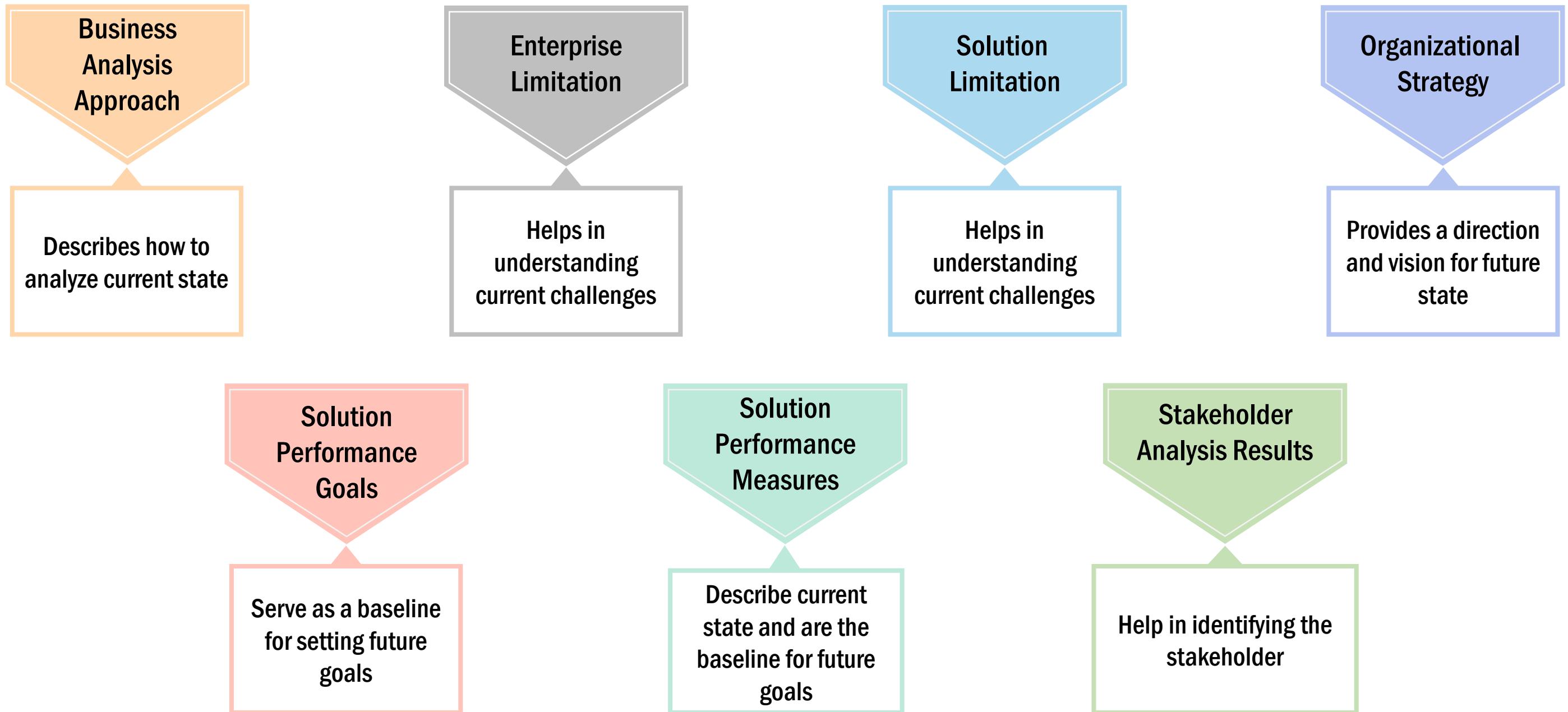
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## GUIDELINES AND TOOLS

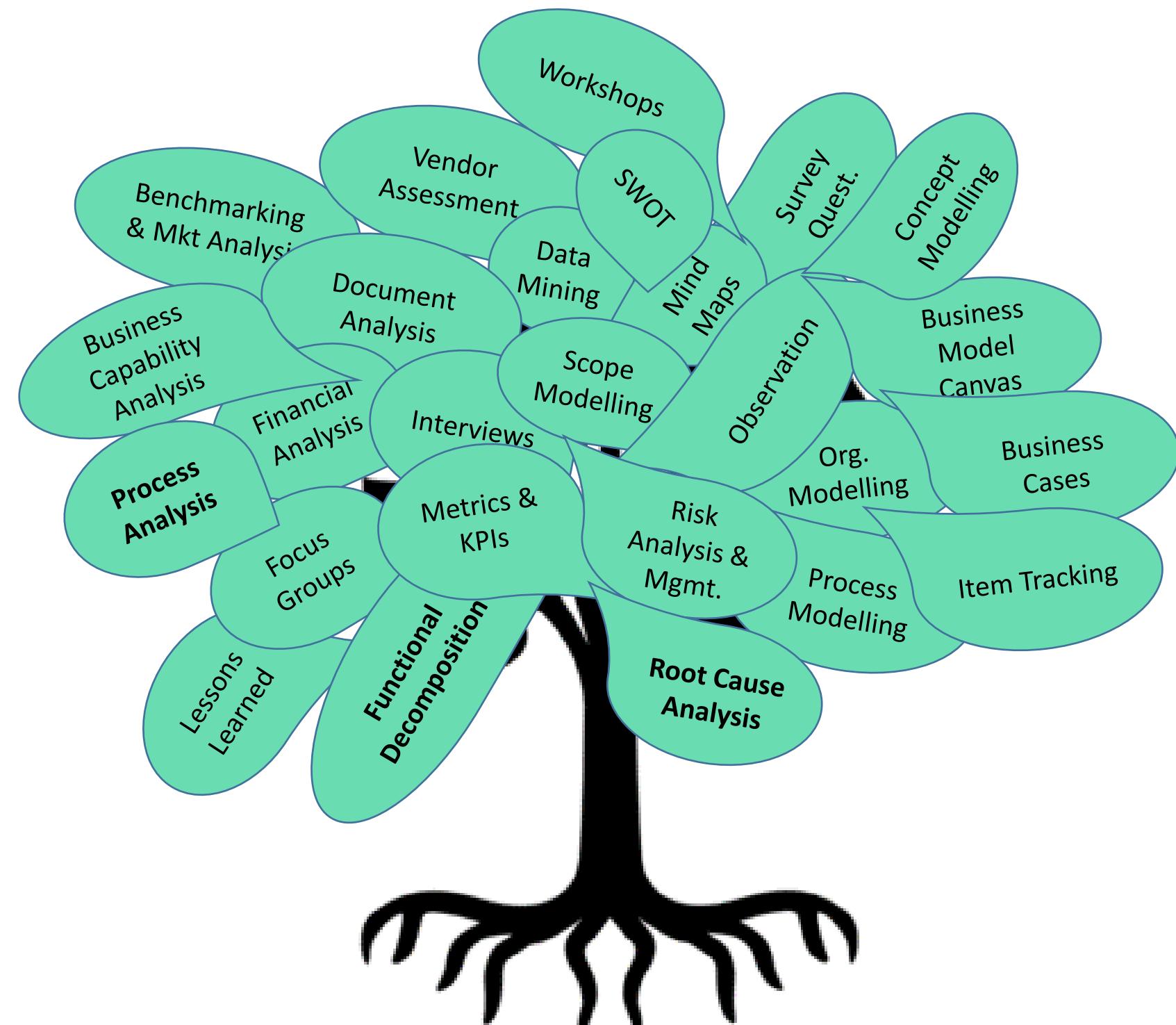


# ANALYZE CURRENT STATE

## GUIDELINES AND TOOLS



# ANALYZE CURRENT STATE TECHNIQUES



## ANALYZE CURRENT STATE

### FUNCTIONAL DECOMPOSITION - OVERVIEW

#### **Functional Decomposition**

It is the process of breaking down processes, systems, functional areas, or deliverables into sub-components.



#### **Benefits**

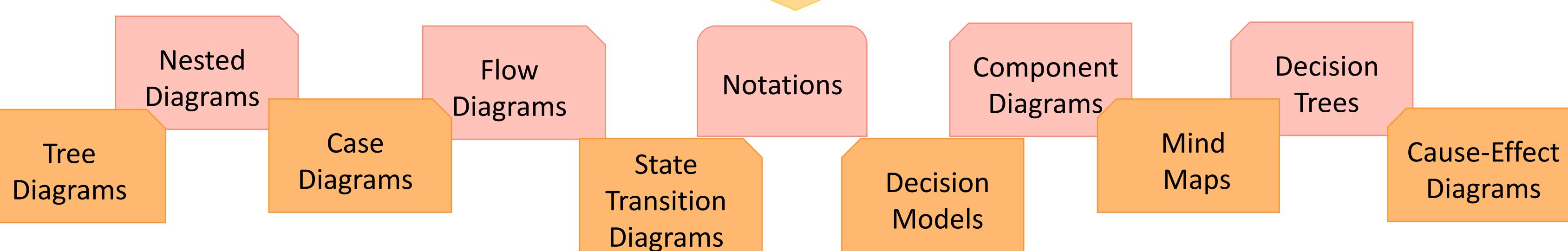
- It helps manage complexity and reduces uncertainty.
- It helps in analyzing each part independently.
- It allows scaling, tracking, measuring work effort and evaluation of the success of each sub-component.

## ANALYZE CURRENT STATE (contd.)

### FUNCTIONAL DECOMPOSITION - OVERVIEW



Representing Decomposition results



# ANALYZE CURRENT STATE

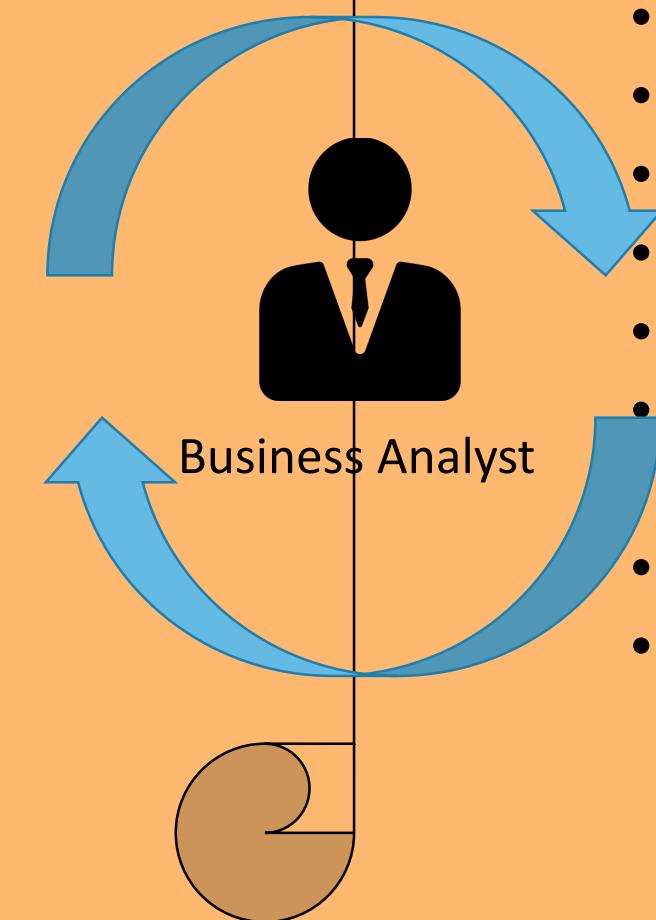
## FUNCTIONAL DECOMPOSITION - ELEMENTS

### Decomposition Objectives

- Designing
- Analyzing
- Estimating and Forecasting
- Reusing
- Measuring and Managing
- Optimizing
- Substituting
- Encapsulating

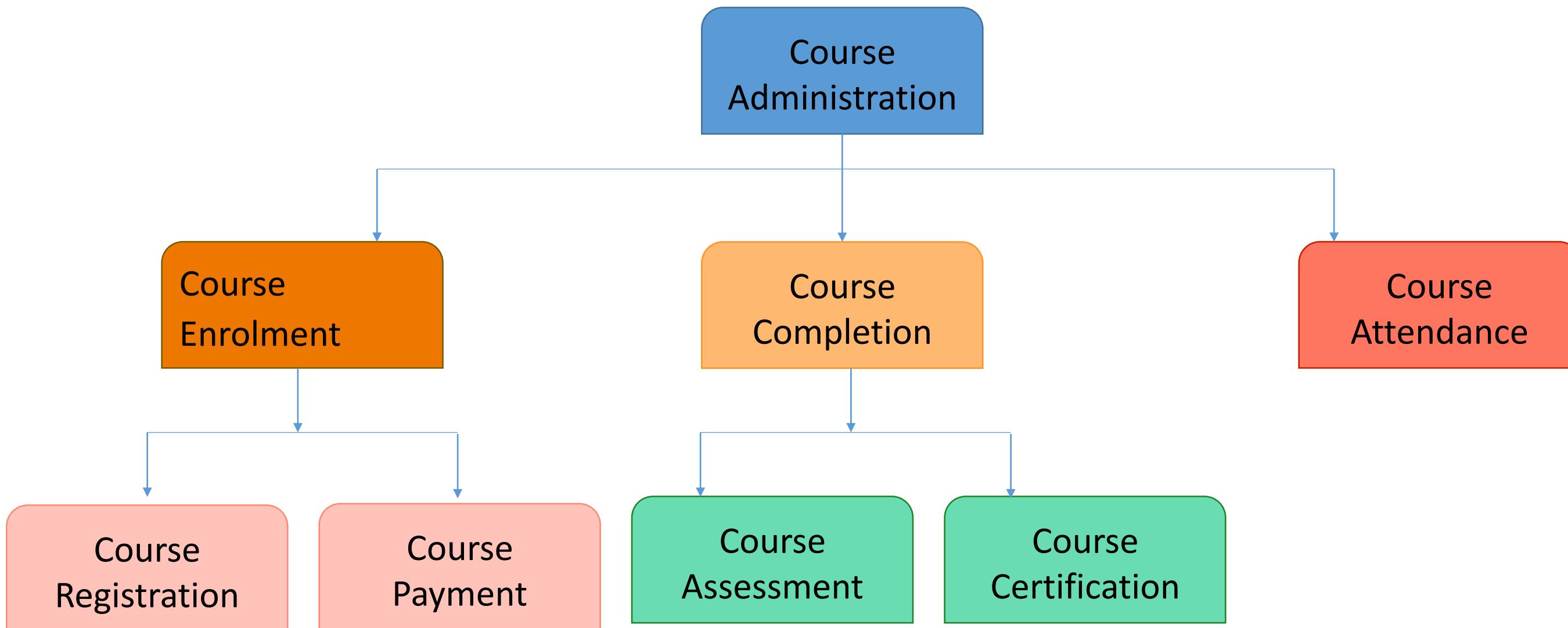
### Subject of Decomposition

- Business Outcomes
- Work to be done
- Business Processes
- Functions
- Business units
- Solution components
- Activities
- Products and Services
- Decisions



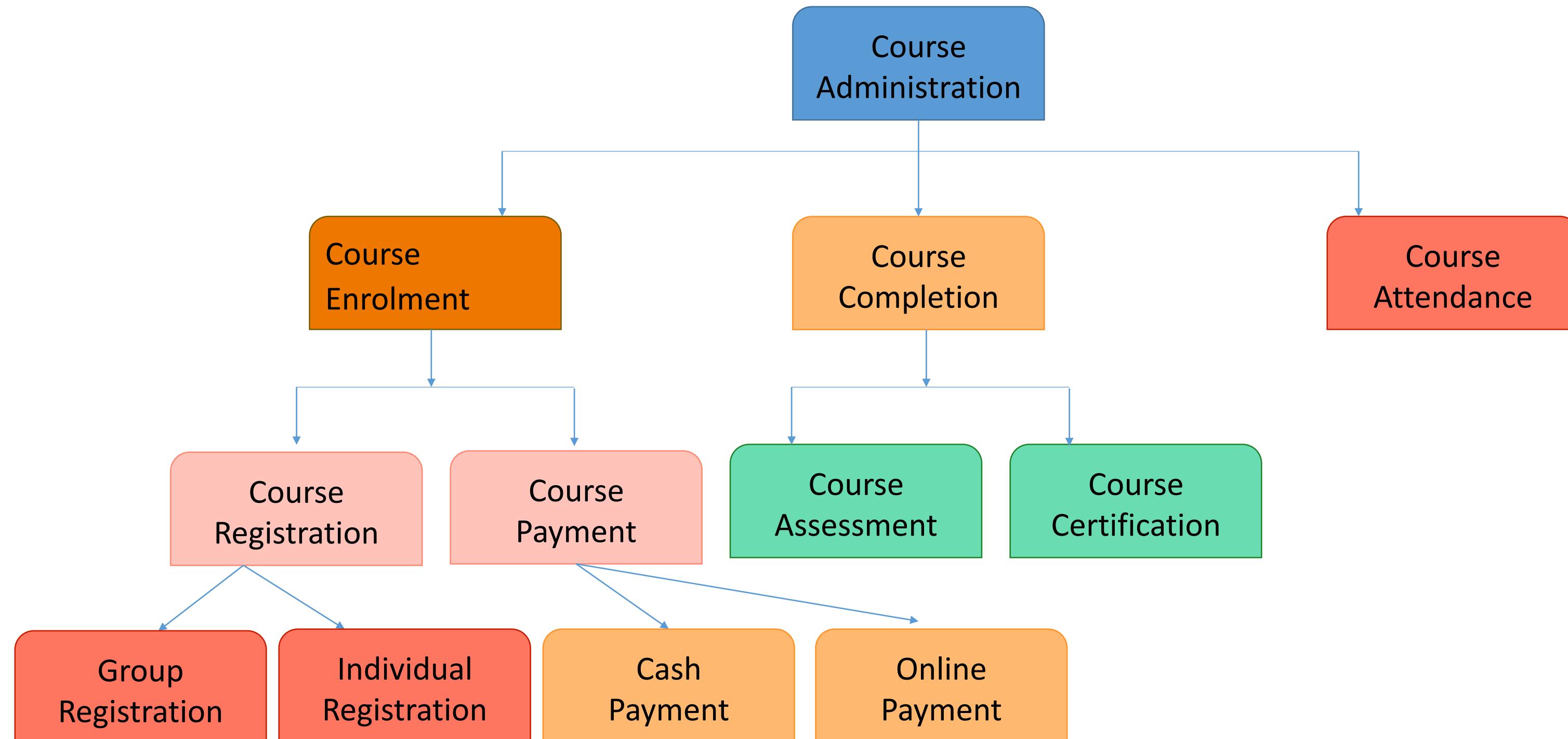
# ANALYZE CURRENT STATE

## FUNCTIONAL DECOMPOSITION - EXAMPLE



# ANALYZE CURRENT STATE

## FUNCTIONAL DECOMPOSITION - EXAMPLE



## ANALYZE CURRENT STATE

### PROCESS ANALYSIS- OVERVIEW

A **process** is a systematic series of actions or steps taken to achieve a particular end.



**Process Analysis** is used to assess a process for efficiency, effectiveness, and to identify opportunities for change.



#### It is used for:

- Recommending a more efficient process
- Determining gaps between the current and future state.
- Understanding the factors to be included in a contract negotiation.
- Understanding how data and technology are used in a process.
- Analyzing the impact of pending changes to the process.



## ANALYZE CURRENT STATE

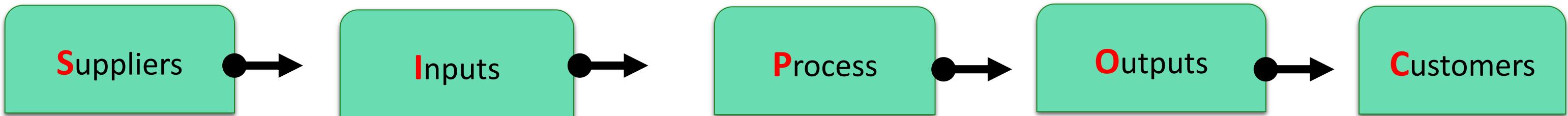
### PROCESS ANALYSIS- SIPOC



PROCESS

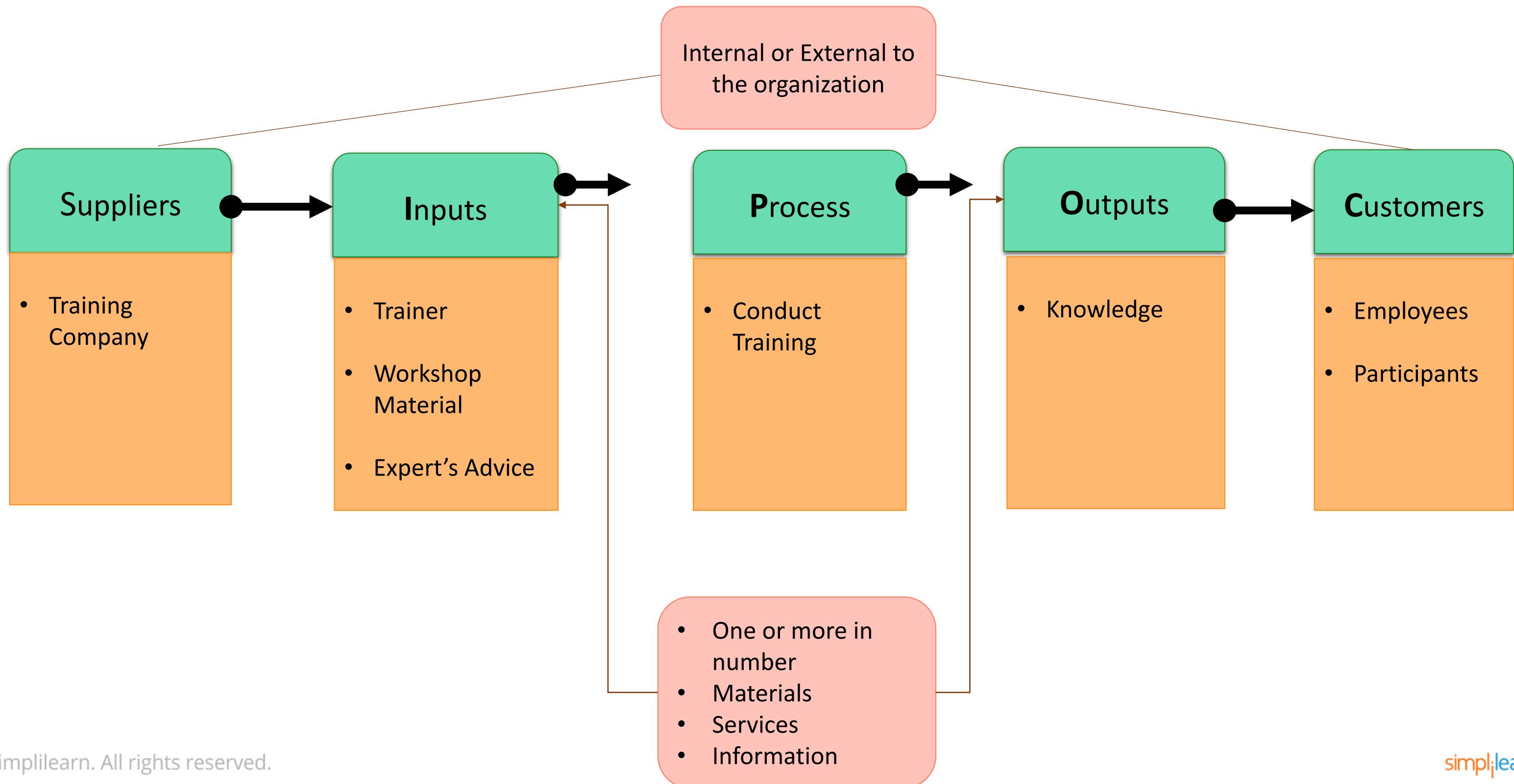


Is a systematic series of actions or steps taken to achieve a particular end



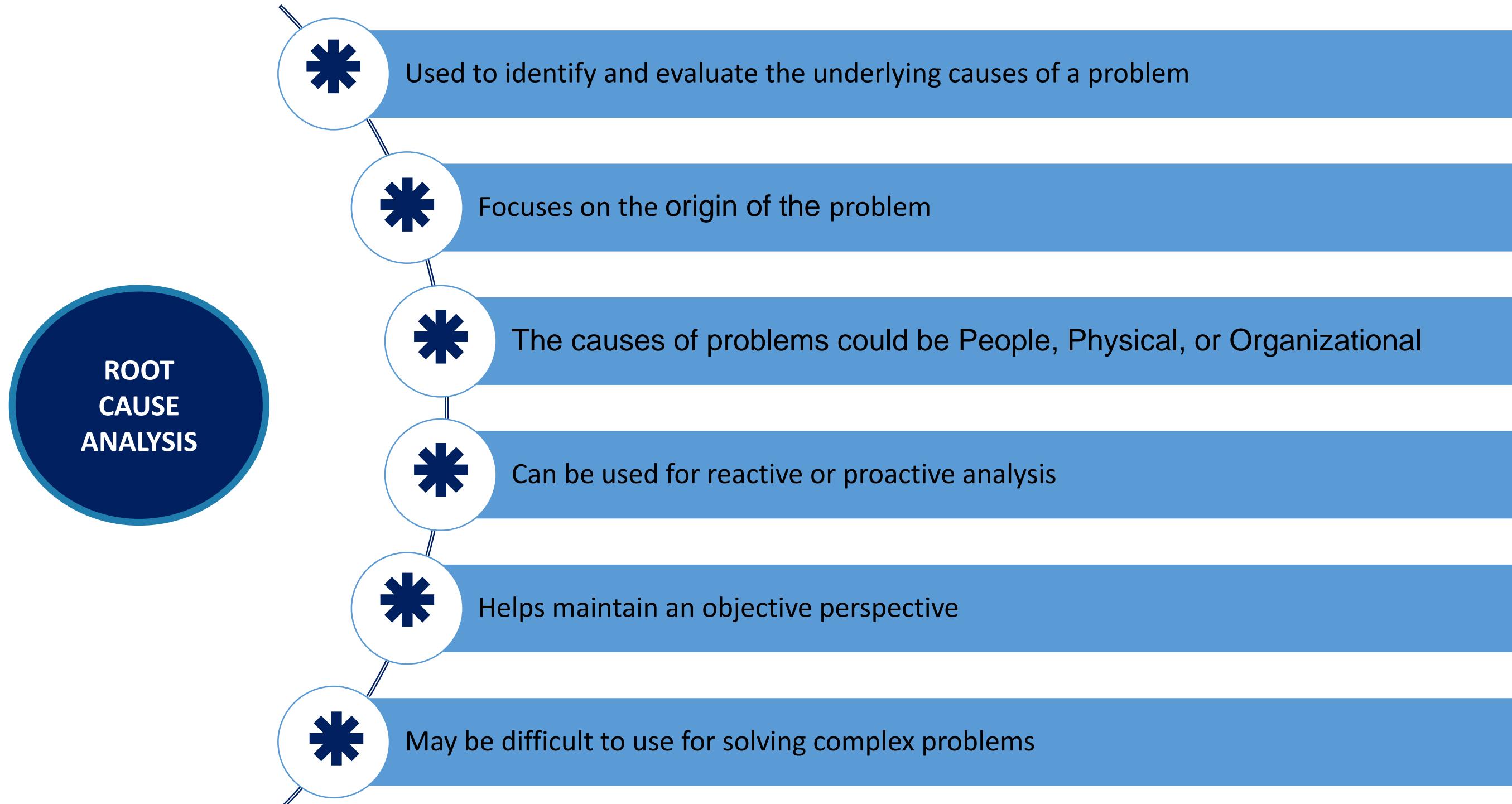
## ANALYZE CURRENT STATE (contd.)

### PROCESS ANALYSIS- SIPOC



## ANALYZE CURRENT STATE

### ROOT CAUSE ANALYSIS - OVERVIEW



## ANALYZE CURRENT STATE

### ROOT CAUSE ANALYSIS - ELEMENTS

Techniques used for Root Cause Analysis

Fishbone Diagrams/  
Ishikawa/ Cause-Effect  
Diagrams

Questioning process with  
5 ‘Whys’.

Main activities in Root Cause Analysis

Problem Statement  
Definition

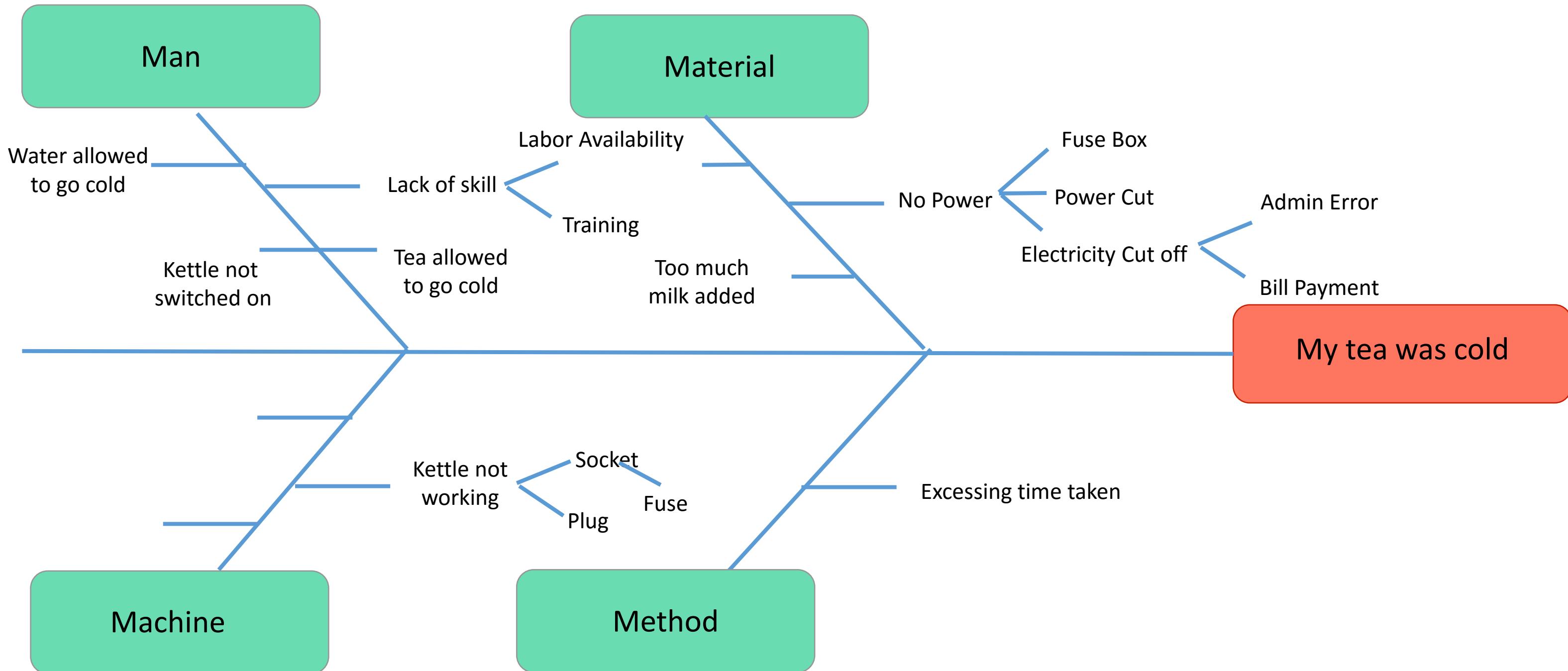
Data Collection

Cause Identification

Action Identification

# ANALYZE CURRENT STATE

## ROOT CAUSE ANALYSIS - ELEMENTS

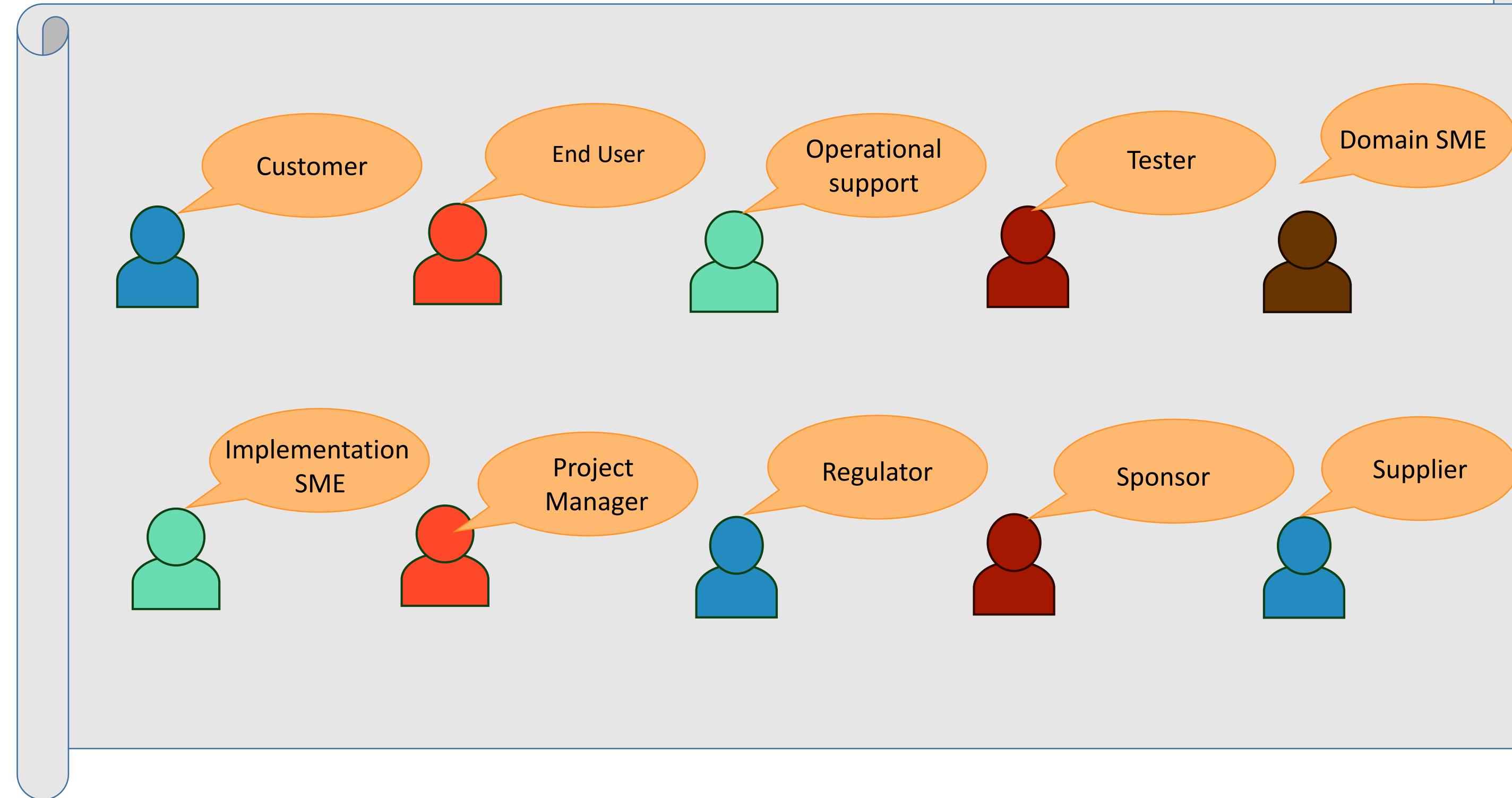


# ANALYZE CURRENT STATE

## STAKEHOLDERS



Business Analyst



# Lesson 6: Strategy Analysis

## Topic 6.2: Define Future State

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and tools
- ✓ Techniques
- ✓ Stakeholders

# DEFINE FUTURE STATE

## PURPOSE

### Purpose

To determine the set of necessary conditions for meeting the business needs

INPUT

- Business Requirements

- Business Objectives
- Future State Description
- Potential Value

OUTPUT

The Business Analyst needs to ensure that the future state of the enterprise is:

- well defined
- feasible for implementation
- agreed upon by the key stakeholders

## DEFINE FUTURE STATE

---

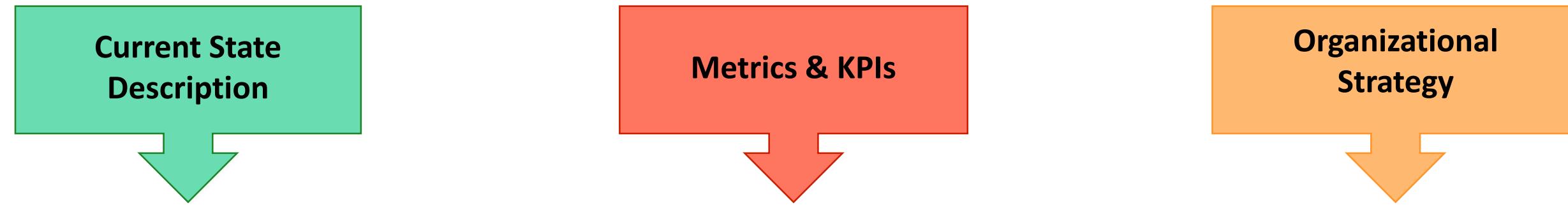
### ELEMENTS

- Business Goals & Objectives
- Scope of Solution Space
- Constraints
- Organizational Structure & Culture
- Capabilities & Processes
- Technology & Infrastructure
- Policies
- Business Architecture
- Internal Assets
- Identify Assumptions
- Potential Value

## DEFINE FUTURE STATE

---

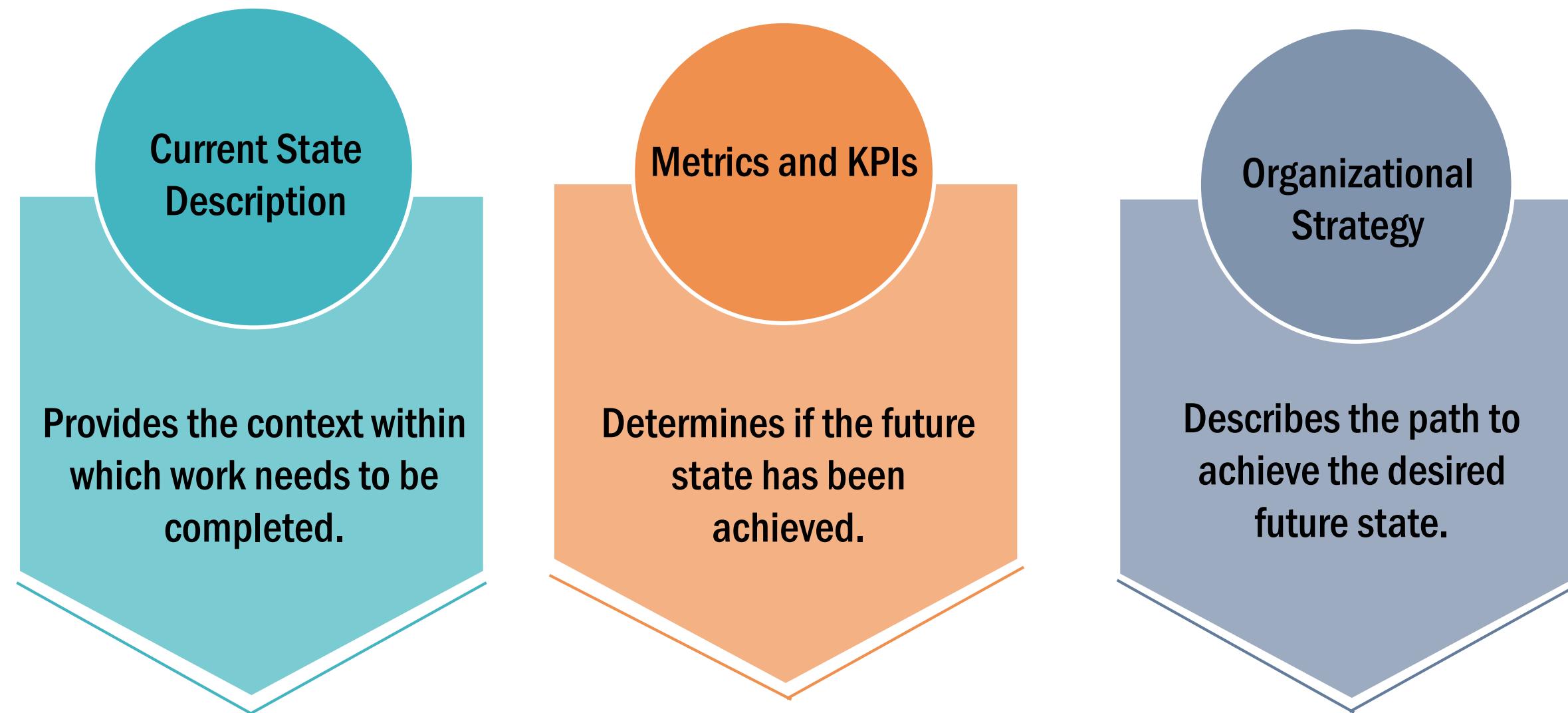
### GUIDELINES AND TOOLS



## DEFINE FUTURE STATE

---

### GUIDELINES AND TOOLS



# DEFINE FUTURE STATE

---

## TECHNIQUES



# DEFINE FUTURE STATE

---

## TECHNIQUES



# DEFINE FUTURE STATE

## BALANCED SCORECARD - OVERVIEW

### Balance Scorecard (BSC)

- Is a strategic performance management tool
- Is supported by design methods and automation tools
- Is used by managers to keep track of the execution of activities and monitor the consequences arising from these actions
- Is used to manage performance in any business model, organizational structure, or business process

Dimensions of BSC

Learning with growth

Customer

Measures should be:

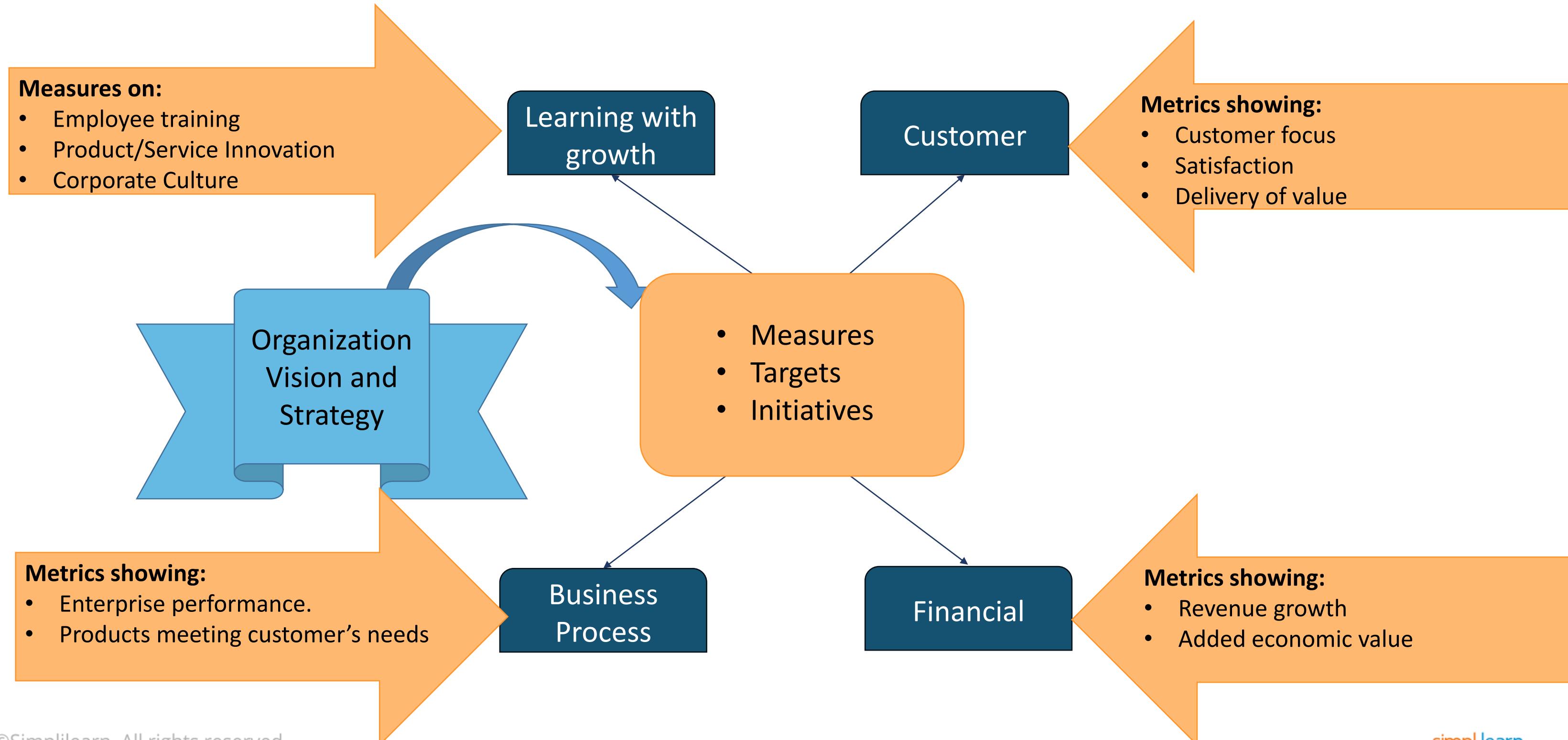
- Quantitative
- Linked to strategy
- Easily understood by stakeholders

Business Process

Financial

# DEFINE FUTURE STATE

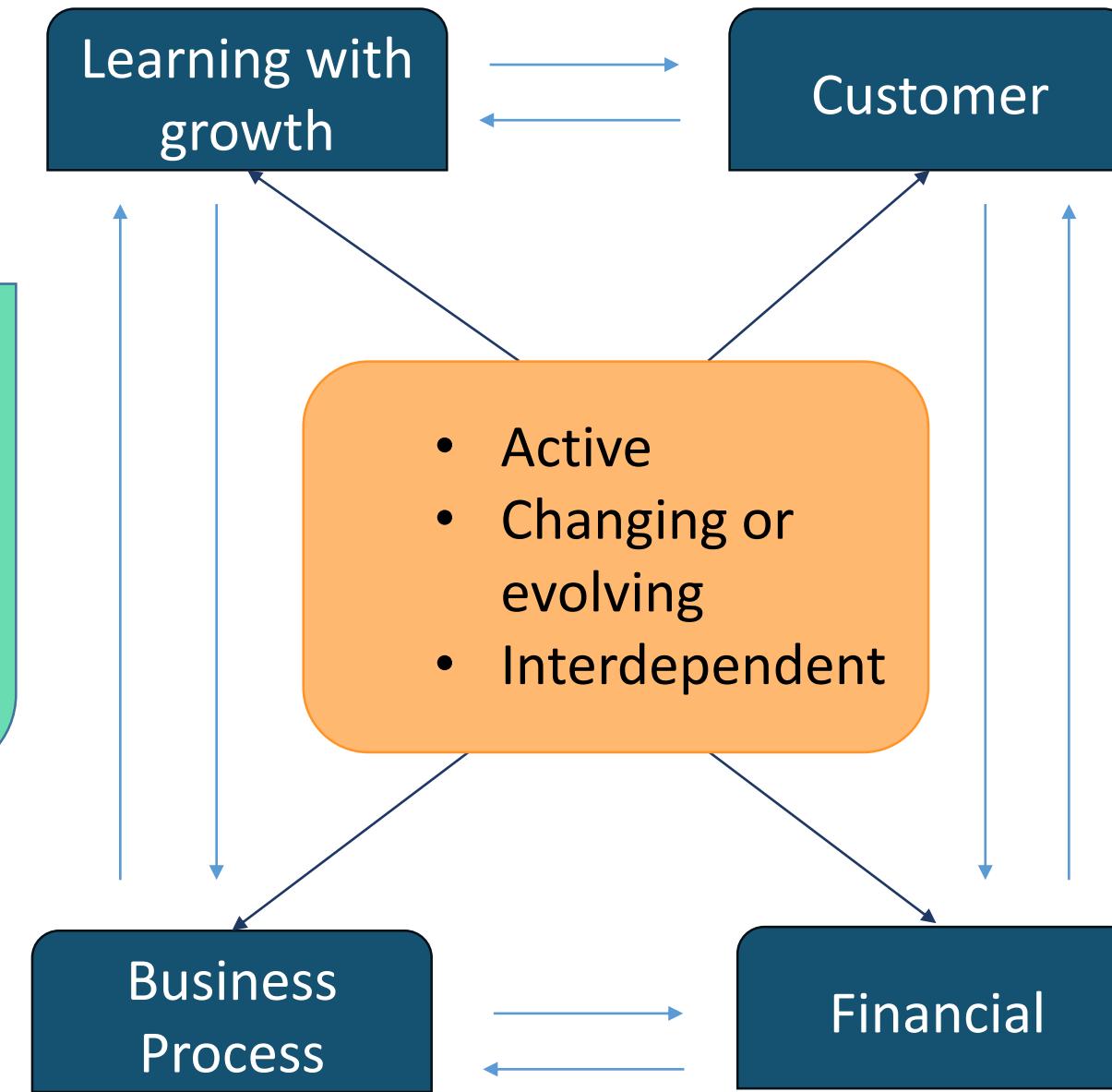
## BALANCED SCORECARD - ELEMENTS



## DEFINE FUTURE STATE (contd.)

### BALANCED SCORECARD - ELEMENTS

The Balanced Scorecard allows the organization to establish a monitoring process and measuring progress against the objectives and to adapt strategy as needed.



# DEFINE FUTURE STATE

## BENCHMARKING AND MARKET ANALYSIS - OVERVIEW

### Benchmarking and Market Analysis is used

- To improve organizational operations
- To increase customer satisfaction
- To increase value to the stakeholders

### Benchmarking and Market Analysis:

- Is time-consuming
- Is expensive
- Requires expertise

#### Benchmarking

- May be performed against standards for compliance
- Results ~~from this study~~ may initiate change within an organization

#### Market Analysis

- Involves researching customers in order to determine the products and services that they need
- Helps in determining when to exit a market
- May be used to determine viable alternatives for an enterprise - partnering, merging, or divesting

# DEFINE FUTURE STATE

## BENCHMARKING AND MARKET ANALYSIS - ELEMENTS



### Benchmarking



### Market Analysis

**1** Identify the areas to be studied

**2** Identify enterprises that are leaders in the sector

**3** Conduct survey

**4** Gather information about capabilities using RFI

**5** Arrange visits

**6** Determine gaps between current and best practices

**7** Develop a project proposal for best practices

**1** Identify customers and understand their preferences

**2** Identify opportunities to increase value

**3** Identify competition

**4** Look for market trend

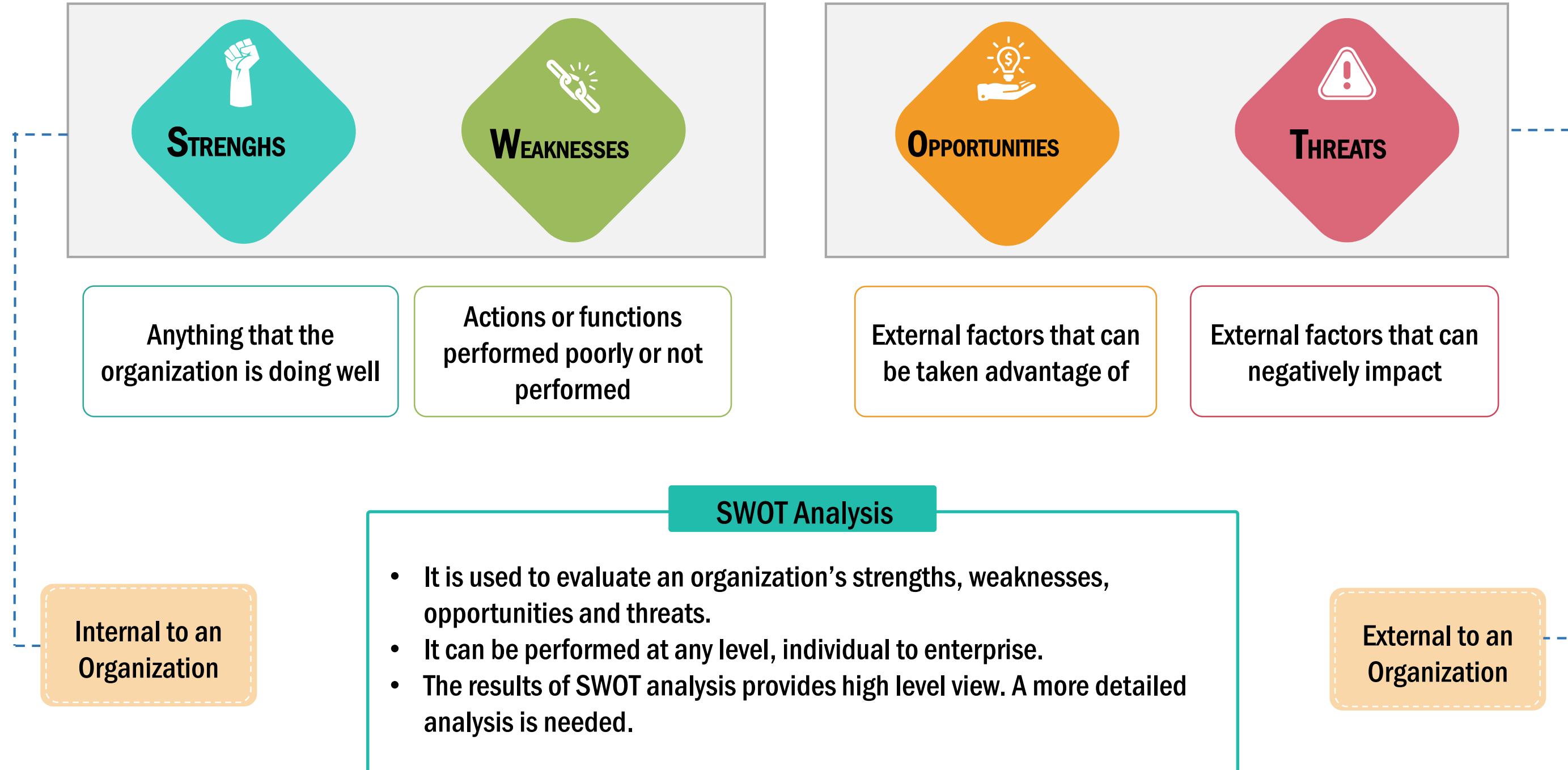
**5** Define appropriate business strategy

**6** Gather Market Data

**7** Review data to determine trends and draw conclusion

# DEFINE FUTURE STATE

## SWOT ANALYSIS - OVERVIEW



## DEFINE FUTURE STATE

### SWOT ANALYSIS - ELEMENTS

| SWOT       | Opportunities                                                                                                                                        | Threats                                                                                                                                        |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Strengths  | <b>SO Strategies</b> <ul style="list-style-type: none"><li>• Use Strengths to exploit</li><li>• Opportunities</li><li>• Best case scenario</li></ul> | <b>ST Strategies</b> <ul style="list-style-type: none"><li>• Use Strengths towards Threats</li><li>• Turn Threats into Opportunities</li></ul> |
| Weaknesses | <b>WO Strategies</b> <ul style="list-style-type: none"><li>• Use Opportunities to eliminate or mitigate weaknesses</li></ul>                         | <b>WT Strategies</b> <ul style="list-style-type: none"><li>• Avoid threat</li><li>• Get out of market</li><li>• Worst Case Scenario</li></ul>  |

# DEFINE FUTURE STATE

## SWOT ANALYSIS - EXAMPLE

### STRENGTHS

- What does your organisation do **better** than others?
- What are your **unique** selling points?
- What do your competitors and customers perceive as your **strengths**?
- What is your organisations **competitive edge**?

### OPPORTUNITIES

- What PEST changes could be **favourable** to you?
- Are there any current **demand gaps** in the market or unfulfilled demands?
- What new **innovation** could your organisation bring to the market?

### WEAKNESSES

- What do other organisations do **better than you**?
- What elements of your business add **little or no value to the stakeholders**?
- What do competitors and customers perceive as your **weakness**?

### THREATS

- What PEST changes could be **unfavourable** to you?
- What challenges do you face?
- What is your competition doing that could **negatively impact** you?

# DEFINE FUTURE STATE

## BUSINESS MODEL CANVAS - OVERVIEW

### Business Model Canvas

- It describes how an enterprise creates, delivers, and captures value for its customers.
- It can be used as diagnostic and planning tool for strategy and initiatives.
- It is also used to understand and optimize business models.
- It helps in understanding where the efforts of various departments and work groups fit and align to the overall strategy of an enterprise.

**Limitation:**  
It does not account for alternative measures of values such as the impact of social and environmental factors.

# DEFINE FUTURE STATE

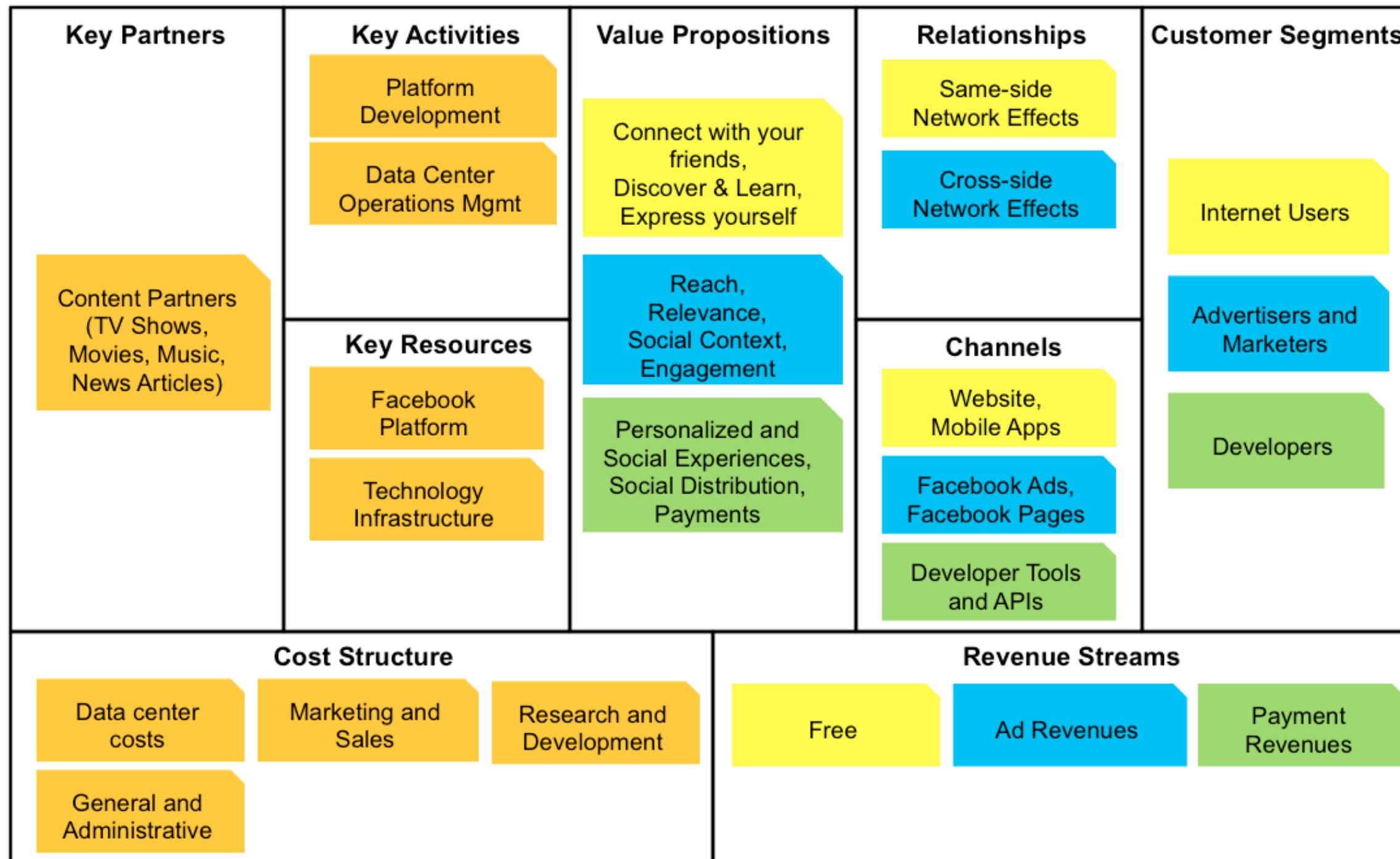
## BUSINESS MODEL CANVAS - ELEMENTS

| Key Partnership                                                                                                                        | Key Activities                                                                                                                                                                                                                                                                                                                                                               | Value Proposition                                                                                                       | Customer Relationship                                                                                                                                                                                                                                                                                                          | Customer Segments                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>- Sharing of proprietary information, technology to maximize value and minimize risk</li> </ul> | <ul style="list-style-type: none"> <li>- Activities critical to creation, delivery and maintenance</li> </ul> <div style="background-color: #f4a460; color: white; padding: 5px; text-align: center;"> <b>Key Resources</b> <ul style="list-style-type: none"> <li>- Assets needed to execute activities.</li> <li>- Physical/Financial/Intellectual/Human</li> </ul> </div> | <ul style="list-style-type: none"> <li>- What a customer is willing to exchange for having his/her needs met</li> </ul> | <ul style="list-style-type: none"> <li>- Customer Acquisition</li> <li>- Customer Retention</li> </ul> <div style="background-color: #f4a460; color: white; padding: 5px; text-align: center;"> <b>Channels</b> <ul style="list-style-type: none"> <li>- Communication oriented</li> <li>- Delivery Oriented</li> </ul> </div> | <ul style="list-style-type: none"> <li>-Based on common needs and attributes</li> </ul> |
| Cost Structure                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                         | Revenue Streams                                                                                                                                                                                                                                                                                                                |                                                                                         |
|                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                         | <ul style="list-style-type: none"> <li>- Ways of revenue coming in.</li> <li>- One-Time Purchase and Ongoing Support are two revenue streams</li> </ul>                                                                                                                                                                        |                                                                                         |

# DEFINE FUTURE STATE

## BUSINESS MODEL CANVAS - EXAMPLE

### Facebook – World's leading Social Networking Site (SNS)

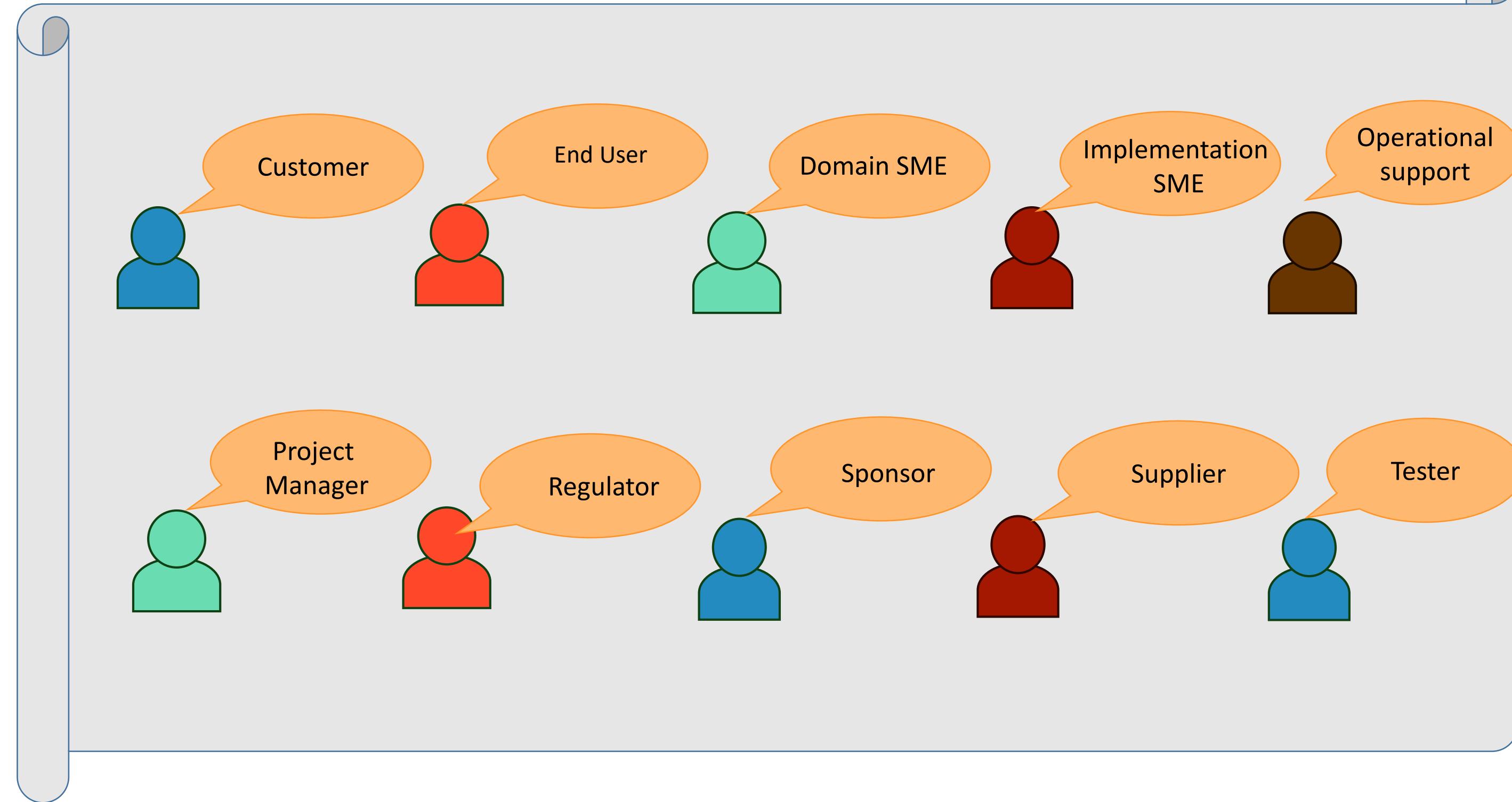


# DEFINE FUTURE STATE

## STAKEHOLDERS



Business Analyst



# Lesson 6: Strategy Analysis

## Topic 6.3: Assess Risks

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and tools
- ✓ Techniques
- ✓ Stakeholders

## ASSESS RISKS

### PURPOSE

#### Purpose

- Understand the undesirable consequences of internal and external forces on the enterprise during a transition to the future state

INPUT

- Business objectives
- Elicitation results (confirmed)
- Influences
- Potential value
- Requirement (prioritized)

Risk analysis results  
(provide an understanding of the risks associated with achieving the future state and mitigation strategies)

OUTPUT

## ASSESS RISKS

---

### ELEMENTS

Unknown:

- Historical information,
- Lessons learned

- Constraints
- Assumptions
- Dependencies

Negative impact on value

Risk tolerance:

- Risk aversion
- Neutrality
- Risk seeking

Categories of Recommendations

Pursue the benefit of a change regardless of the risk

Do not pursue the benefit of a change

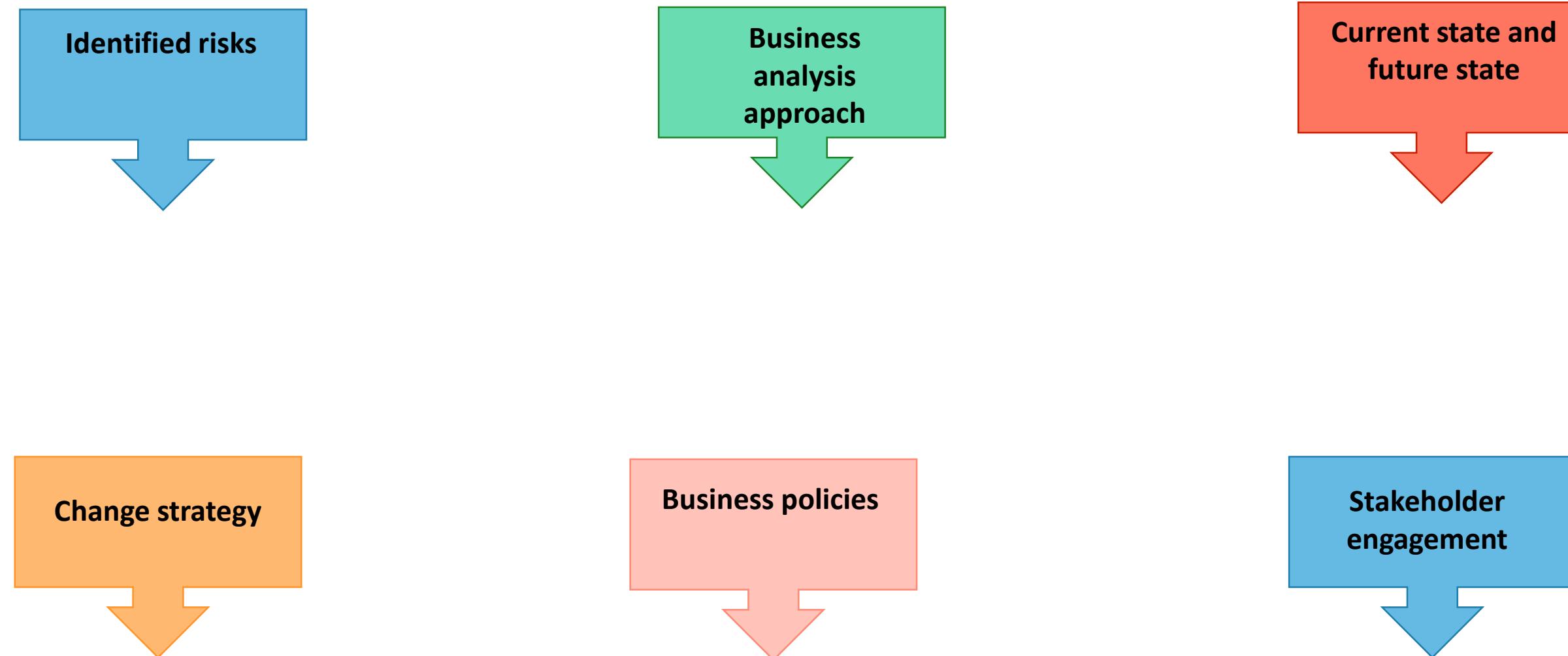
Pursue the benefit of a change and invest on reducing risks

Increase the benefit of a change to outweigh the risk

# ASSESS RISKS

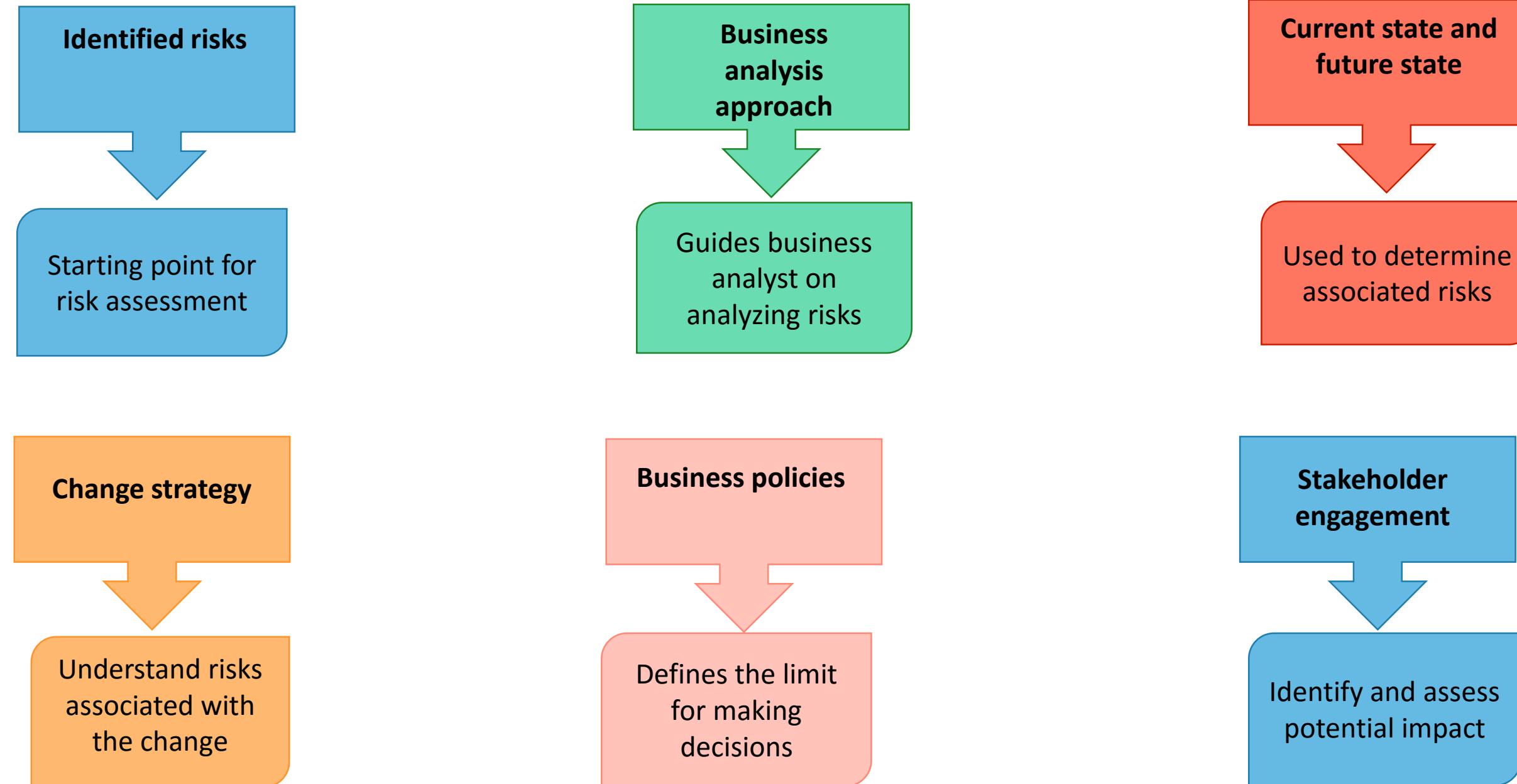
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## GUIDELINES AND TOOLS

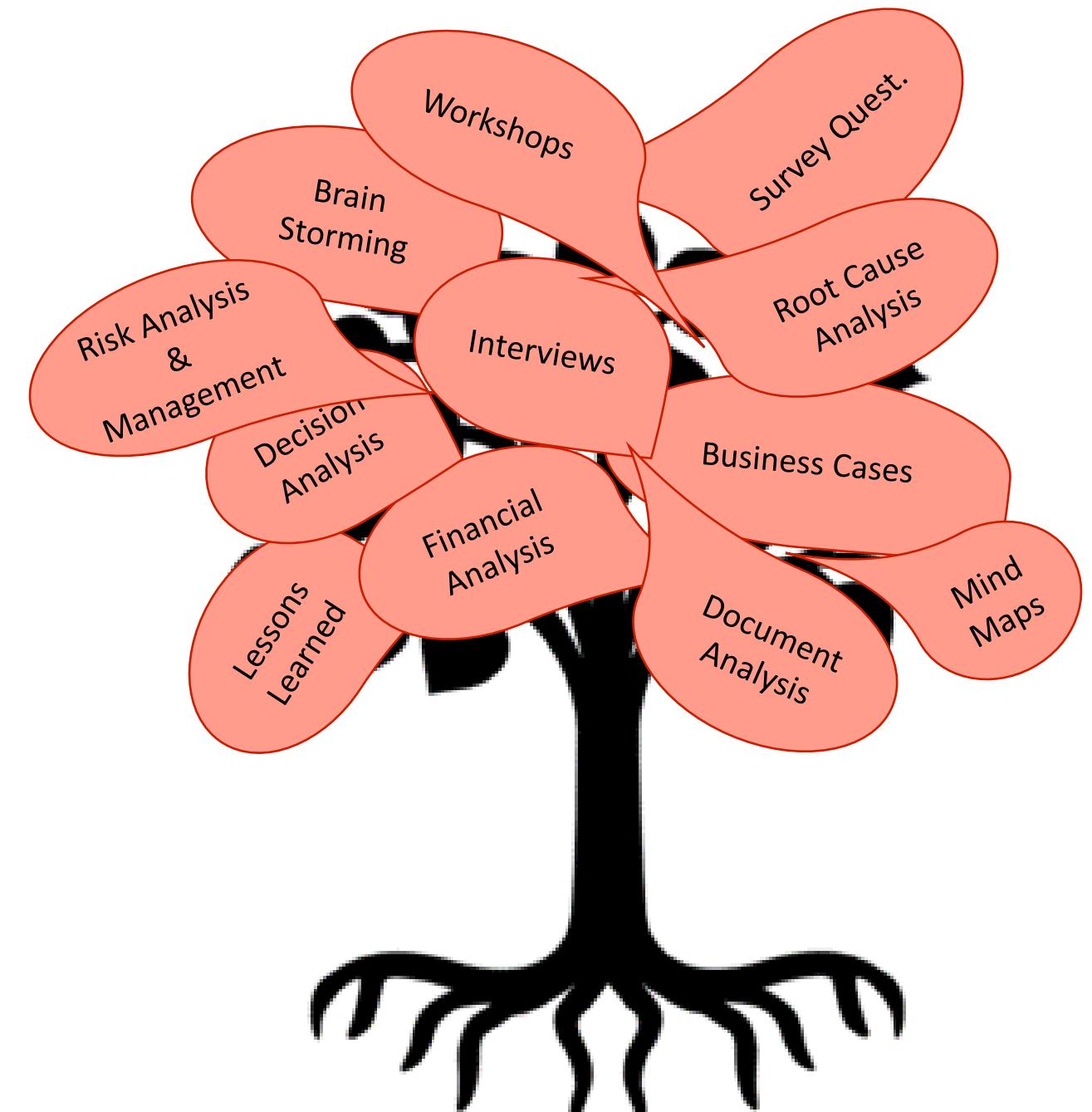


## ASSESS RISKS (contd.)

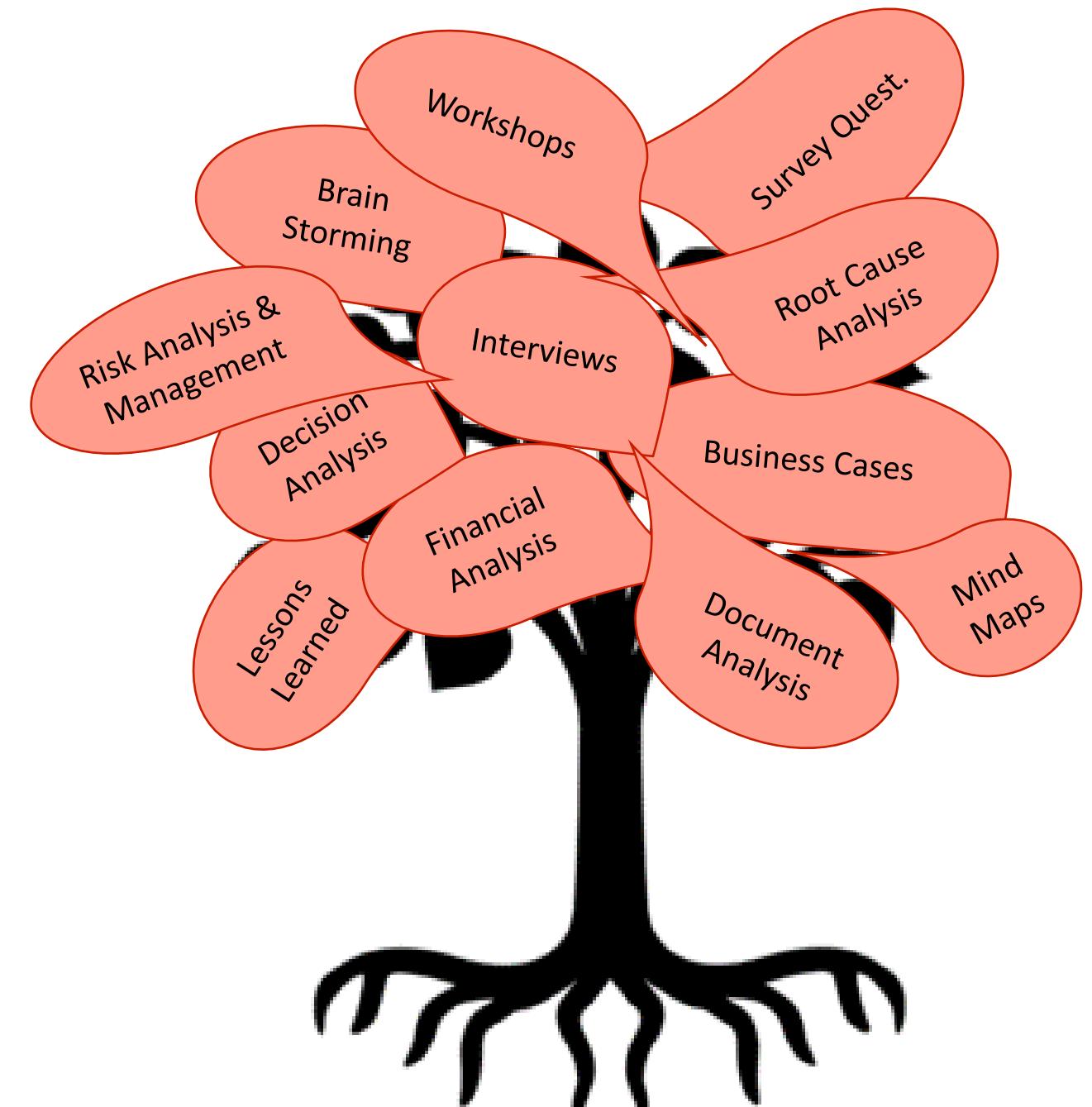
### GUIDELINES AND TOOLS



# ASSESS RISKS TECHNIQUES



# ASSESS RISKS TECHNIQUES



# ASSESS RISKS

## RISK ANALYSIS AND MANAGEMENT - OVERVIEW

### Risk analysis and management

A systematic way of:

- Identifying
- Analyzing
- Evaluating
- Developing ways to deal with uncertainties

### Risk management

Ongoing activity of:

- Identifying new risks
- Monitoring identified risks

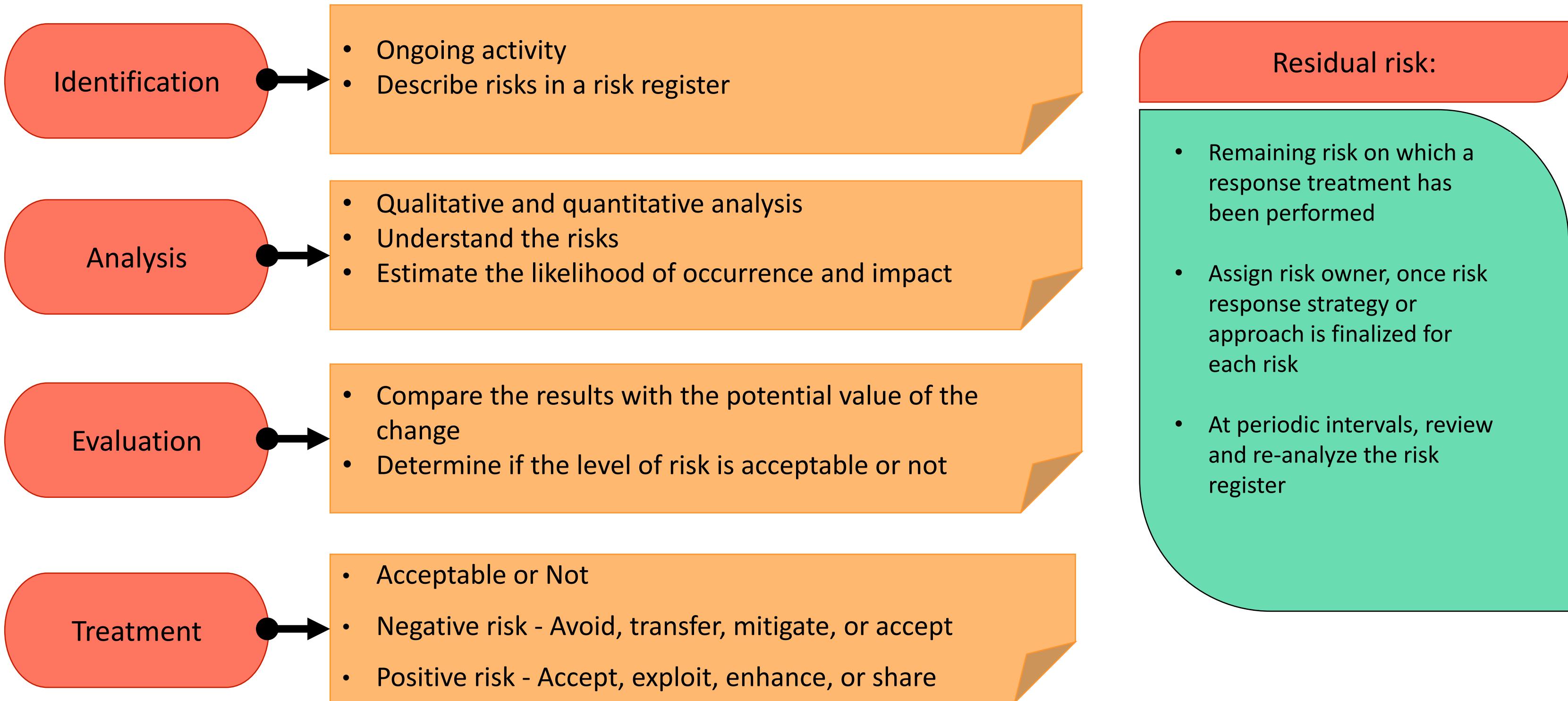
### Risk appetite

Risk tolerance level

- Risk averse
- Risk neutral
- Risk seeker

# ASSESS RISKS

## RISK ANALYSIS AND MANAGEMENT - ELEMENTS



# ASSESS RISKS

---

## RISK REGISTER

| ID | Risk Description                                                       | Consequences                                                             | Trigger               | Probability<br>(0 % to 100%) | Impact*<br>(1 to 5) | Risk Level | Risk Owner |
|----|------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------|------------------------------|---------------------|------------|------------|
| 1  | Subject Matter Experts are not available during elicitation activities | Scope and quality shall be reduced, and delivery date may be pushed back | Elicitation           | 40%                          | 5                   | 2.0        | Paul       |
| 2  | Delay in adjusting organization structure per new business process     | Business may not realize the potential value of the solution             | Enterprise Readiness  | 30%                          | 4                   | 1.2        | John       |
| 3  | Delay in infrastructure setup may impact schedule                      | Delivery date may be pushed back                                         | Enterprise Readiness  | 20%                          | 4                   | 0.8        | Francis    |
| 4  | Change in job description is not acceptable                            | Planned staff change will not occur                                      | Change implementation | 30%                          | 3                   | 0.9        | Marie      |
| 5  | Constructed solution doesn't meet all aspects of business needs        | Realized value may reduce                                                | Validation            | 20%                          | 3                   | 0.6        | Karl       |

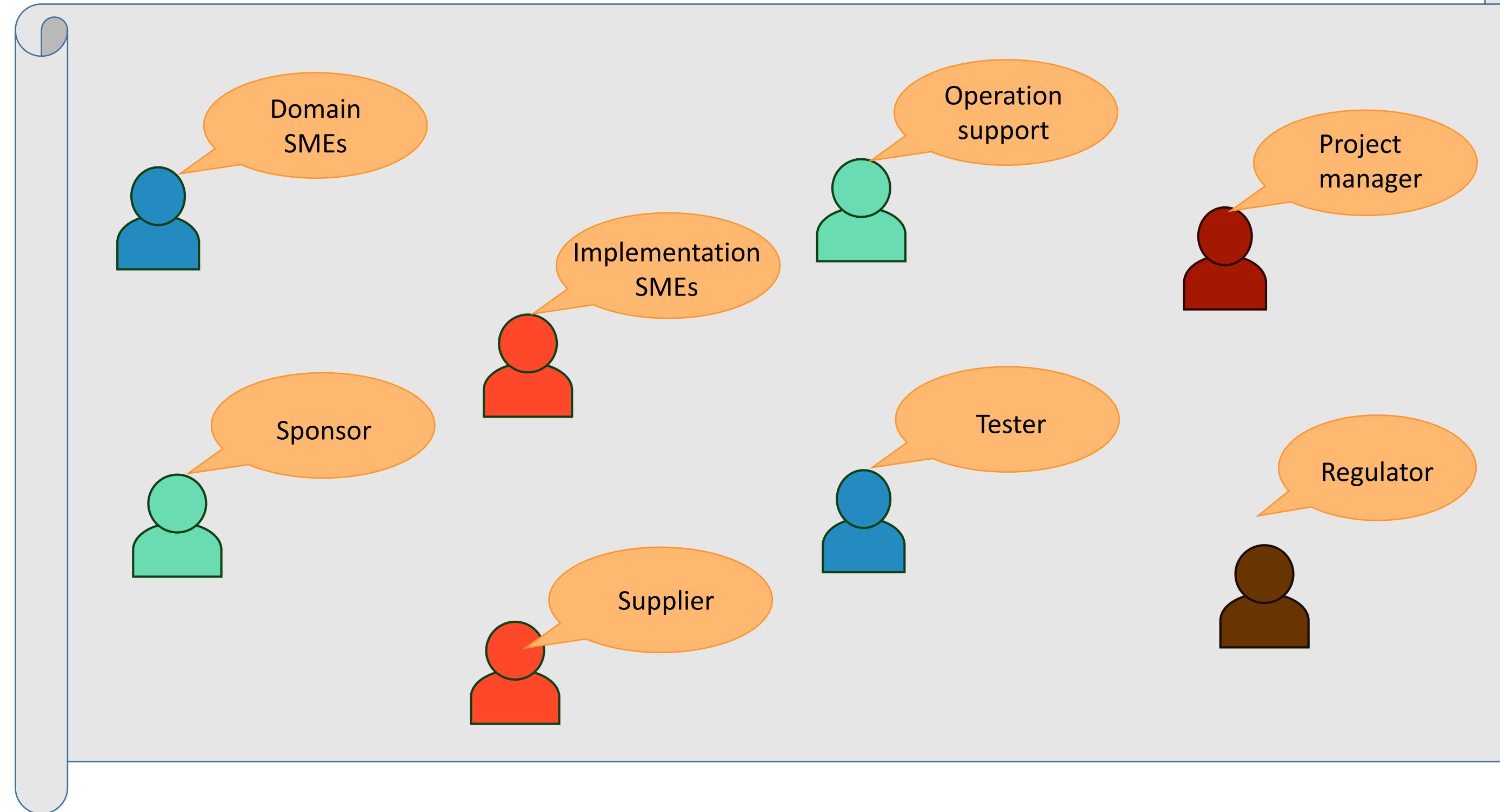
# ASSESS RISKS

---

## STAKEHOLDERS



Business Analyst



# Lesson 6: Strategy Analysis

## Topic 6.4: Define Change Strategy

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and tools
- ✓ Techniques
- ✓ Stakeholders

# DEFINE CHANGE STRATEGY

## PURPOSE

### Purpose

- Develop and assess alternative approaches to change
- Select the recommended approach

INPUTS

- Current state description
- Future state description
- Risk analysis results
- Stakeholder engagement approach

- Change strategy
- Solution scope

OUTPUTS

# DEFINE CHANGE STRATEGY

---

## ELEMENTS

Solution scope defines the boundaries of the solution.

Gap analysis identifies the difference between current state and future state capabilities.

Enterprise readiness assesses whether the enterprise is ready to use, sustain, and realize value from the solution.

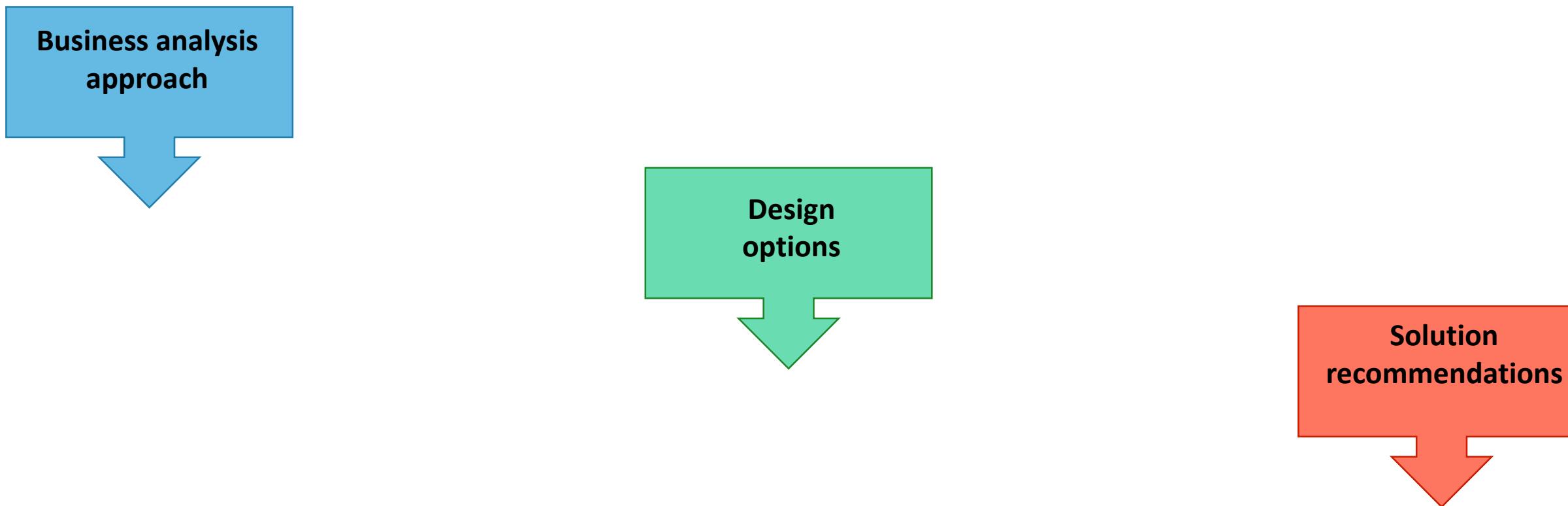
Change strategy is a high-level plan to transform the enterprise from the current state to the future state.

Transition states and release planning determines which requirements to include in each phase, or iteration of the change.

# DEFINE CHANGE STRATEGY

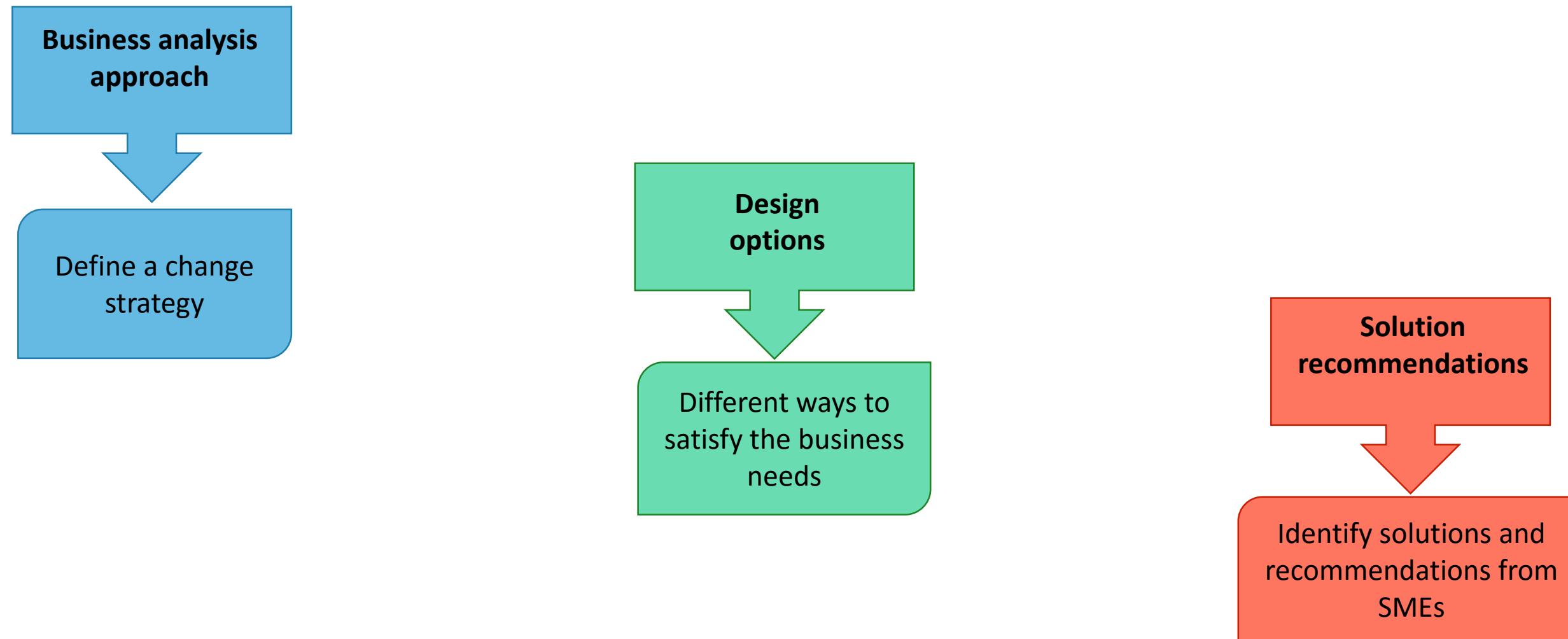
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## GUIDELINES AND TOOLS



# DEFINE CHANGE STRATEGY (contd.)

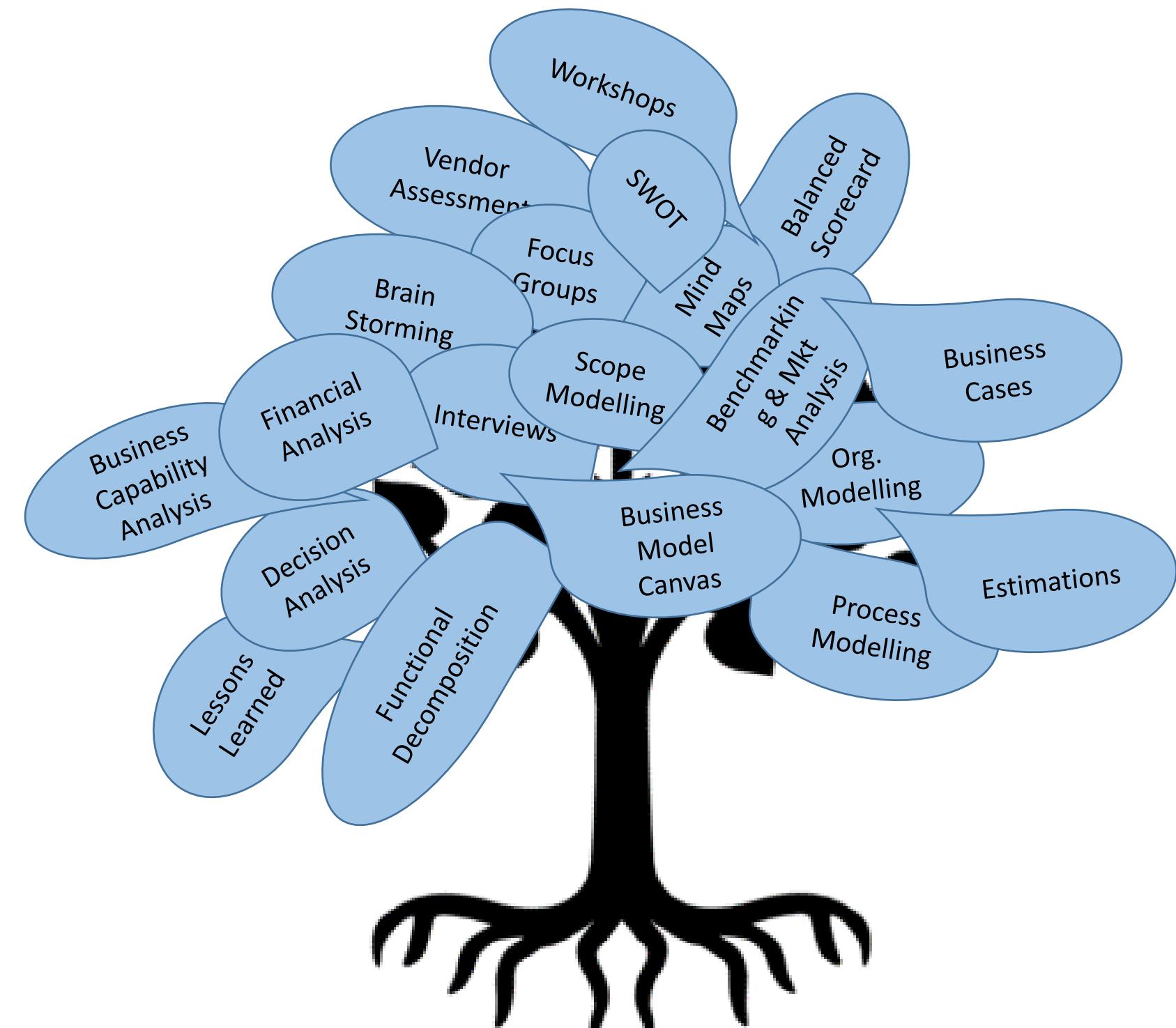
## GUIDELINES AND TOOLS



# DEFINE CHANGE STRATEGY

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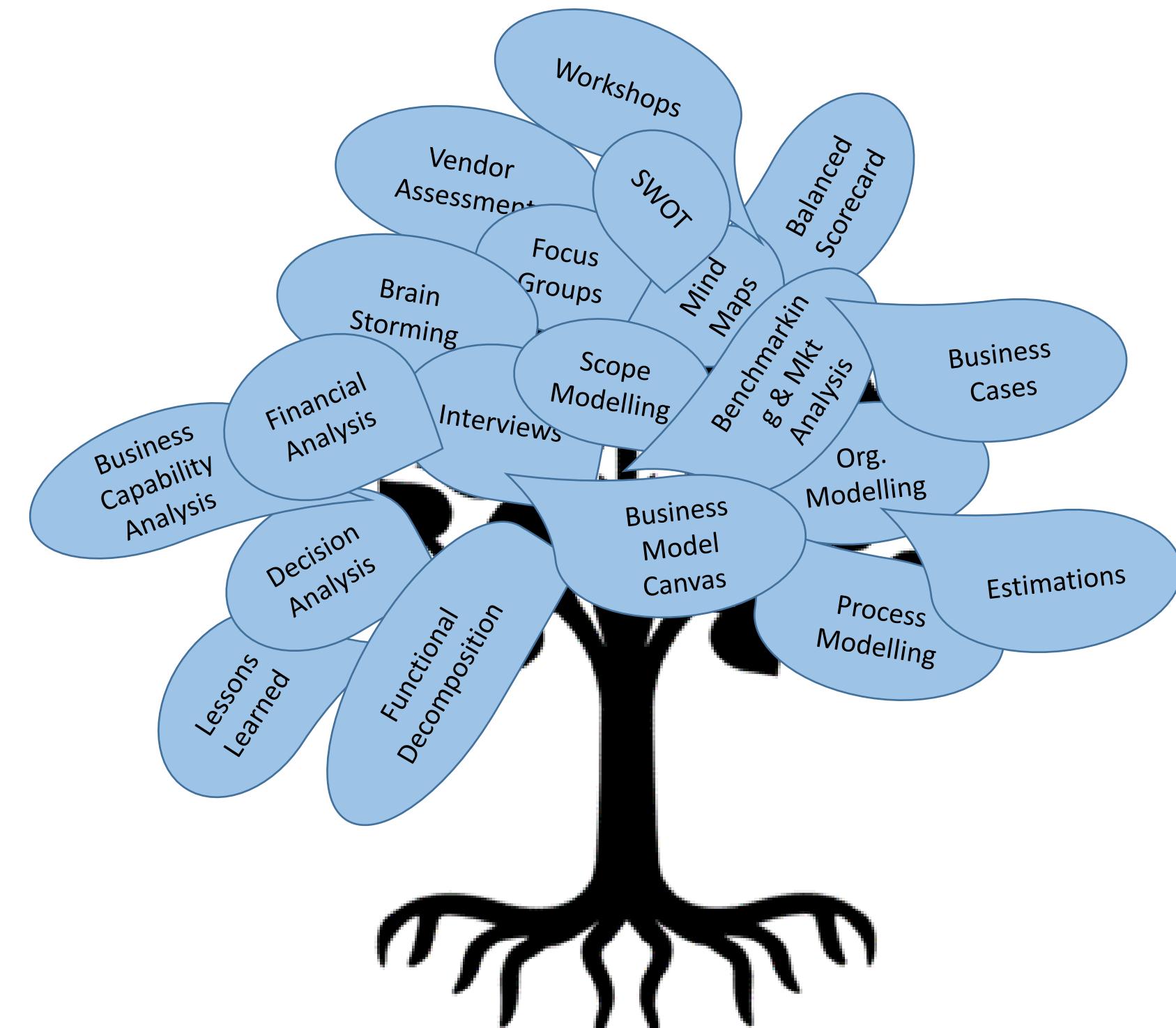
## TECHNIQUES



# DEFINE CHANGE STRATEGY

---

## TECHNIQUES



# DEFINE CHANGE STRATEGY

## BUSINESS CAPABILITY ANALYSIS - OVERVIEW

### What is Business capability analysis?

- Scope business analysis
- Plan business analysis

What does a business do?

### Business capabilities:

- Are the building blocks
- Represent stable business functions
- Are unique and independent
- Are abstracted from the organizational model
- Capture the business's interests

### Strength

Assessing organizations ability to offer new products and services

### Limitation

Requires cross-functional collaboration in defining the capability model

# DEFINE CHANGE STRATEGY

## BUSINESS CAPABILITY ANALYSIS - ELEMENTS



# DEFINE CHANGE STRATEGY

## FINANCIAL ANALYSIS - OVERVIEW

### Financial analysis

Understand financial aspects of an:

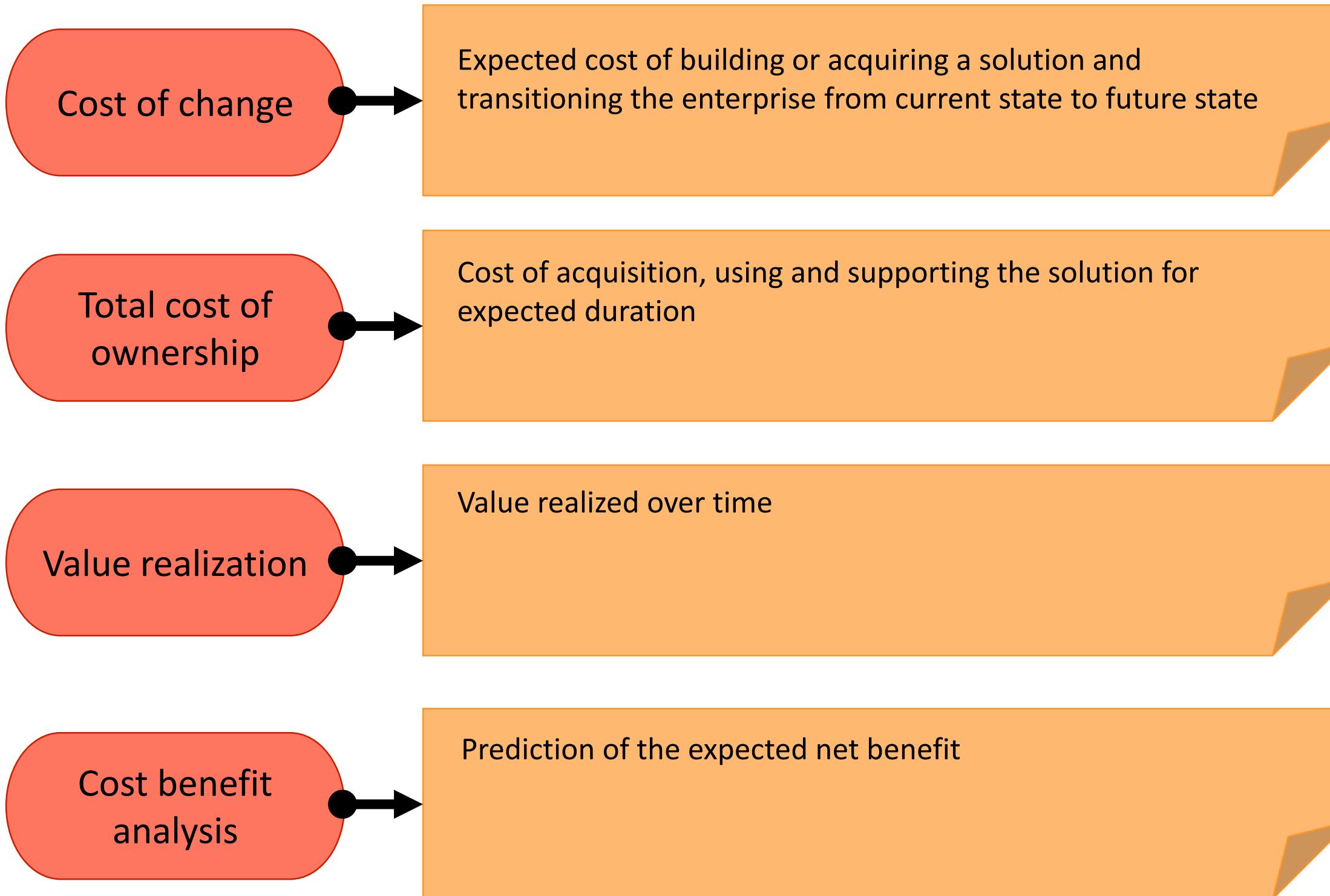
- Investment
- Solution or solution approach

### Recommend based on the analysis of:

- Initial cost and time frame in which costs are incurred
- Expected financial benefit and time frame in which they will be realized
- Ongoing costs of using and supporting the solution
- Risks associated with the change
- Ongoing risks to business value by using that solution

# DEFINE CHANGE STRATEGY

## FINANCIAL ANALYSIS - ELEMENTS



### Financial calculations

- Return on Investment (ROI)
- Discount Rate
- Present Value (PV)
- Net Present Value (NPV)
- Internal Rate of Return (IRR)
- Payback Period (PBP)

# DEFINE CHANGE STRATEGY

## BUSINESS CASE - OVERVIEW

### Business case:

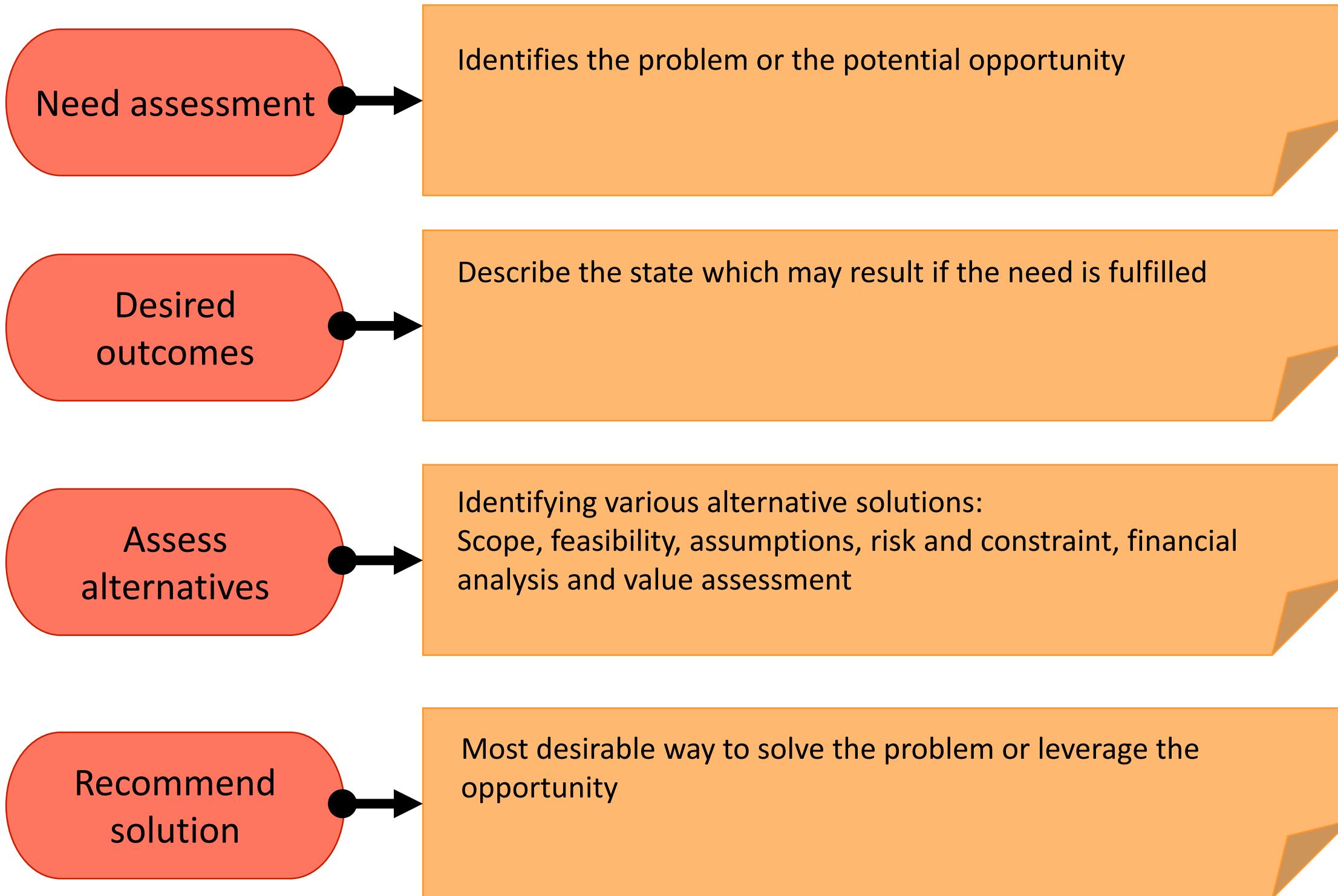
Provides a justification for a course of action based on the benefits to be realized

### A Business case is used to:

- Define the need
- Determine the desired outcomes
- Assess constraints, assumptions and risks
- Recommend solutions
- Provide guidance for ongoing decision making throughout the initiative

# DEFINE CHANGE STRATEGY

## BUSINESS CASE - ELEMENTS



### Financial calculations

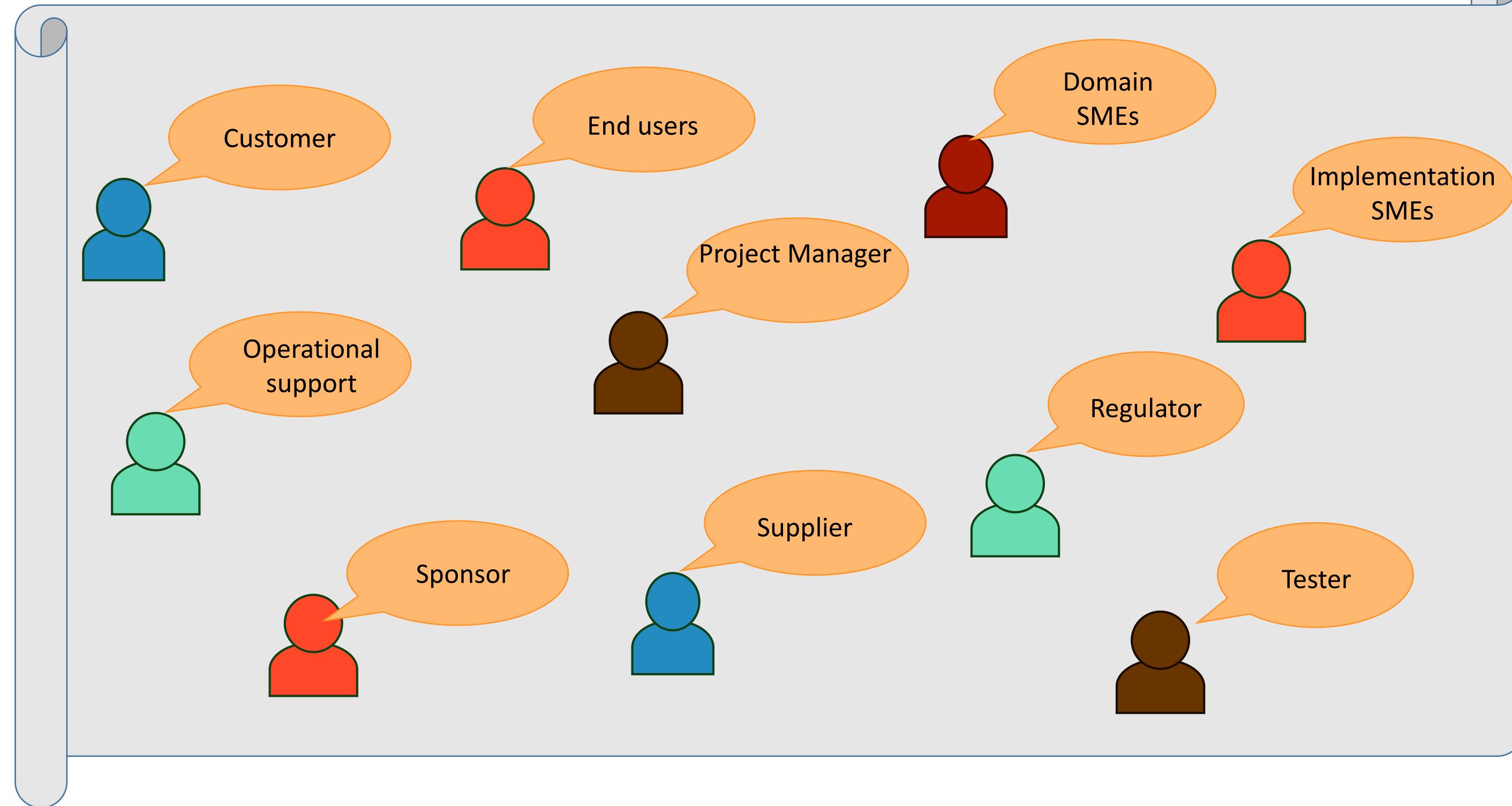
- Return on Investment (ROI)
- Discount Rate
- Present Value (PV)
- Net Present Value (NPV)
- Internal Rate of Return (IRR)
- Payback Period (PBP)

# DEFINE CHANGE STRATEGY

## STAKEHOLDERS



Business Analyst



## KEY TAKEAWAYS

Strategy Analysis provides a context to requirements analysis and design definition for a given change. It is an ongoing activity and an adjustment to the change strategy may be required as the context changes.

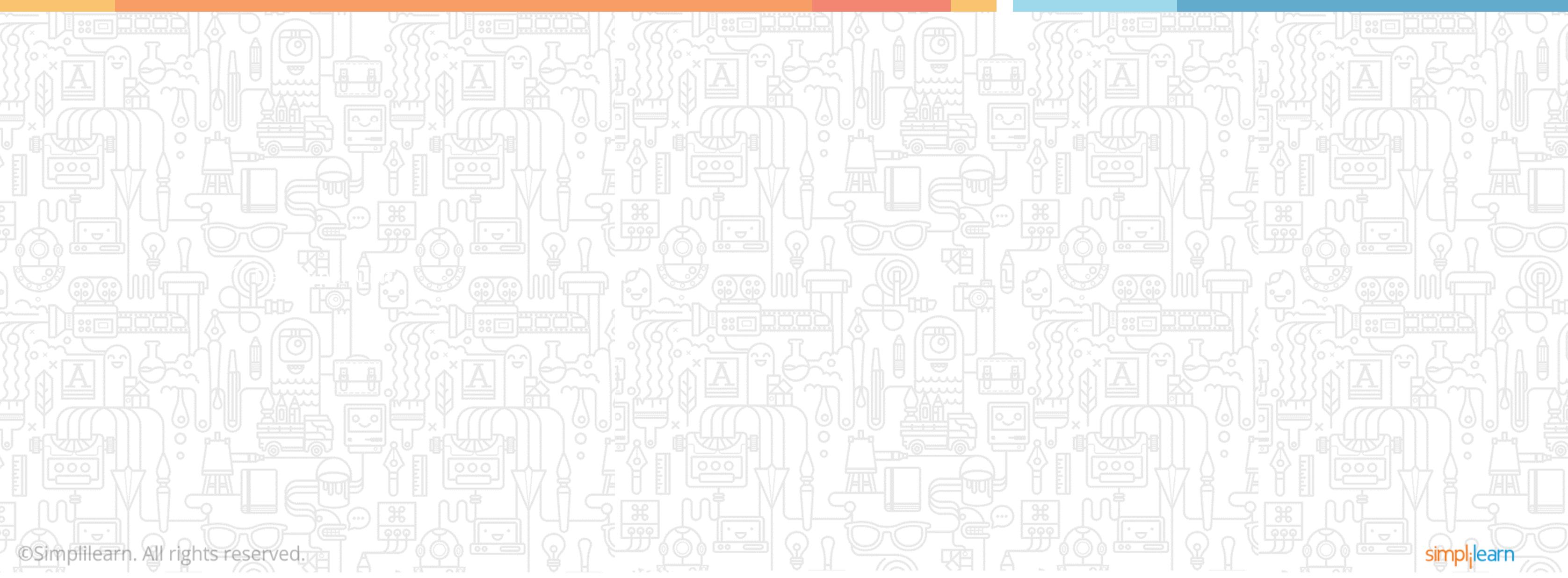
A Business Analyst needs to understand the current capabilities, processes, technologies, infrastructure, policies, business architecture, internal assets, and external influences in order to analyze the current state.

It is important to understand the undesirable consequences or risks of the internal and external forces, acting upon the enterprise, during a transition to the future state.

- 
- 1 Strategy Analysis is the process of developing a strategy for a business by researching the business and the environment in which it operates.
  - 2
  - 3 Strategy Analysis includes tasks like 'Analyze Current State', 'Define Future State', 'Assess Risks', and 'Define Change Strategy'.
  - 4
  - 5 A Business Analyst's job is to ensure that the future state of the enterprise is well defined, that it is well achievable with the available resources, and all the key stakeholders agree on the description of the future state.
  - 6
  - 7 Define change strategy means to develop and assess alternative approaches to the change and then select the most recommended approach.

# **Lesson 6: Strategy Analysis**

## **CASE STUDY EXERCISE**



# CASE STUDY

---

## PROBLEM STATEMENT



### Quick facts:

- ✓ Established in 1990
- ✓ Leading Mutual Funds Business
- ✓ One of the largest teams of research analysis
- ✓ Diversified and sector specific equity schemes.
- ✓ Services through distributors



## CASE STUDY

### PROBLEM STATEMENT



## CASE STUDY

### ACTIVITIES

Paul has defined the:

#### Current State Description



#### Future State Description



- ✓ Analytics model based on limited parameters
- ✓ Lack of expertise to develop an advanced analytics solution
- ✓ Distributed portal and limited functionality website

- ✓ Online request submission for redemption and additional purchases
- ✓ Manage funds using analytics model based on multiple parameters
- ✓ Use of CRM capability and Digital marketing tools

## CASE STUDY

### EXERCISE

|   | Questions                                                                                       | Response                                                                                                                                                                                                                                      |
|---|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Which of the given options is the most unlikely business driver?                                | <input type="radio"/> From external driver<br><input type="radio"/> From middle management<br><input checked="" type="radio"/> From the bottom-up<br><input type="radio"/> From the top-down                                                  |
| 2 | Which technique is not likely to be used while defining the future state?                       | <input type="radio"/> Vendor assessment<br><input type="radio"/> Workshops<br><input checked="" type="radio"/> Process modelling<br><input type="radio"/> Use case diagram                                                                    |
| 3 | Which one of the stakeholders is the most important while defining the future state?            | <input type="radio"/> Supplier<br><input checked="" type="radio"/> Tester<br><input type="radio"/> Regulator<br><input type="radio"/> Project manager                                                                                         |
| 4 | What factors must be considered while selecting the change strategy from the available options? | <input type="radio"/> Timelines to make the change<br><input type="radio"/> Major costs and investments to make the change<br><input checked="" type="radio"/> Alignment to the business objectives<br><input type="radio"/> All of the above |

## CASE STUDY

### ANSWERS

| Questions                                                                                         | Answers           |
|---------------------------------------------------------------------------------------------------|-------------------|
| 1 Which of the given options is the most unlikely business driver?                                | From the top down |
| 2 Which technique is not likely to be used while defining the future state?                       | Use case diagram  |
| 3 Which one of the stakeholders is the most important while defining the future state?            | Supplier          |
| 4 What factors must be considered while selecting the change strategy from the available options? | All of the above  |



QUIZ  
1**What is the SIPOC model?**

- a. Supplier, Input, Product, Output, Customer
- b. Source, Input, Process, Output, Customer
- c. Supplier, Input, Process, Output, Customer
- d. Supplier, Input, Process, Outcome, Customer



QUIZ  
1**What is the SIPOC model?**

- a. Supplier, Input, Product, Output, Customer
- b. Source, Input, Process, Output, Customer
- c. Supplier, Input, Process, Output, Customer
- d. Supplier, Input, Process, Outcome, Customer



The correct answer is **c.**

**Explanation:** SIPOC Model is Supplier, Input, Process, Output, Customer

QUIZ  
2

A business need \_\_\_\_\_.

- a. Is something a particular stakeholder wants
- b. Is a capability the current system does not provide
- c. Defines the problem to be solved
- d. Describes the solution approach



QUIZ  
2

A business need \_\_\_\_\_.

- a. Is something a particular stakeholder wants
- b. Is a capability the current system does not provide
- c. Defines the problem to be solved
- d. Describes the solution approach



The correct answer is **c.**

**Explanation:** A business need defines the problem to be solved.

QUIZ  
3**What are the outputs of 'Define Change Strategy'?**

- a. Change Strategy, Potential Value
- b. Potential Value, Business Case
- c. Change Strategy, Future State
- d. Change Strategy, Solution Scope



QUIZ  
3**What are the outputs of 'Define Change Strategy'?**

- a. Change Strategy, Potential Value
- b. Potential Value, Business Case
- c. Change Strategy, Future State
- d. Change Strategy, Solution Scope



The correct answer is **d**.

**Explanation:** The outputs of 'Define Change Strategy' are Change Strategy and Solution Scope

QUIZ  
4

**When considering the best solution for a business problem it is necessary to \_\_\_\_\_.**

- a. Use Benchmarking
- b. Use Gap analysis
- c. Use Focus Group
- d. Use Observation



QUIZ  
4

**When considering the best solution for a business problem it is necessary to \_\_\_\_\_.**

- a. Use Benchmarking
- b. Use Gap analysis
- c. Use Focus Group
- d. Use Observation



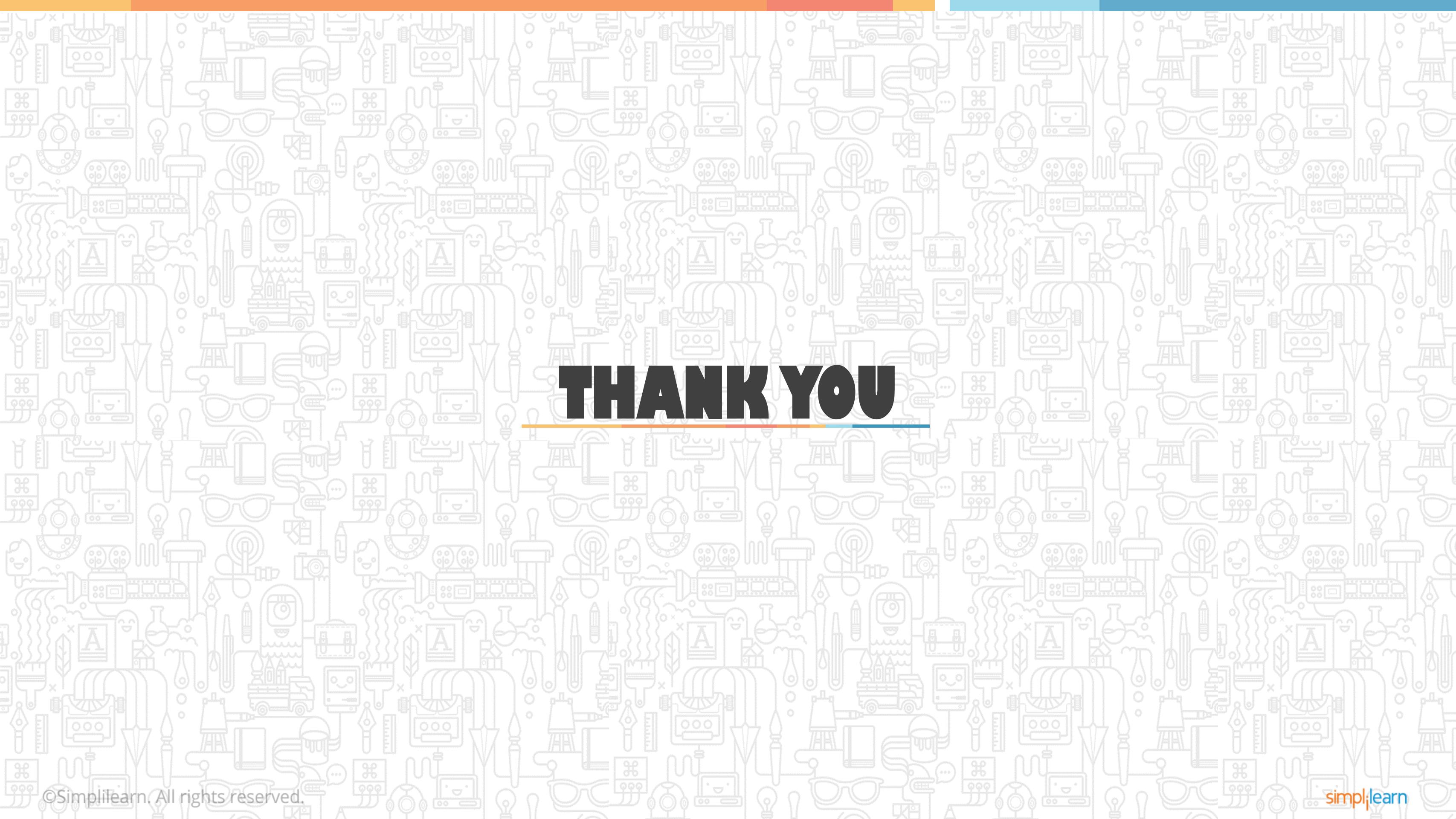
The correct answer is **b**.

**Explanation:** When considering the best solution for a business problem it is necessary to use Gap Analysis.



**This concludes “Strategy Analysis”**

The next lesson is “Requirements Analysis and Design Definition”



# THANK YOU

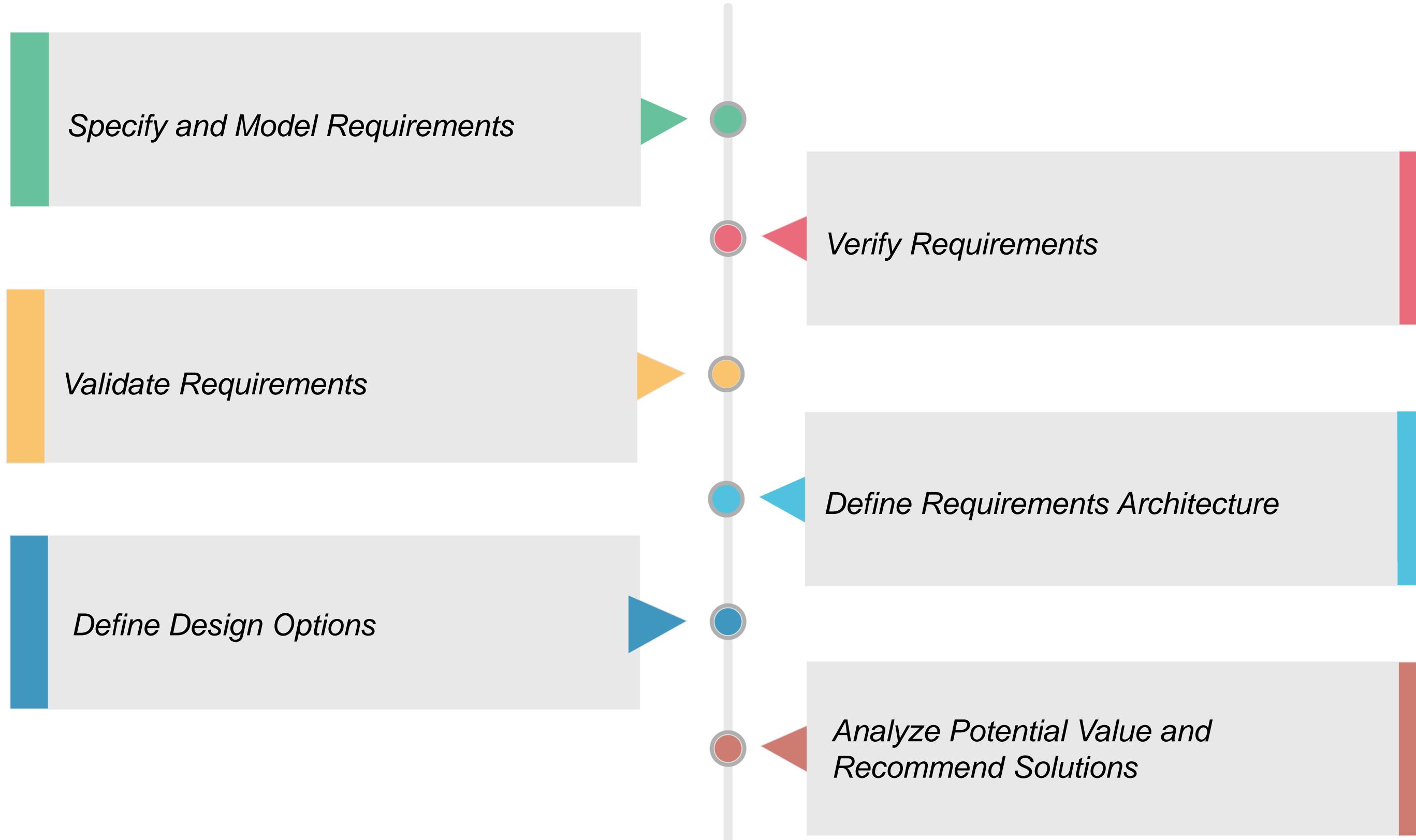
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# CCBA® Exam Preparation Course

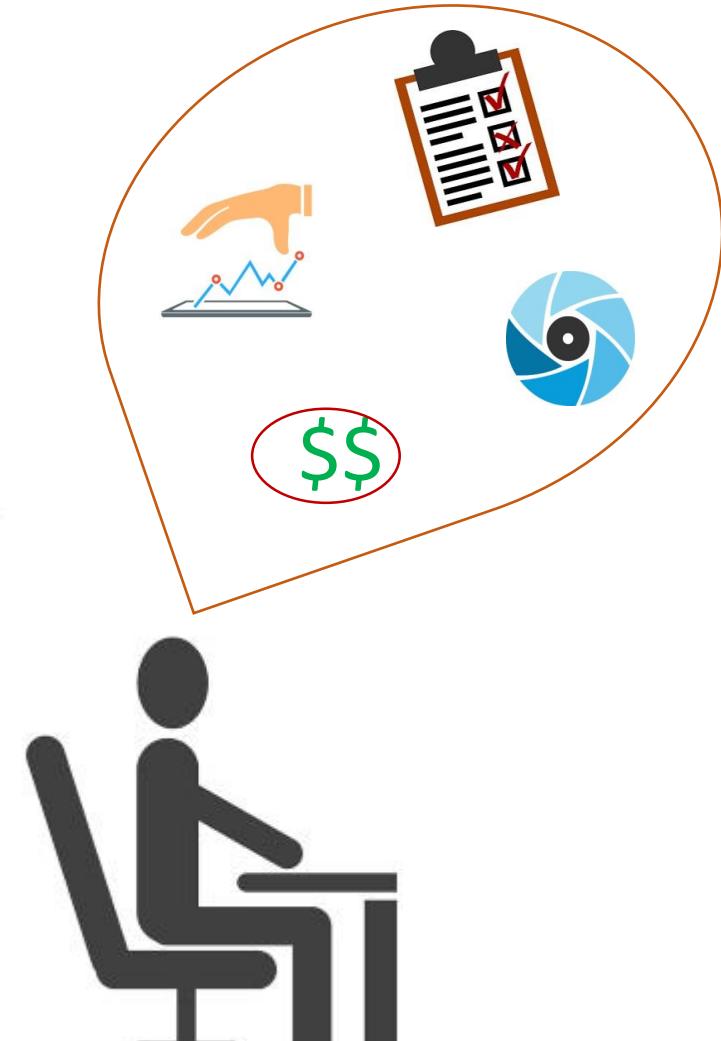
## Lesson 7 – Requirements Analysis and Design Definition



# WHAT'S IN IT FOR ME



# INTRODUCTION

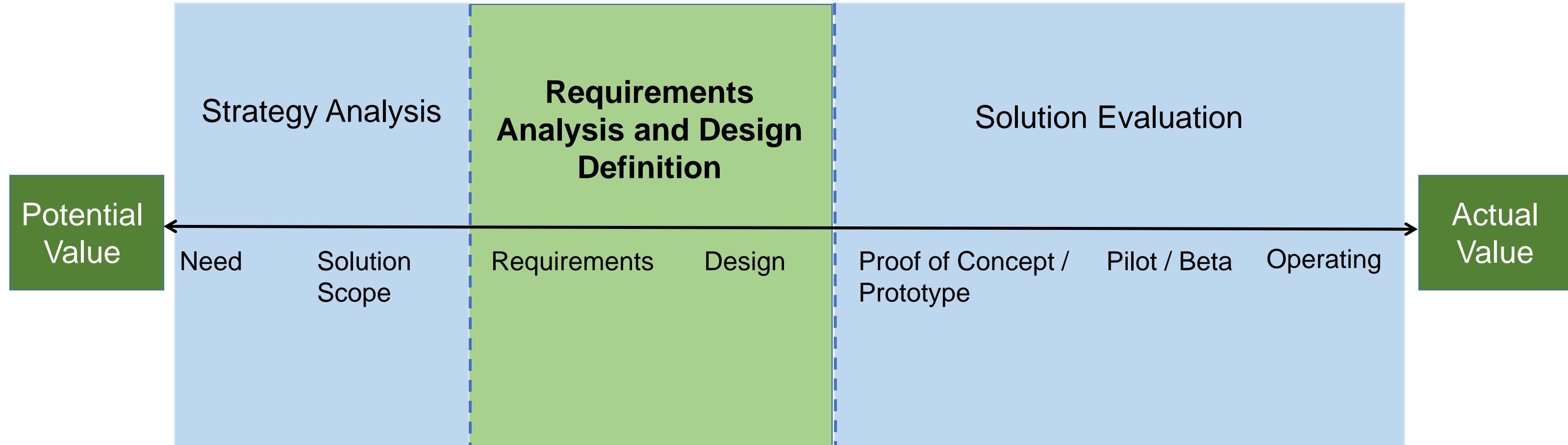


Business Analyst

## Requirements Analysis and Design Definition knowledge area:

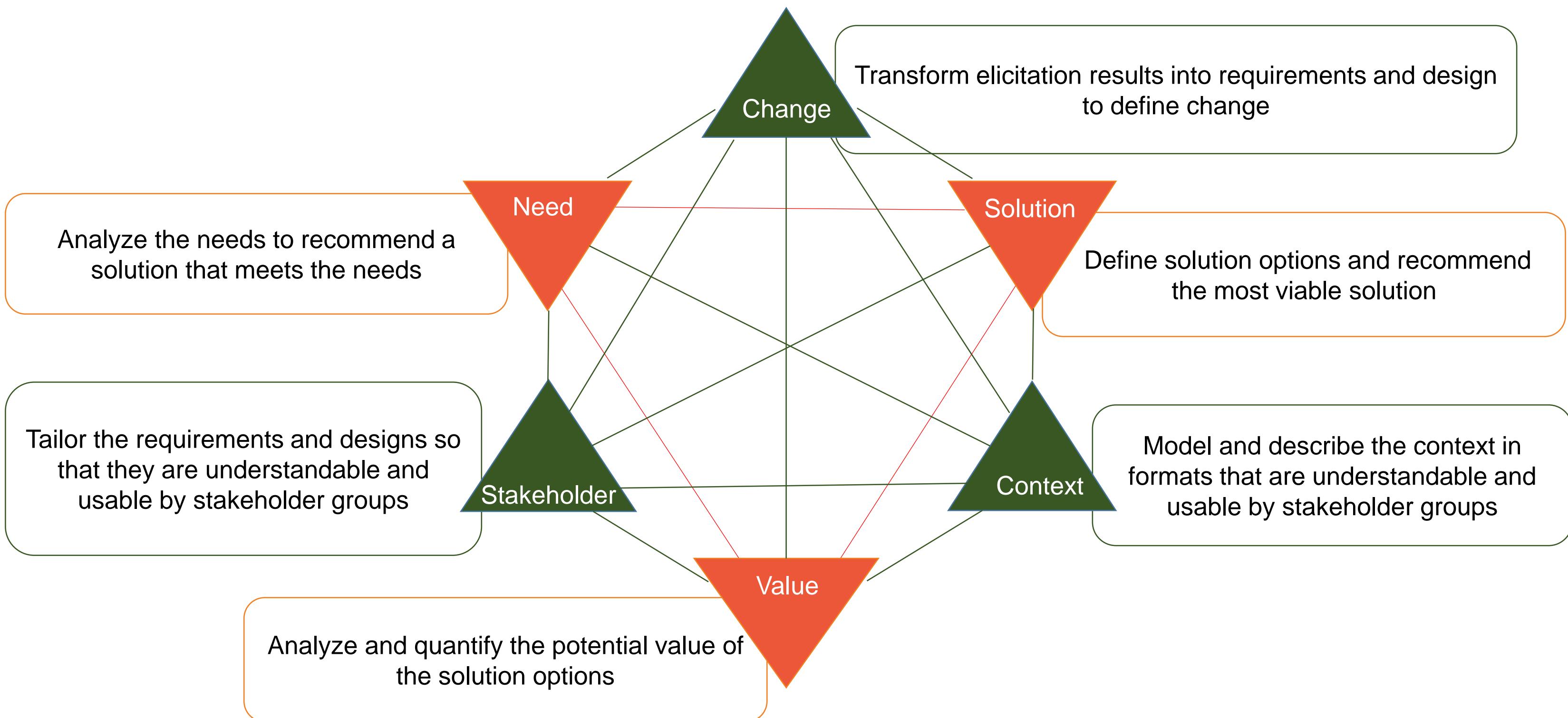
- Describes the tasks that the business analyst performs to:
  - Structure and organize the requirements discovered during elicitation activities,
  - Specify and model requirements and designs,
  - Validate and verify information,
  - Identify solution options that meet business needs, and
  - Estimate the potential value that could be realized for each solution option.
- Covers the incremental and iterative activities ranging from the initial concept and exploration of the need through the transformation of those needs into a particular recommended solution
- Is the core knowledge area for a business analyst

# BUSINESS ANALYSIS VALUE SPECTRUM



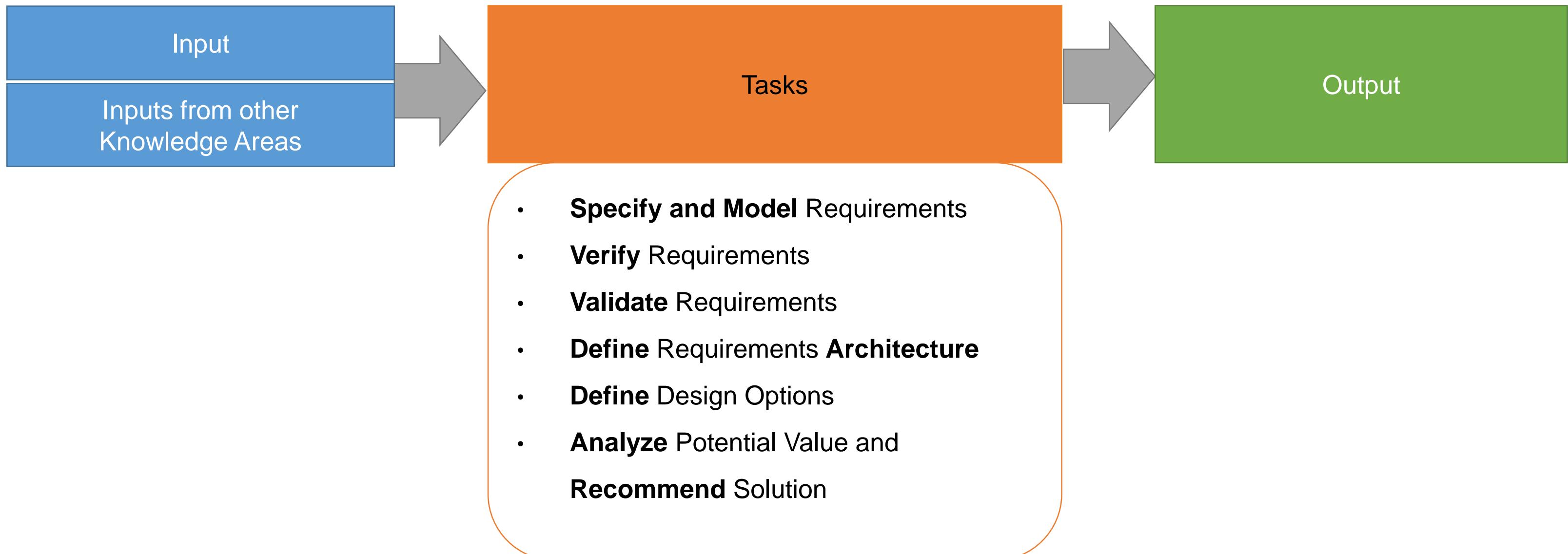
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION

## OVERVIEW



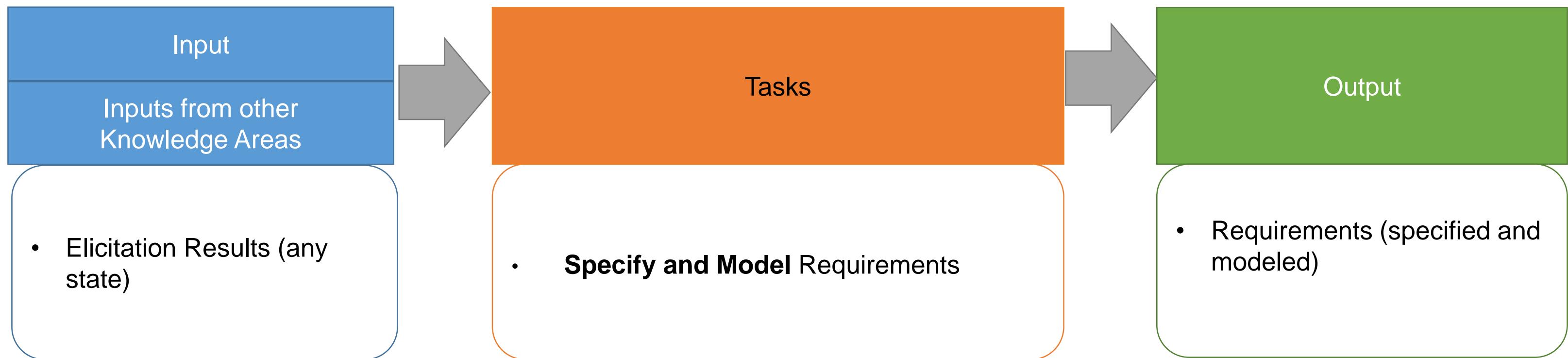
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT— OVERVIEW



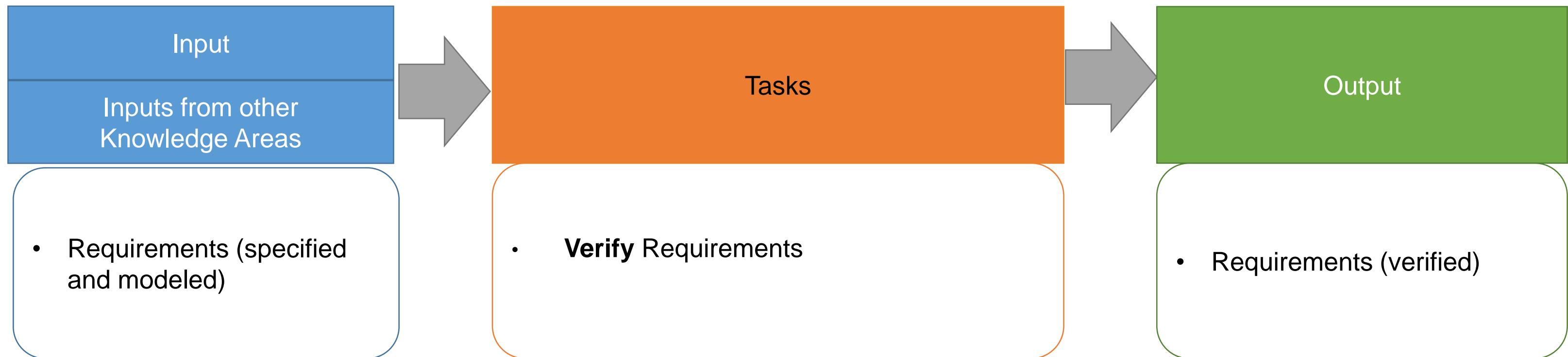
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT — OVERVIEW



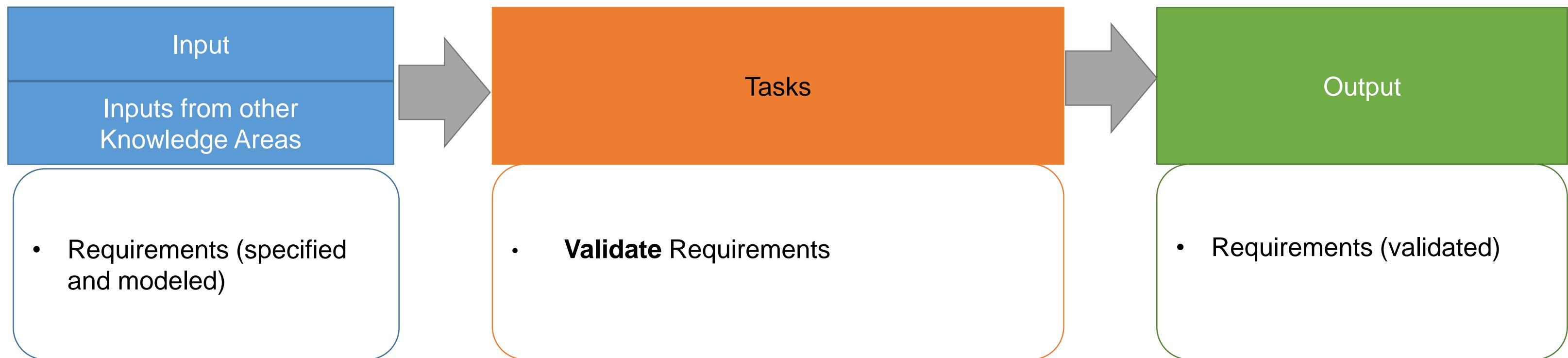
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT — OVERVIEW



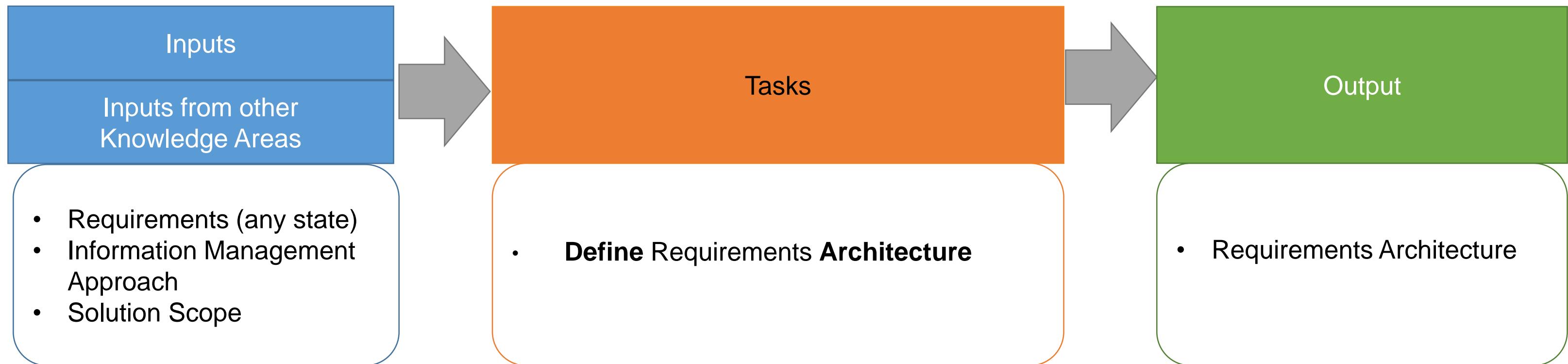
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS AND OUTPUT — OVERVIEW



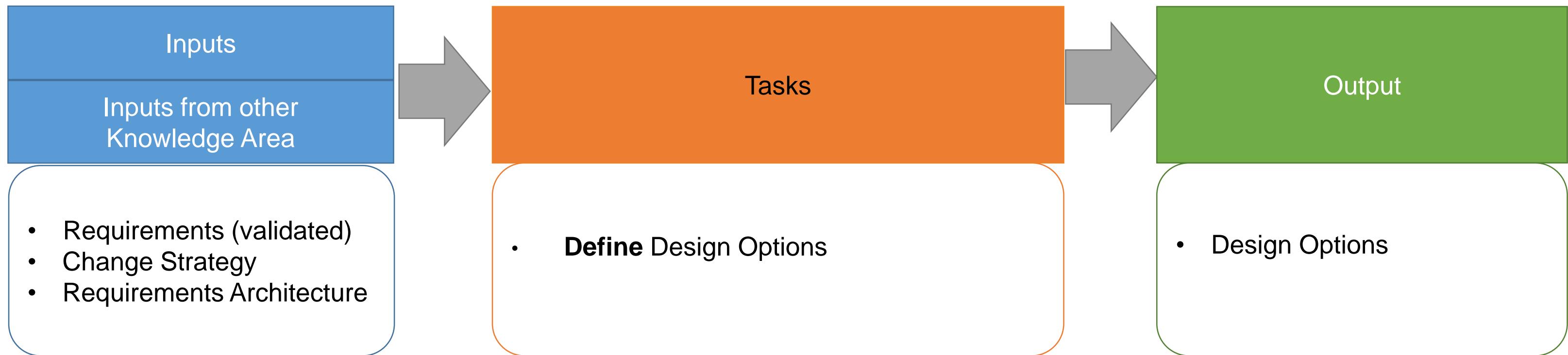
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS AND OUTPUT — OVERVIEW



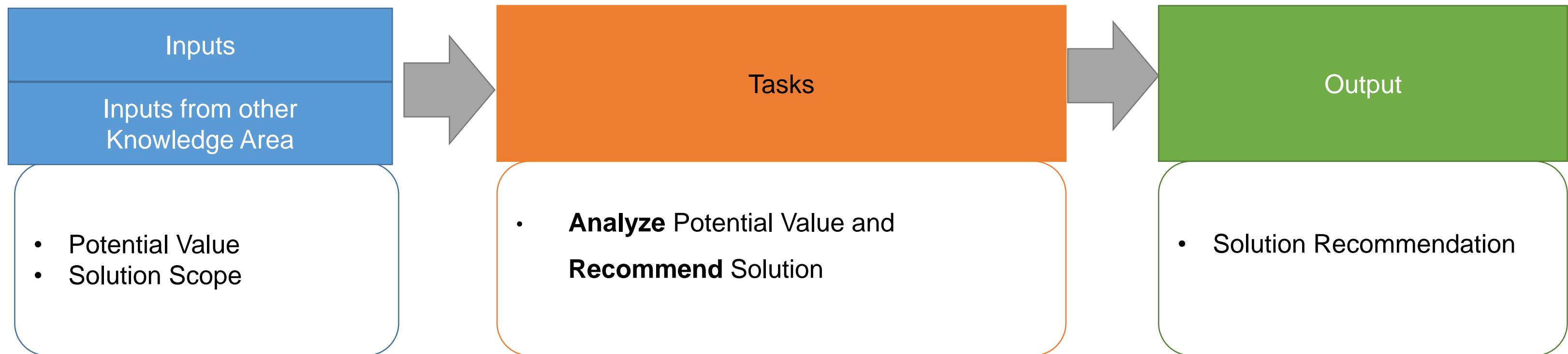
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT — OVERVIEW



# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS AND OUTPUT — OVERVIEW



## Topic 7.1: Specify and Model Requirements

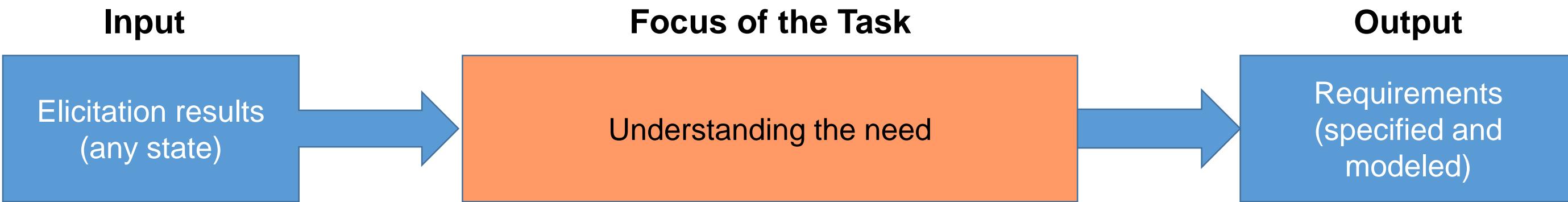
# Lesson 7: Requirements Analysis and Design Definition

- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

## SPECIFY AND MODEL REQUIREMENTS

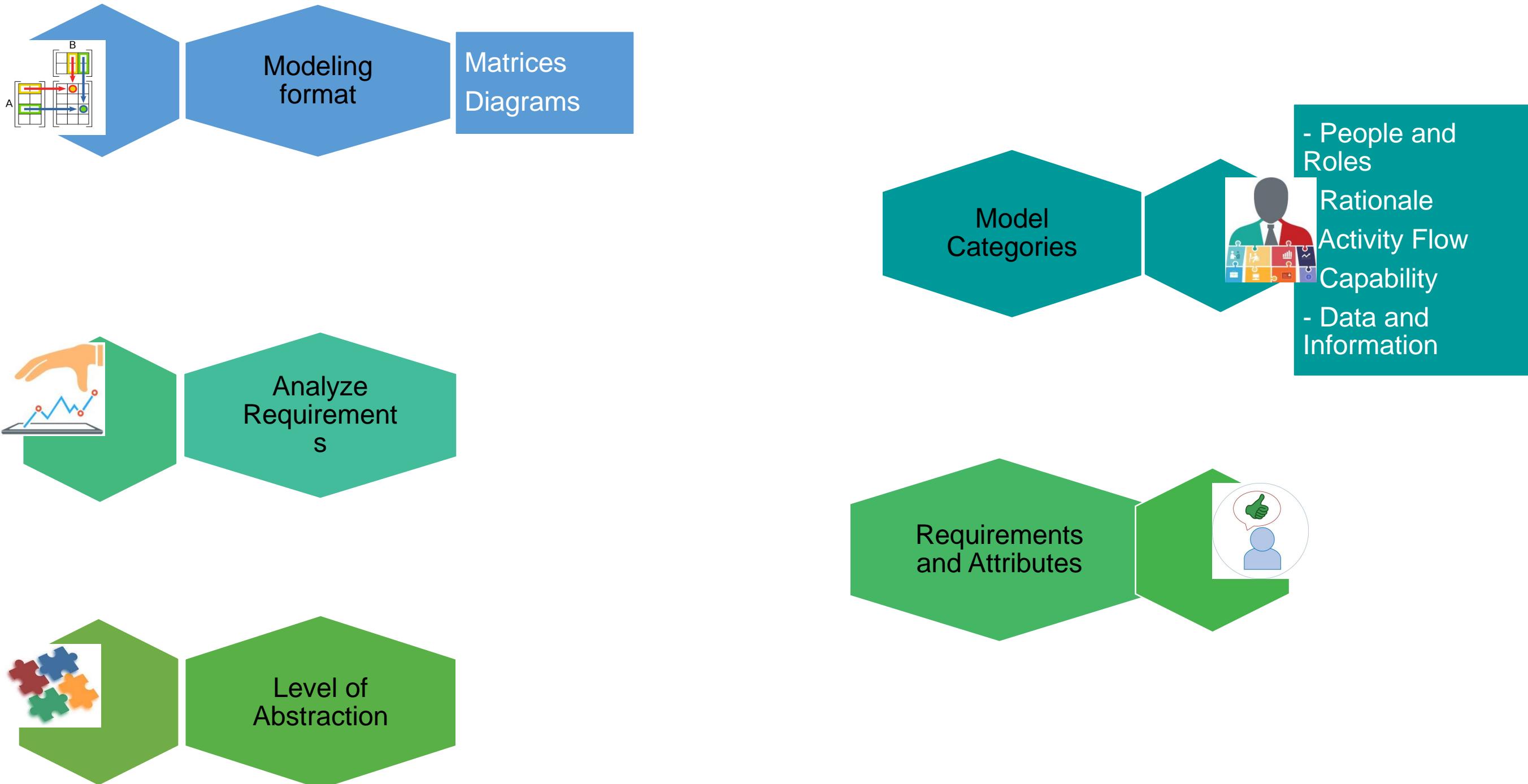
### PURPOSE

The purpose of this task is to analyze, synthesize, and refine elicitation results into a set of requirements and designs.



# SPECIFY AND MODEL REQUIREMENTS (contd.)

## ELEMENTS



## SPECIFY AND MODEL REQUIREMENTS (contd.)

### GUIDELINES and TOOLS

Modeling Notations / Standards

Modeling Tools

Requirements Architecture

Requirements Life Cycle Management Tools

Solution Scope

# SPECIFY AND MODEL REQUIREMENTS (contd.)

## TECHNIQUES

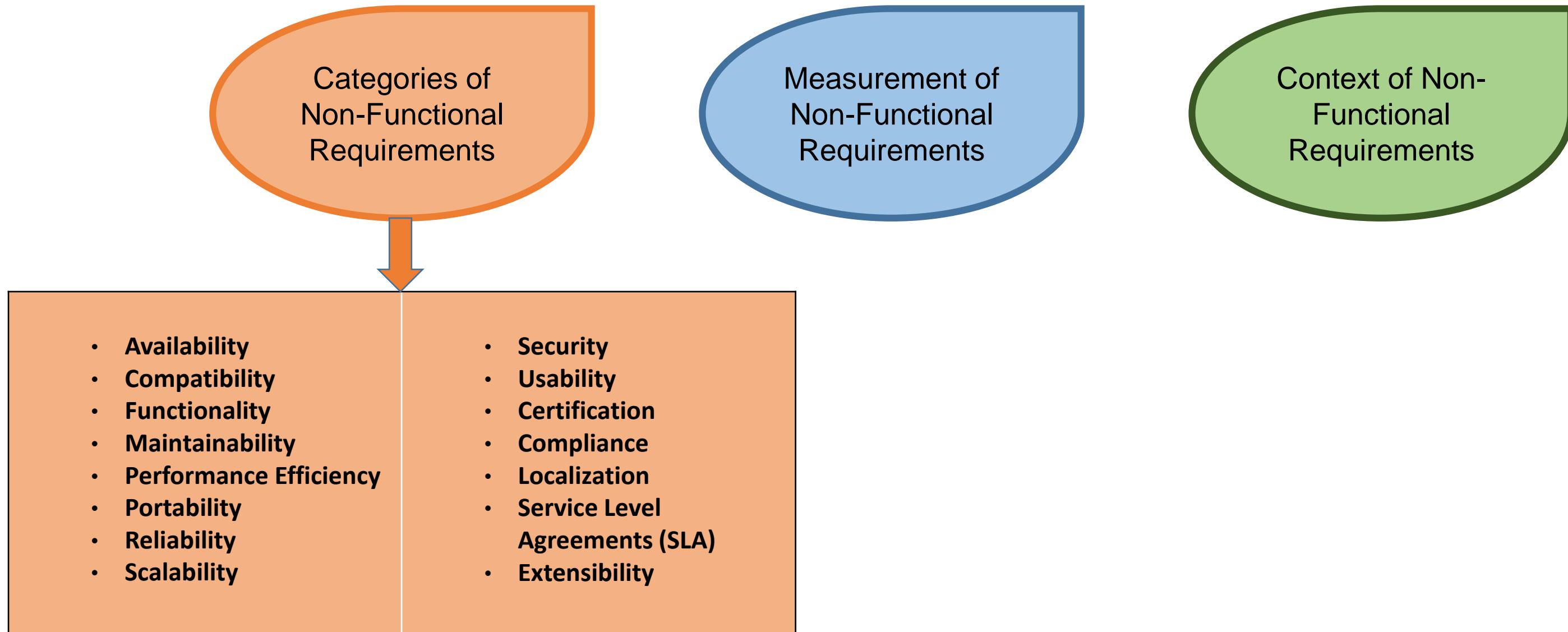
|                                    |                                      |                         |                                    |                             |
|------------------------------------|--------------------------------------|-------------------------|------------------------------------|-----------------------------|
| Acceptance and Evaluation Criteria | Non-Functional Requirements Analysis | Organizational Modeling | Stakeholder List, Map, or Personas | Roles and Permission Matrix |
| Concept Modeling                   | Business Model Canvas                | Scope Modeling          | Decision Modeling                  | Root Cause Analysis         |
| Business Rules Analysis            | Sequence Diagrams                    | Process Modeling        | Use Cases and Scenarios            | User Stories                |
| Business Capability Analysis       | Functional Decomposition             | Prototyping             | Data Dictionary                    | Glossary                    |
| Data Flow Diagrams                 | Data Modeling                        | State Modeling          | Interface Analysis                 |                             |

## OVERVIEW

Non-Functional Requirements  
or  
Quality Attributes  
or  
Quality of Service (QoS)

- Defines performance of functional requirements
- Used to specify criteria to judge the operation of a system
- Expressed in textual formats as declarative statements
- States the constraints that apply to a set of functional requirements

## ELEMENTS



# NON-FUNCTIONAL REQUIREMENTS AND ANALYSIS (contd.)

## EXAMPLES

| ID   | Type          | Non Functional Requirement                                                                                |                                                                                       |
|------|---------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| NF01 | Availability  | The website should be available 24 Hours x 7 Days, except during schedule maintenance work.               |    |
| NF02 | Compatibility | The website should be compatible with Explorer, Chrome, Firefox, and Mozilla.                             |    |
| NF03 | Performance   | A webpage should load within 10 seconds on a standard DSL connection.                                     |  |
| NF04 | Localization  | The website by default is in English. It should redirect to localized pages based on the users' location. |  |
| NF05 | Security      | Secured pages should be displayed for authenticated and authorized users only.                            |  |

# BUSINESS RULES ANALYSIS

## OVERVIEW

Business Rules Analysis is used to identify, express, validate, refine, and organize the rules that shape day-to-day business operations and guide decision making.

| Business Policy                                                                                             | Business Rule                                                                                                               | Complex Business Rules                                                                     | Structural Rules                                                    | Operatives Rules                                                     |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Non-actionable directive</li><li>• Supports business goal</li></ul> | <ul style="list-style-type: none"><li>• Specific actionable testable directive</li><li>• Supports business policy</li></ul> | <ul style="list-style-type: none"><li>• Represented using decision tree or table</li></ul> | <ul style="list-style-type: none"><li>• Cannot be changed</li></ul> | <ul style="list-style-type: none"><li>• Frequently changed</li></ul> |

### ELEMENTS — BASIC PRINCIPLES

**Based** on standard business vocabulary

**Express** the rules separately from how they will be enforced

**Define** the rules at the atomic level and in declarative format

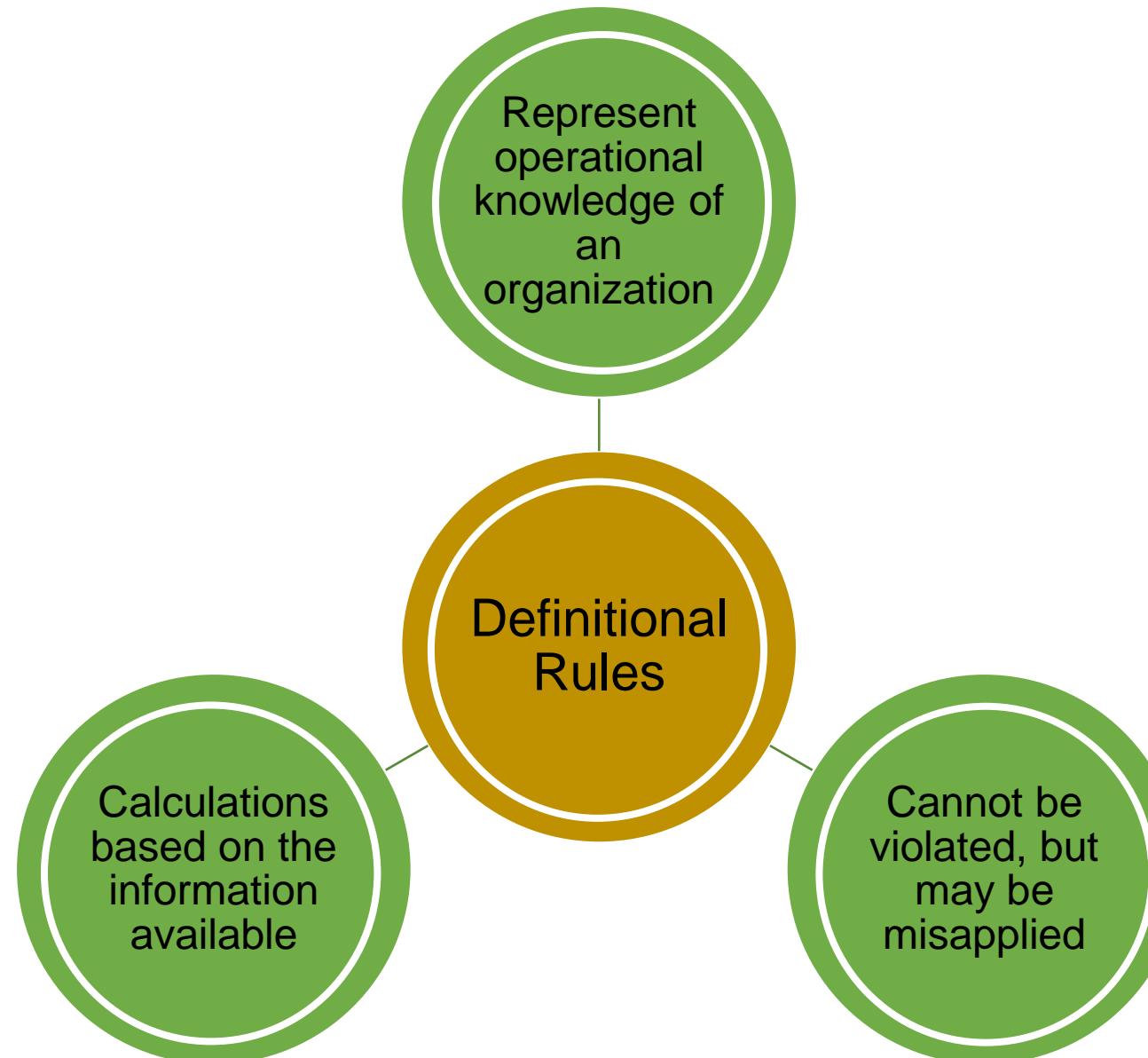
**Separate** the rules from processes

**Map** the rules to decisions

**Maintain** the rules

### ELEMENTS — DEFINITIONAL RULES

Definitional Rules are intended to make operational business decisions during some processes or events.

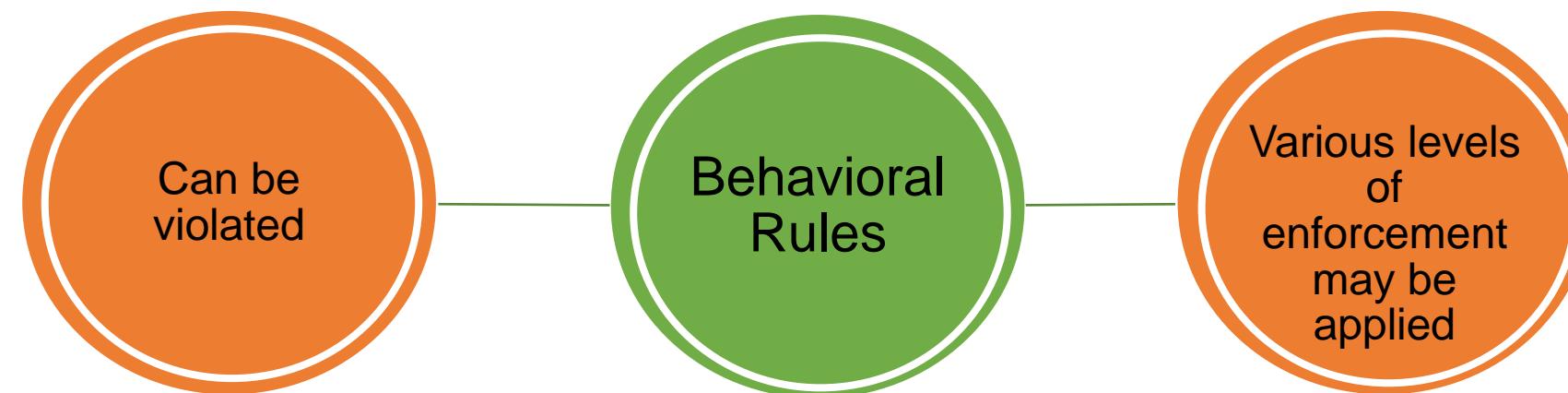


#### Examples:

- Local tax must be calculated as based on the tax rate applicable for each items.
- Service tax must be calculated on the local tax based on local service tax.

### ELEMENTS — BEHAVIOURAL RULES

Behavioral Rules are intended to guide the actions of people working within the organization.



#### Examples:

- Delivery invoice must not be accepted if it doesn't contain the purchase order number.
- Order must not be accepted, when there is mismatch in billing address and address provided by the credit card provider.

### DECISION MODELING - OVERVIEW

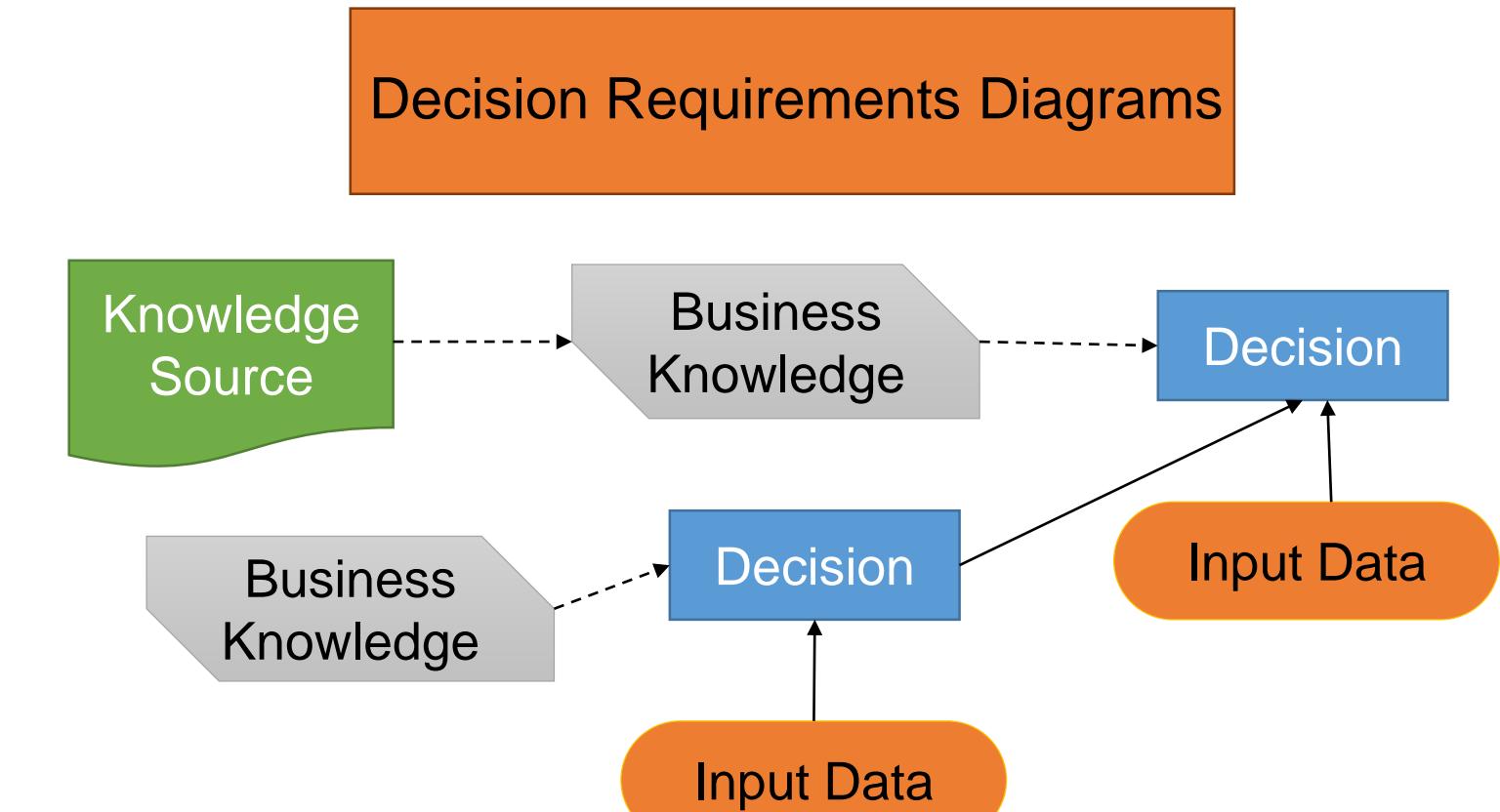
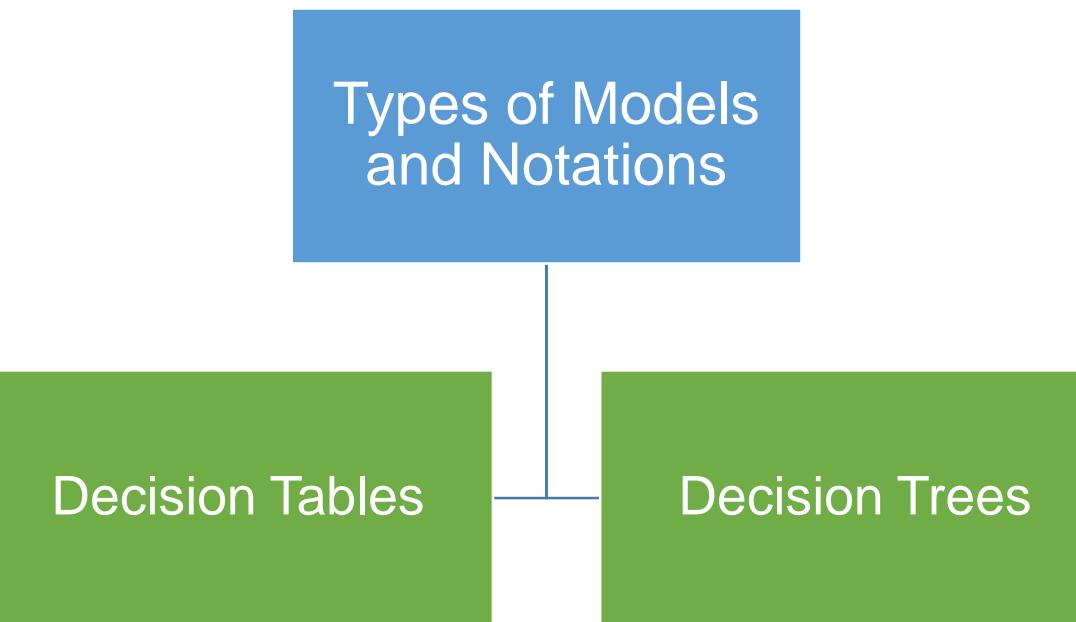
Shows how repeatable business decisions are made

Shows how data and knowledge are combined to make a specific decisions

Is linked to processes, performance measures, and organization

Decision tables and decision trees — define how a specific decision is made

## DECISION MODELING - ELEMENTS



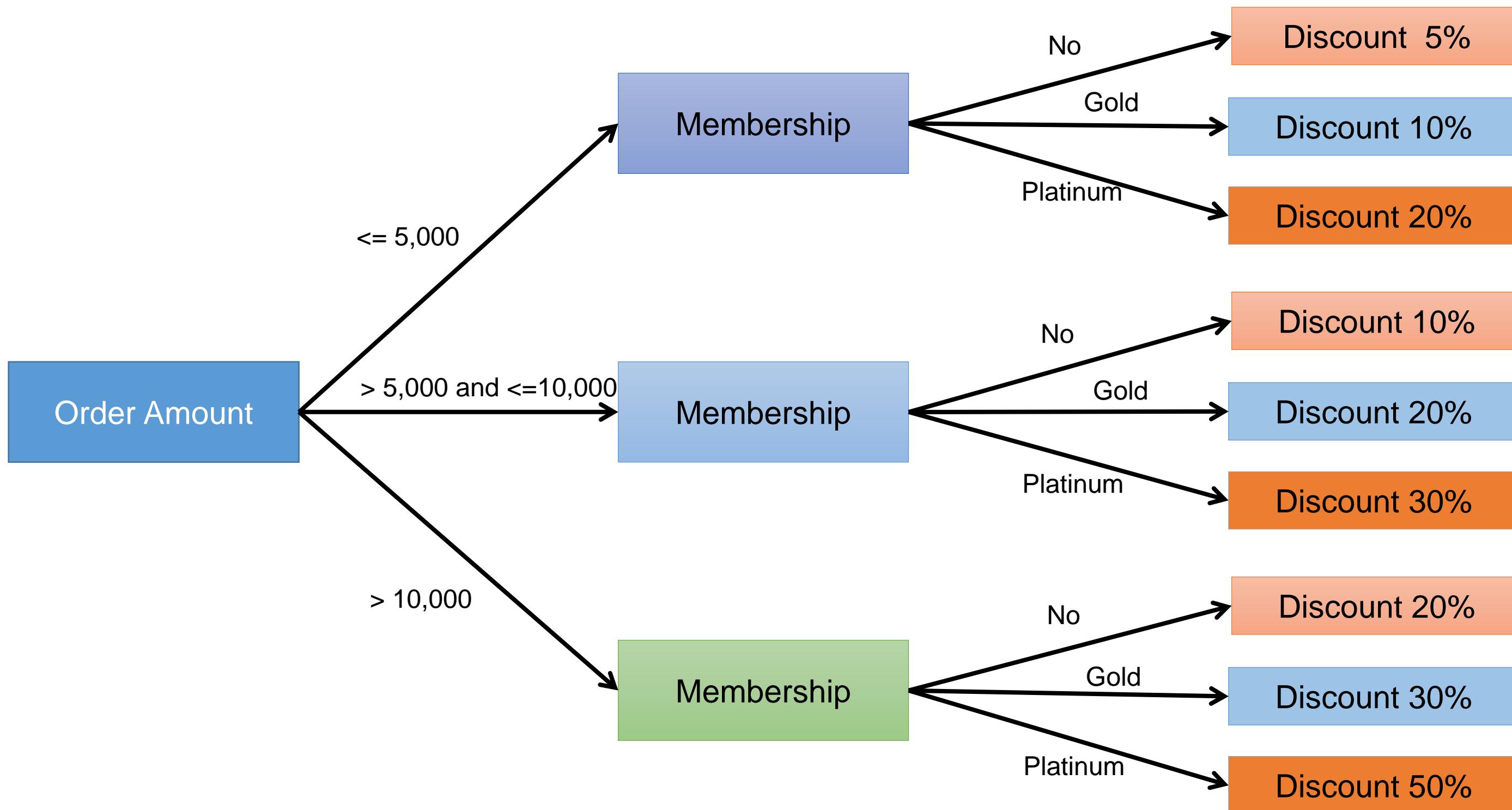
## BUSINESS RULES ANALYSIS (contd.)

### EXAMPLE — DECISION TABLE

| Condition 1 - Age   | Condition 2 – Smoking<br>Yes/No | Condition 3 – Pre-Existing<br>Diseased or Operated | Outcome or Decision (Eligibility, Base<br>Price and Loading) |
|---------------------|---------------------------------|----------------------------------------------------|--------------------------------------------------------------|
| > 0 and <= 15 Years | Not Applicable                  | Yes                                                | Base Price (BP0) * 150%                                      |
|                     | Not Applicable                  | No                                                 | Base Price (BP0)                                             |
| >15 and <= 30 Years | No                              | No                                                 | Base Price (BP15)                                            |
|                     | Yes                             | Yes                                                | Not Eligible                                                 |
|                     | No                              | Yes                                                | Base Price (BP15) * 150%                                     |
|                     | Yes                             | No                                                 | Base Price (BP15) * 120%                                     |
| >30 and <= 45 Years | No                              | No                                                 | Base Price (BP30)                                            |
|                     | Yes                             | Yes                                                | Not Eligible                                                 |
|                     | No                              | Yes                                                | Base Price (BP30) * 150%                                     |
|                     | Yes                             | No                                                 | Base Price (BP30) * 120%                                     |
| >45 and <= 60 Years | No                              | No                                                 | Base Price (BP45)                                            |
|                     | Yes                             | Yes                                                | Not Eligible                                                 |
|                     | No                              | Yes                                                | Base Price (BP45) * 150%                                     |
|                     | Yes                             | No                                                 | Base Price (BP45) * 120%                                     |
| >60                 | No                              | No                                                 | Base Price (BP60)                                            |
|                     | Yes                             | Yes                                                | Not Eligible                                                 |
|                     | No                              | Yes                                                | Not Eligible                                                 |
|                     | Yes                             | No                                                 | Base Price (BP60) * 150%                                     |

## BUSINESS RULES ANALYSIS (contd.)

### EXAMPLE — DECISION TREE



# CONCEPT MODELING

## OVERVIEW

Used to organize the business vocabulary needed to consistently and thoroughly communicate the knowledge of a domain

Starts with a glossary

Goal is to support the expression of natural language statements

Provides design-independent definitions

## ELEMENTS

Noun Concepts

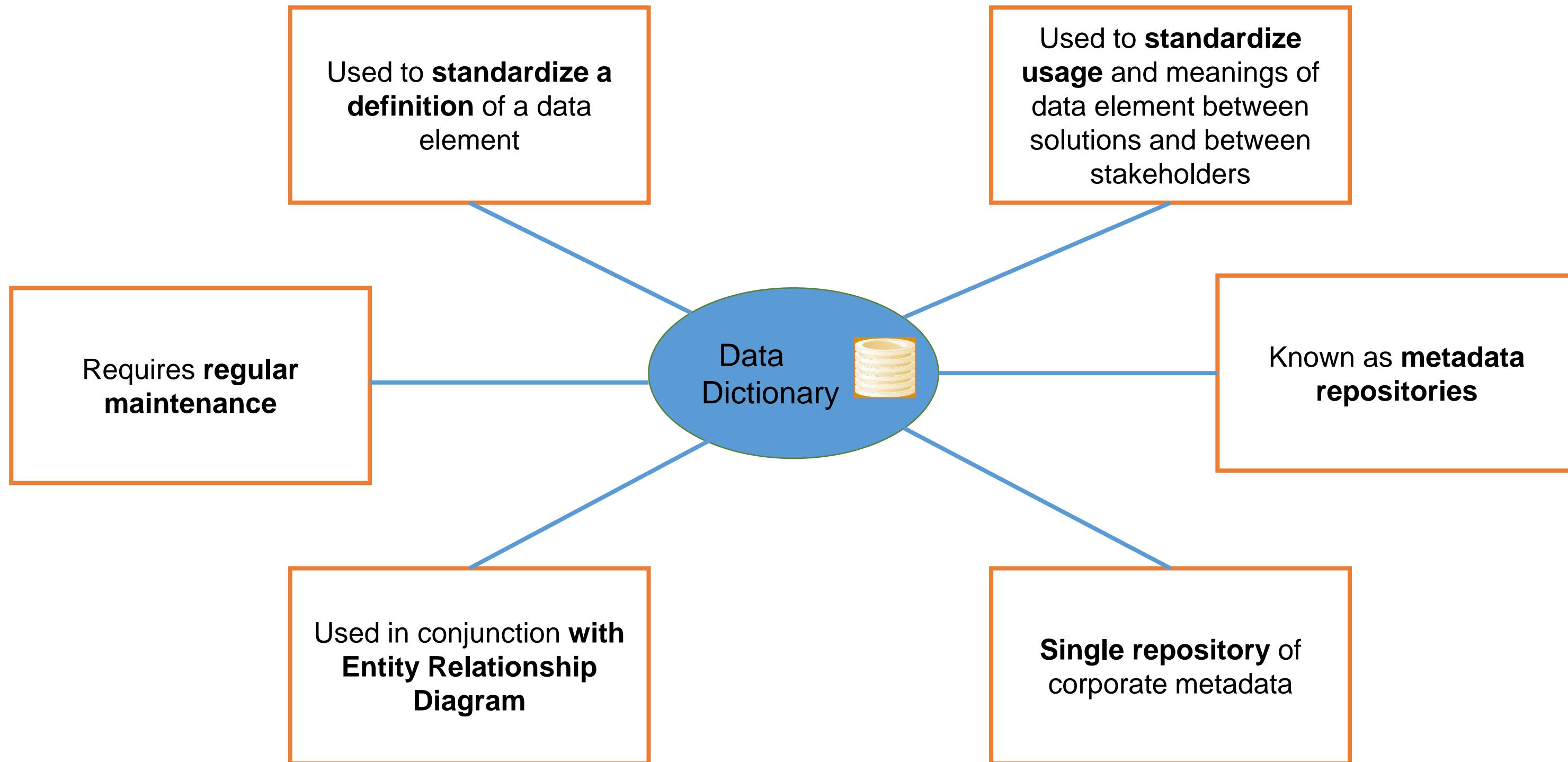
Verb Concepts

Other Connections

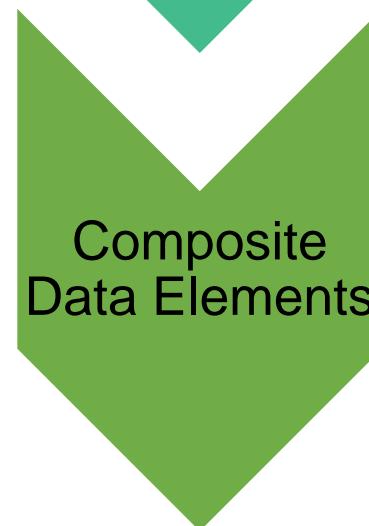
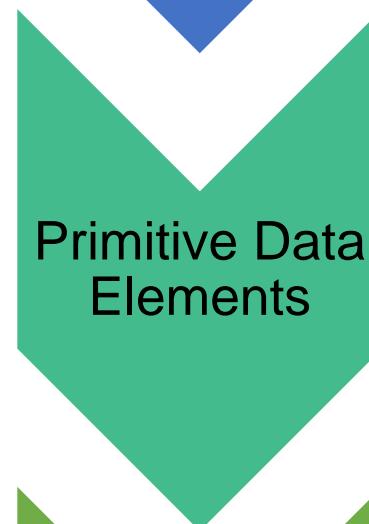
- Categorizations
- Classification
- Partitive connection
- Roles

# DATA DICTIONARY

## OVERVIEW



## ELEMENTS



- The data dictionary describes data element characteristics

- Name
- Aliases
- Values/Meaning
- Description

- Sequence
- Repetitions
- Optional Elements

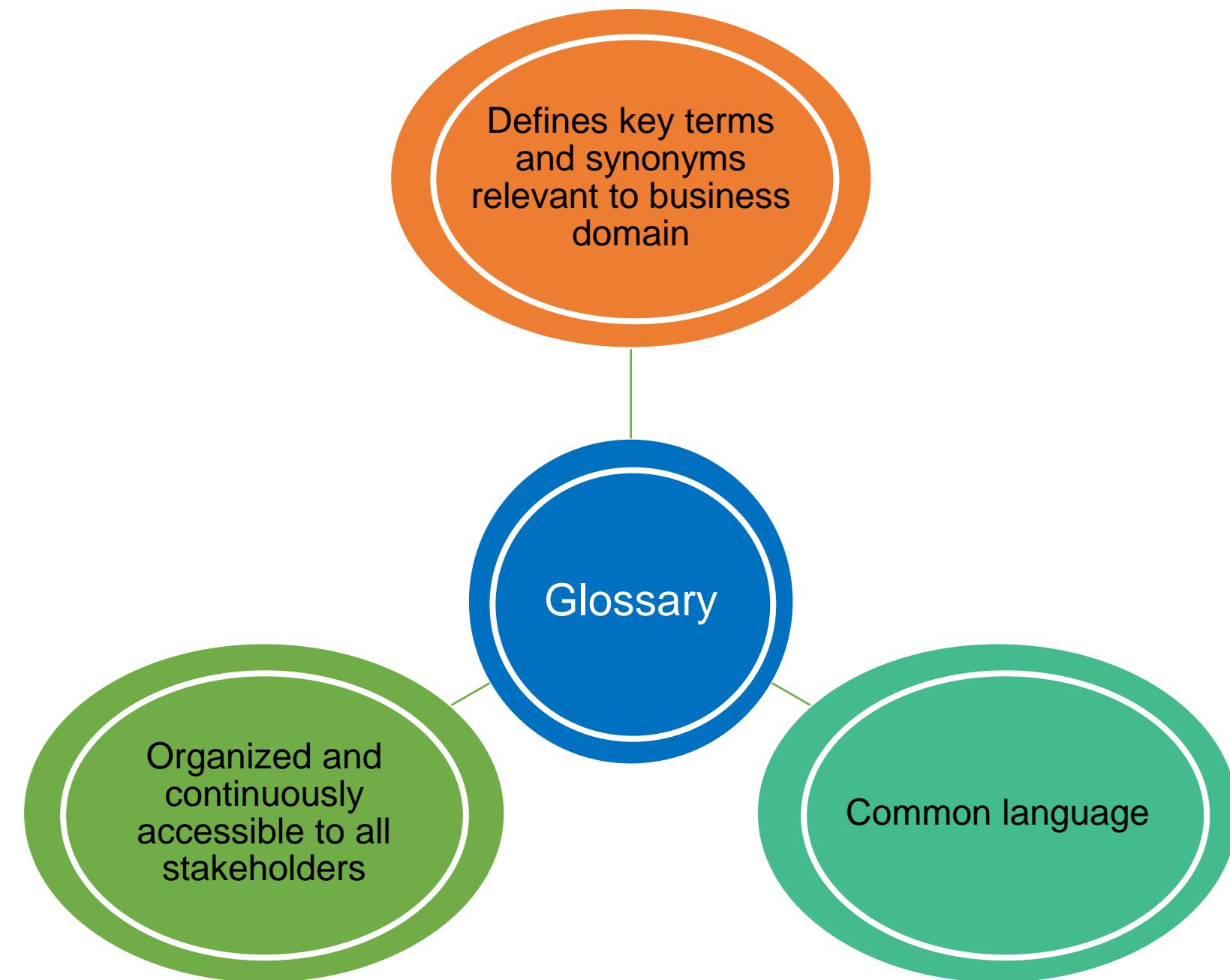
# DATA DICTIONARY (contd.)

## EXAMPLE

| Primitive Data Elements | Data Element 1                                       | Data Element 2 | Data Element 3      | Data Element 4                             | Data Element 5 | Data Element 6  |
|-------------------------|------------------------------------------------------|----------------|---------------------|--------------------------------------------|----------------|-----------------|
| Name                    | First Name                                           | Middle Name    | Last Name           | International Dialing Code                 | Country Code   | Phone Number    |
| Alias                   | Given Name                                           | Middle Name    | Sur Name            | ISD                                        | STD            | Landline Number |
| Value / Meaning         | Minimum 2 Character                                  | Optional       | Minimum 1 Character | Numeric                                    | Numeric        | Numeric         |
| Description             | First Name                                           | Middle Name    | Family Name         | International Dialing Code                 | Country Code   | Phone Number    |
| Composite               | Employee Name = First Name + Middle Name + Last Name |                |                     | Telephone Number: ISD + STD + Phone Number |                |                 |

# GLOSSARY OVERVIEW

---



### ELEMENTS

A term is included in the glossary when

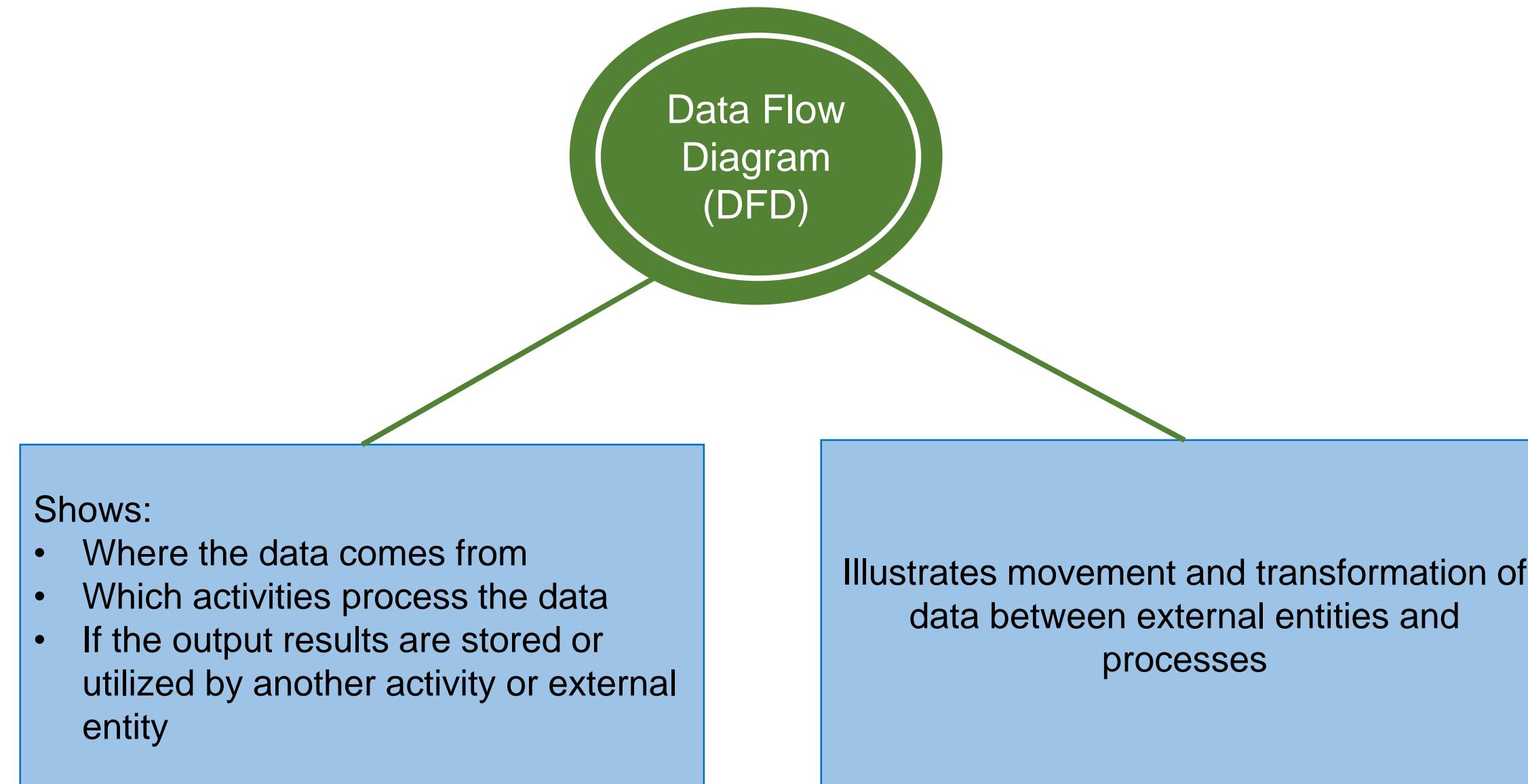
- The term is unique to a domain
- Multiple definitions exist
- The definition is outside of term's common use
- There are chances of misunderstanding

When developing a glossary

- All definitions should be clear, concise, and brief
- Acronyms should be spelled out
- There must be easy and reliable access
- Editing should be limited to specific stakeholders

# DATA FLOW DIAGRAM (DFD)

## OVERVIEW



### OVERVIEW

#### **Three simple rules of Data Flow Diagrams:**

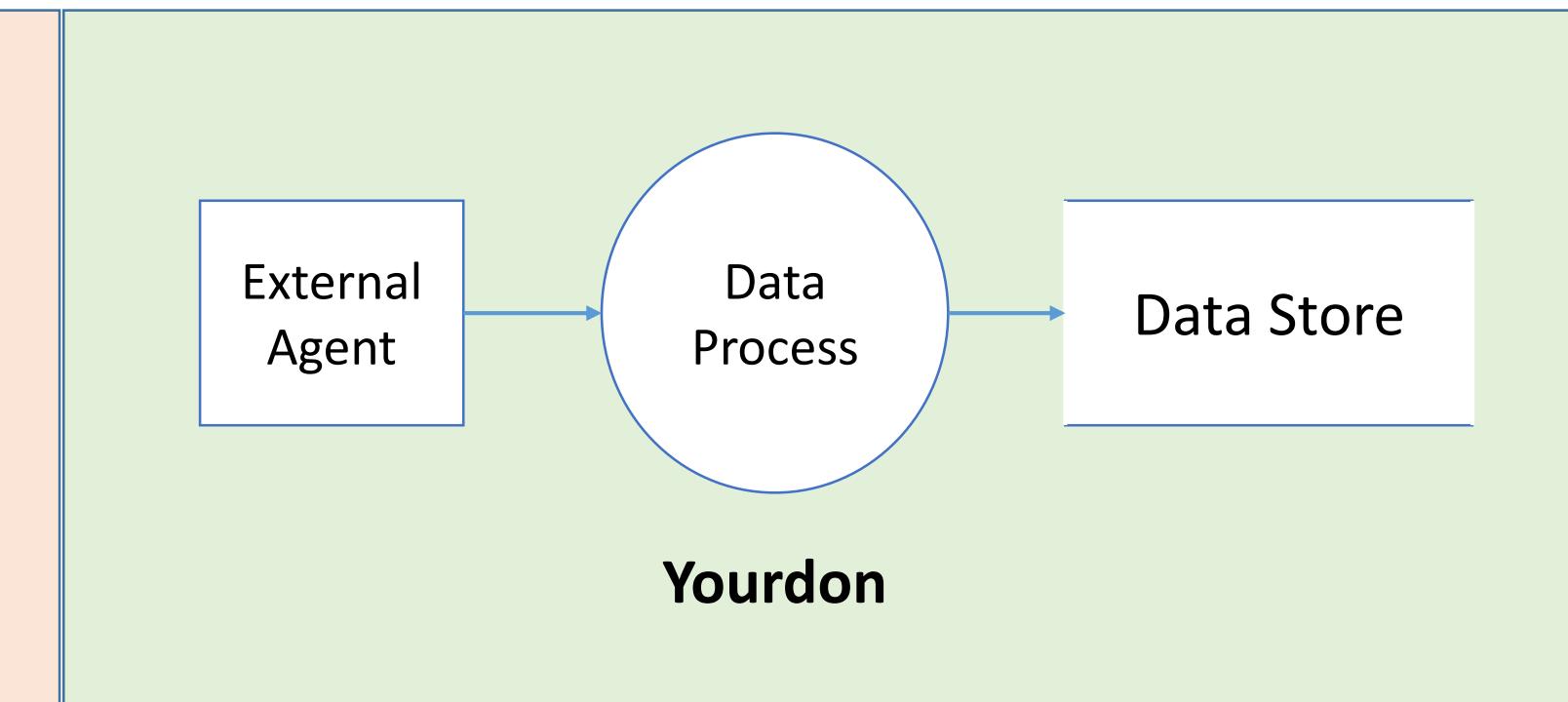
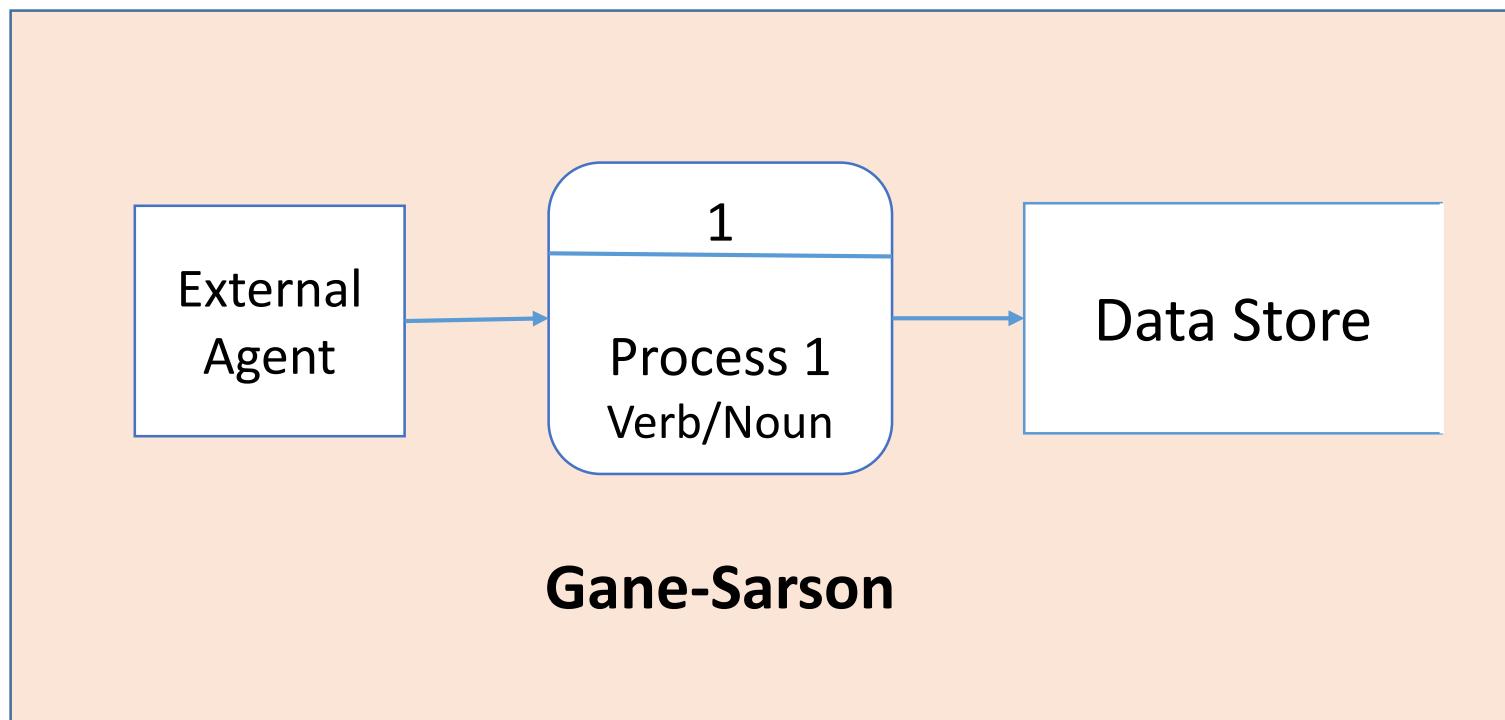
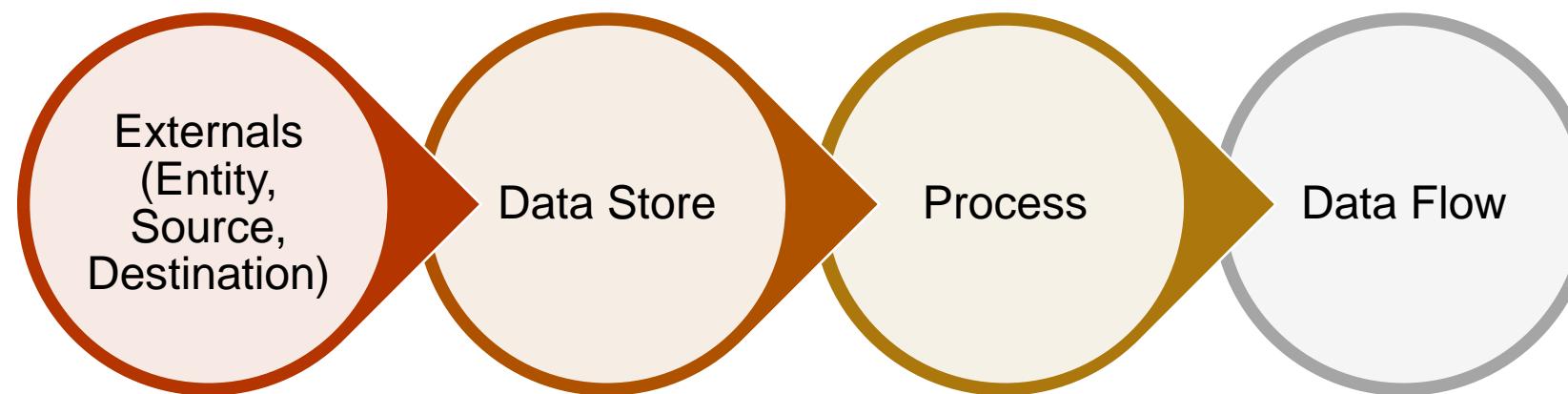
**Rule 1:** Inputs (data) must either come directly from an external party or be created by another process.

**Rule 2:** Every process must have at least one input and one output.

**Rule 3:** Every output must flow to another process, external party, or data store.

# DATA FLOW DIAGRAM (DFD) (contd.)

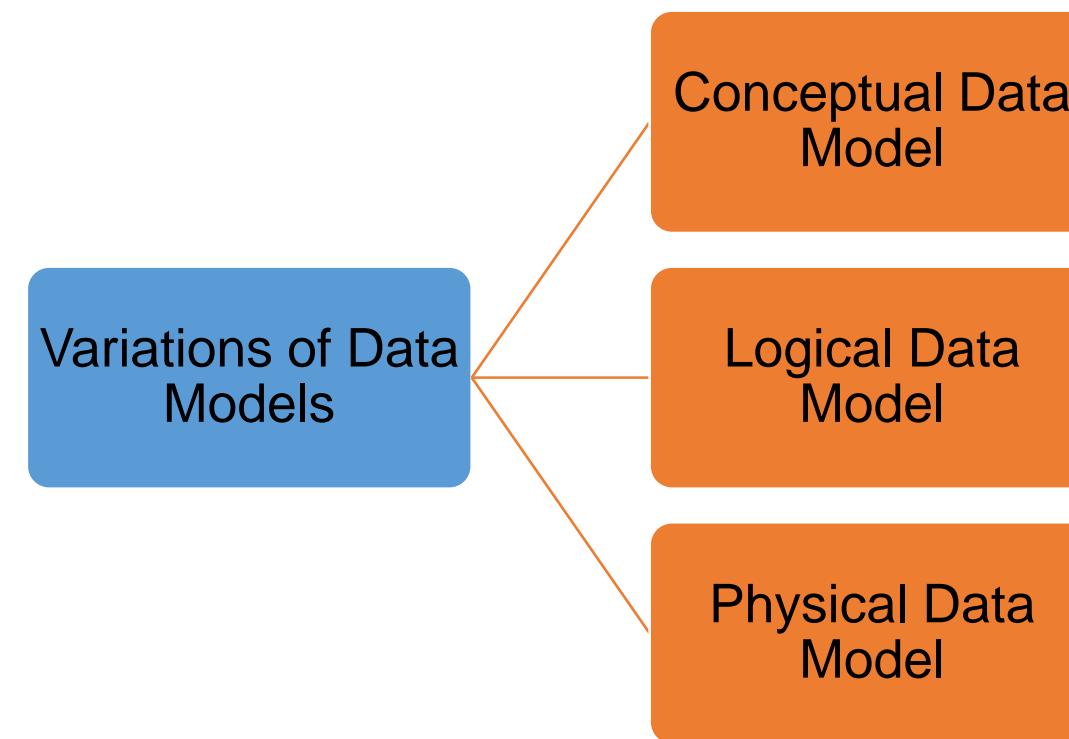
## ELEMENTS



# DATA MODELING

## OVERVIEW

A data model describes the entities, classes, or data objects relevant to a domain, the attributes that are used to describe them, and the relationships among them to provide a common set of semantics for analysis.



### CONCEPTUAL DATA MODEL

Includes important entities and the relationship between them

Does not specify attributes and primary keys

Can be used as the foundation for logical data models

### LOGICAL DATA MODEL

Includes all entities and relationships between them

Specifies attributes and a primary key for each entity

Specifies foreign keys, which identify the relationship between different entities

Involves normalization

### PHYSICAL DATA MODEL

Specifies all tables and columns

Includes foreign keys to identify relationships between tables

May include denormalization, depending on user requirements

May be significantly different from the logical data model

## ELEMENTS

Entity or Class

Attribute

- Name
- Value or Meaning
- Description

Relationship or Association

Cardinality and Ordinality

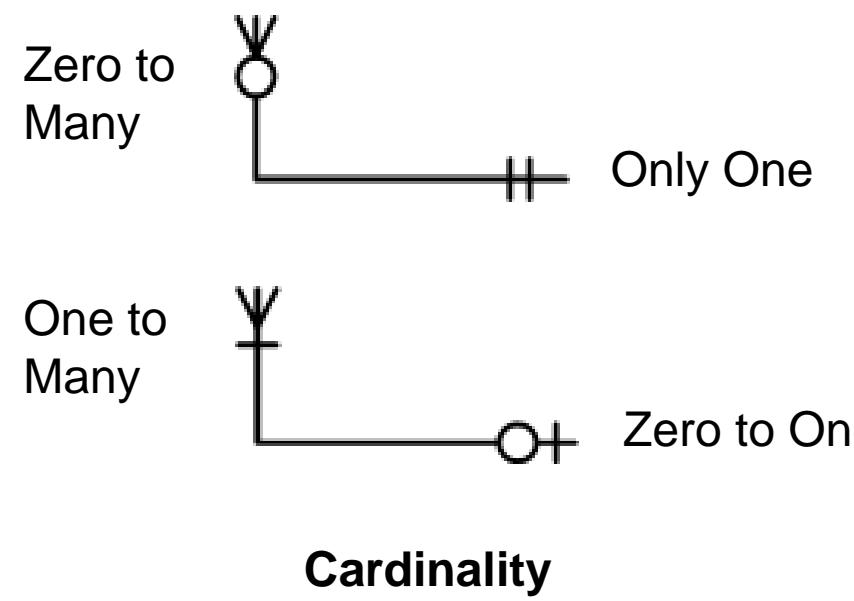
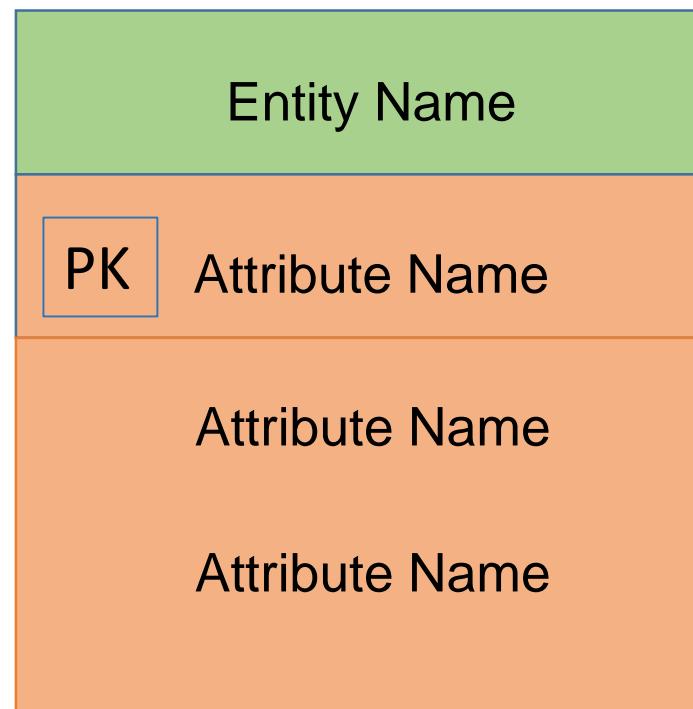
Metadata

Diagrams

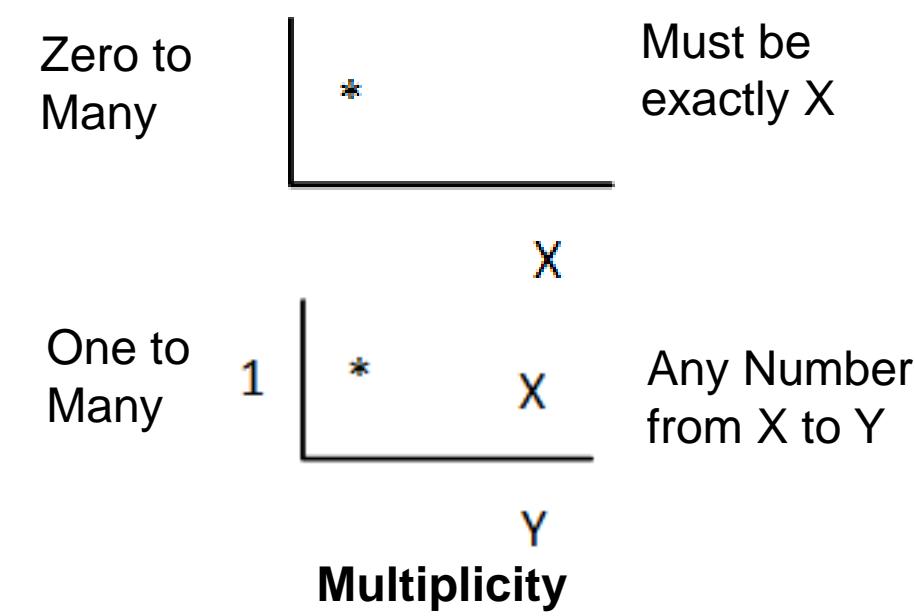
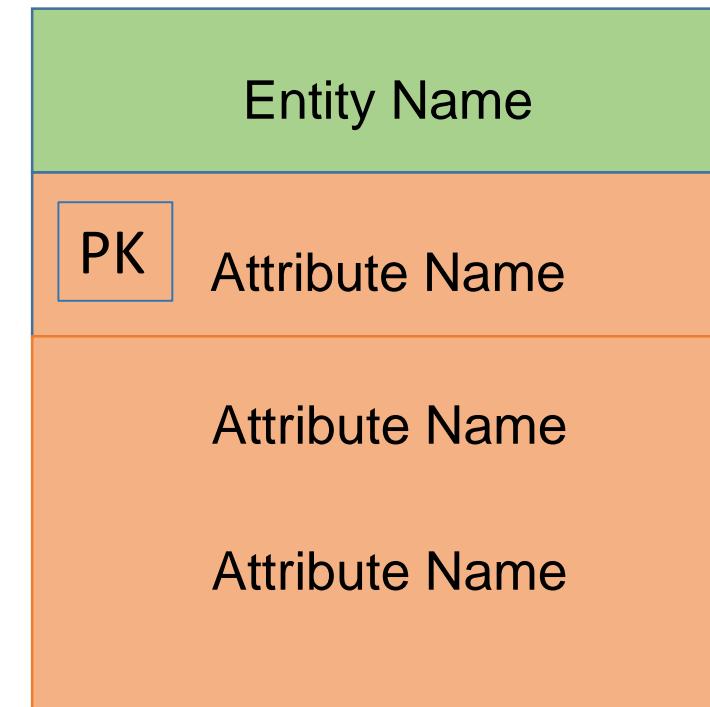
- Entity Relationship Diagram or Crow's Foot Notation
- UML Database Notation

## ENTITY RELATIONSHIP DIAGRAMS

## Crow's Foot Notation



## UML Database Notation



# PROCESS MODELING

## OVERVIEW

Process Modeling is a standardized graphical model used to show how work is carried out. It is a foundation for process analysis.

Used to describe a Business Process, System Process, and Program Process

Can be constructed on multiple levels, High (Enterprise or context) to Low (Operational)

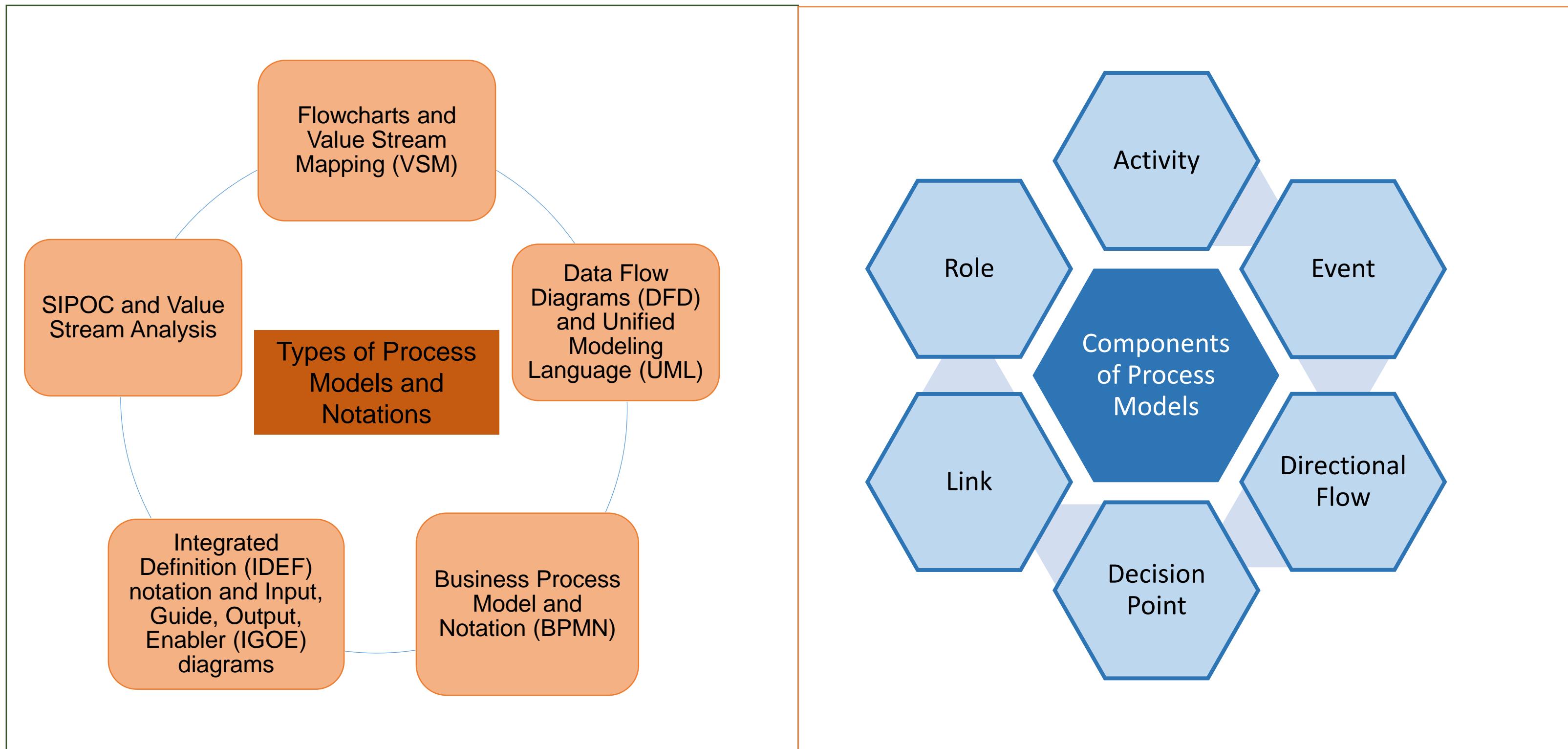
Used to define current state of process (as-is model) or potential future state (to-be model)

Process model includes

- Participants
- Business Event (trigger)
- Steps or Activities
- Path
- Decision Points
- Result of the process

# PROCESS MODELING (contd.)

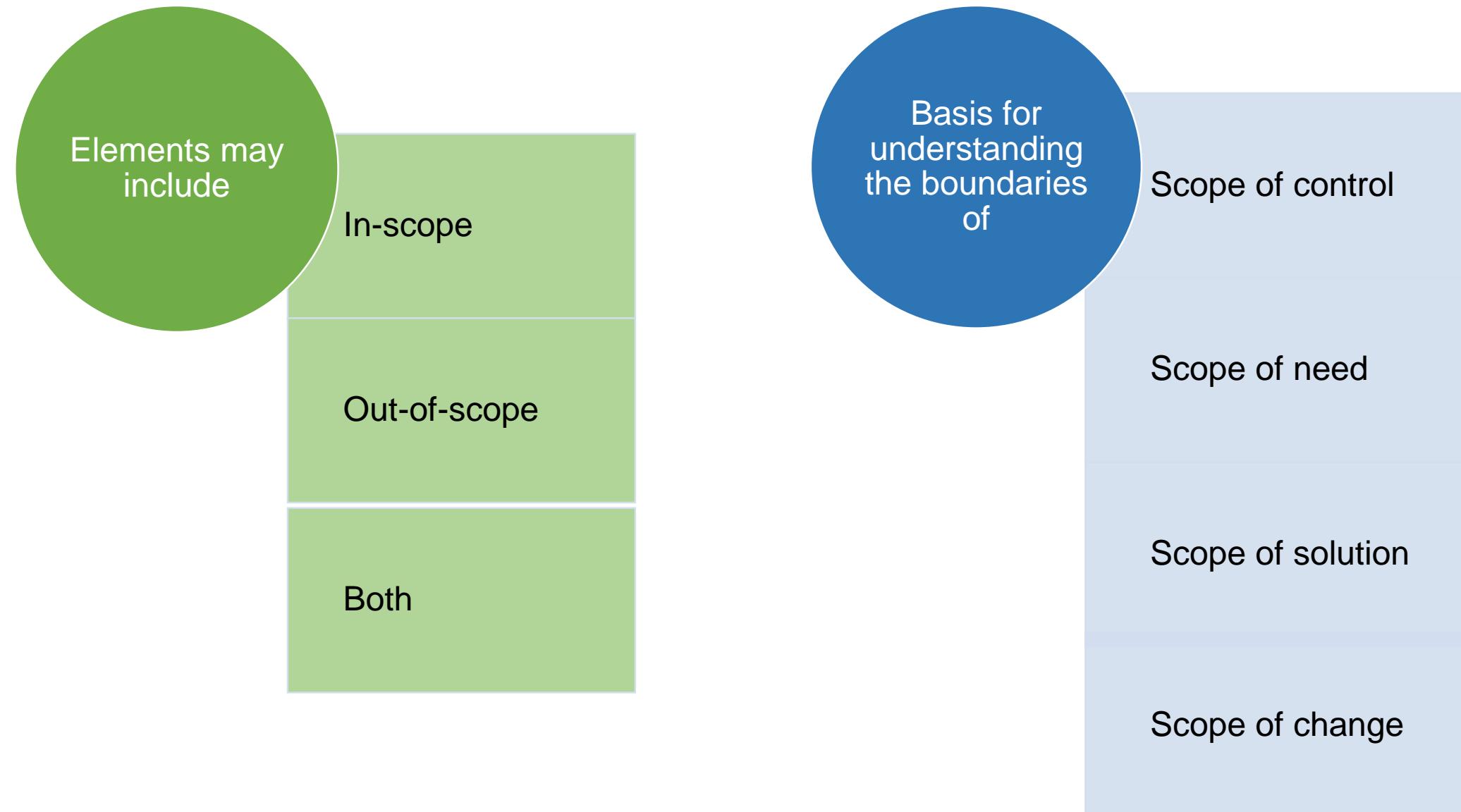
## ELEMENTS



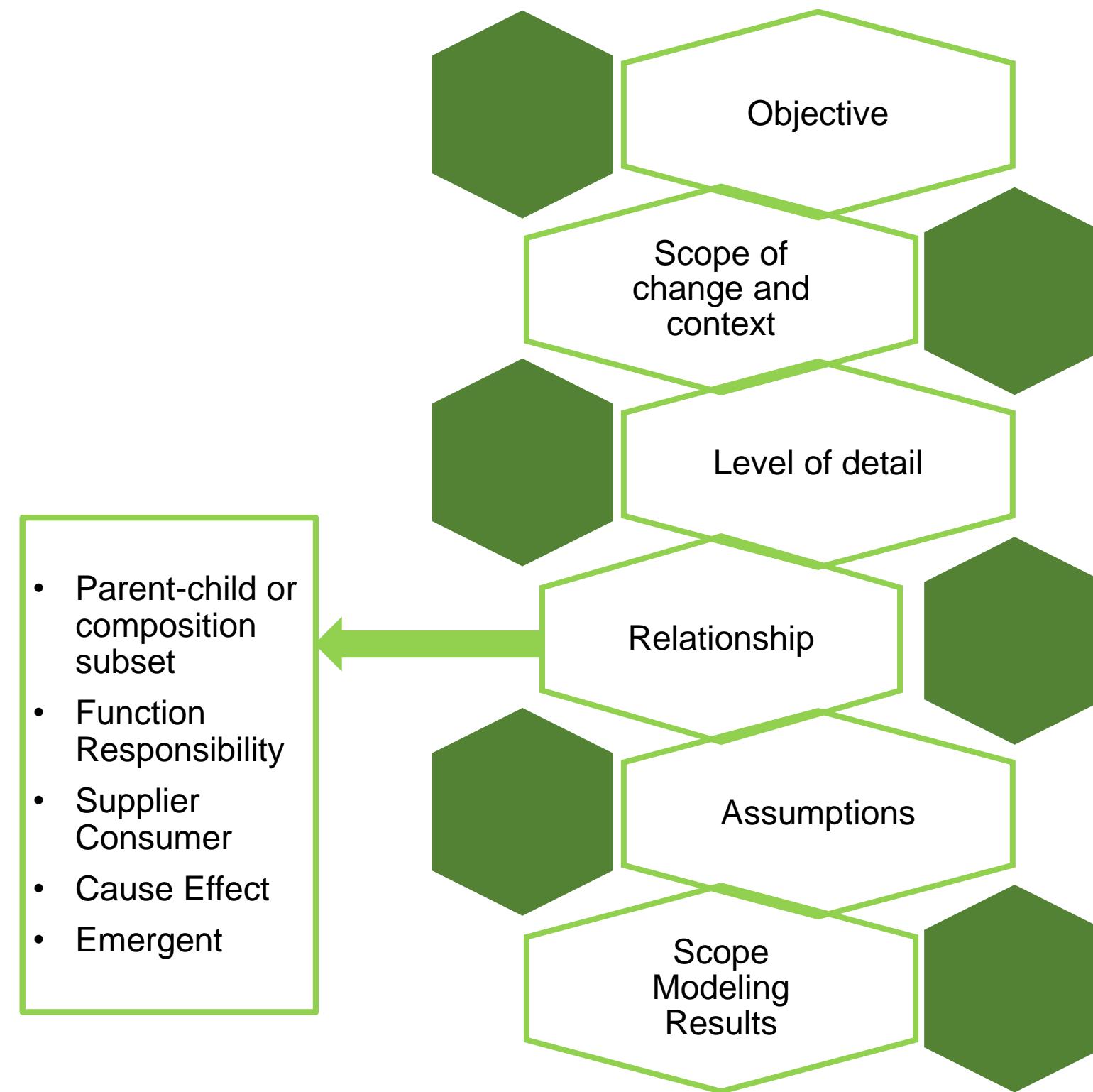
# SCOPE MODELS

## OVERVIEW

Scope Models define the nature of one or more limits or boundaries and place elements inside or outside those boundaries.



### ELEMENTS



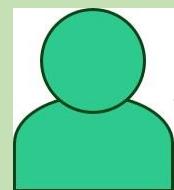
# USE CASES AND SCENARIOS

## OVERVIEW

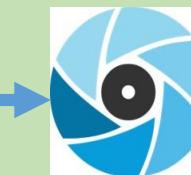
Use cases and scenarios describe how a person or system interacts with the solution being modeled to achieve a goal.

A use case describes several scenarios.

### Use Cases



Primary  
Actor



Solution or  
Secondary actors

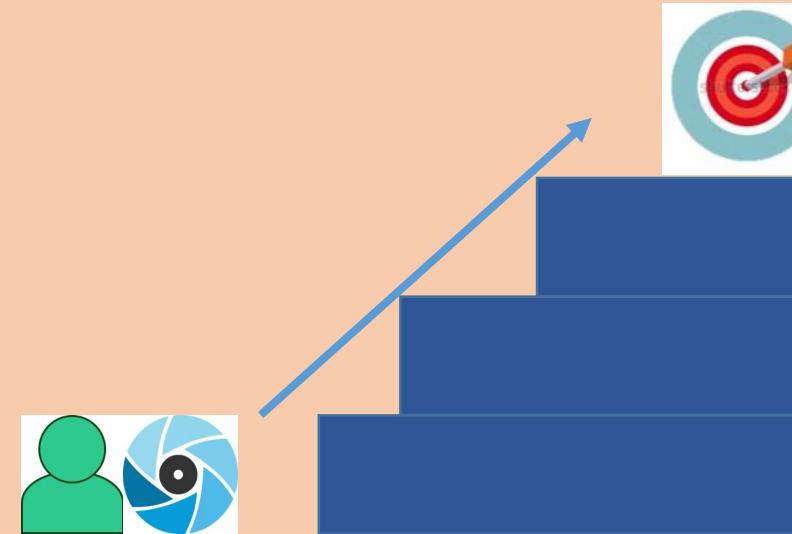
### Use Case Diagrams

Use case diagrams are graphical representations of the relationships between actors and one or more use cases supported by the solution.

### Scenarios

A scenario describes just one way that an actor can accomplish a particular goal.

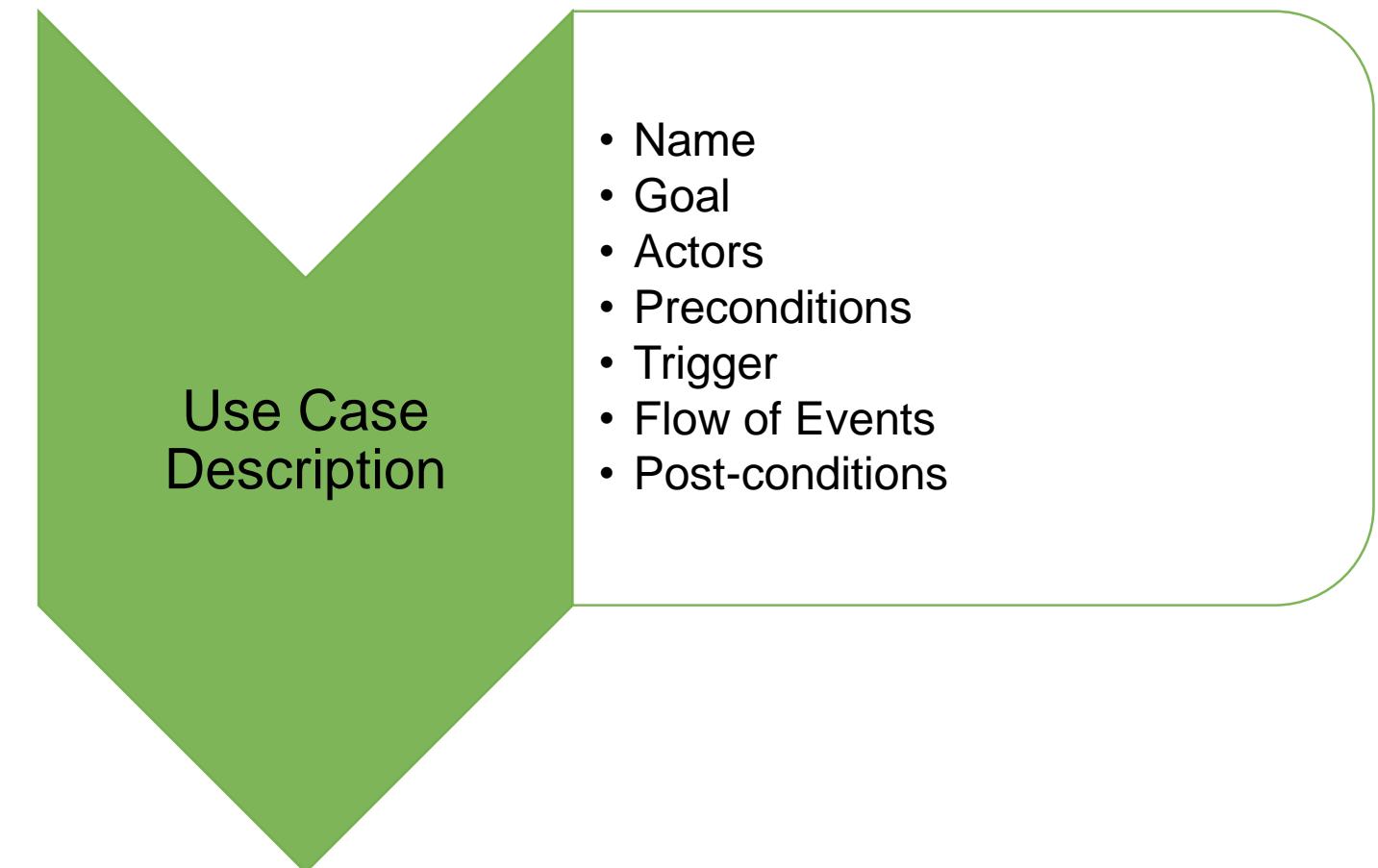
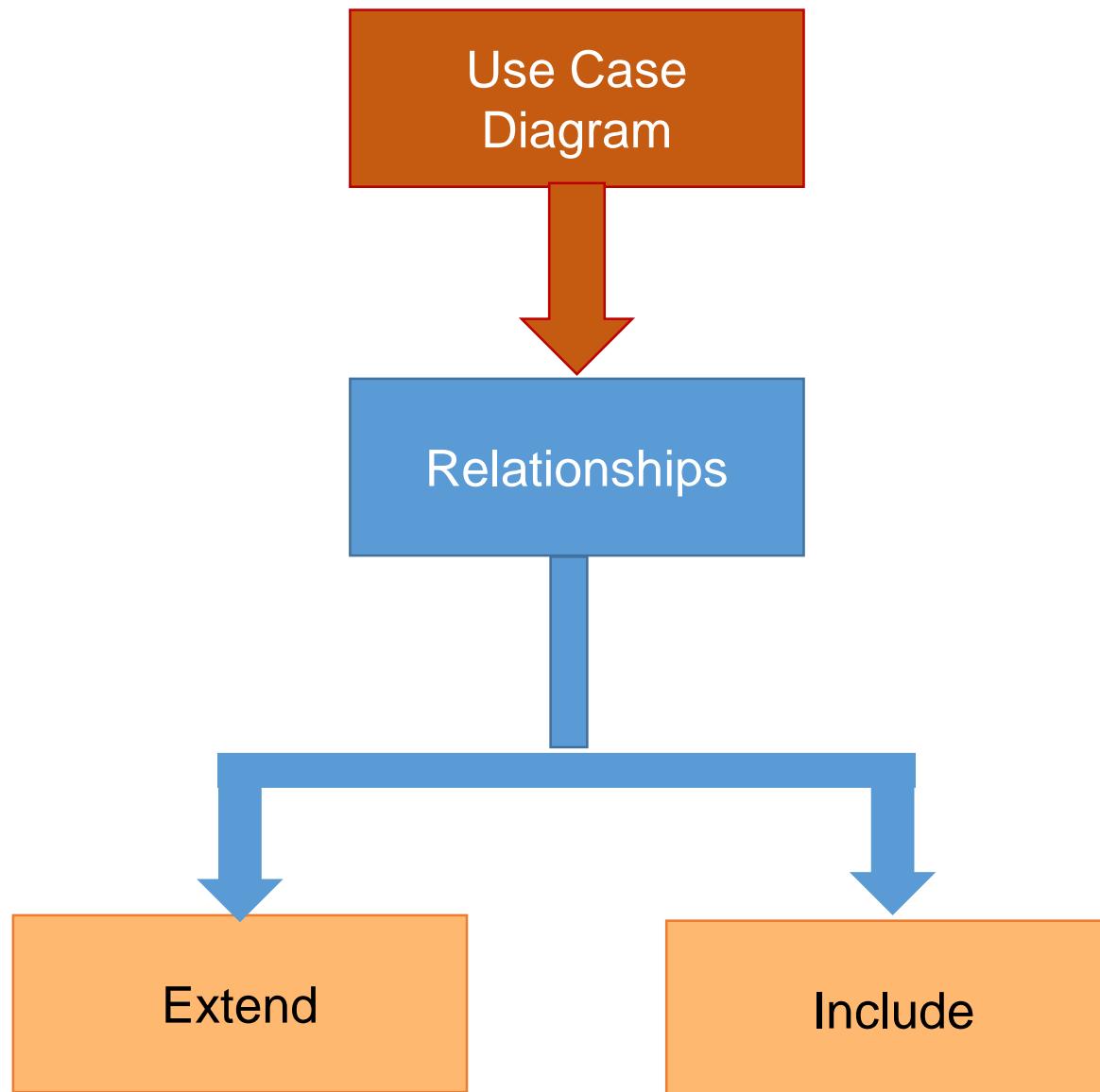
Goal



Actors or Solution

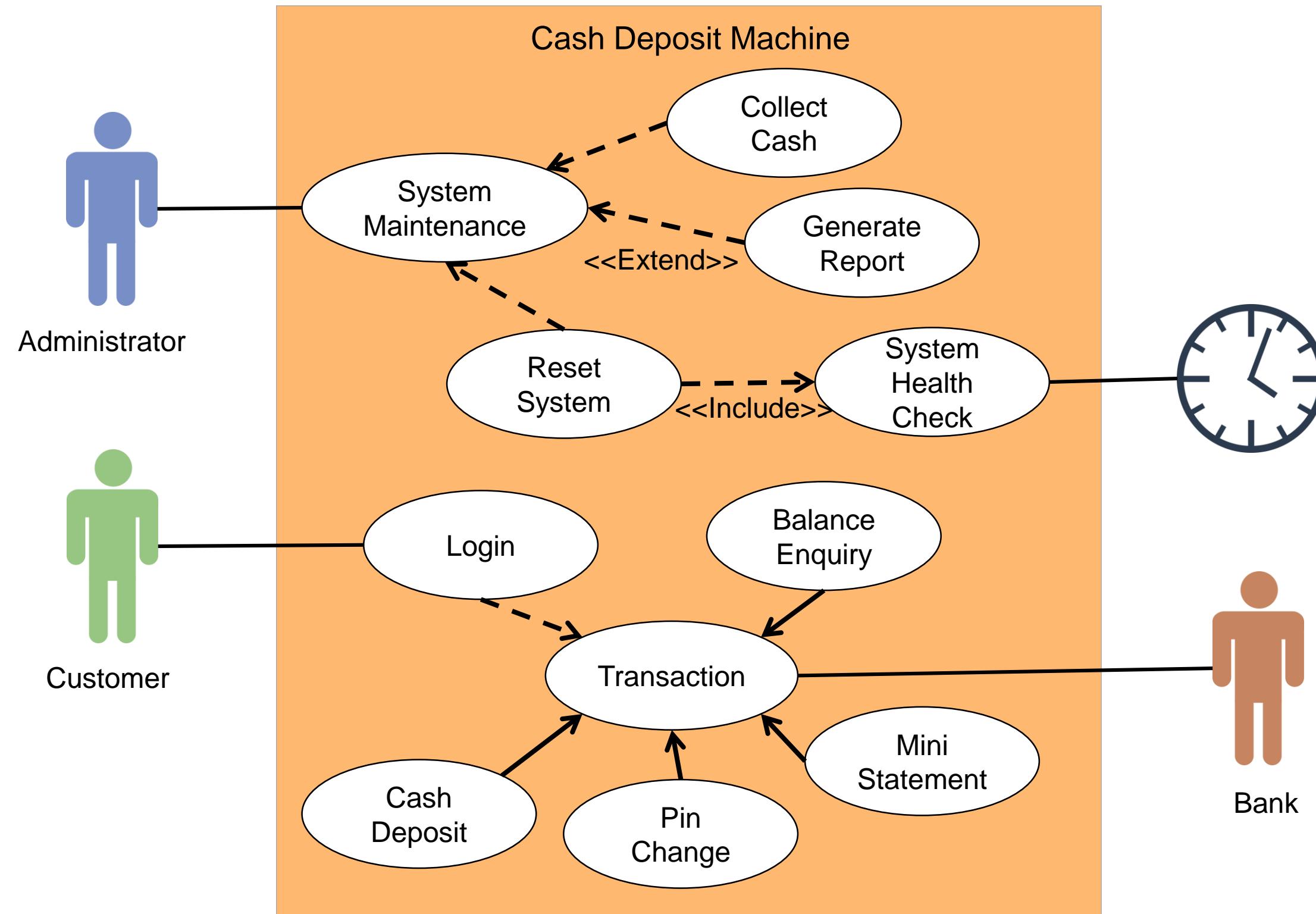
# USE CASES AND SCENARIOS (contd.)

## ELEMENTS



# USE CASE DIAGRAM

## EXAMPLE



# USE CASE DESCRIPTION

## EXAMPLE

| Use Case ID             | Unique ID                                                   |
|-------------------------|-------------------------------------------------------------|
| Name                    | Verb + Noun                                                 |
| Description             | Short Description                                           |
| Goals                   | Goal / Benefit of the use case                              |
| Actors                  | Primary / Secondary / Supporting actors                     |
| Trigger                 | Trigger point                                               |
| Precondition            | Pre-condition                                               |
| Main Flow               | Steps / Actions between two parties                         |
| Alternate Flow          | Alternate Flow                                              |
| Post Conditions         | Post conditions once all steps executed / actions performed |
| Related Use Case        | Related Use Case IDs                                        |
| Business Rules          | Business Rules ID                                           |
| Frequency of occurrence | How frequently it is triggered                              |
| Notes                   | Any other notes – Assumptions, Constraints, etc.            |

# SEQUENCE DIAGRAM

## OVERVIEW

Sequence diagrams are used to model the logic of usage scenarios by showing the information passed between the objects in the system through the execution of the scenarios.

Shows how processes or objects interact during a scenario

Does not show how objects are related to each other

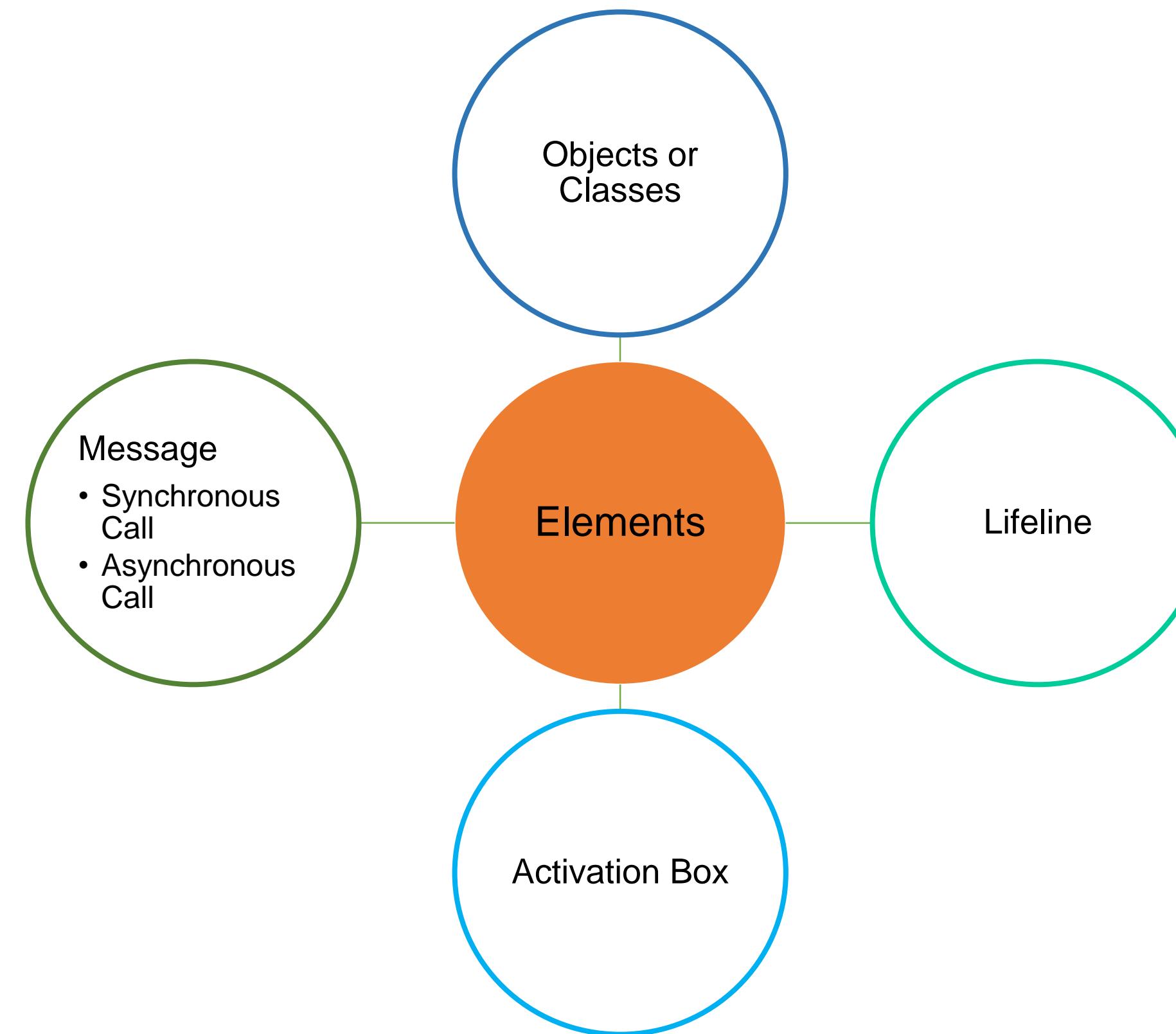
A Sequence Diagram  
or Event Diagram

Shows how user interface components or software components interact

The order of messages is represented in a top-down and left-to-right sequence

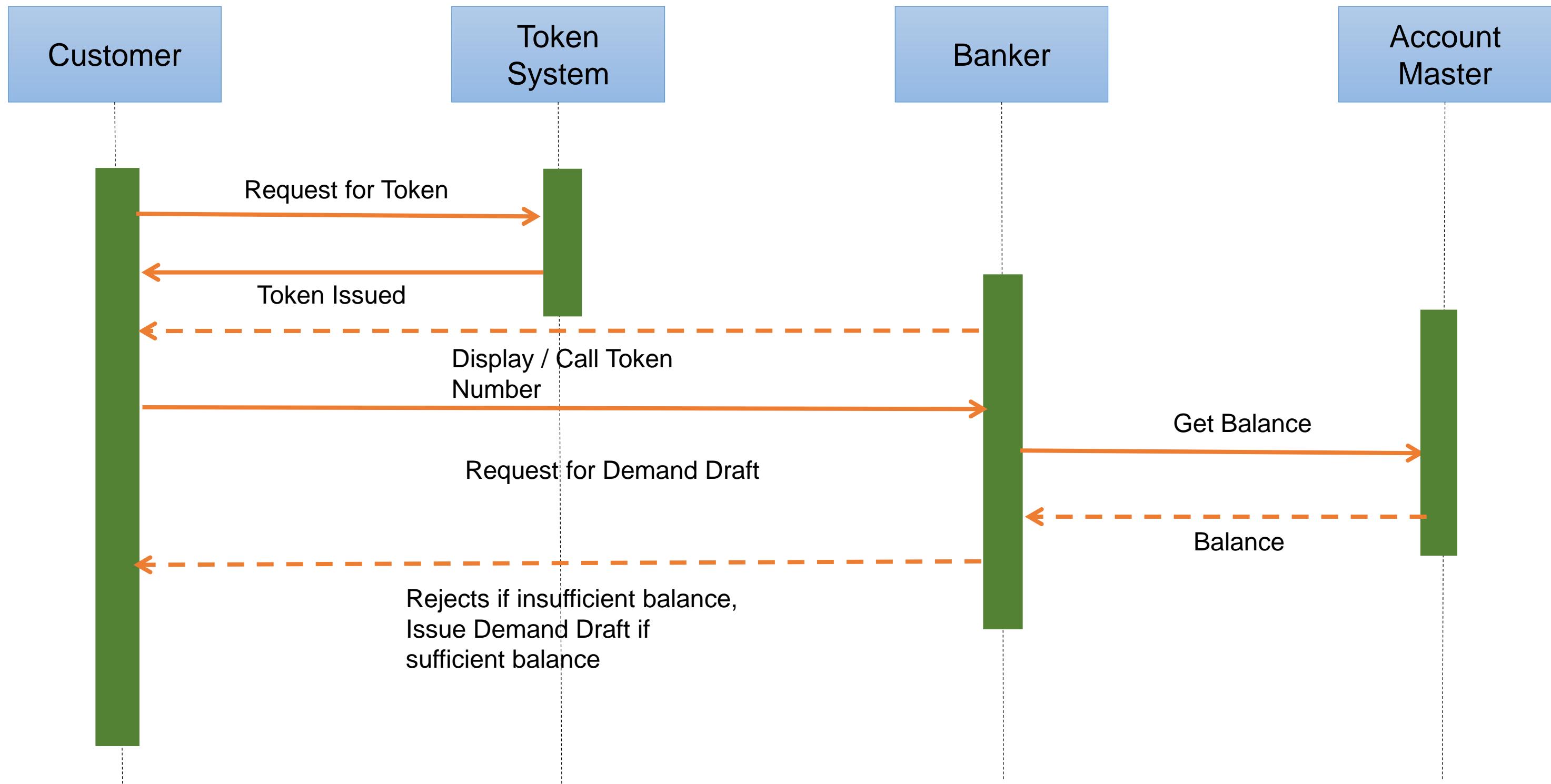
## SEQUENCE DIAGRAM (contd.)

### ELEMENTS



## SEQUENCE DIAGRAM (contd.)

### EXAMPLE



A state modeling is used to describe and analyze the different possible states of an entity within a system, how that entity changes from one state to another, and what can happen to the entity when it is in each state.

### A State Model describes

A set of possible states for an entity

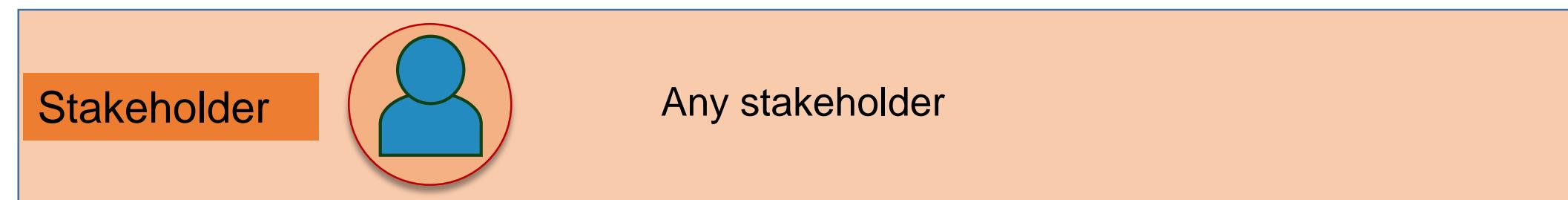
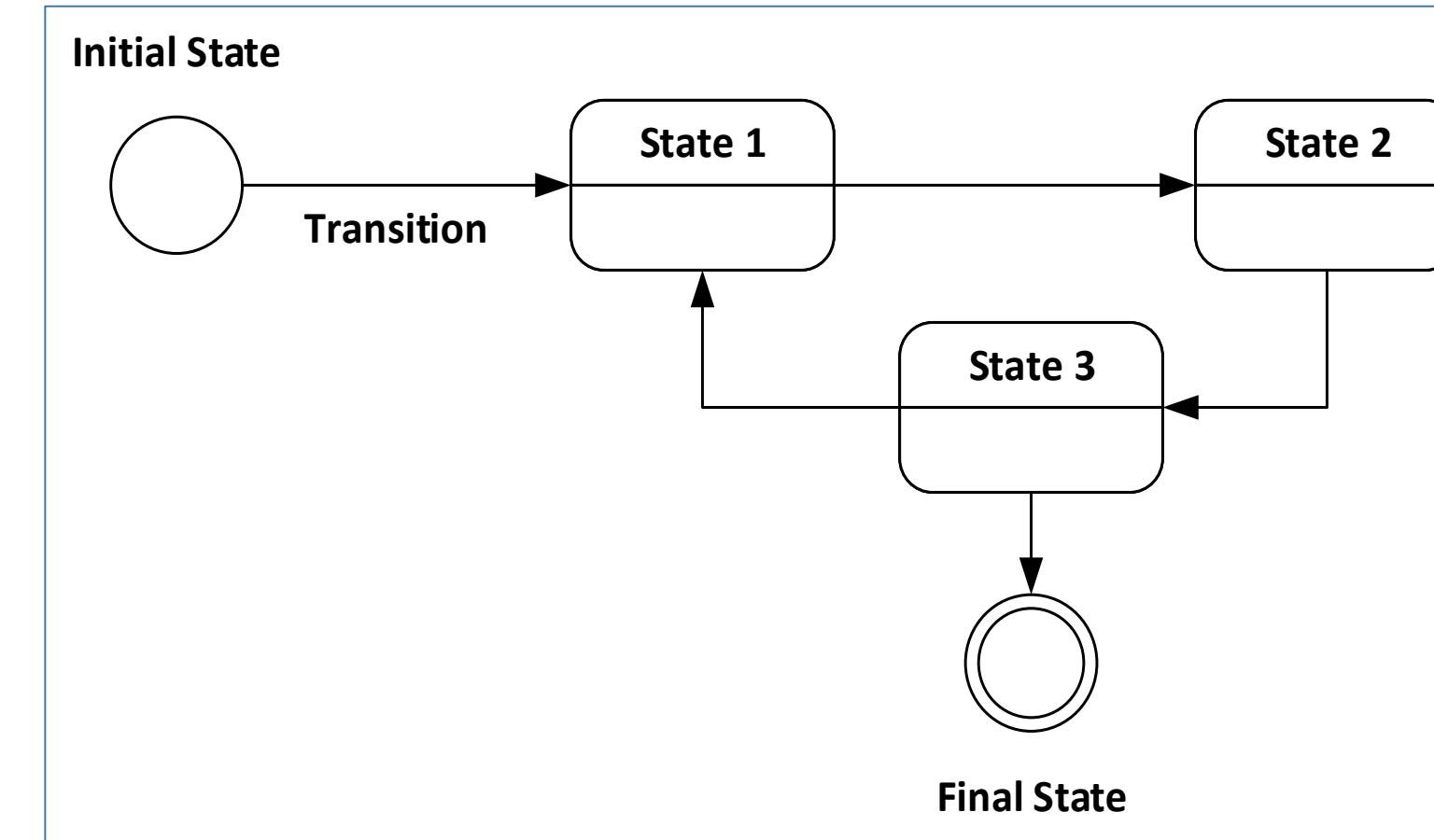
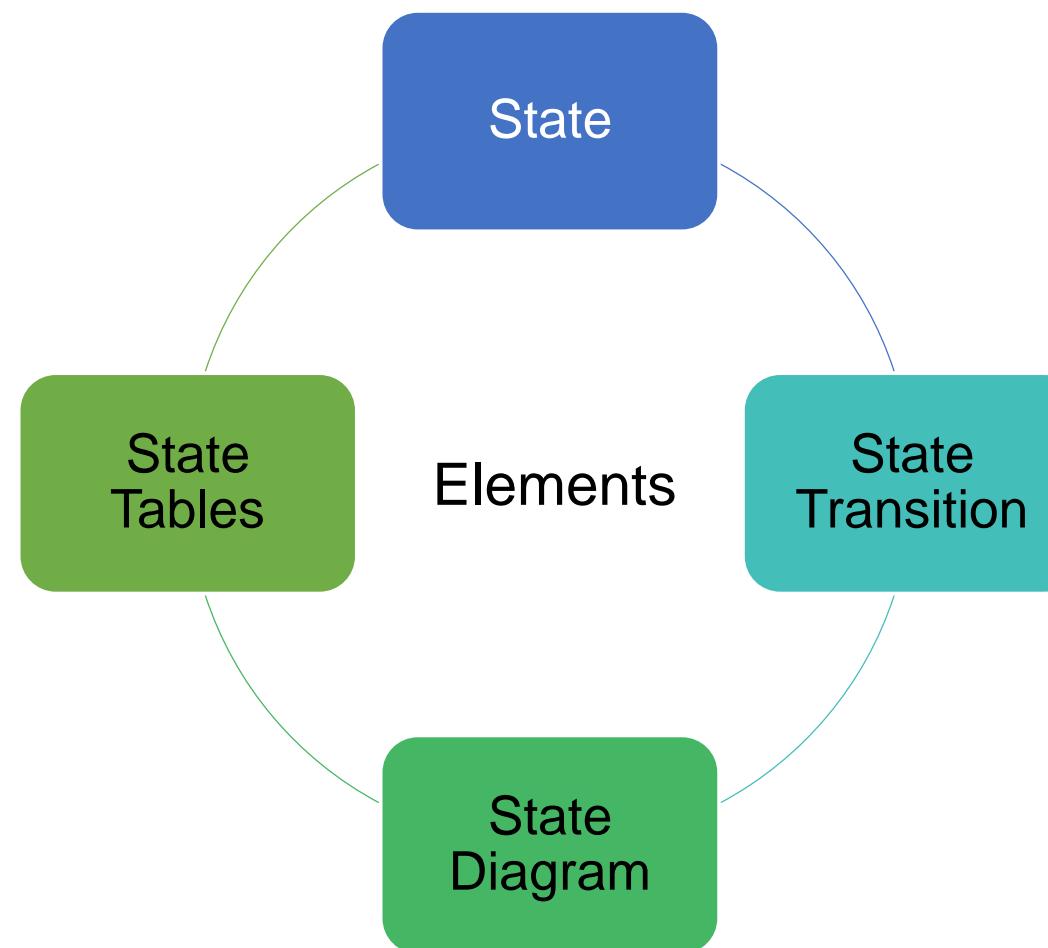
The sequence of states that the entity can be in

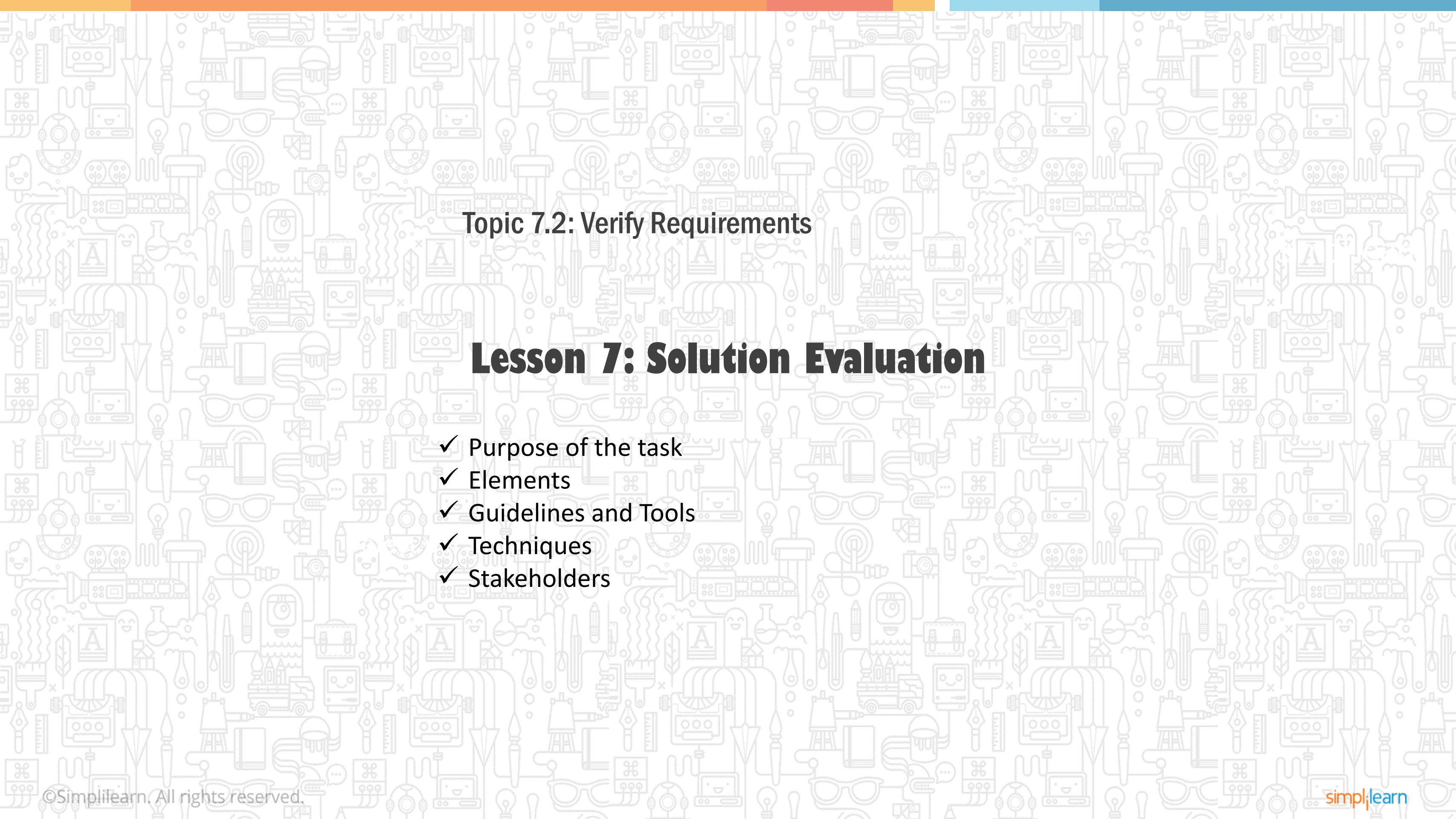
How an entity changes from one state to another

The events and conditions that cause the entity to change states

The actions that can or must be performed by the entity in each state

## ELEMENTS AND STAKEHOLDERS





## Topic 7.2: Verify Requirements

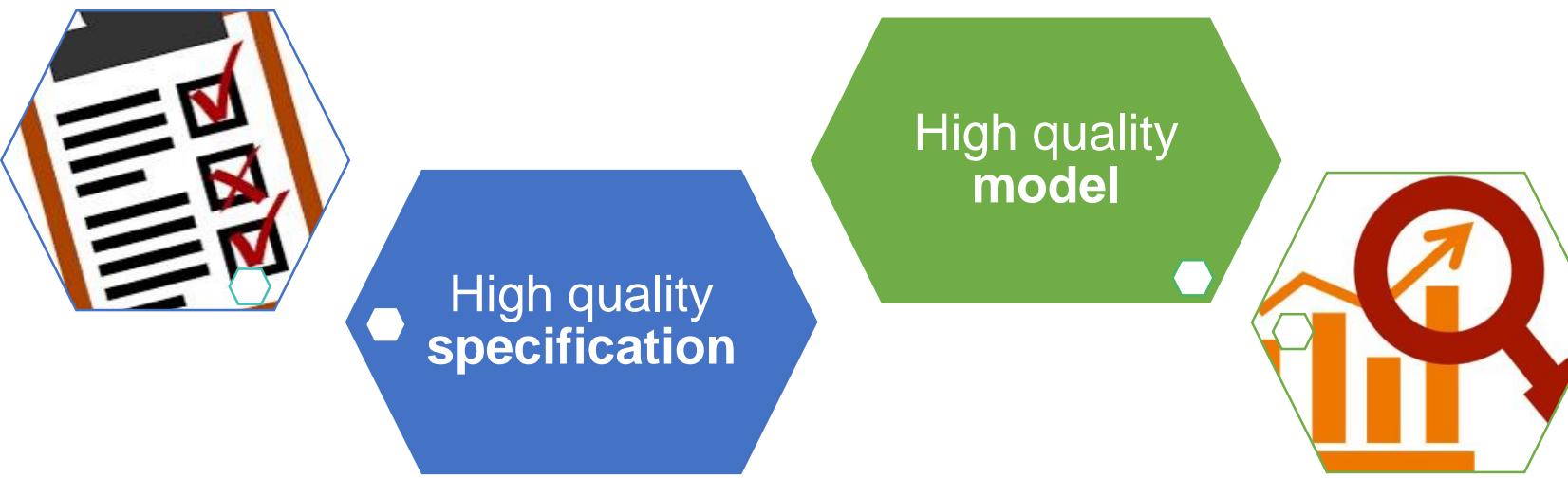
# Lesson 7: Solution Evaluation

- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# VERIFY REQUIREMENTS

## PURPOSE

The purpose of this task is to ensure that the requirements and the designs specifications and models meet **quality standards** and are usable for the purpose.



### Input

Requirements  
(specified and  
modeled)

### Focus of the Task

Verifying the requirements

### Output

Requirements  
(verified)

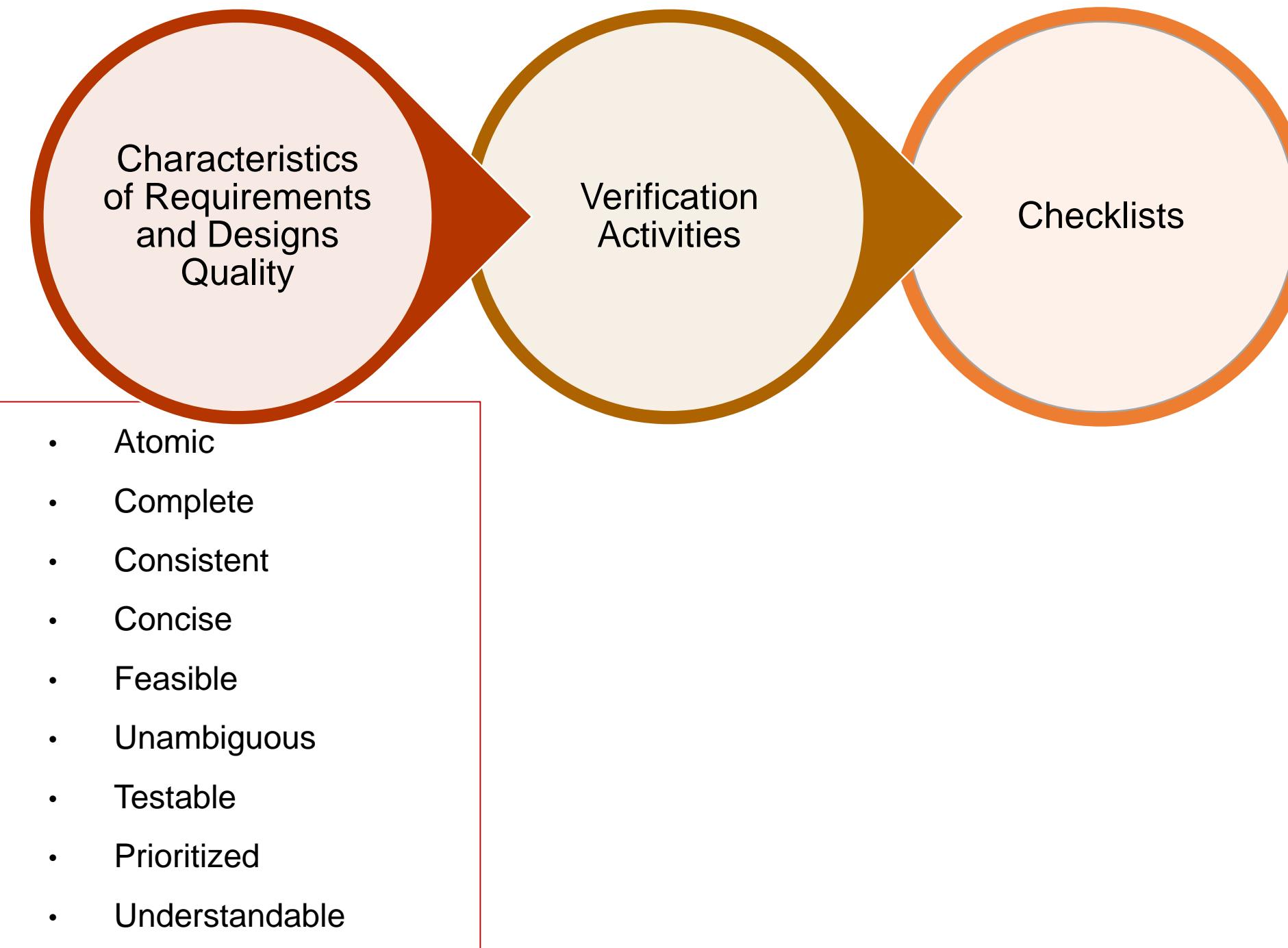
# VERIFY REQUIREMENTS

## ELEMENTS



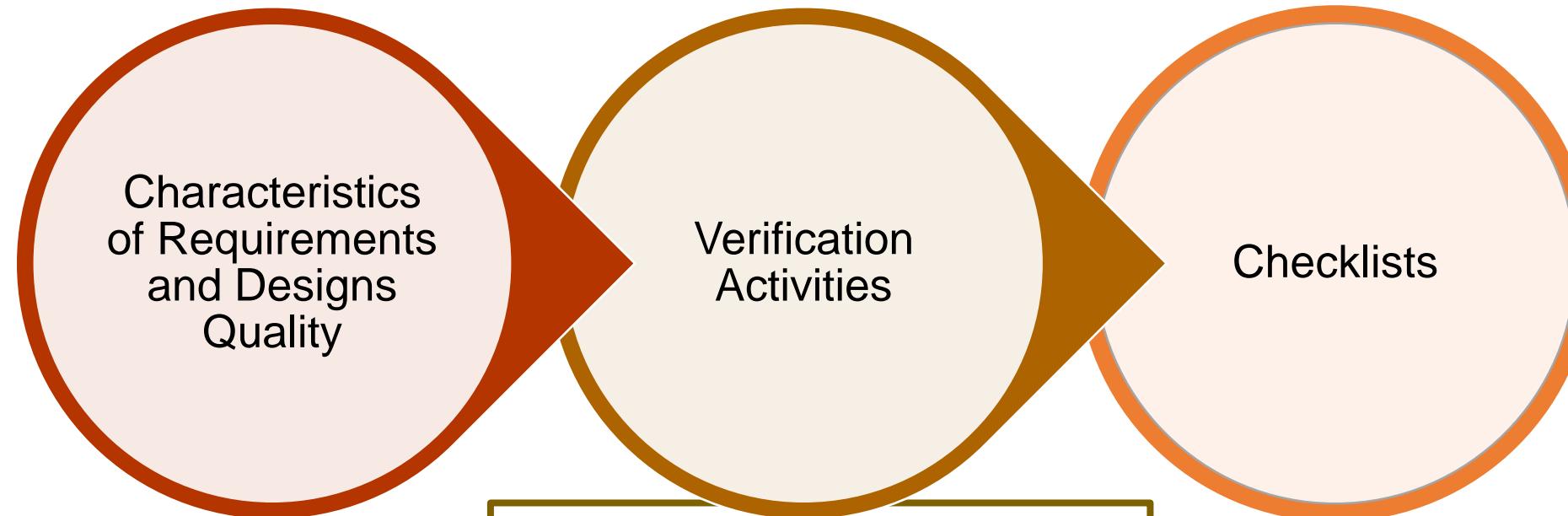
## VERIFY REQUIREMENTS (contd.)

### ELEMENTS



# VERIFY REQUIREMENTS (contd.)

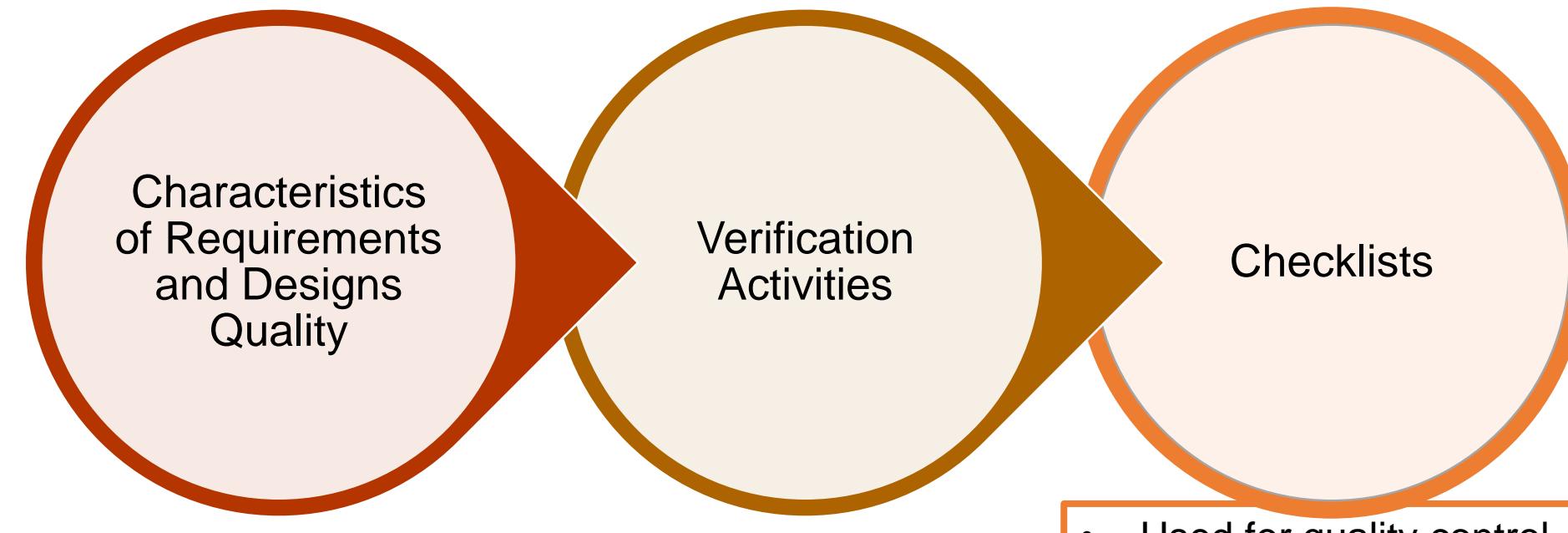
## ELEMENTS



- Performed iteratively throughout the requirements analysis process
- Requirements are verified for the following:
  - Compliance with organizational standards
  - Correct usage of modeling notations and templates
  - Consistency between models
  - Understandable terminology for stakeholders

## VERIFY REQUIREMENTS (contd.)

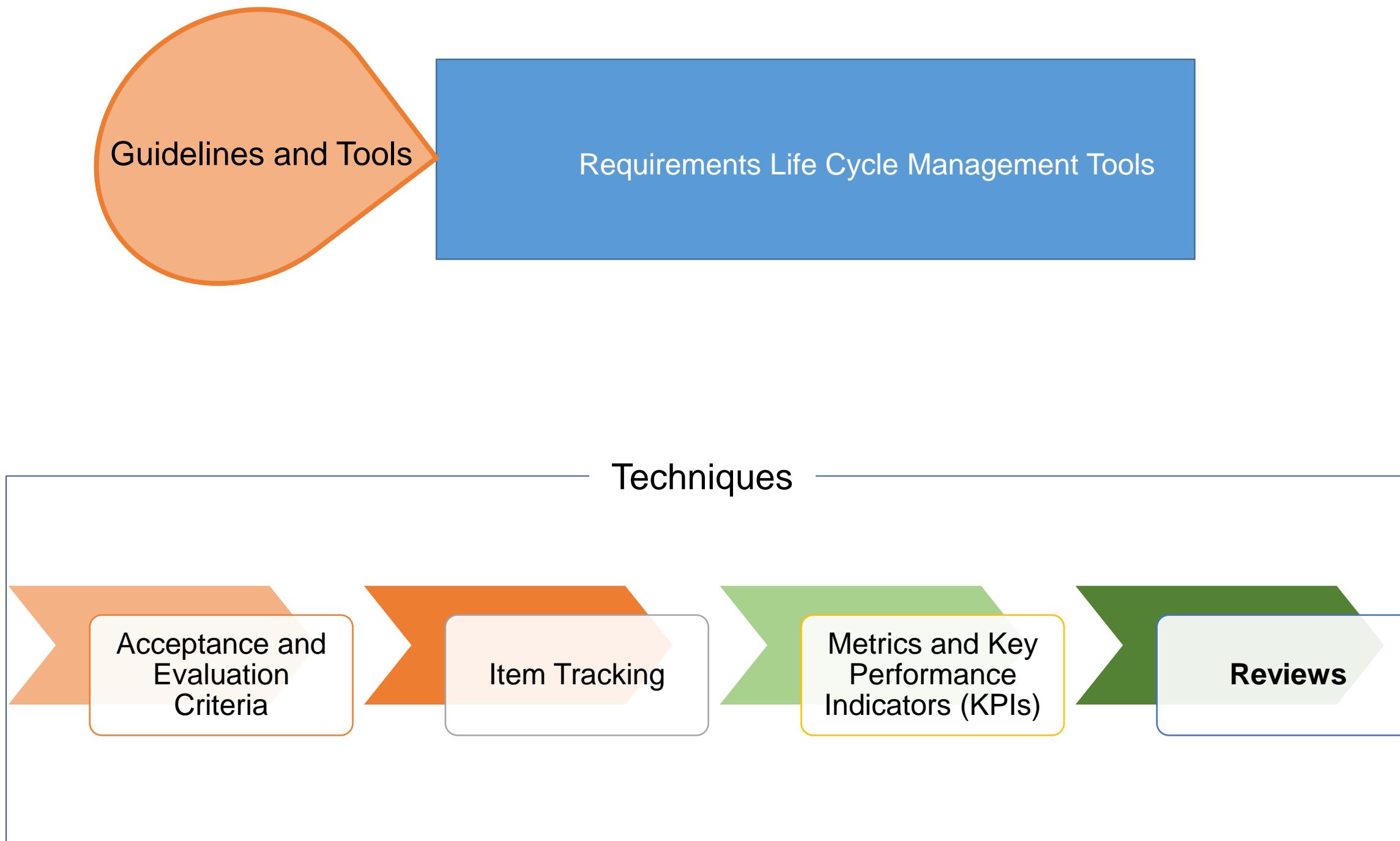
### ELEMENTS



- Used for quality control when verifying requirements or designs
- Include a set of quality elements that business analyst use to verify requirements

# VERIFY REQUIREMENTS

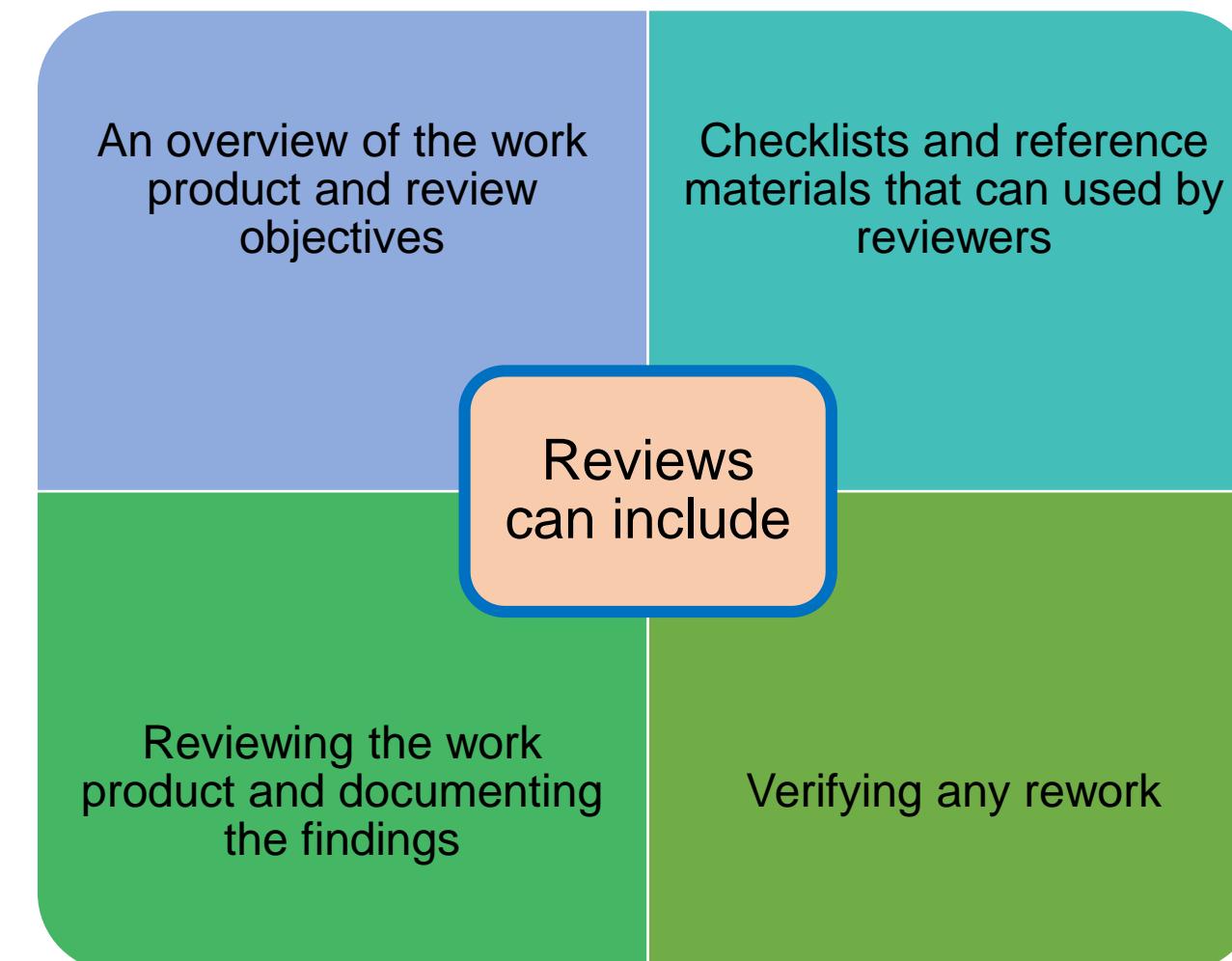
## GUIDELINES AND TOOLS — TECHNIQUES



# VERIFY REQUIREMENTS

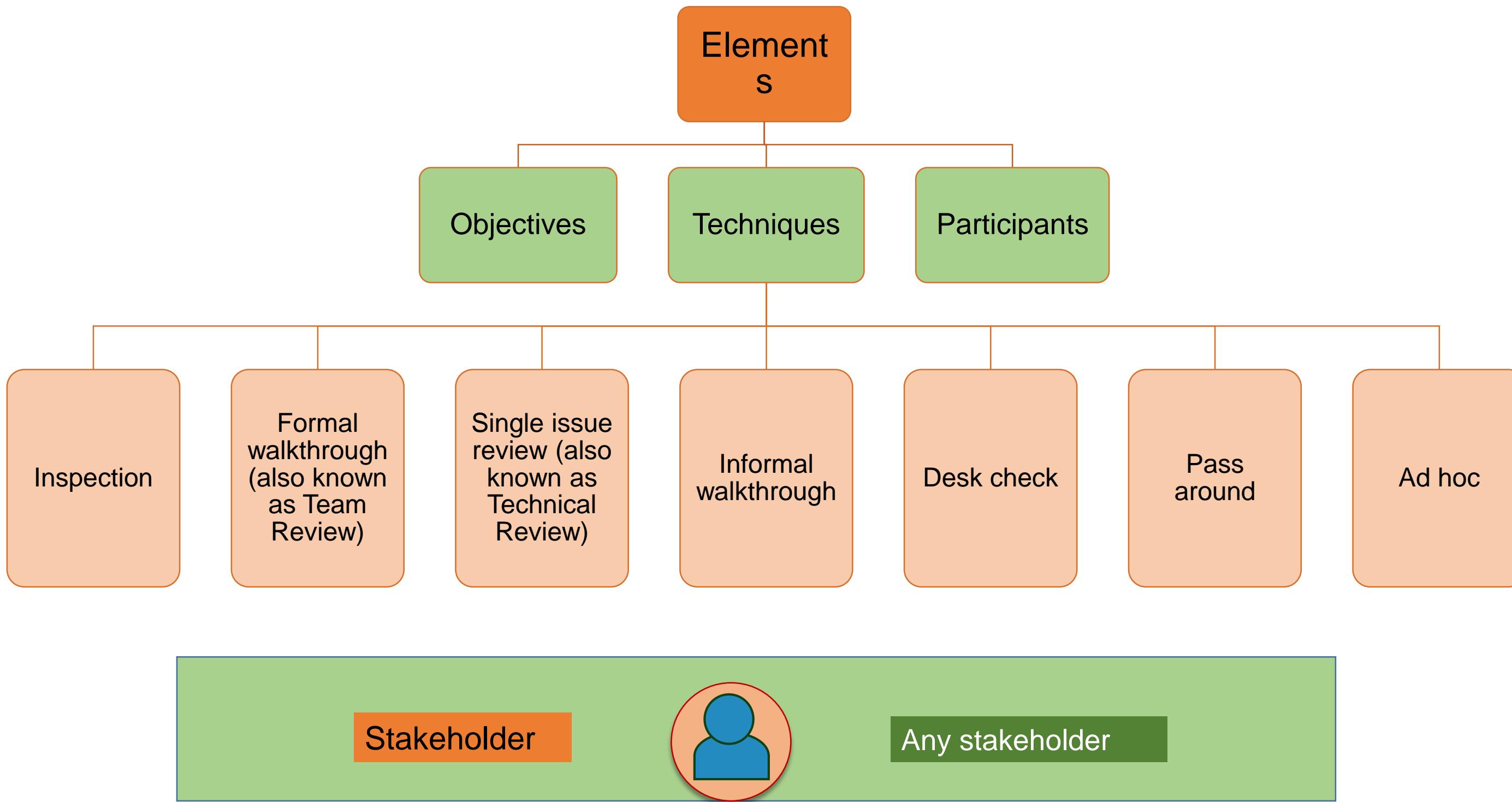
## REVIEWS — OVERVIEW

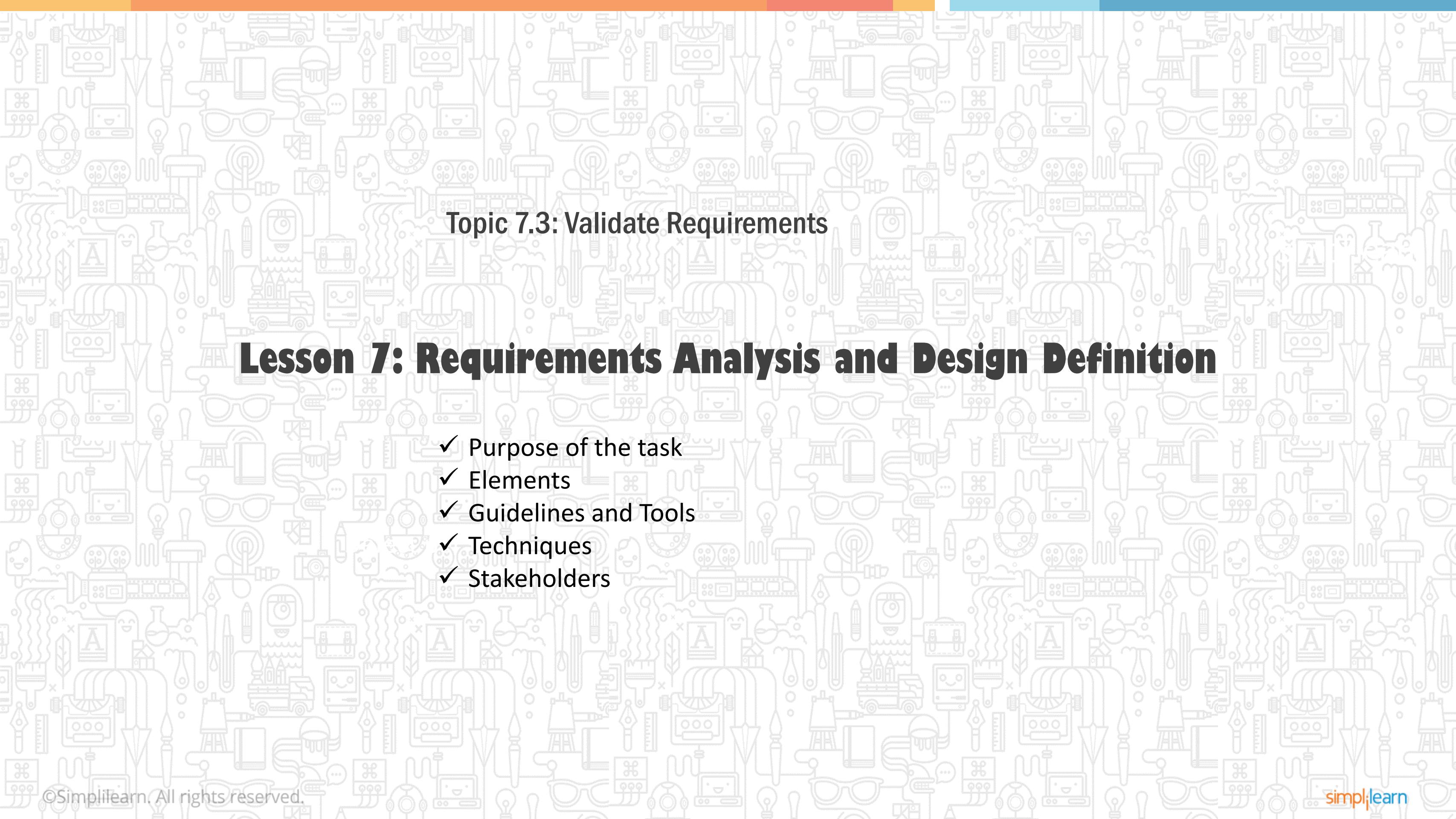
Reviews are used to evaluate the content of a work product.



# VERIFY REQUIREMENTS

## REVIEWS — ELEMENTS AND STAKEHOLDERS





### Topic 7.3: Validate Requirements

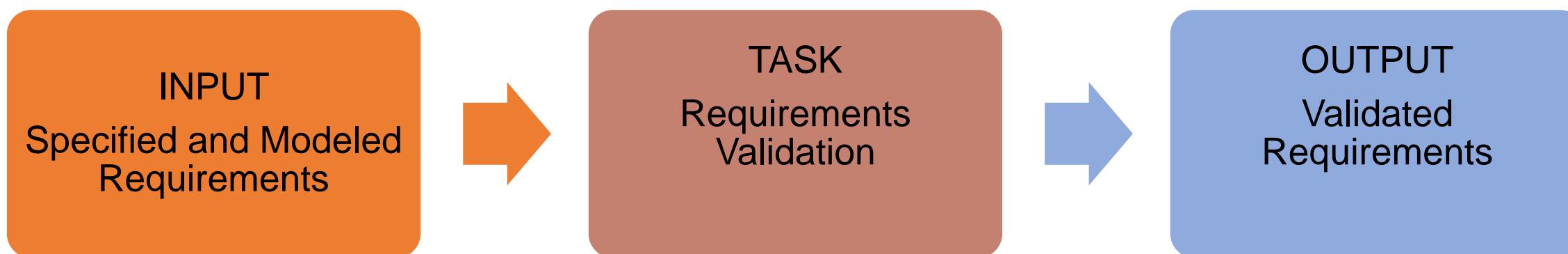
## Lesson 7: Requirements Analysis and Design Definition

- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# VALIDATE REQUIREMENTS

## PURPOSE

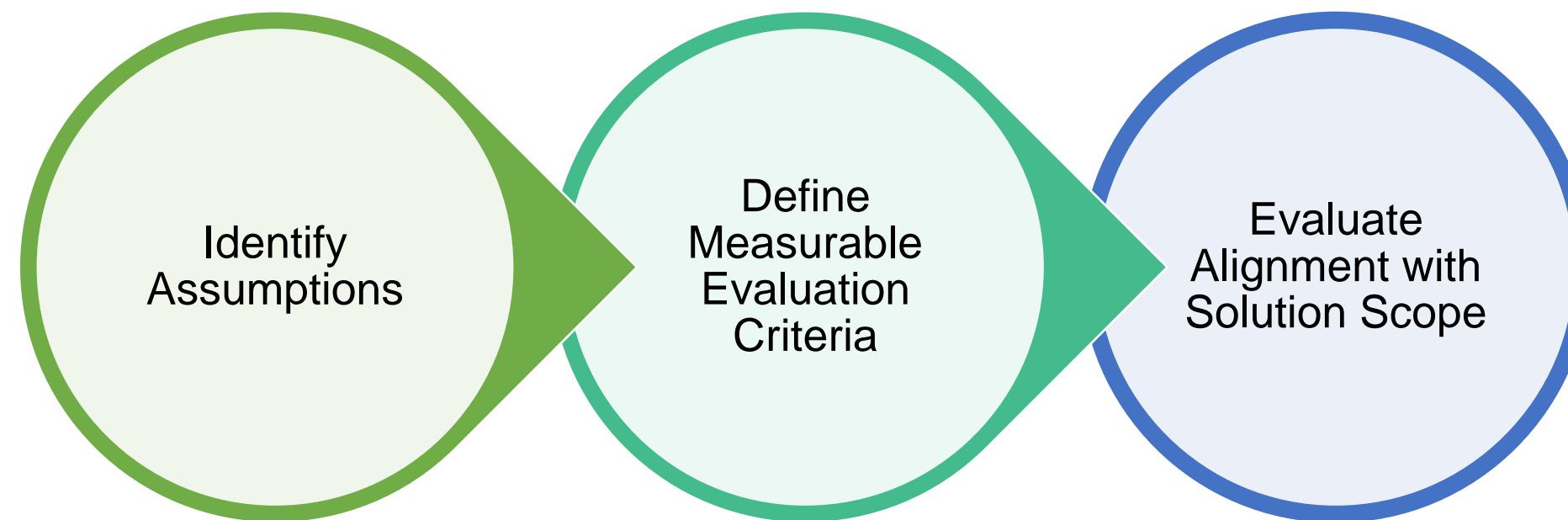
Requirements validation is an ongoing process to ensure that the stakeholders, solution, and transition requirements align to the business requirements. It also validate the designs to ensure they satisfy the stated requirements.



## VALIDATE REQUIREMENTS (contd.)

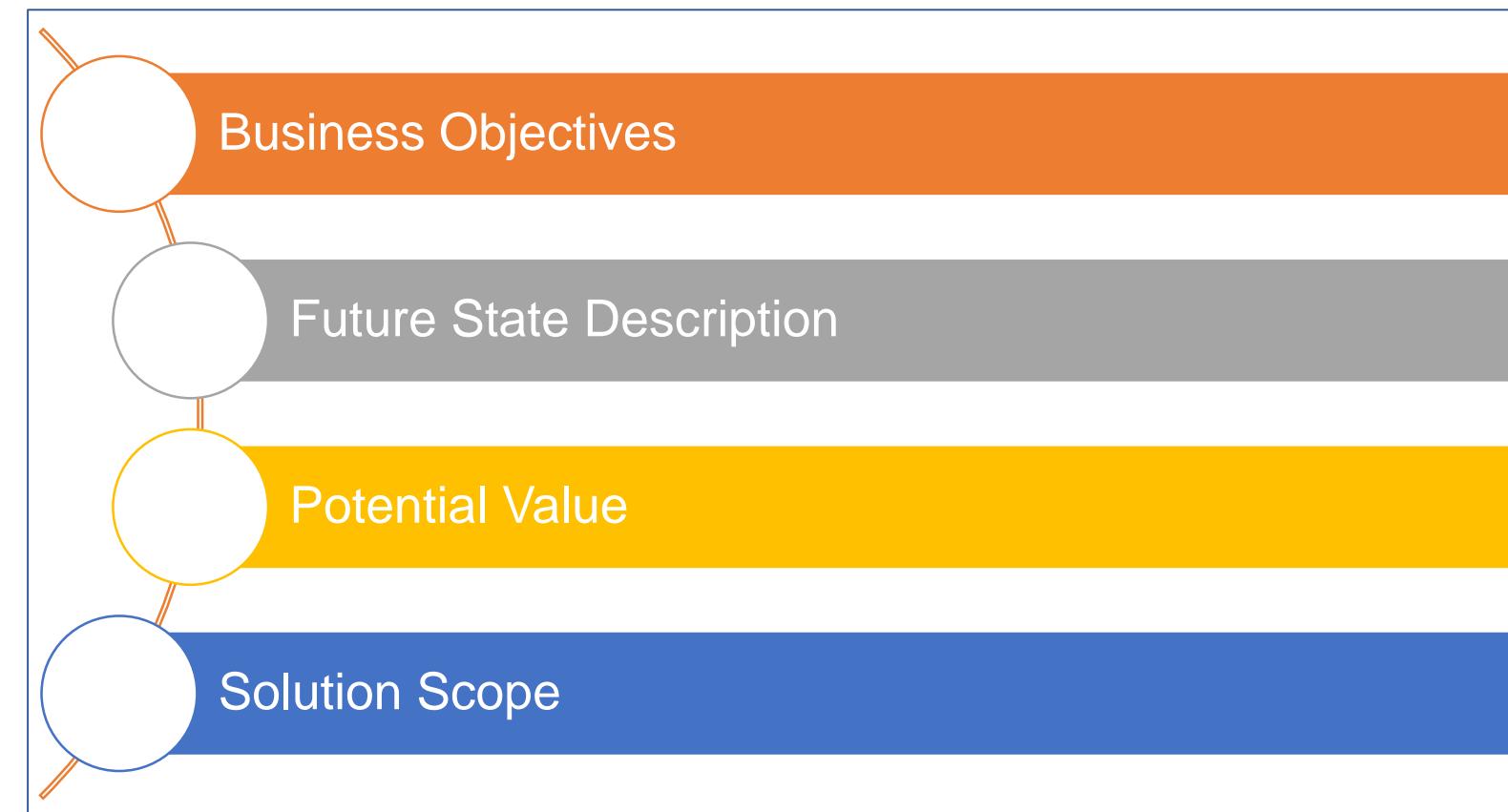
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### ELEMENTS



## VALIDATE REQUIREMENTS (contd.)

### GUIDELINES AND TOOLS



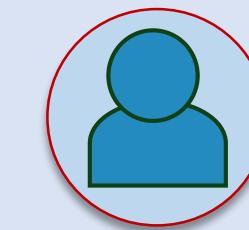
## VALIDATE REQUIREMENTS (contd.)

### TECHNIQUES AND STAKEHOLDERS

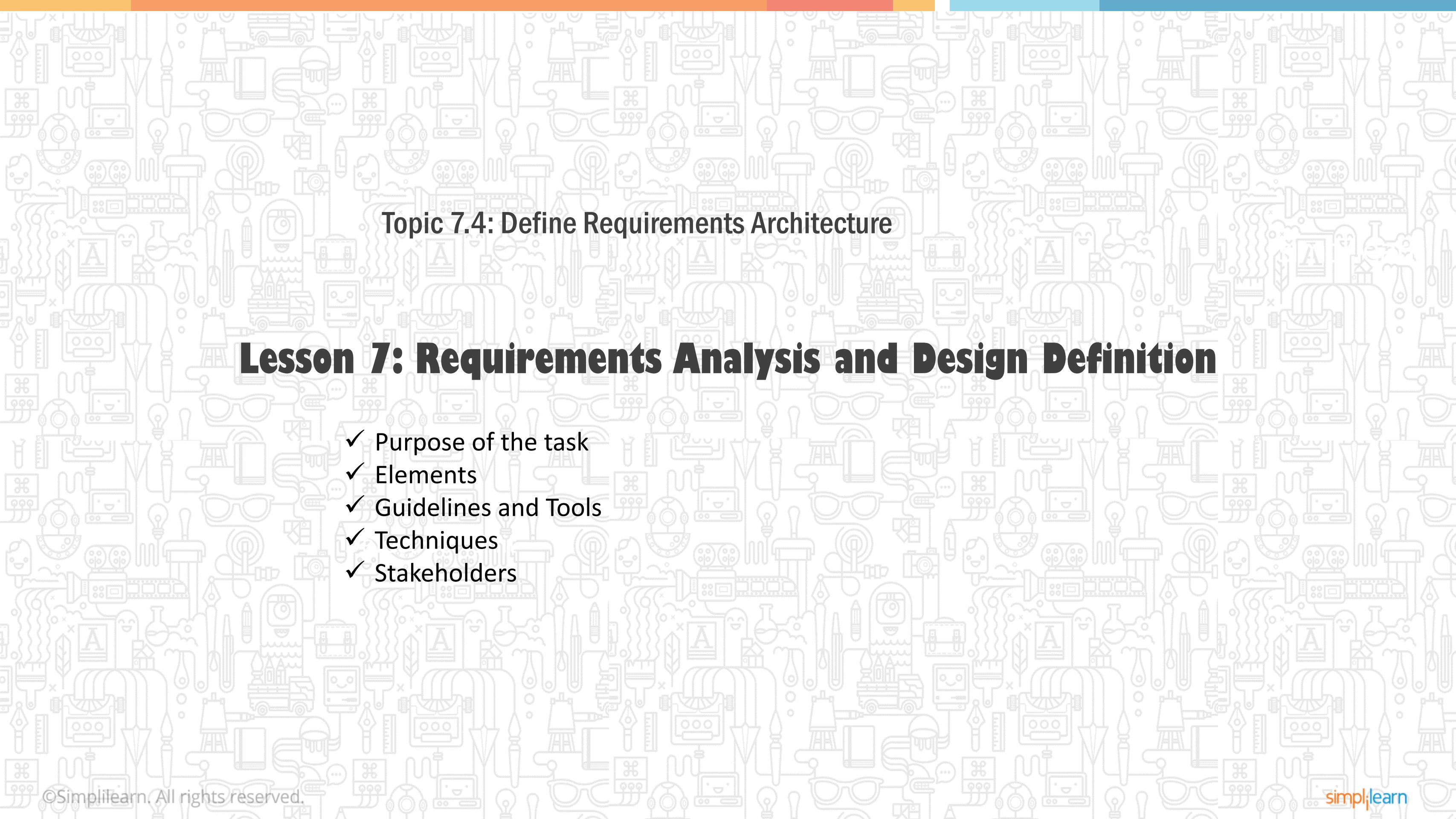


- Acceptance and Evaluation Criteria
- Document Analysis
- Financial Analysis
- Item Tracking
- Metrics and Key Performance Indicators (KPIs)
- Reviews
- Risk Analysis and Management

Stakeholder



Any stakeholder



Topic 7.4: Define Requirements Architecture

## Lesson 7: Requirements Analysis and Design Definition

- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# DEFINE REQUIREMENTS ARCHITECTURE

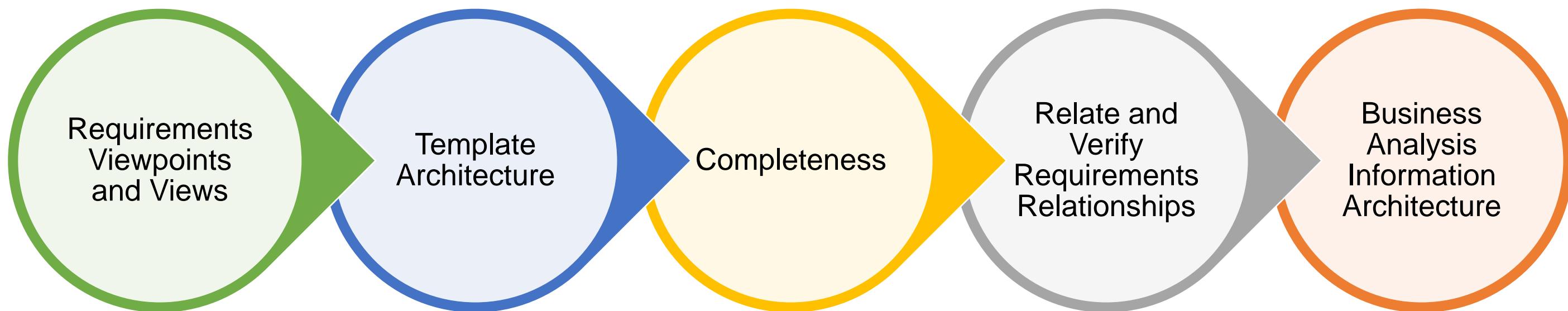
## PURPOSE

The purpose of the Define Requirements Architecture task is to ensure that the requirements collectively support one another to fully achieve the objectives.



## DEFINE REQUIREMENTS ARCHITECTURE (contd.)

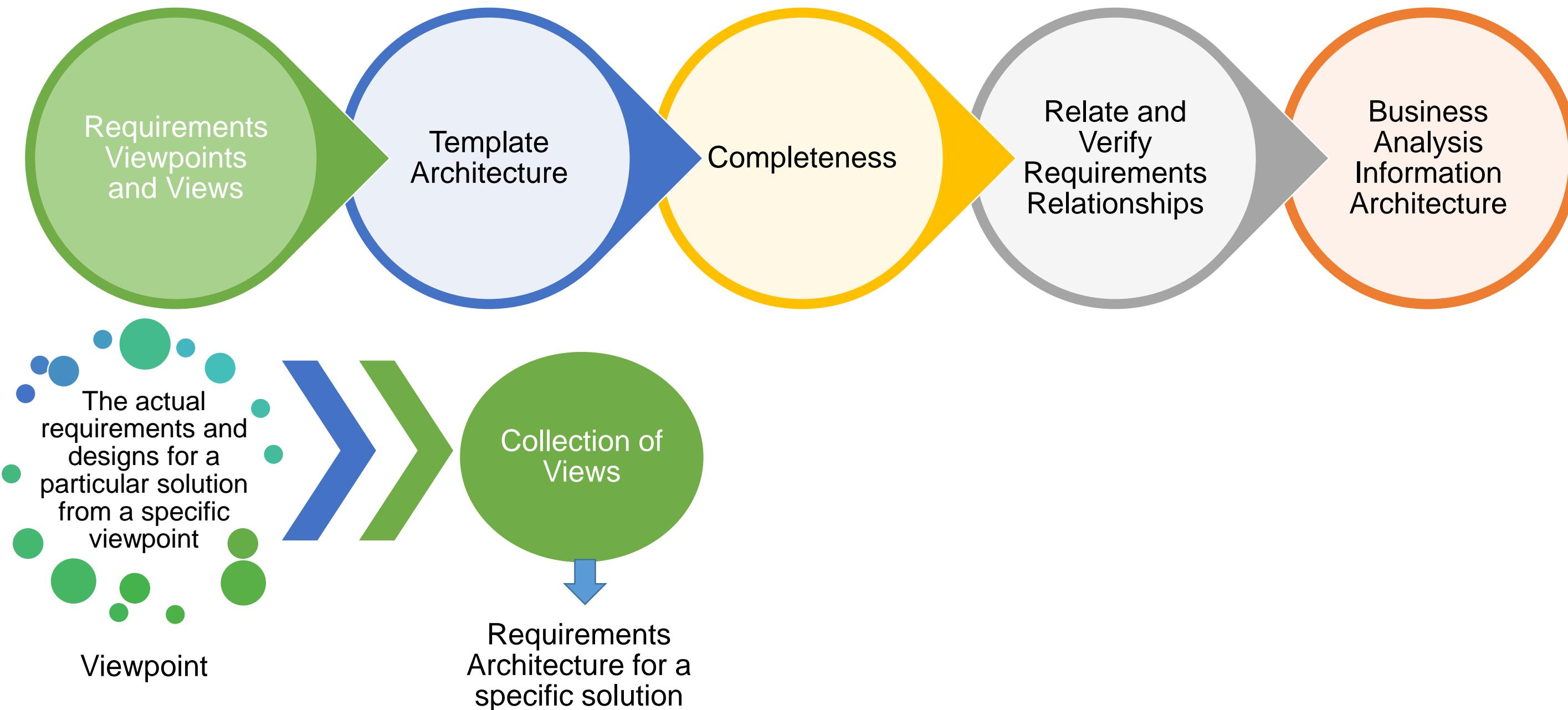
### ELEMENTS



# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS

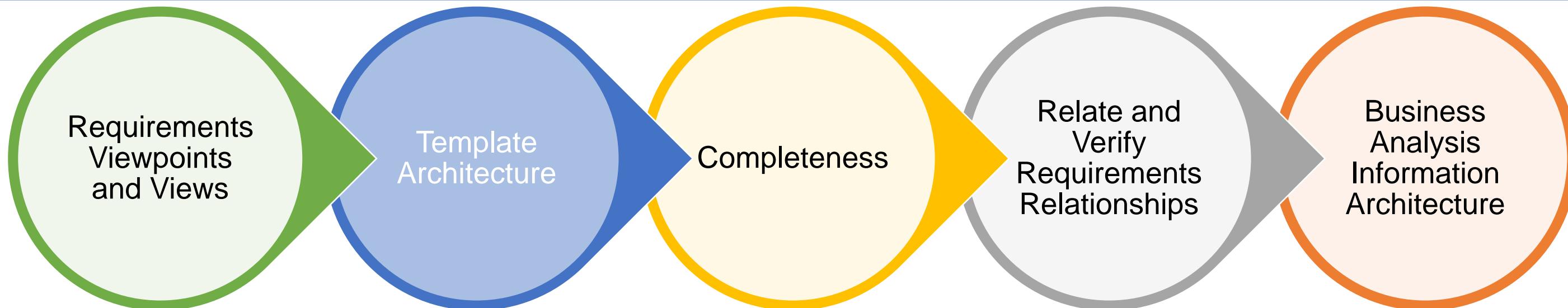
A viewpoint is a set of conventions that define how the requirements will be represented and organized.



# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS

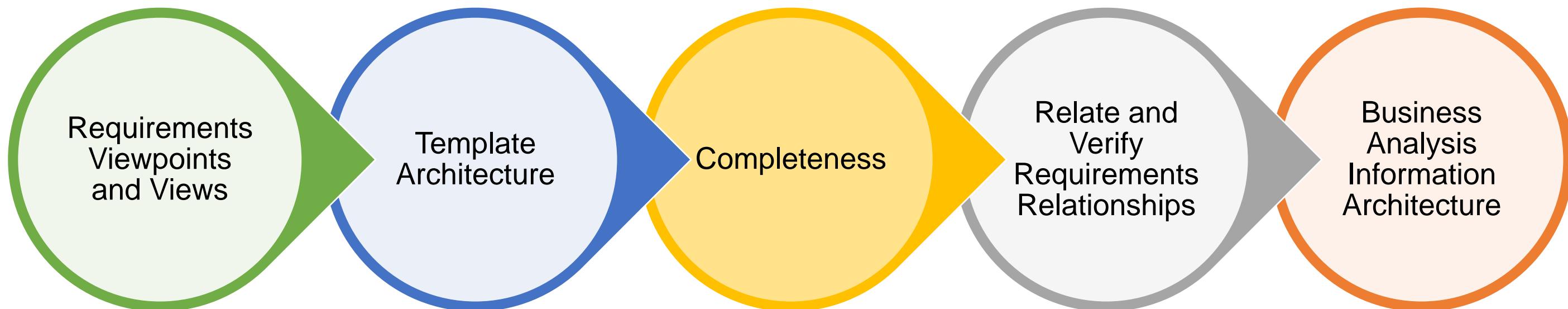
An architectural framework is a collection of viewpoints that are standard across the industry, sector, or organization.



Architectural framework -  
used as a template to start  
defining the architecture

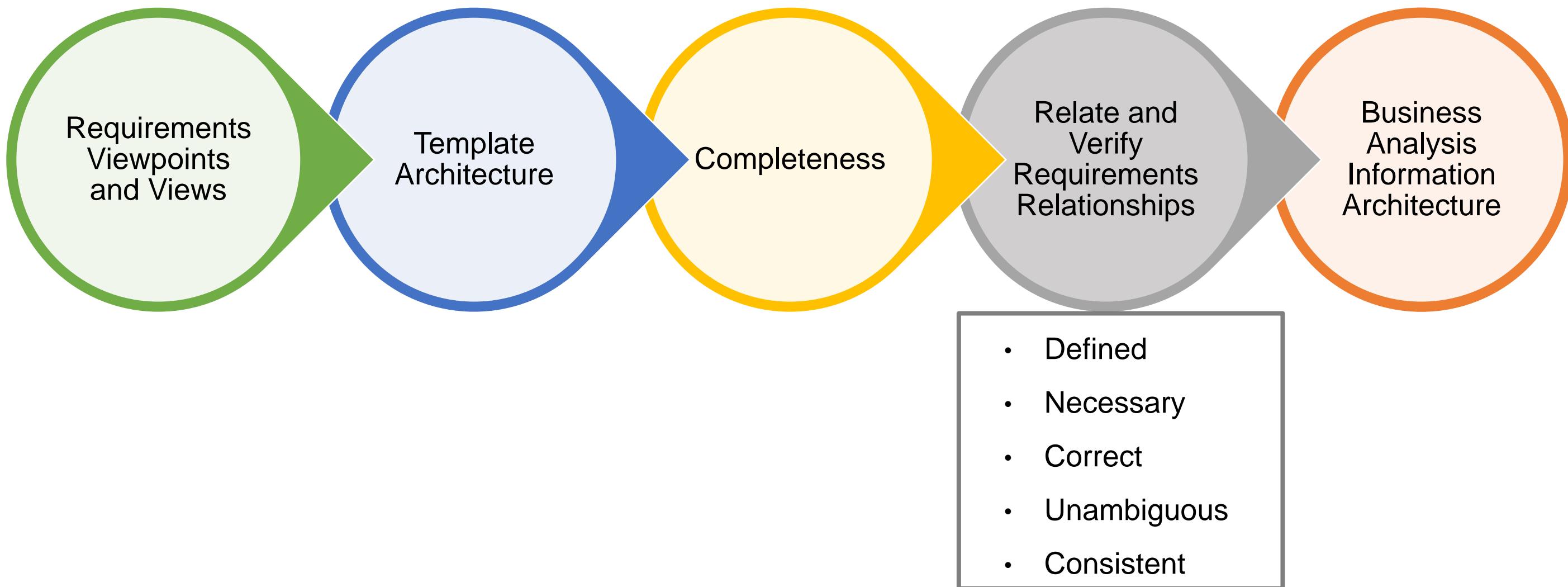
# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS



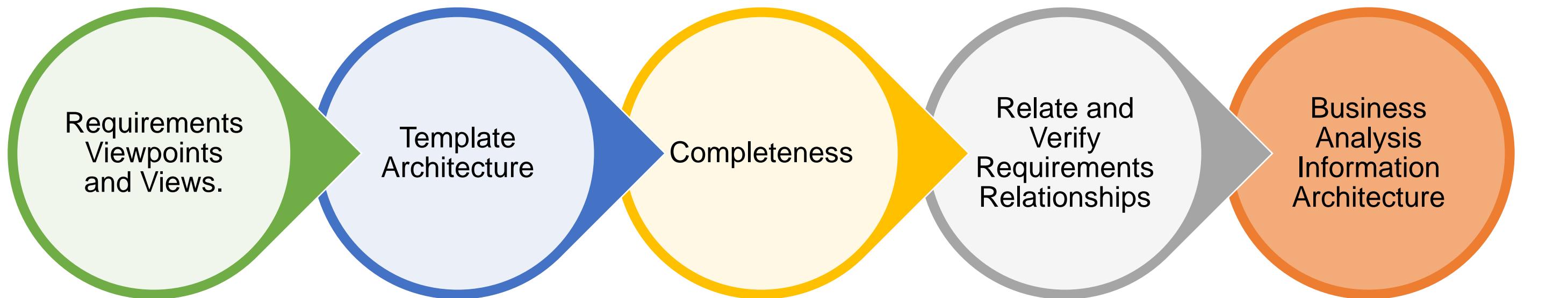
# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS



# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

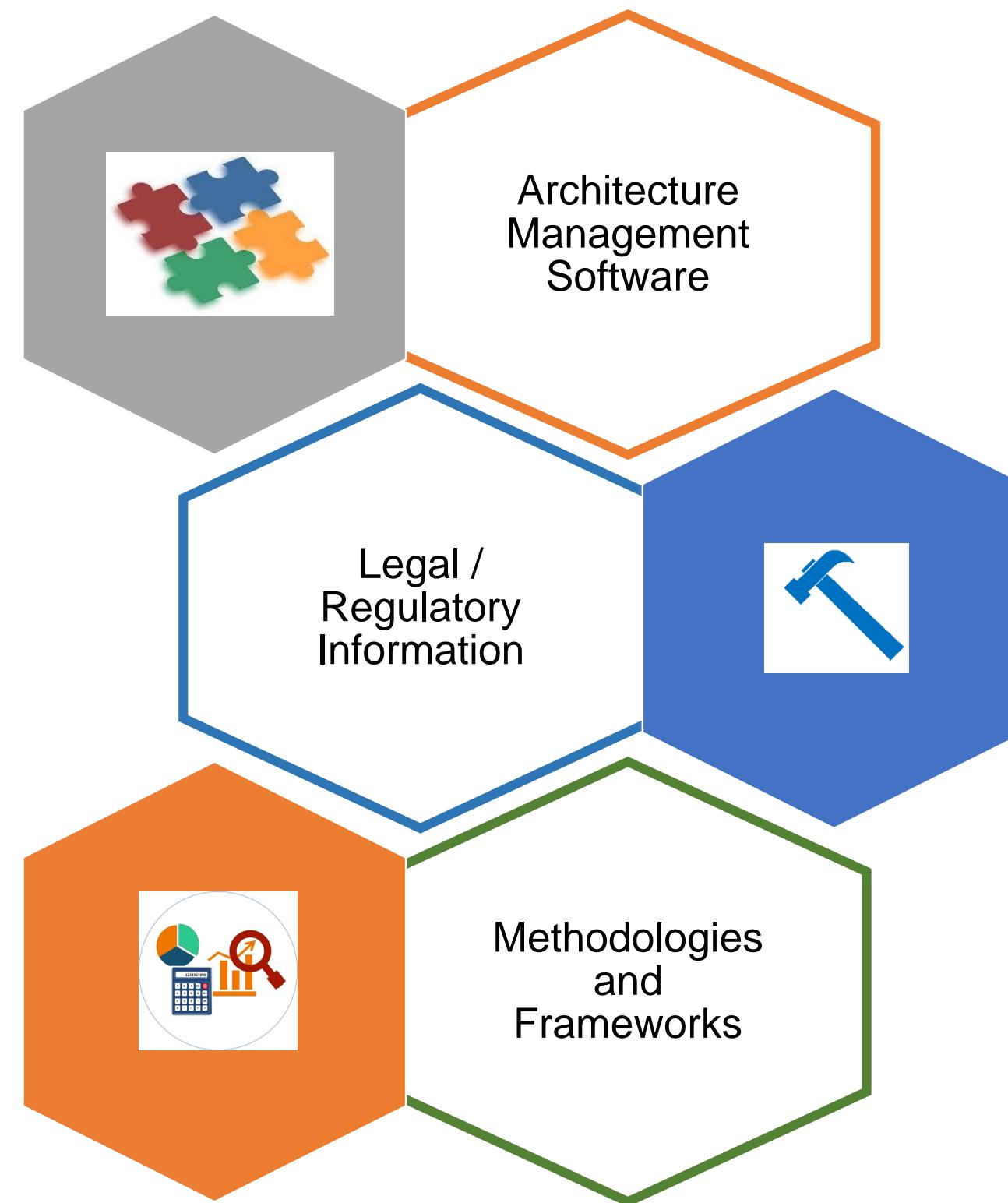
## ELEMENTS



Structure of the business analysis information is known as **Information architecture**

## DEFINE REQUIREMENTS ARCHITECTURE (contd.)

### GUIDELINES and TOOLS



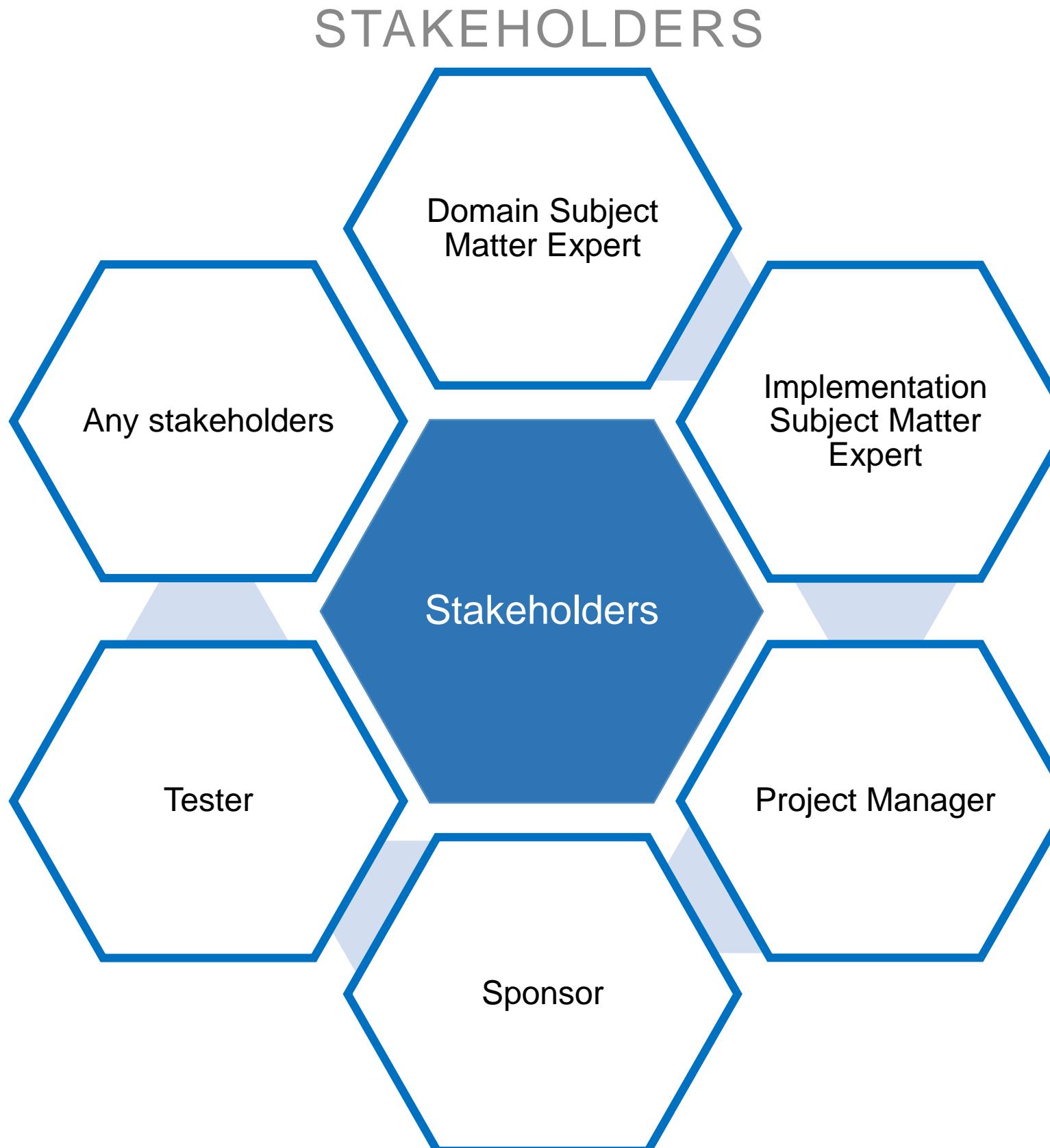
# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

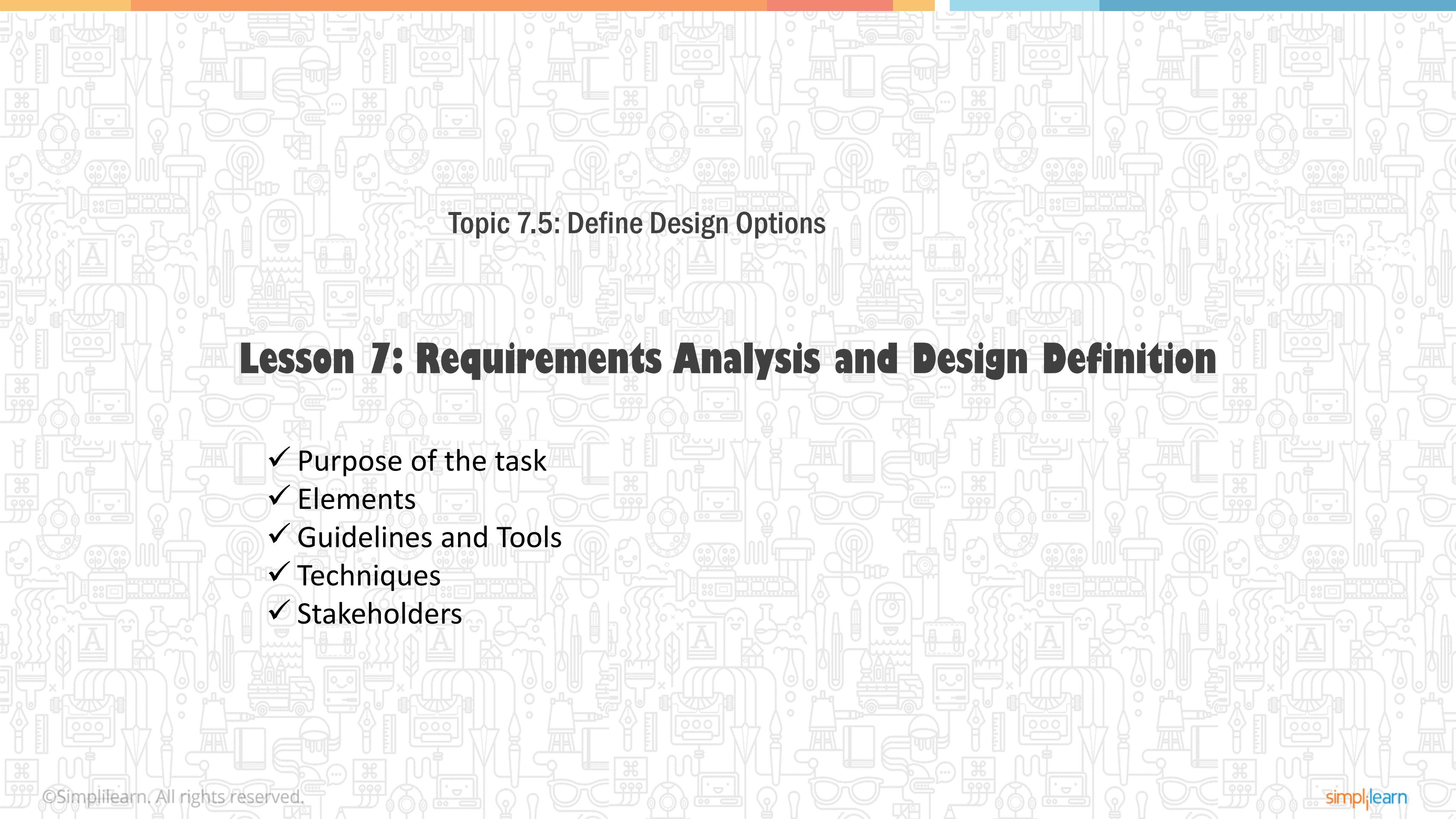
## TECHNIQUES



## DEFINE REQUIREMENTS ARCHITECTURE (contd.)

---





### Topic 7.5: Define Design Options

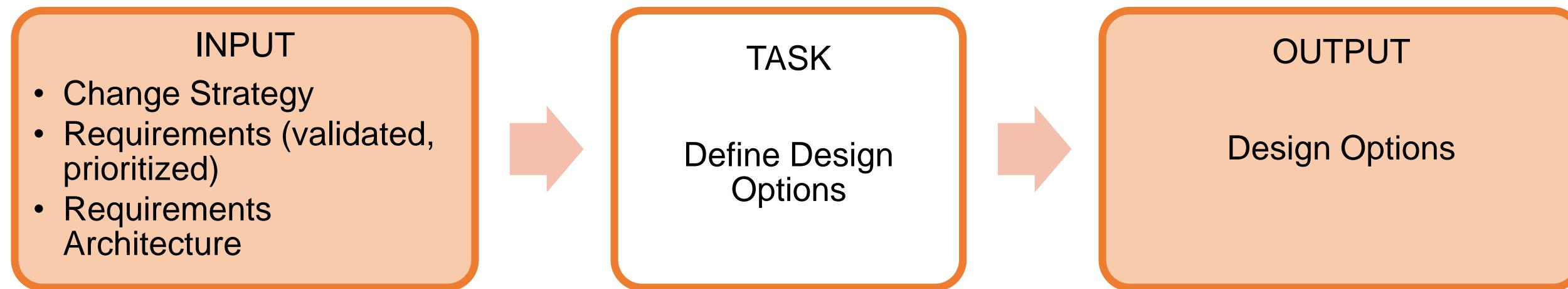
## Lesson 7: Requirements Analysis and Design Definition

- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

## DEFINE DESIGN OPTIONS

### PURPOSE

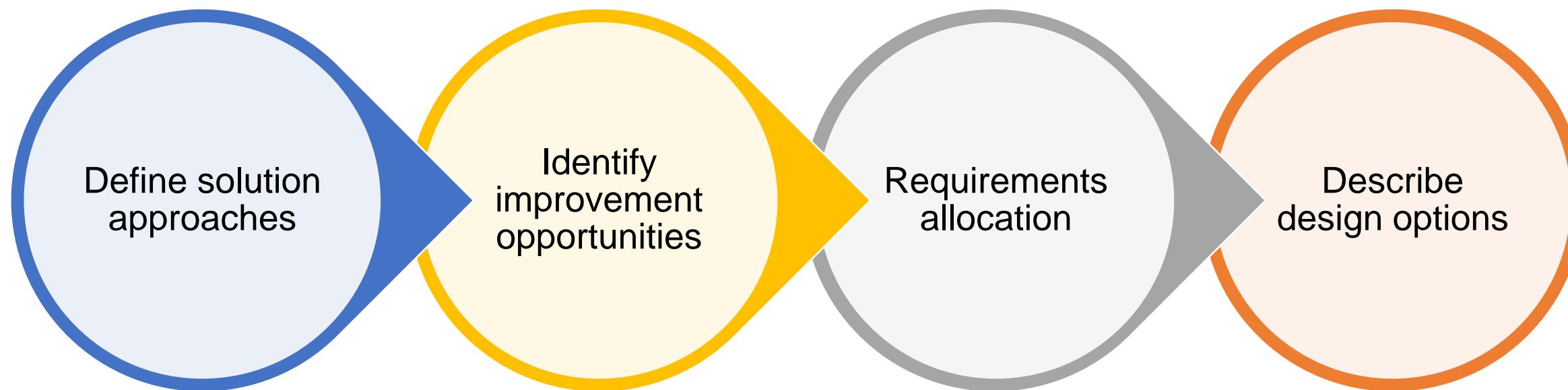
The purpose of this task is to define the solution approach, identify opportunities to improve the business, allocate requirements across solution components, and represent design options.



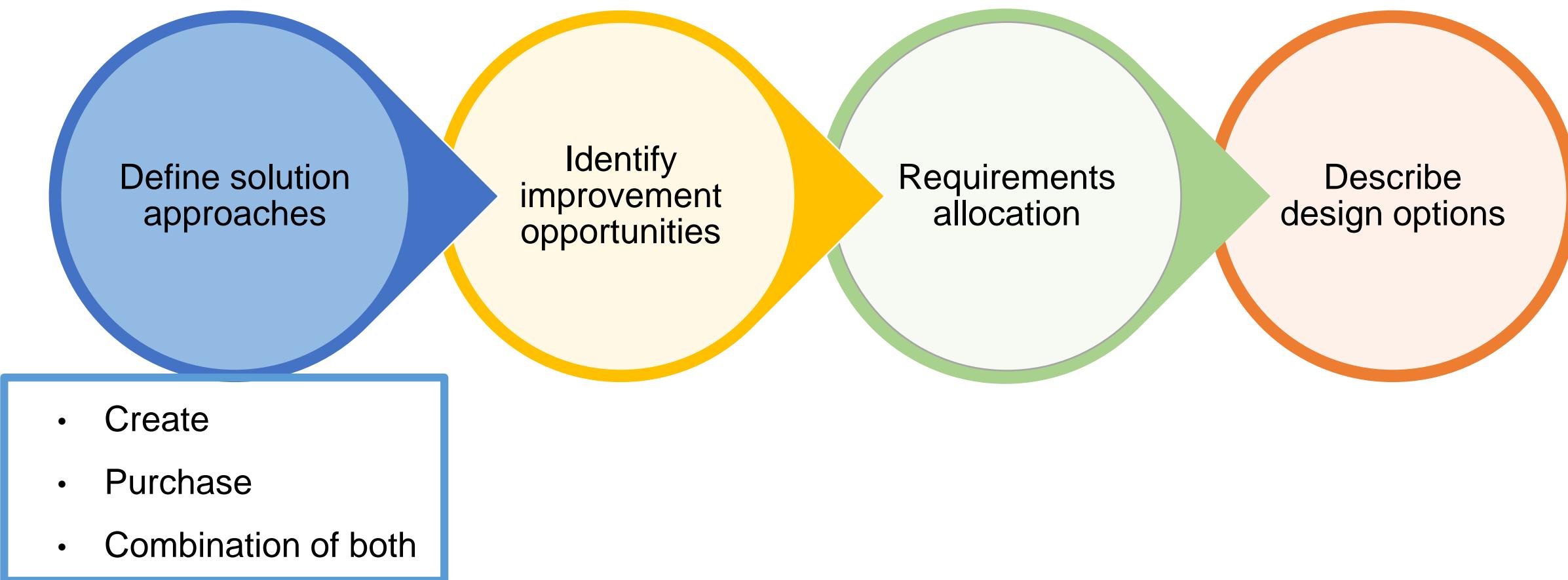
## DEFINE DESIGN OPTIONS (contd.)

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### ELEMENTS

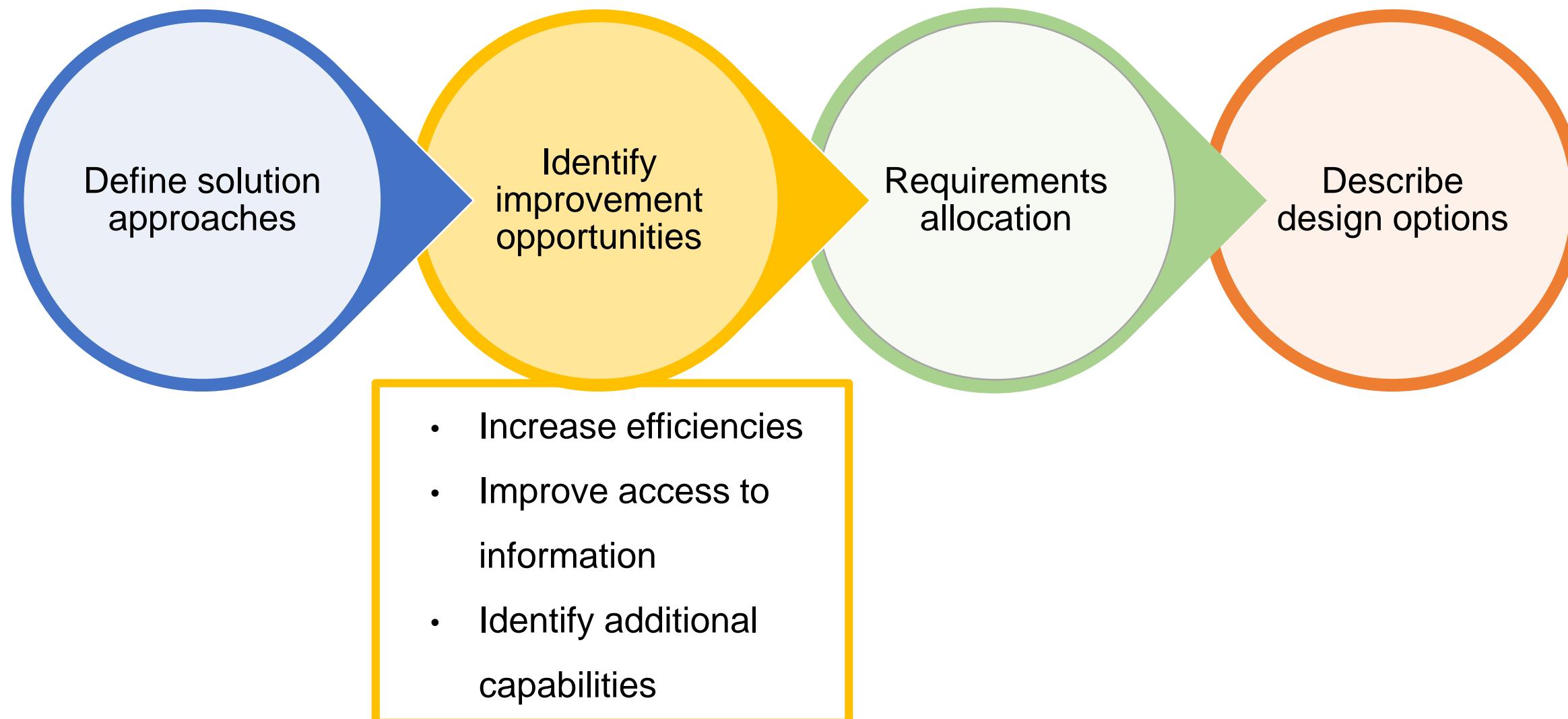


## ELEMENTS



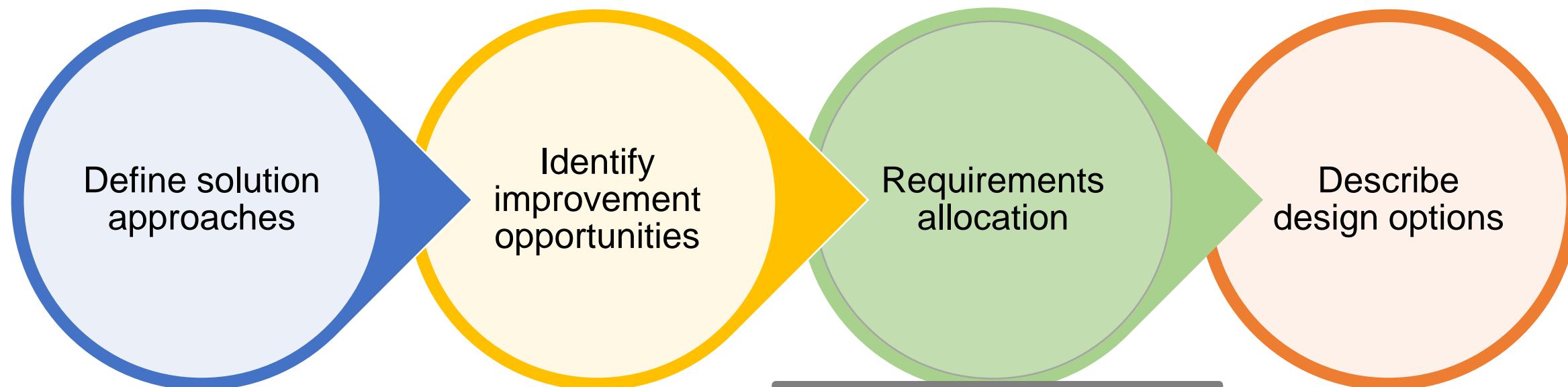
## DEFINE DESIGN OPTIONS (contd.)

### ELEMENTS



## DEFINE DESIGN OPTIONS (contd.)

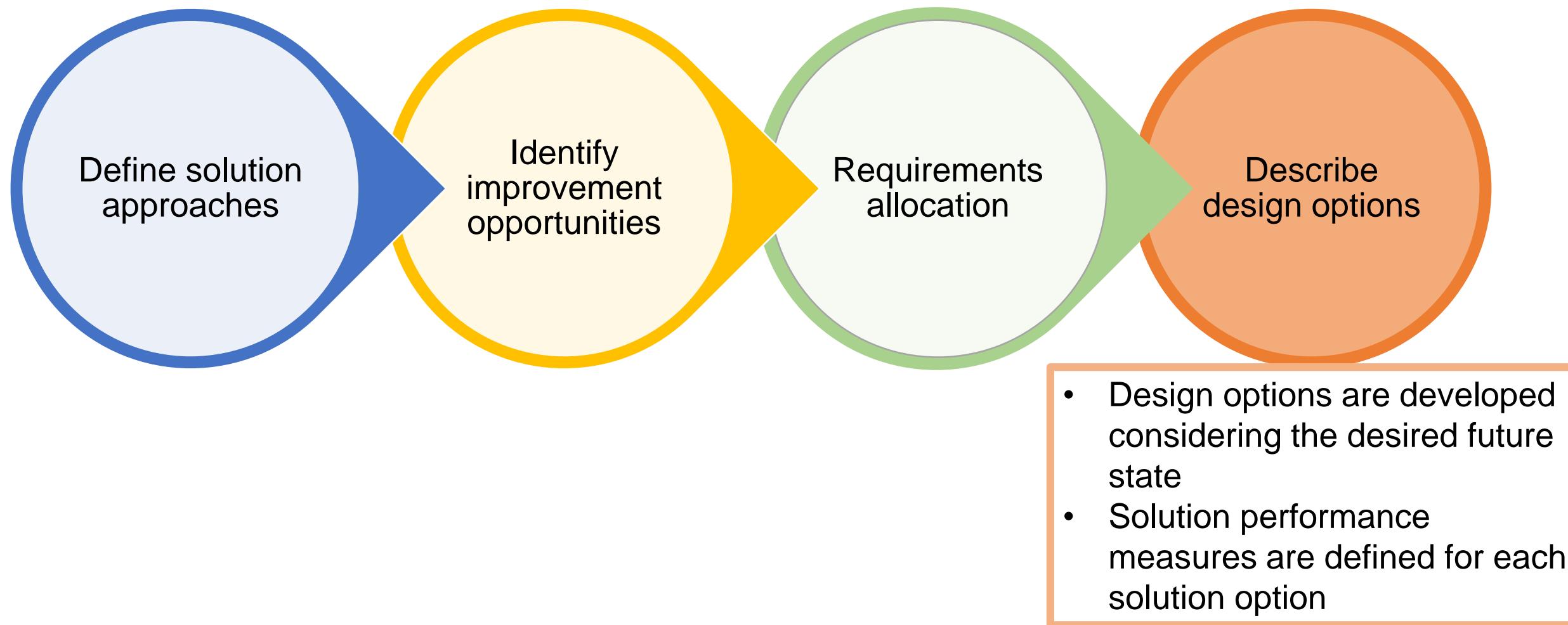
### ELEMENTS



The process of assigning requirements to solution components and releases

## DEFINE DESIGN OPTIONS (contd.)

### ELEMENTS



## DEFINE DESIGN OPTIONS (contd.)

### GUIDELINES and TOOLS



Existing Solutions

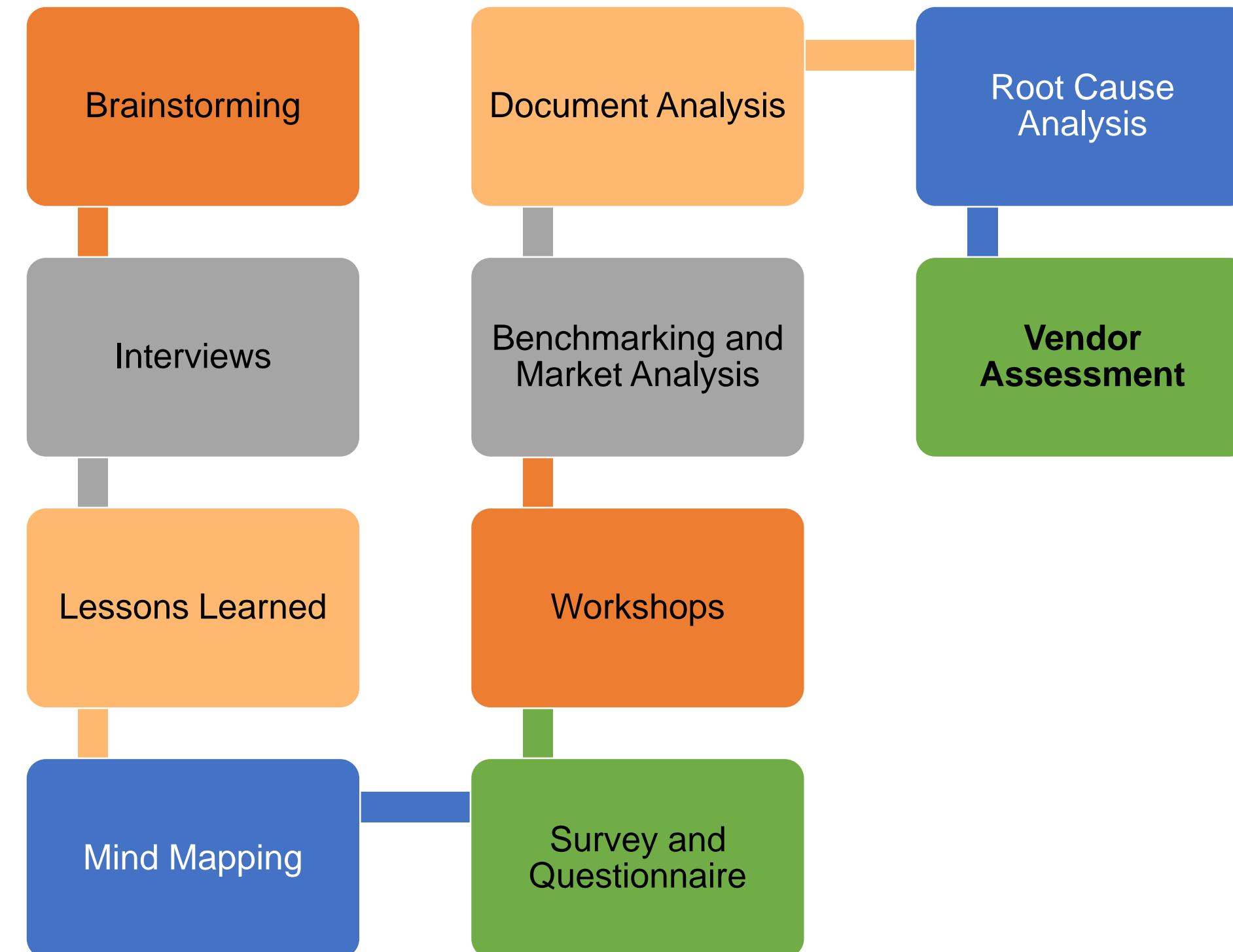
Future State Description

Requirements (traced)

Solution Scope

## DEFINE DESIGN OPTIONS (contd.)

### TECHNIQUES



# VENDOR ASSESSMENT

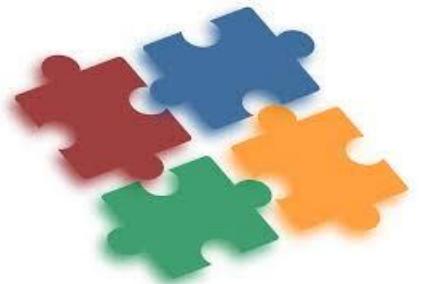
## OVERVIEW

A vendor assessment is used to determine the ability of a vendor to meet commitments regarding the delivery and consistent provision of a product or service.

- Non-functional requirements can be used to define service levels expected.
- Certification from an independent authority may be requested.
- The assessment may be informal or formal through the submission of the following:
  - A Request for Information (RFI)
  - A Request for Quote (RFQ)
  - A Request for Tender (RFT)
  - A Request for Proposal (RFP)
- Organization standard, project complexity, and solution criticality may influence the level of formality.

# VENDOR ASSESSMENT (contd.)

## ELEMENTS



Knowledge  
and Expertise

Licensing and  
Pricing Models

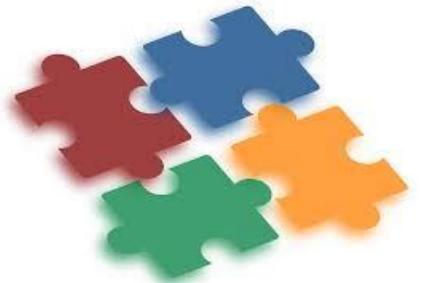
Vendor Market  
Position

Terms and  
Conditions

Vendor  
Experience,  
Reputation,  
and Stability

## VENDOR ASSESSMENT (contd.)

### ELEMENTS



Knowledge and Expertise

Licensing and Pricing Models

Vendor Market Position

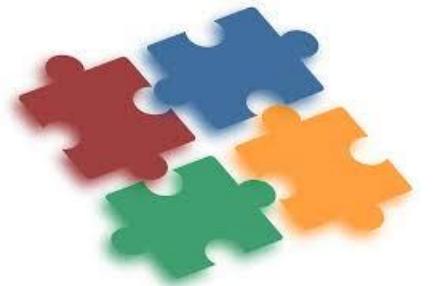
Terms and Conditions

Vendor Experience, Reputation, and Stability

Vendors can provide knowledge and expertise which are not available within the organization.

## VENDOR ASSESSMENT (contd.)

### ELEMENTS



Knowledge and Expertise

Licensing and Pricing Models

Vendor Market Position

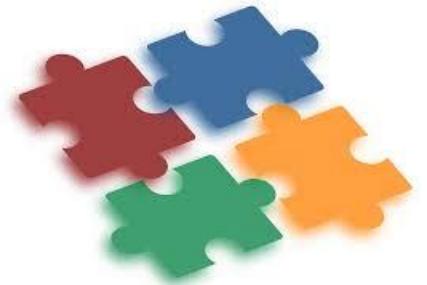
Terms and Conditions

Vendor Experience, Reputation, and Stability

These need to be considered when a solution or solution component is purchased from a third party.

# VENDOR ASSESSMENT (contd.)

## ELEMENTS



Knowledge  
and Expertise

Licensing and  
Pricing Models

Vendor Market  
Position

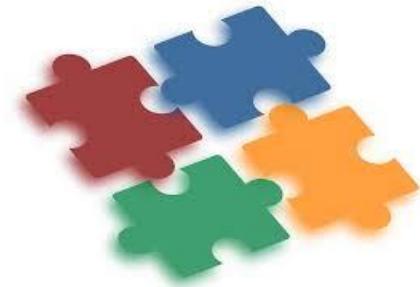
Terms and  
Conditions

Vendor  
Experience,  
Reputation,  
and Stability

Compare each vendor  
with its competitors to  
understand the market  
position.

# VENDOR ASSESSMENT (contd.)

## ELEMENTS



Knowledge and Expertise

Licensing and Pricing Models

Vendor Market Position

Terms and Conditions

Vendor Experience, Reputation, and Stability

Investigate the vendor's licensing terms, intellectual property rights, and technology

## VENDOR ASSESSMENT (contd.)

### ELEMENTS



Knowledge  
and Expertise

Licensing and  
Pricing Models

Vendor Market  
Position

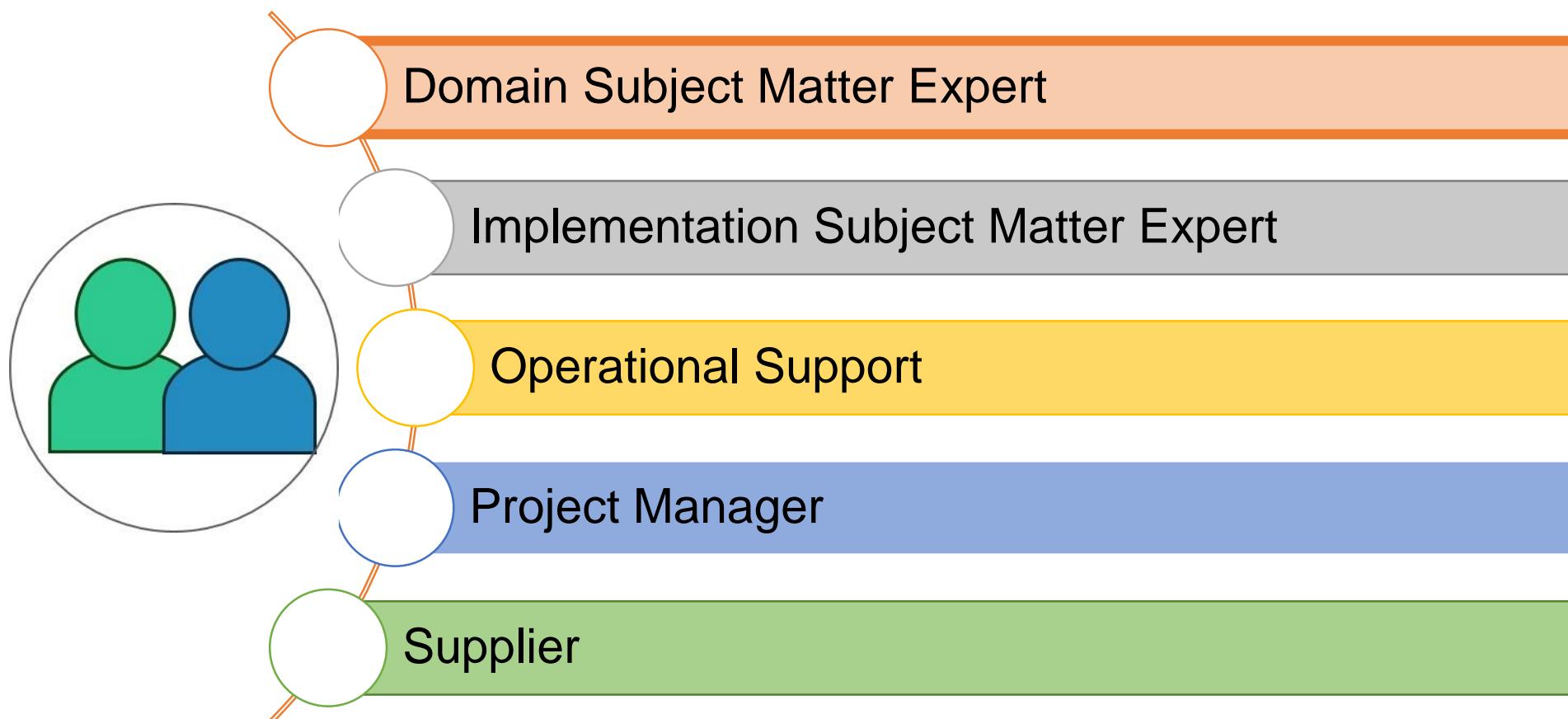
Terms and  
Conditions

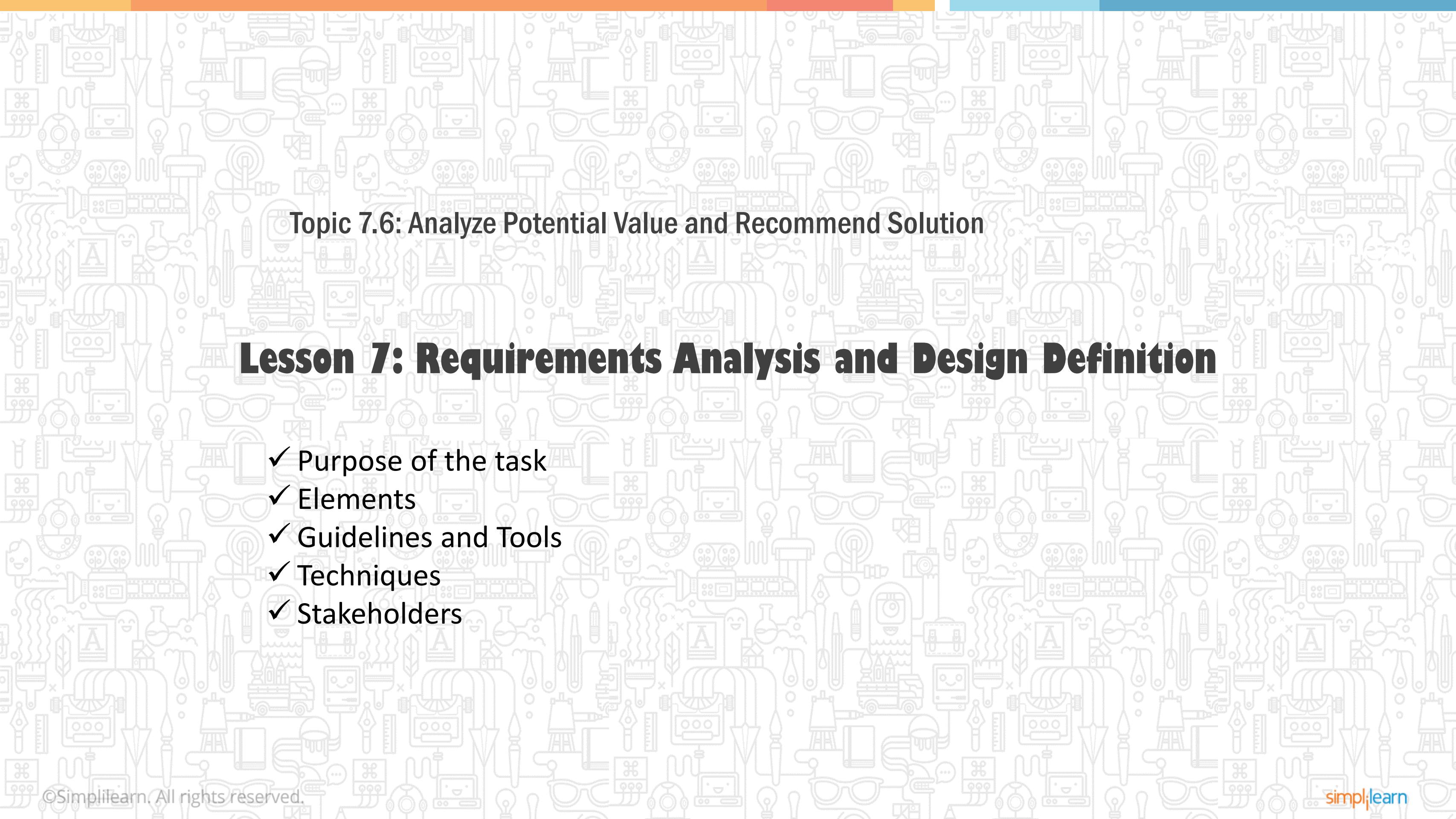
Vendor  
Experience,  
Reputation,  
and Stability

Vendor's experience with  
other customers may  
provide valuable  
information

## DEFINE DESIGN OPTIONS (contd.)

### STAKEHOLDERS





**Topic 7.6: Analyze Potential Value and Recommend Solution**

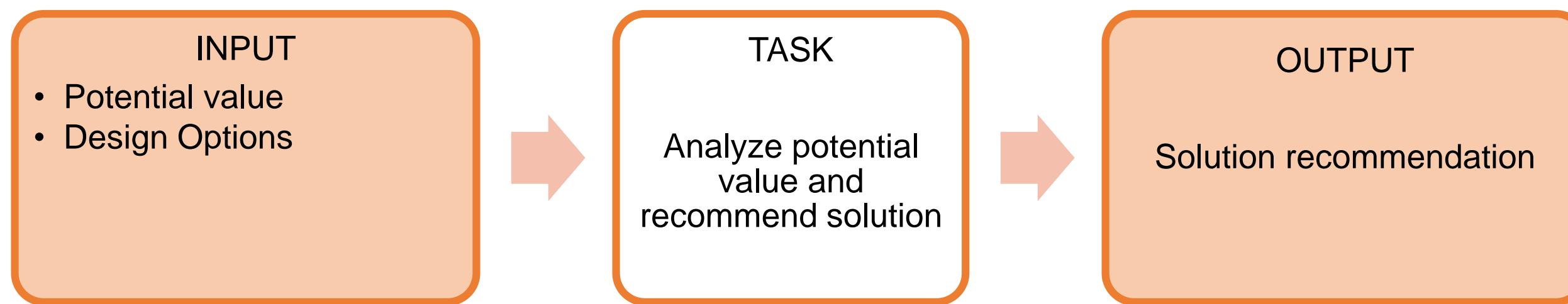
## **Lesson 7: Requirements Analysis and Design Definition**

- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## PURPOSE

The purpose of this task is to estimate the potential value for each design option and establish which one is the most appropriate to meet the enterprise requirements.

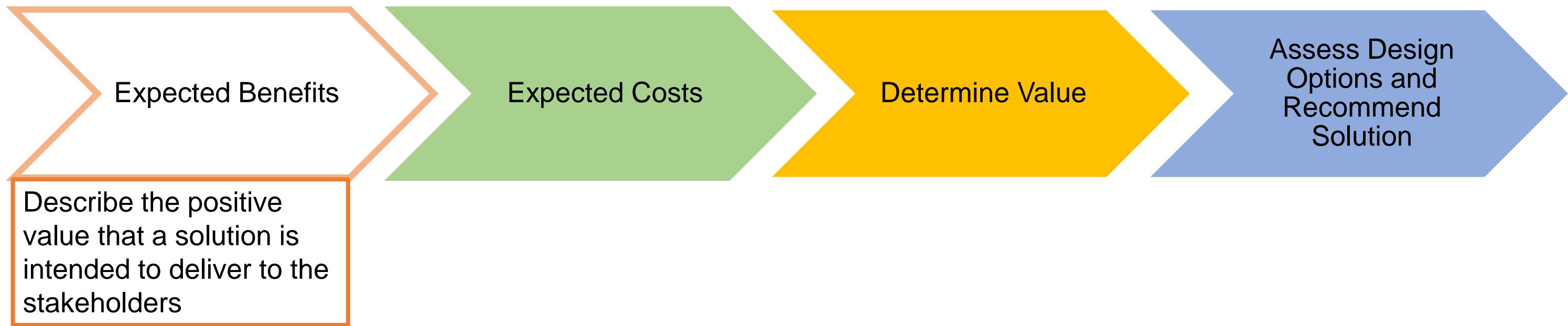


# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION ELEMENTS



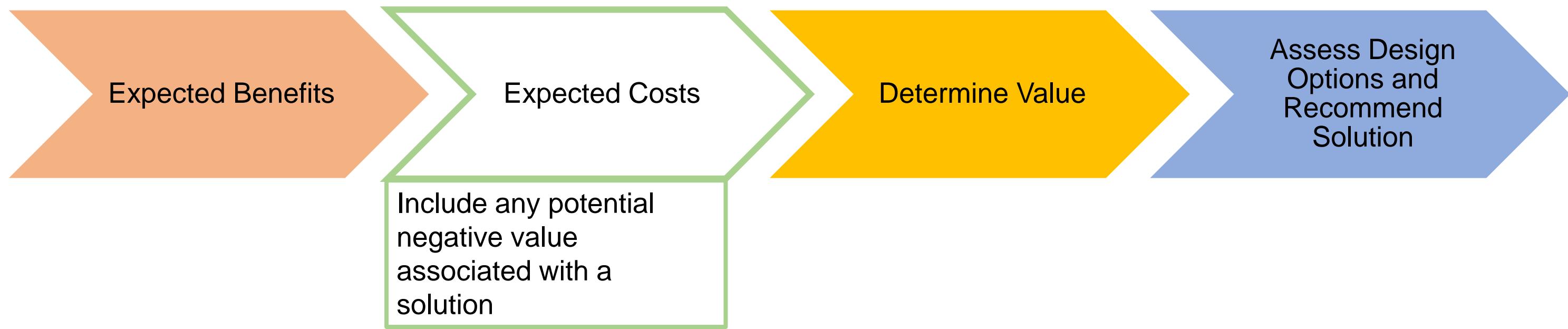
# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## ELEMENTS



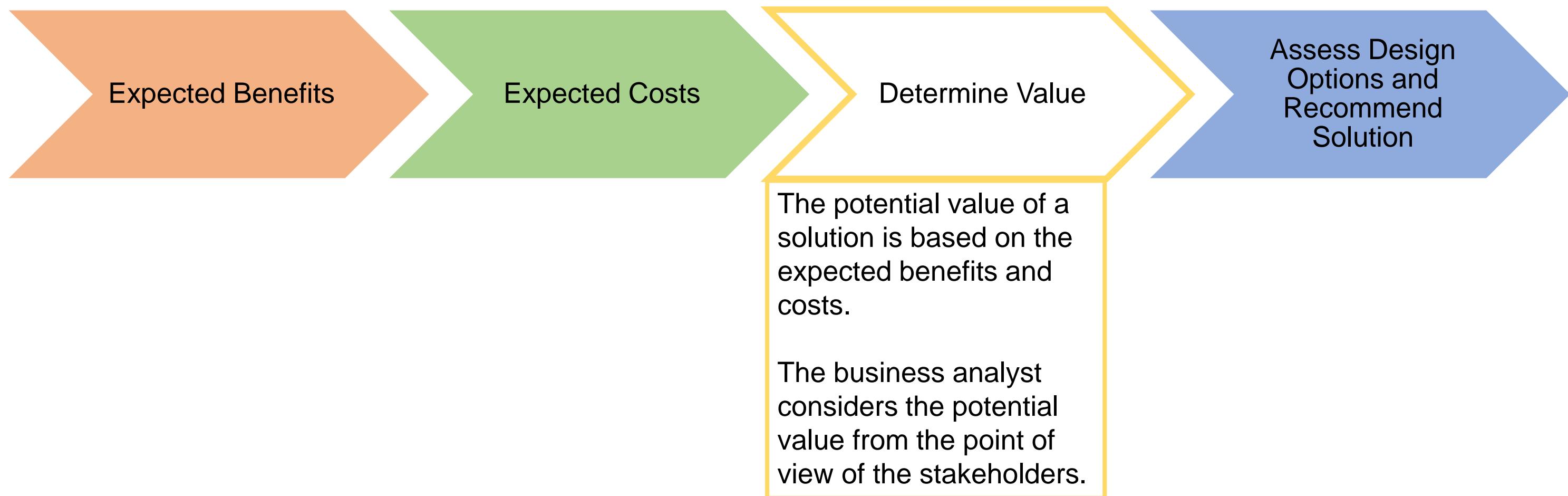
# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## ELEMENTS



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## ELEMENTS



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## ELEMENTS



## GUIDELINES AND TOOLS



Business Objectives

Current State Description

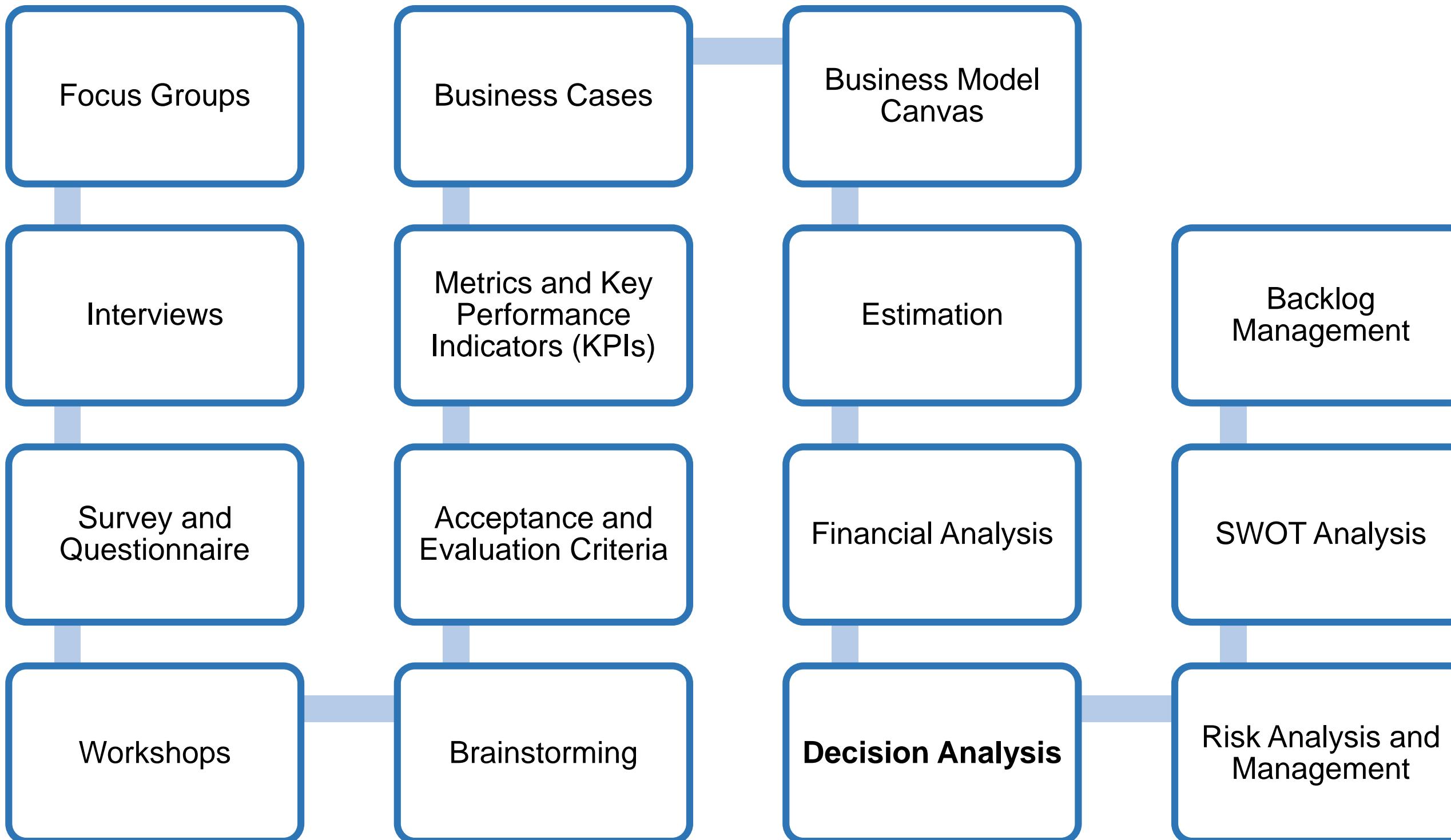
Future State Description

Risk Analysis Results

Solution Scope

# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## TECHNIQUES



## ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

### DECISION ANALYSIS — OVERVIEW

**Decision analysis** formally assesses a problem and possible decisions to determine the value of alternate outcomes under conditions of uncertainty.



## ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION(contd.)

### DECISION ANALYSIS — OVERVIEW

**Decision analysis** formally assesses a problem and possible decisions to determine the value of alternate outcomes under conditions of uncertainty.

| Decision                                                                           | Value                                                                               | Decision Analysis Approach Activities                                               |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |

Act of choosing a single course of action from several uncertain outcomes with different values

## ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION(contd.)

### DECISION ANALYSIS — OVERVIEW

**Decision analysis** formally assesses a problem and possible decisions to determine the value of alternate outcomes under conditions of uncertainty.

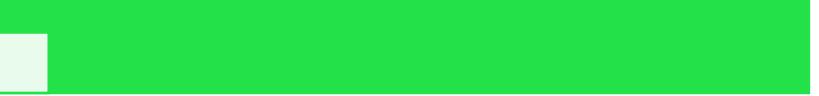
| Decision                                                                           | Value                                                                               | Decision Analysis Approach Activities                                               |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |

- Form of financial value, scoring, or a relative ranking
- depending on the approach, level of uncertainty, quality of information, and evaluation criteria

## ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION(contd.)

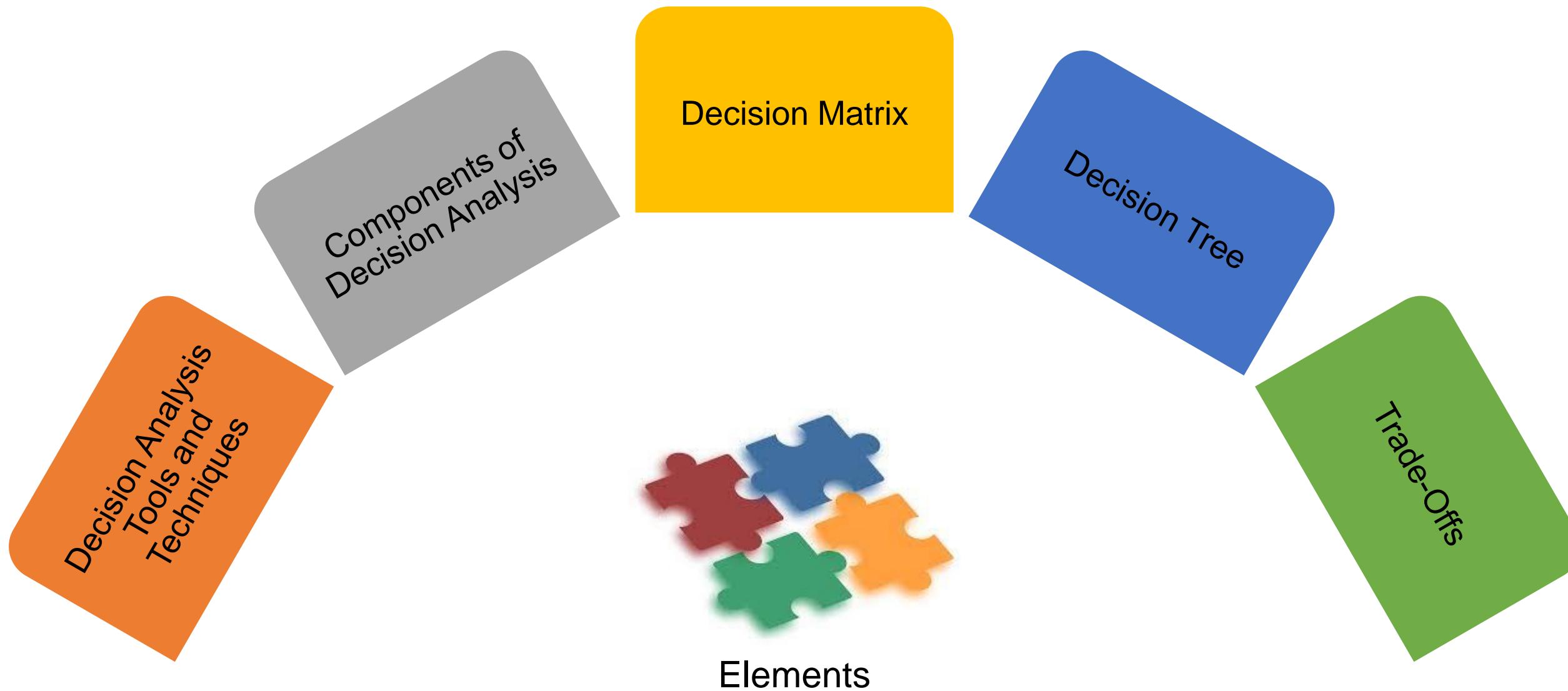
### DECISION ANALYSIS — OVERVIEW

**Decision analysis** formally assesses a problem and possible decisions to determine the value of alternate outcomes under conditions of uncertainty.

| Decision                                                                           | Value                                                                               | Decision Analysis Approach Activities                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | <ul style="list-style-type: none"><li><input type="checkbox"/> Define problem statement</li><li><input type="checkbox"/> Define alternatives</li><li><input type="checkbox"/> Evaluate alternatives</li><li><input type="checkbox"/> Choose alternative to implement</li><li><input type="checkbox"/> Implement choice</li></ul> |

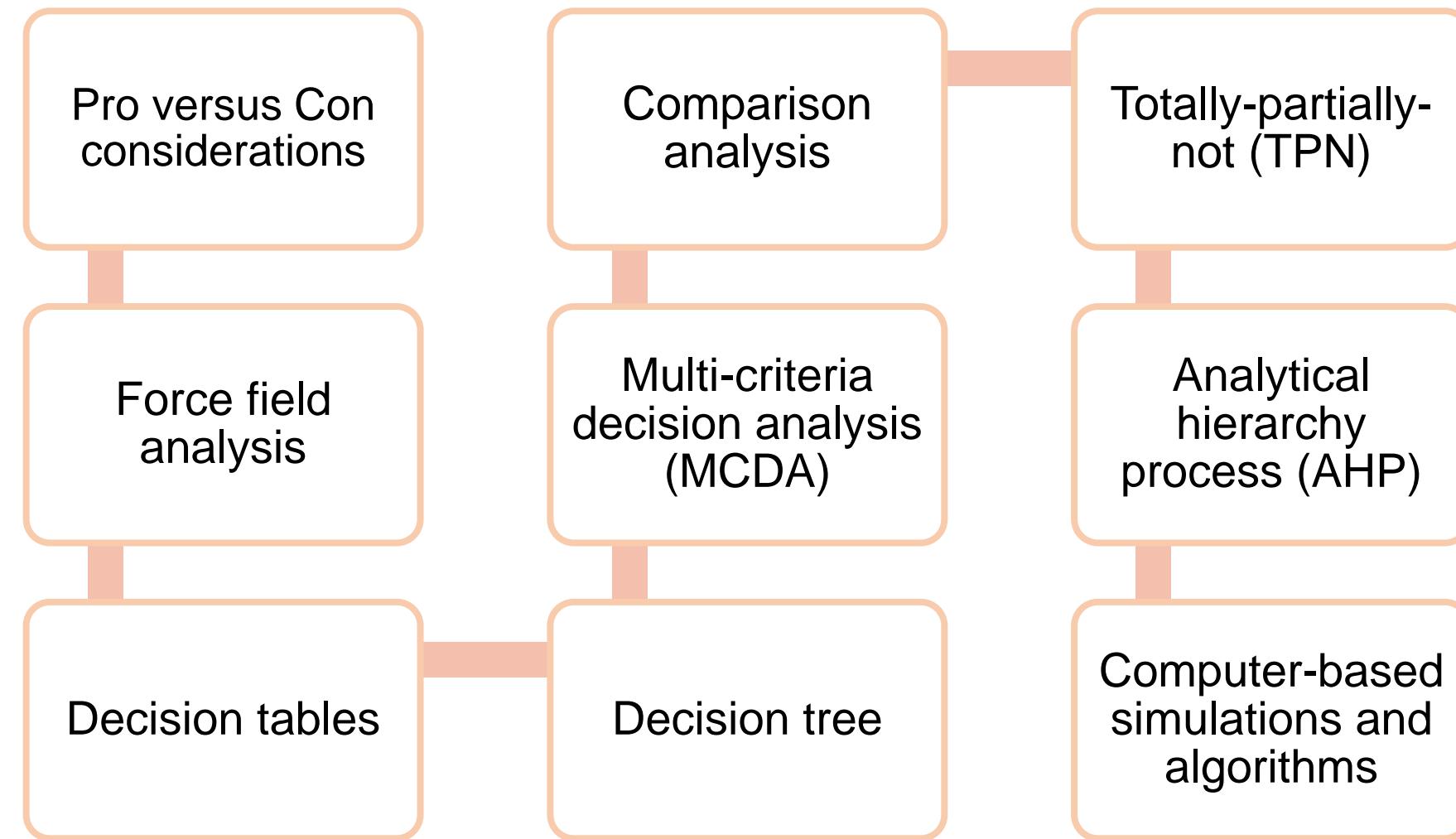
# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## DECISION ANALYSIS — ELEMENTS



## ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

### DECISION ANALYSIS — TOOLS AND TECHNIQUES



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## COMPONENTS OF DECISION ANALYSIS



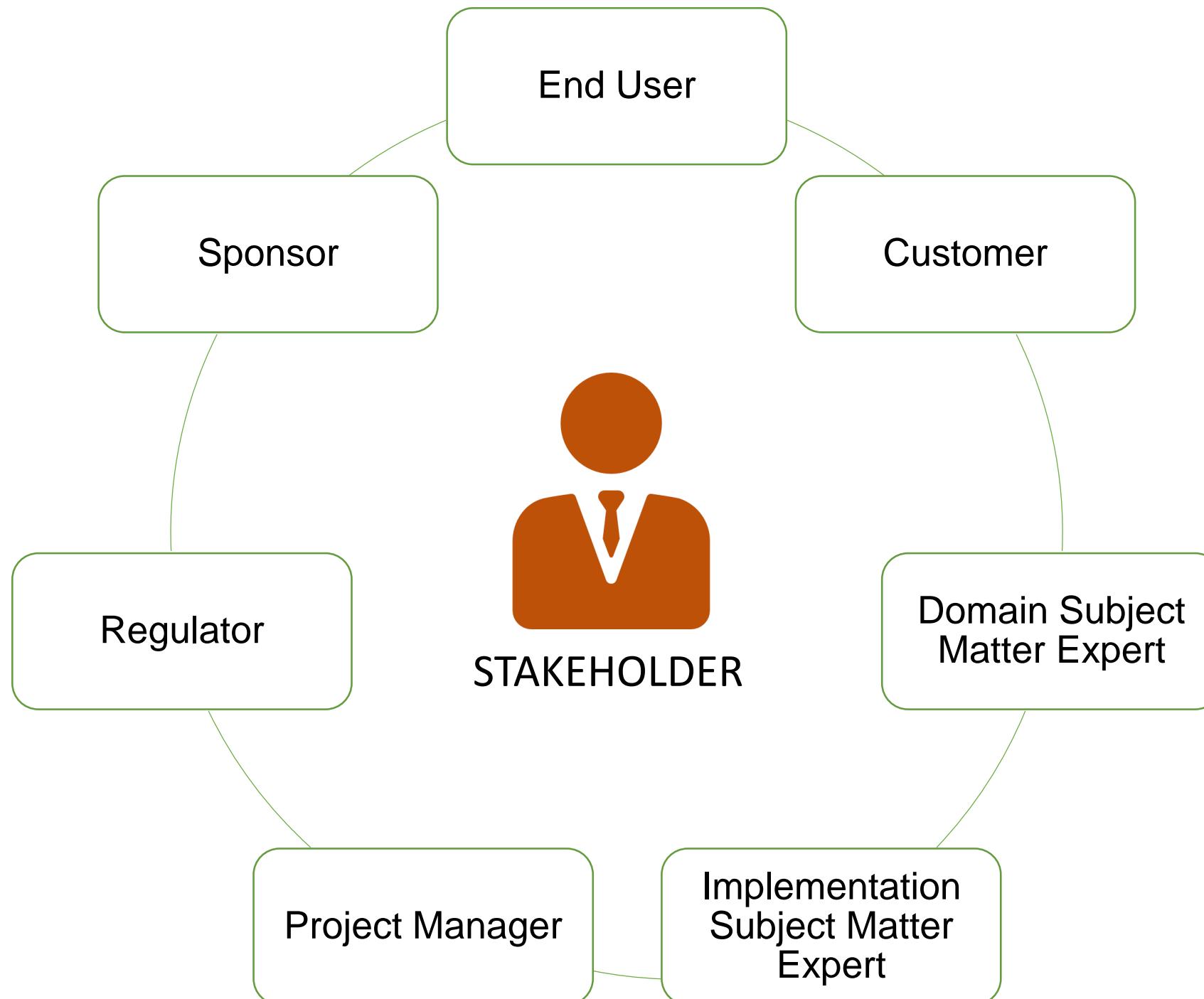
**Decision matrix** – a decision table where each criterion is evaluated for each alternative and the total the number of criteria is matched for each alternate

**Decision tree** – a method of assessing the preferred outcome where multiple sources of uncertainty may exist

**Trade-offs** – are relevant when a decision problem involves multiple conflicting objectives

# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## STAKEHOLDERS

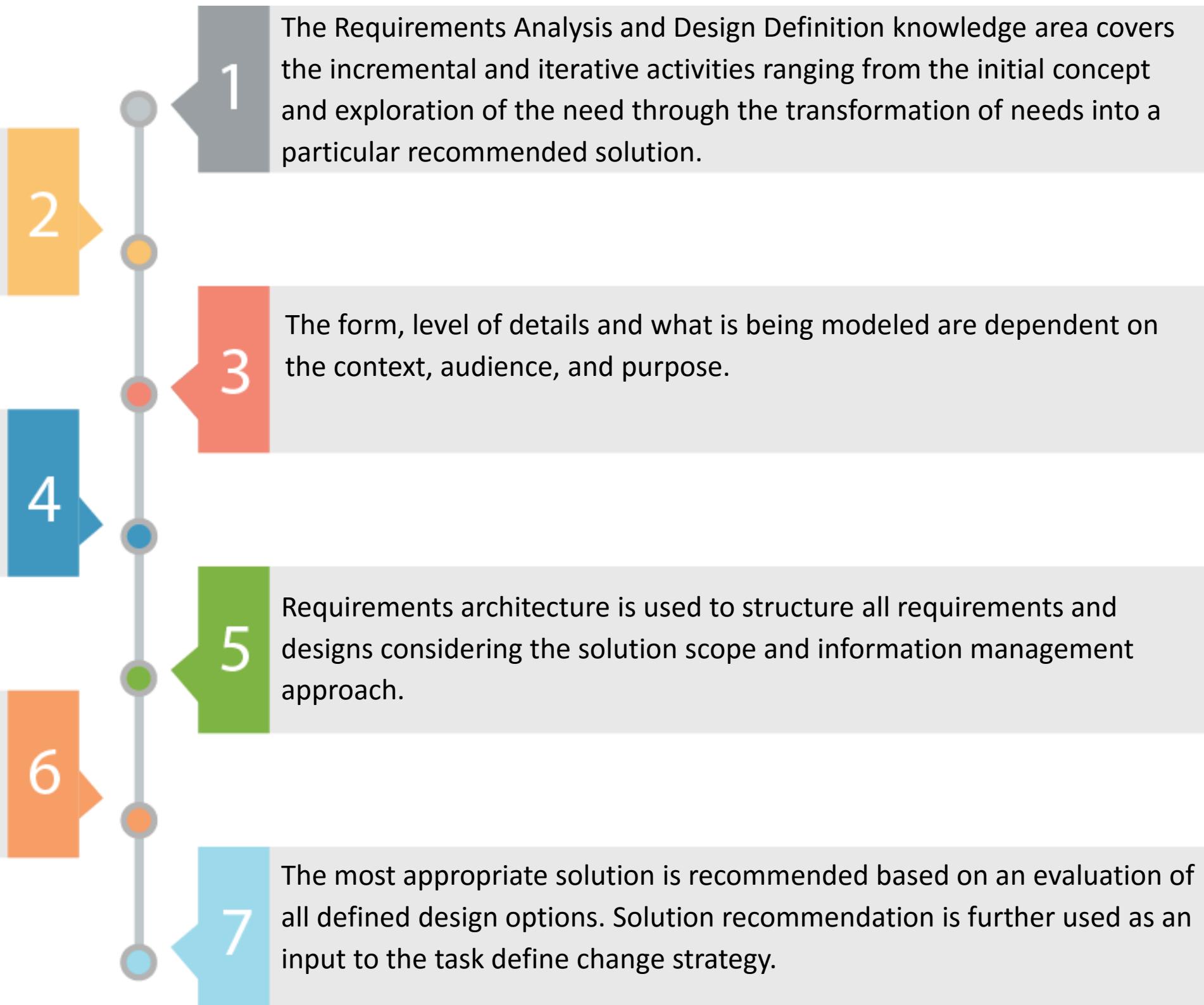


## KEY TAKEAWAYS

Both requirements and designs are important. The main difference between the requirements and designs is in how they are used and by whom. Both may be high level or very detailed.

Six tasks are performed in the Requirements Analysis and Design Definition knowledge area. Elicitation results in any state are specified and modeled, then verified and validated using business analysis techniques.

The business analyst defines design options based on the change strategy, requirements architecture, and validated and prioritized requirements.



# **Lesson 7: Business Analysis Planning and Monitoring**

## **CASE STUDY EXERCISE**

# CASE STUDY

## OVERVIEW

### ABOUT BATONICS

- A leading international financial services company
- Established in 1990
- One of leading mutual funds business managing assets of a large investor base
- Solution options - diversified and sector specific equity schemes
- Has one of the largest team of research analysts in the industry
- Provides services through the distributors
- Industry is regulated by the regulators



Existing investment process  
must be improved

Unable to transact  
online through website  
and mobile interfaces



BATONICS - International  
Financial Services  
Company

Investors are switching  
to competitors

Poor performance in the  
last 6 months

# CASE STUDY

## OVERVIEW – CURRENT STATE



BATONICS - International  
Financial Services  
Company

Existing investor  
needs to submit  
transaction slips for  
redemption and  
additional purchases

Current analytics  
models are based on  
limited parameters and  
data from limited  
sources

Lacks expertise to  
design and develop  
advanced analytics  
solution

Website also has  
distributed portal  
with limited  
functionality

# CASE STUDY

## OVERVIEW – FUTURE STATE



Able to transact online  
for redemption and  
additional investment

Analytics models  
based on multiple  
parameters



BATONICS - International  
Financial Services  
Company

Fund Managers  
proactively manage  
funds

Distributor services  
to investor  
improved using  
CRM capability and  
Digital marketing  
tools

# CASE STUDY

---

## BUSINESS ANALYSIS ELICITATION ACTIVITIES



Analyzed the requirements



Specified and modeled the requirements



Verified the requirements



Validated the requirements

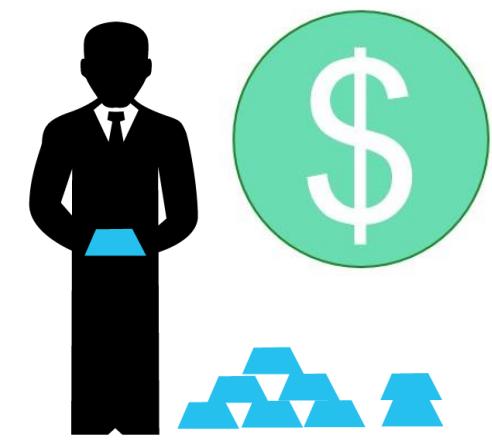
# CASE STUDY

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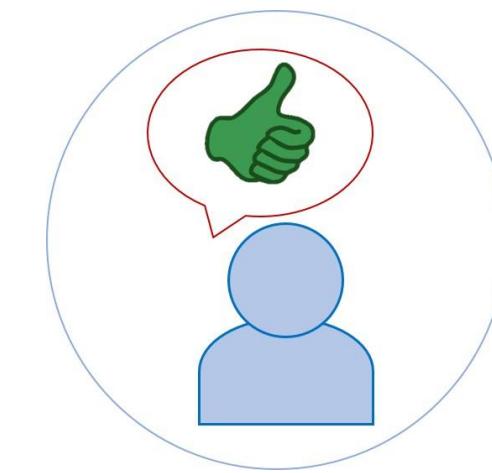
## BUSINESS ANALYSIS AND DESIGN ACTIVITIES



Identified solution options



Analyzed potential value



Recommended a solution

# CASE STUDY

## EXERCISE

|   | Questions                                                                                                                                                        | Options                                                                                                                                                                                                                                                             |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | In the case study, which is the most important stakeholder while defining design options?                                                                        | <ul style="list-style-type: none"><li><input type="radio"/> Suppliers</li><li><input type="radio"/> Implementation SME</li><li><input type="radio"/> Domain SME</li><li><input type="radio"/> Project Manager</li></ul>                                             |
| 2 | In the case study, which technique is likely to be used while defining solution options?                                                                         | <ul style="list-style-type: none"><li><input type="radio"/> Vendor Assessment</li><li><input type="radio"/> Workshop</li><li><input type="radio"/> Brainstorming</li><li><input type="radio"/> All of the above</li></ul>                                           |
| 3 | In the case study, which technique is not likely to be used while specifying and Modeling requirements?                                                          | <ul style="list-style-type: none"><li><input type="radio"/> Interface Analysis</li><li><input type="radio"/> Glossary</li><li><input type="radio"/> Prototyping</li><li><input type="radio"/> Brainstorming</li></ul>                                               |
| 4 | Which of the following is not a likely factor to be considered while assessing each design options in the task “Analyze Potential Value and Recommend Solution”? | <ul style="list-style-type: none"><li><input type="radio"/> Available resources</li><li><input type="radio"/> Constraints on the solution</li><li><input type="radio"/> Dependencies between requirements</li><li><input type="radio"/> Stakeholder value</li></ul> |

## CASE STUDY

### ANSWERS

|   | <b>Questions</b>                                                                                                                                                 | <b>Response</b>   |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1 | In the case study, which of the stakeholders is most important while defining design options?                                                                    | Suppliers         |
| 2 | In the case study, which technique is likely to be used while defining solution options?                                                                         | All of the above  |
| 3 | In the case study, which technique is not likely to be used while specifying and Modeling requirements?                                                          | Brainstorming     |
| 4 | Which of the following is not a likely factor to be considered while assessing each design options in the task “Analyze Potential Value and Recommend Solution”? | Stakeholder Value |



**QUIZ  
1**

To validate requirements, they must be \_\_\_\_\_.

- a. Specified and Modeled
- b. Prioritized
- c. Approved
- d. Verified



QUIZ  
1

To validate requirements, they must be \_\_\_\_\_.

- a. Specified and Modeled
- b. Prioritized
- c. Approved
- d. Verified



The correct answer is **a.**

**Explanation:** Requirements must be specified and modeled to validate requirements.

**QUIZ  
2**

To verify requirements, they must be \_\_\_\_\_.

- a. Specified and Modeled
- b. Prioritized
- c. Approved
- d. Maintained



QUIZ  
2

To verify requirements, they must be \_\_\_\_\_.

- a. Specified and Modeled
- b. Prioritized
- c. Approved
- d. Maintained



The correct answer is     **a.**

**Explanation:** Requirements must be specified and modeled to verify requirements.

QUIZ  
3

Which techniques would be most useful when designing a new business process?

- a. Business Rules Analysis, Data Flow Diagram, Metrics, and KPIs
- b. Business Rules Analysis, Process Modeling, and State Diagram
- c. Business Rules Analysis, Functional Decomposition, and Process Modeling
- d. Data Flow Diagram, Interface Analysis, and Process Flow Diagram



QUIZ  
3

Which techniques would be most useful when designing a new business process?

- a. Business Rules Analysis, Data Flow Diagram, Metrics, and KPIs
- b. Business Rules Analysis, Process Modeling, and State Diagram
- c. Business Rules Analysis, Functional Decomposition, and Process Modeling
- d. Data Flow Diagram, Interface Analysis, and Process Flow Diagram



The correct answer is **c.**

**Explanation:** Business Rules Analysis, Functional Decomposition, and Process Modeling would be most useful when designing a new business process. Business Rules analysis is necessary to ensure the new process enforces the correct rules. Functional decomposition is useful for breaking down processes. Process modeling is used to describe new business processes.

**QUIZ  
4**

A use case diagram includes \_\_\_\_\_.

- a. Actors, Use Cases, and Association
- b. Users, Cases, and Diagrams
- c. Features to be included in the system
- d. System, Interfaces, and Use Cases



QUIZ  
4

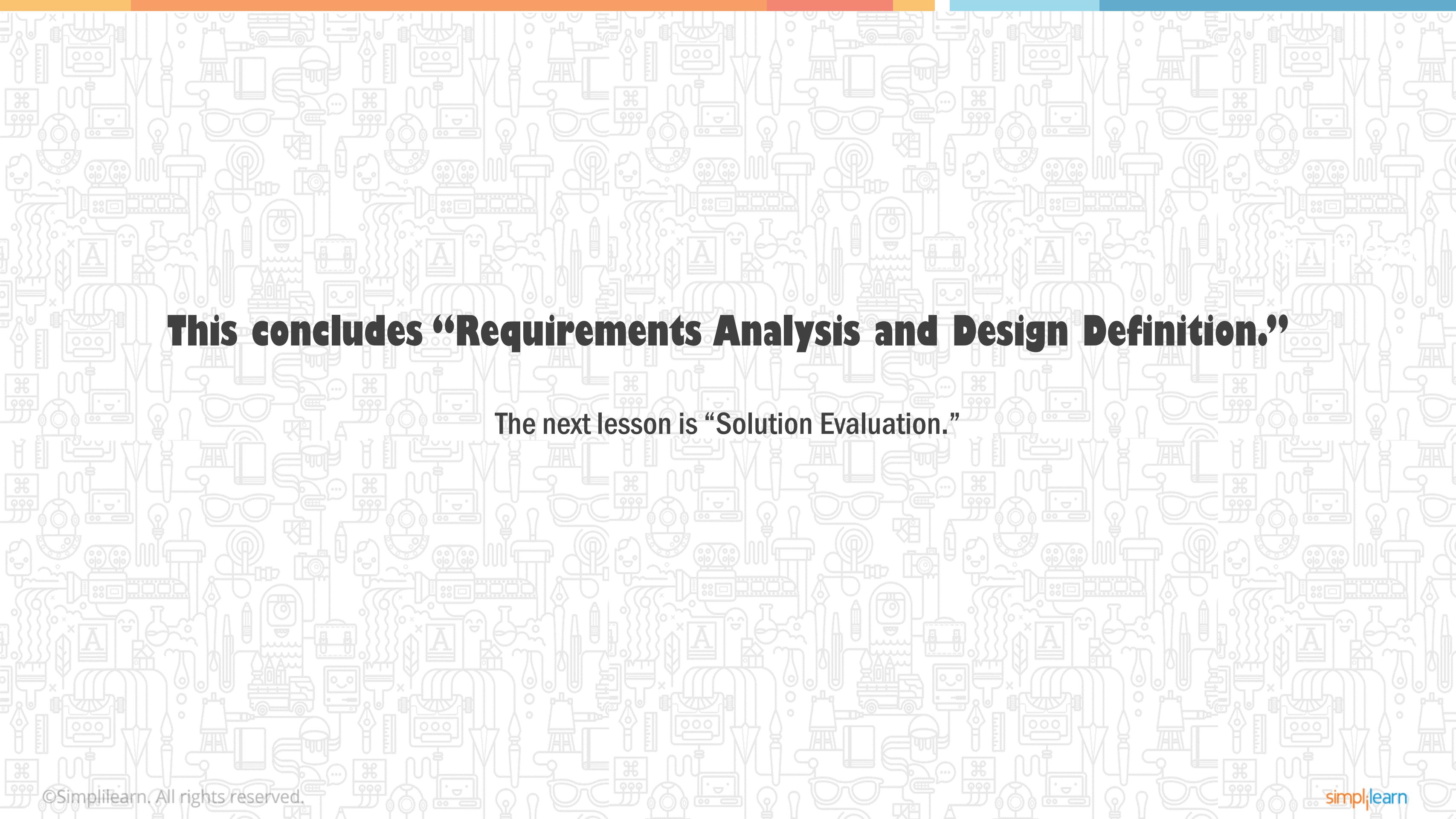
A use case diagram includes \_\_\_\_\_.

- a. Actors, Use Cases, and Association
- b. Users, Cases, and Diagrams
- c. Features to be included in the system
- d. System, Interfaces, and Use Cases



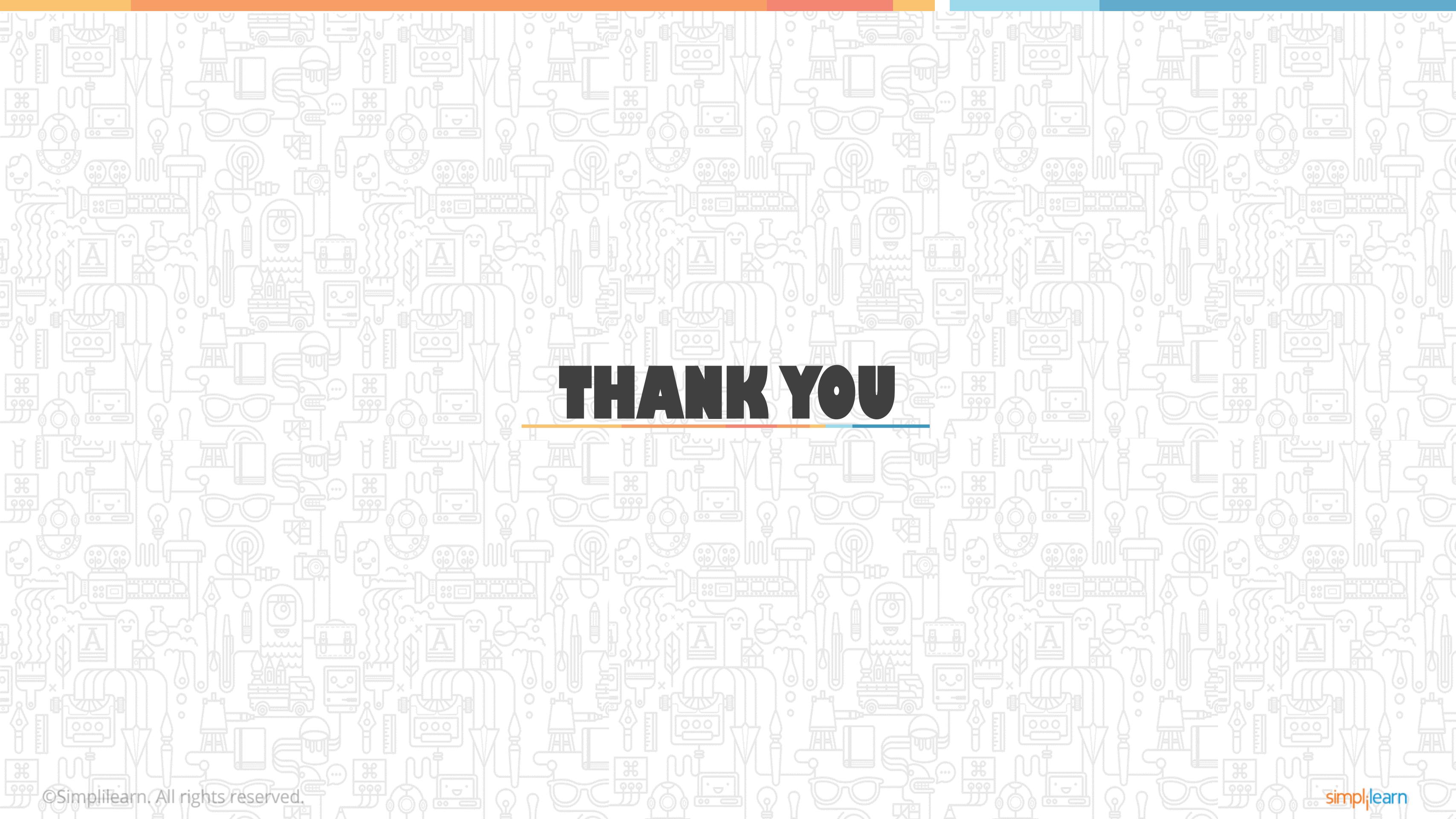
The correct answer is **a.**

**Explanation:** A use case diagram includes Actors, Uses Cases and Association.



**This concludes “Requirements Analysis and Design Definition.”**

The next lesson is “Solution Evaluation.”



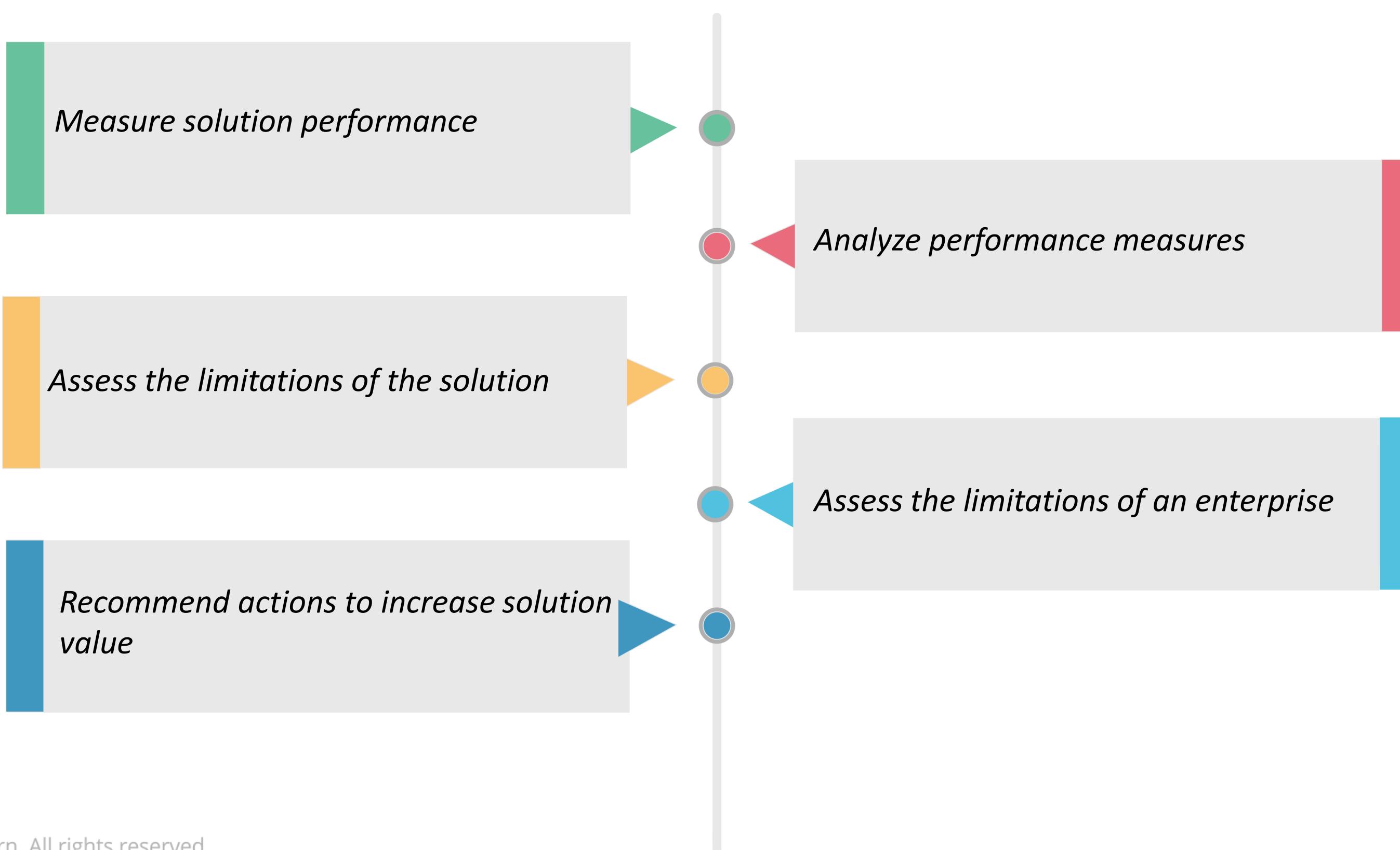
# THANK YOU

# CBAP® Exam Preparation Course

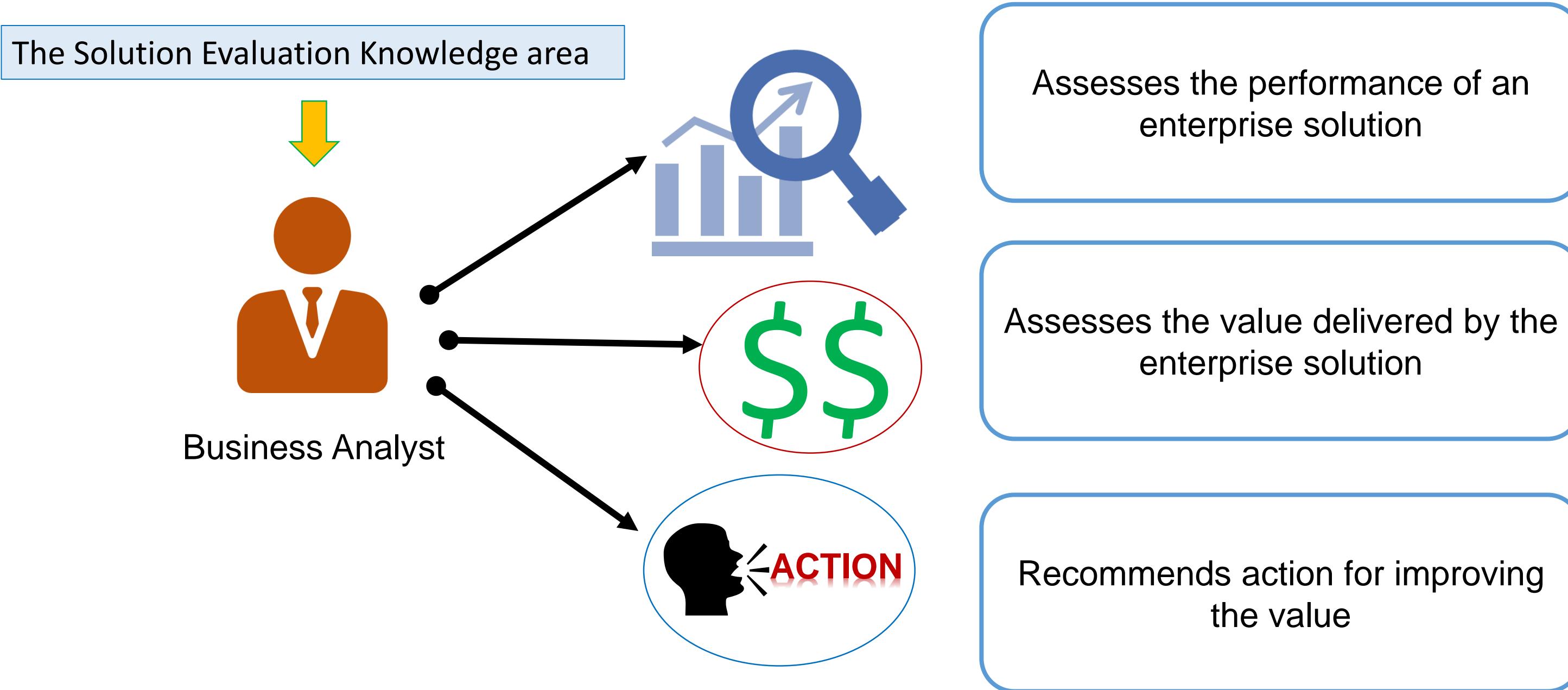
## Lesson 8 – Solution Evaluation



# WHAT'S IN IT FOR ME

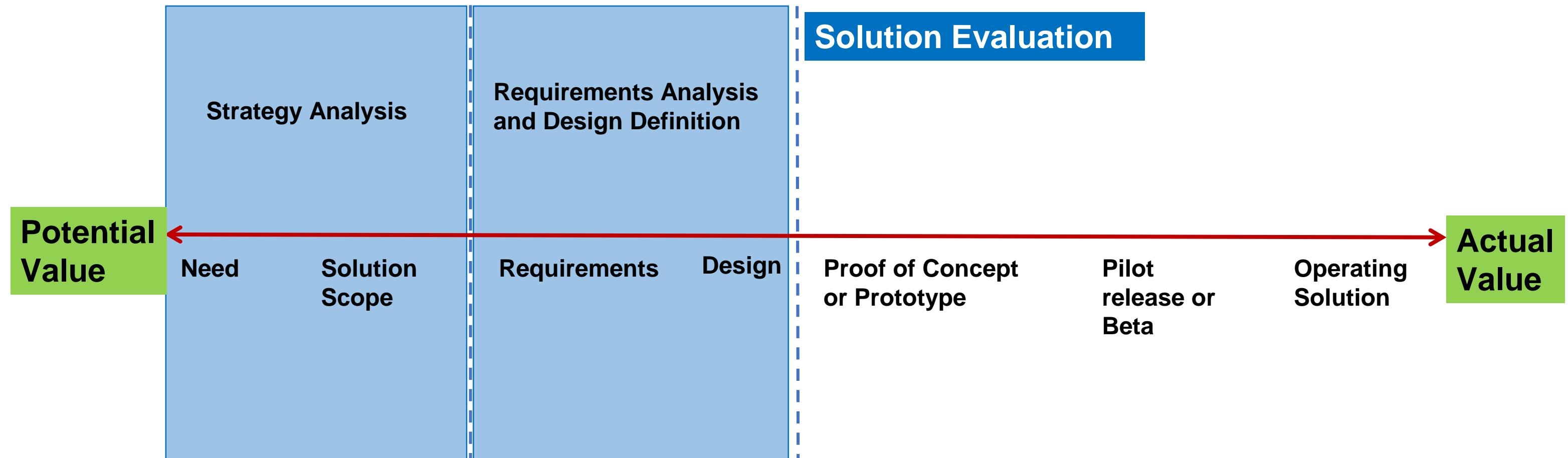


# INTRODUCTION



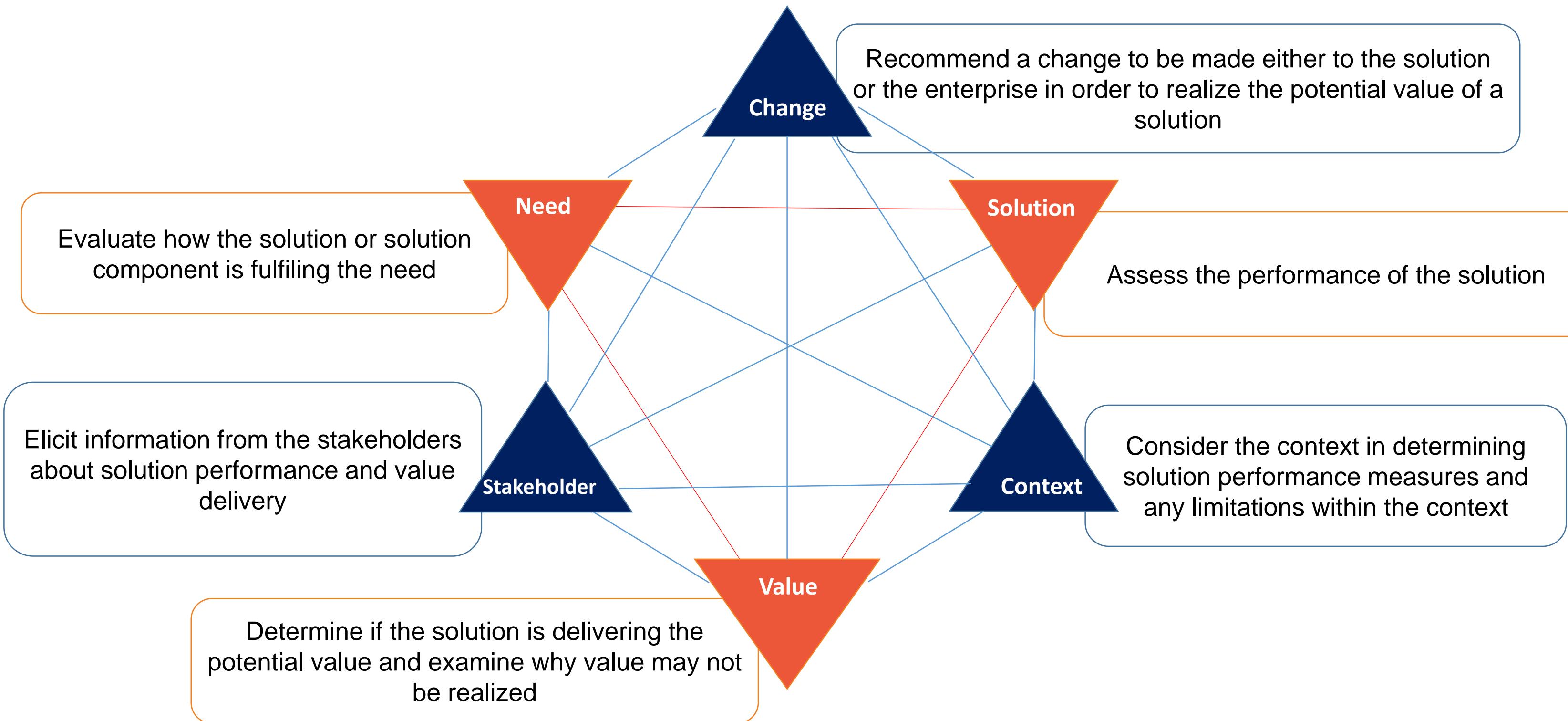
# SOLUTION EVALUATION

## BUSINESS ANALYSIS VALUE SPECTRUM



# SOLUTION EVALUATION

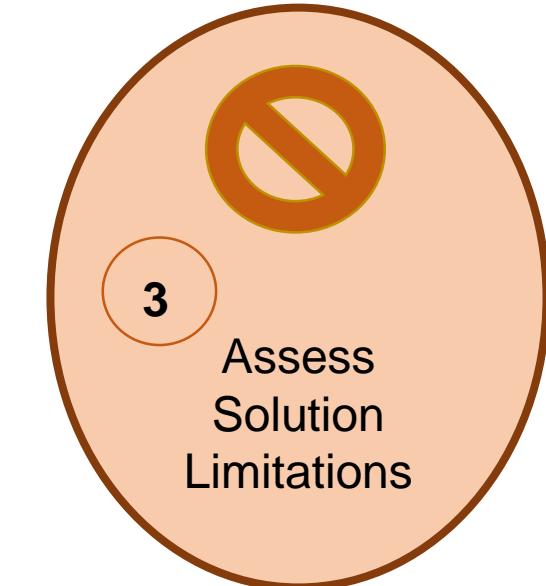
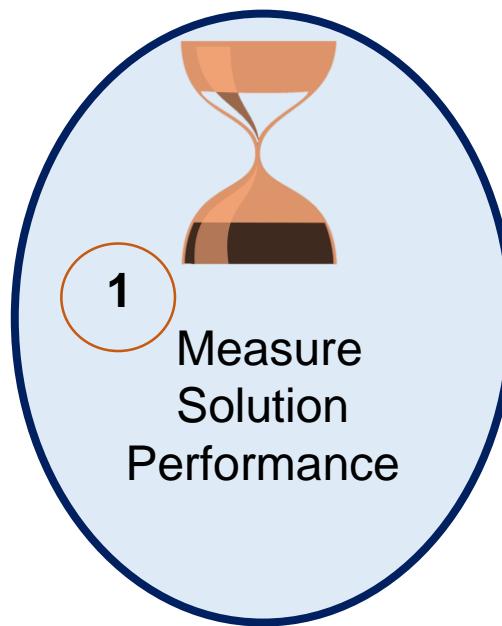
## OVERVIEW



# SOLUTION EVALUATION

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## INPUTS, TASKS, AND OUTPUT



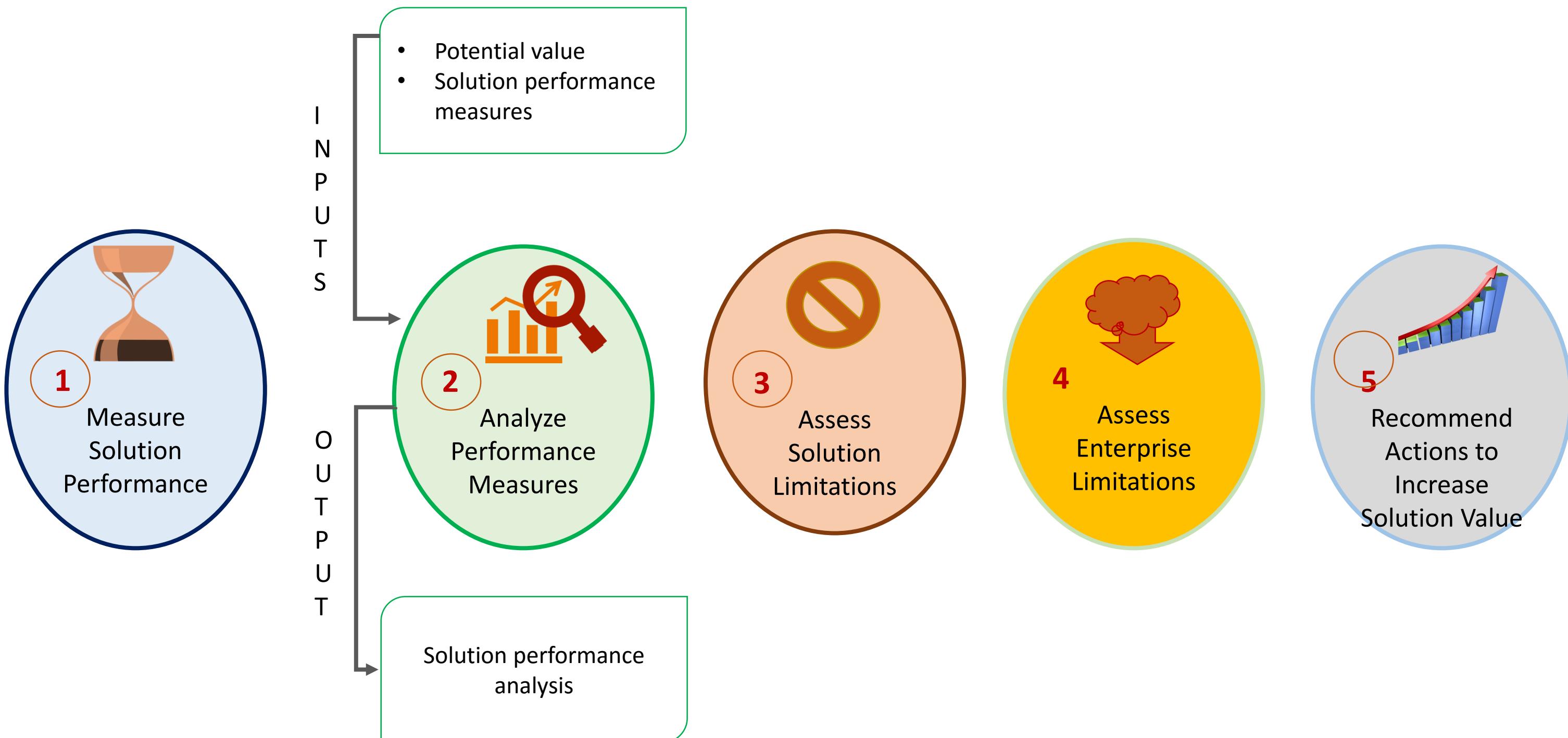
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



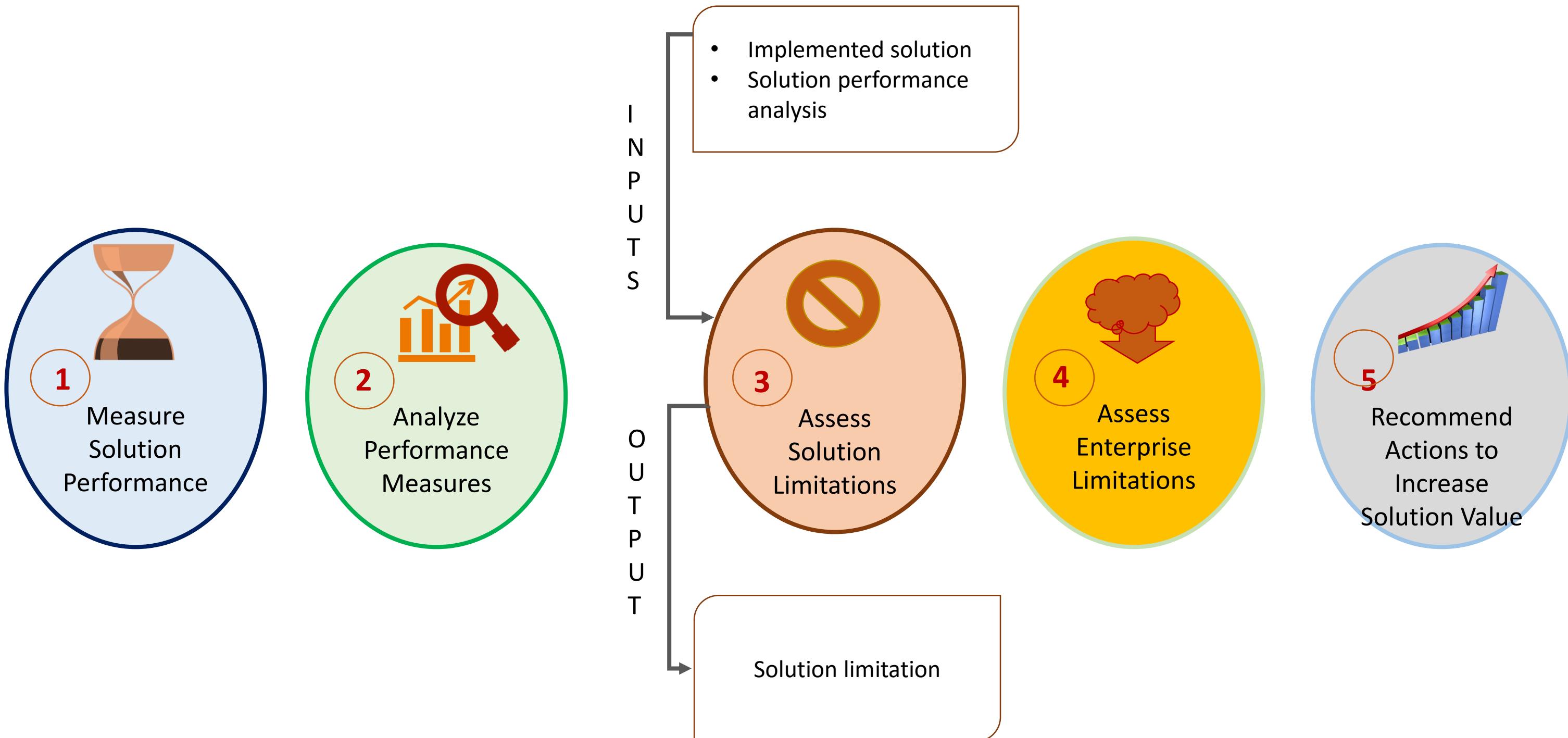
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



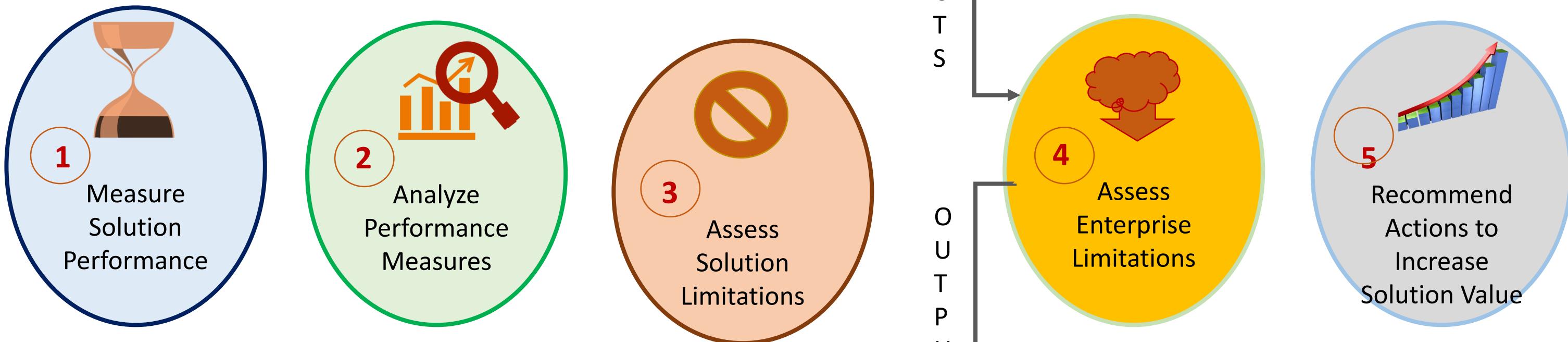
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



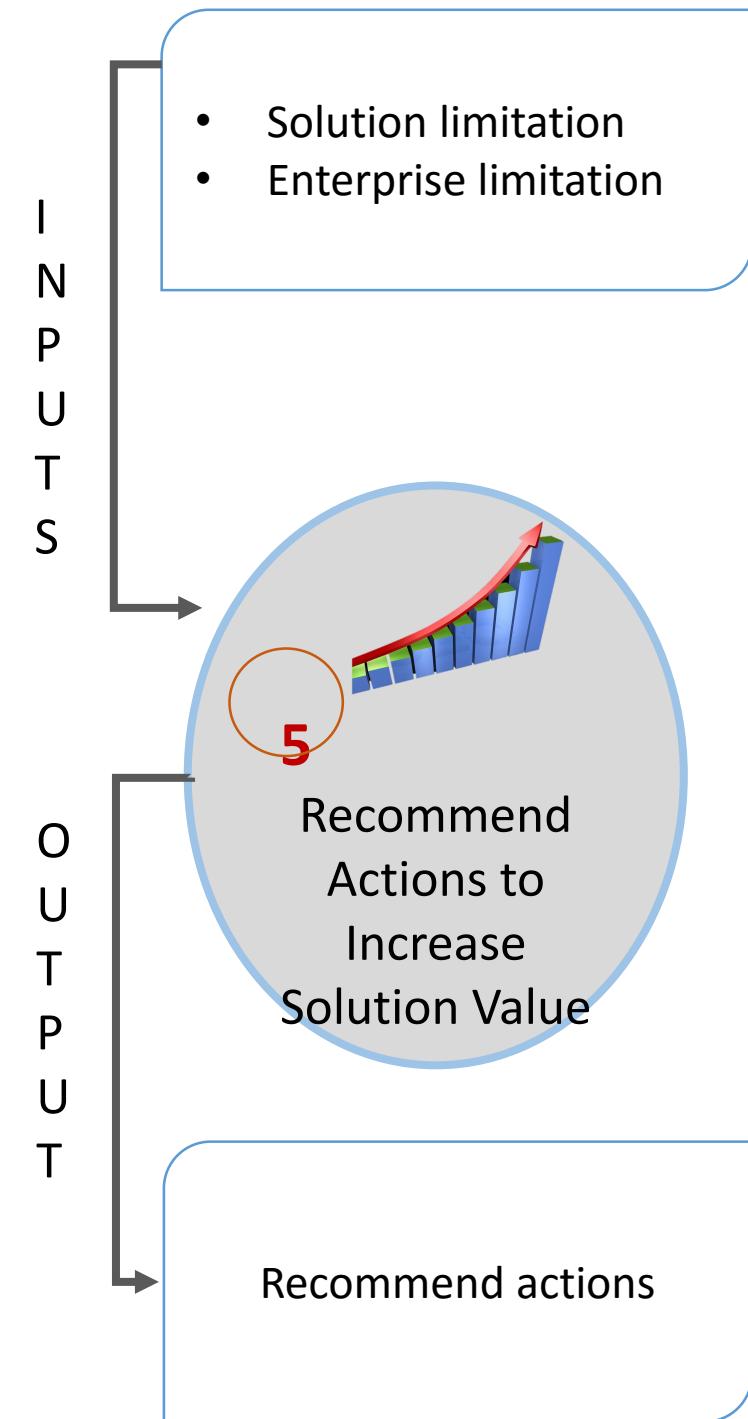
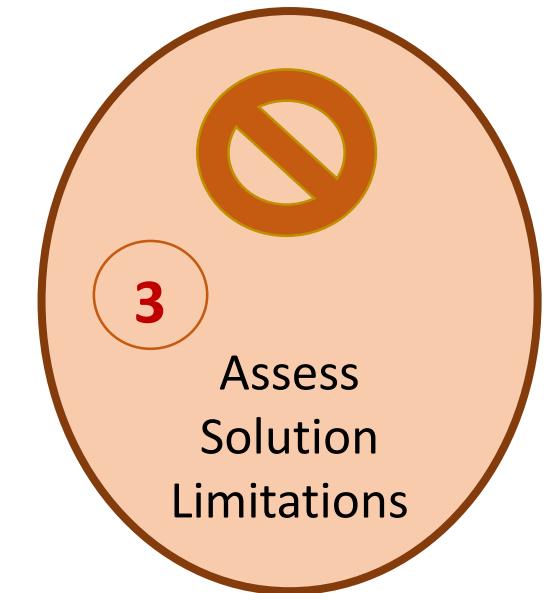
## SOLUTION EVALUATION (contd.)

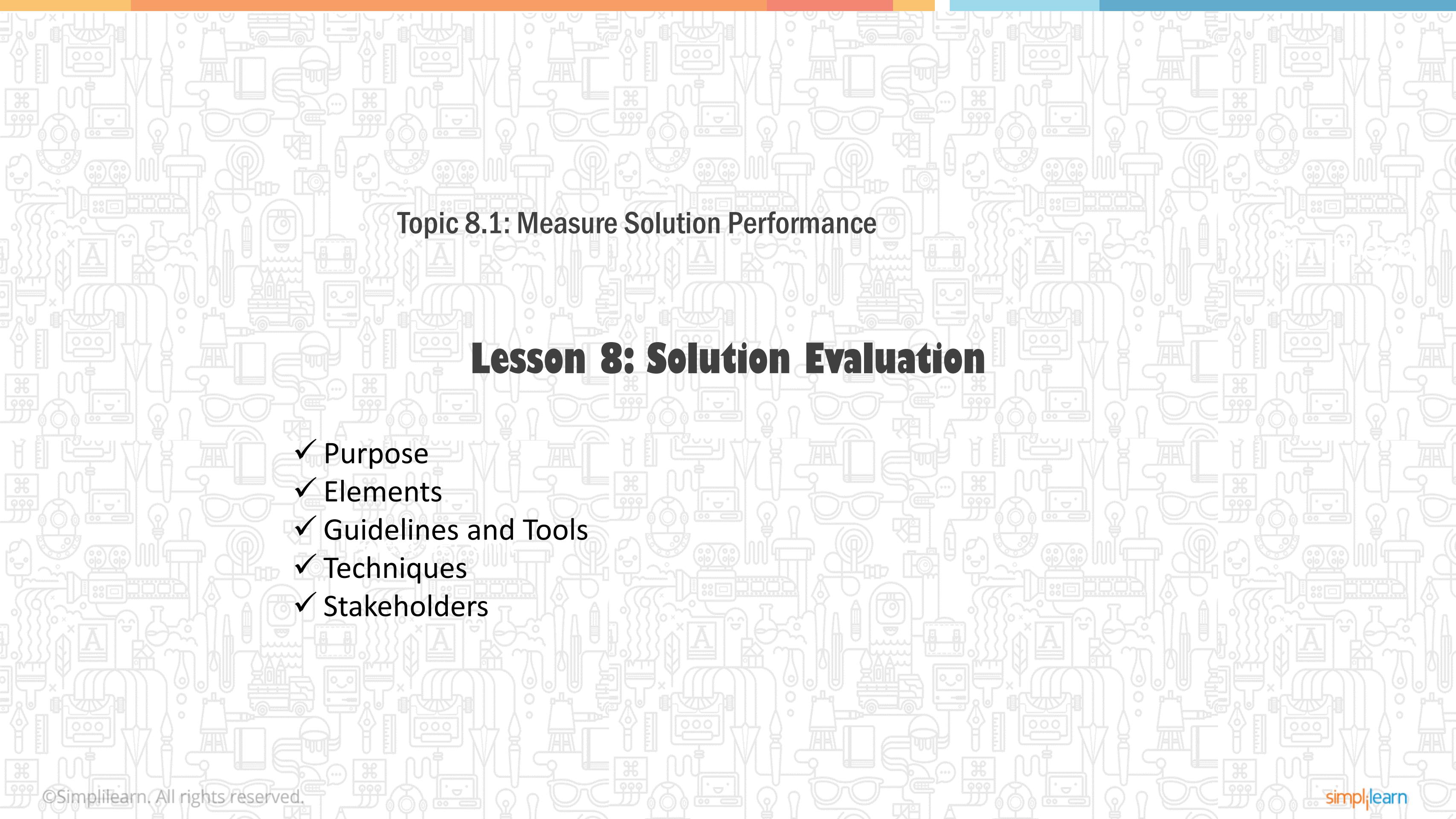
### INPUTS, TASKS, AND OUTPUT



## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT





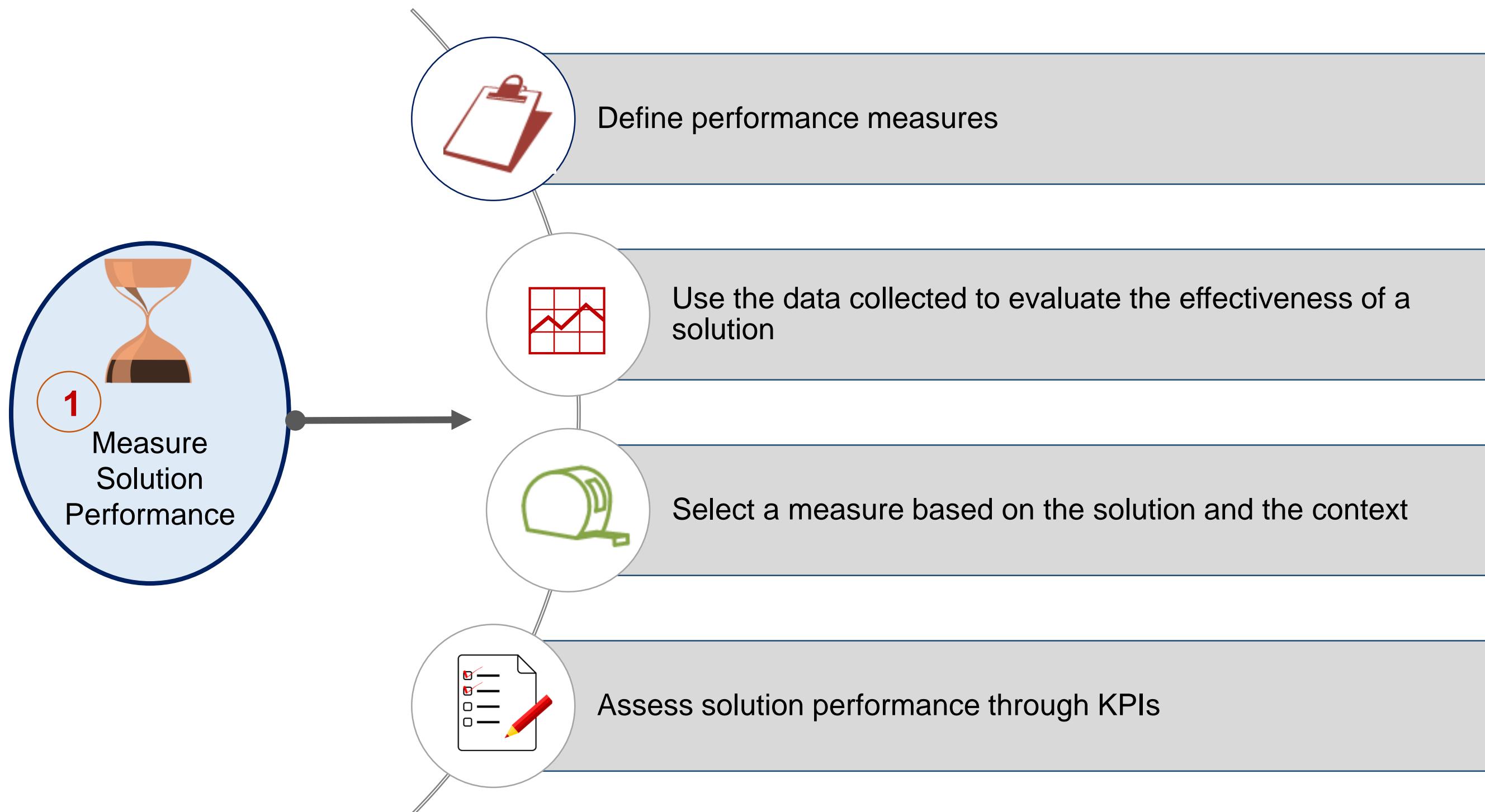
**Topic 8.1: Measure Solution Performance**

## **Lesson 8: Solution Evaluation**

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

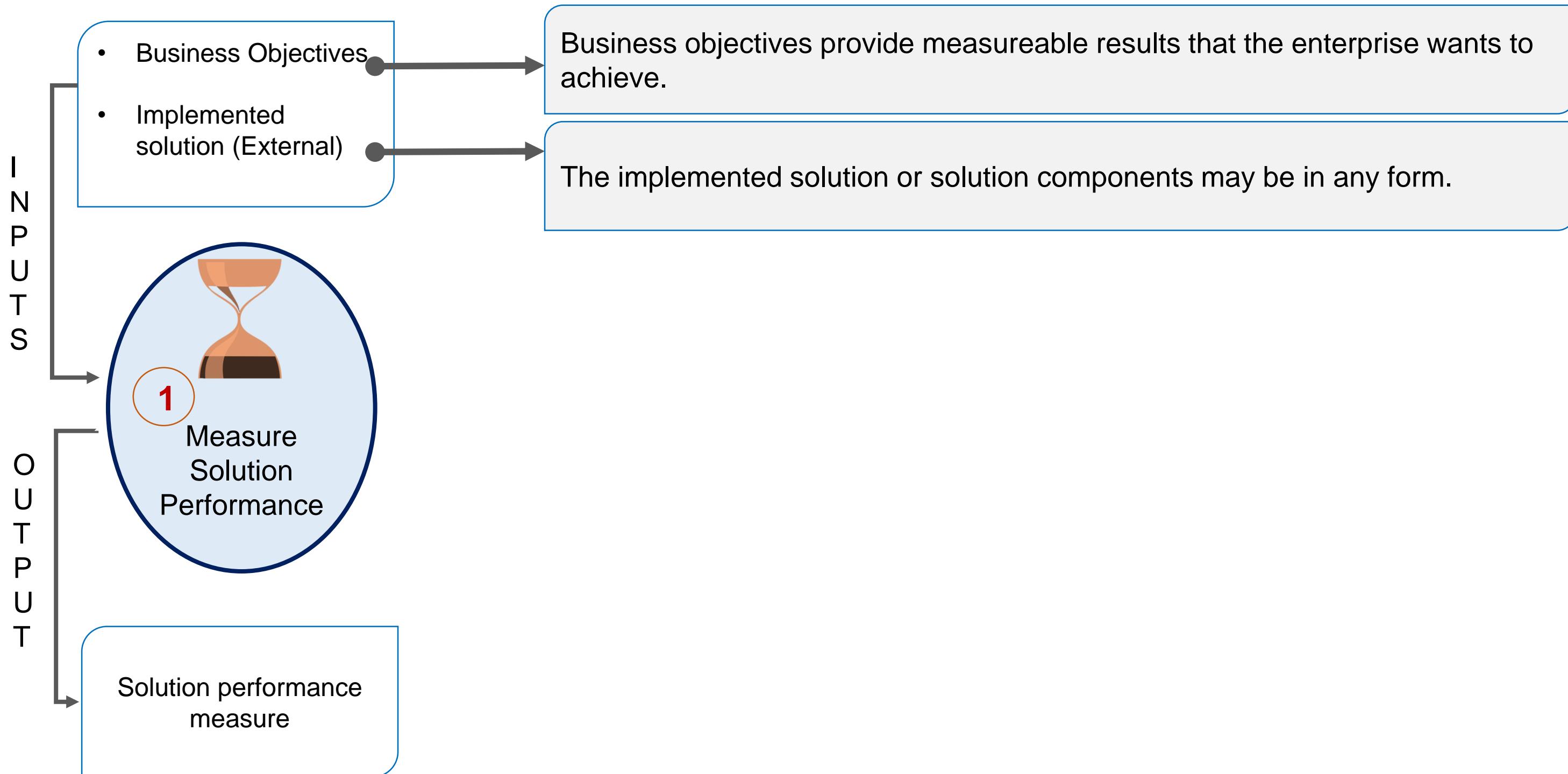
# MEASURE SOLUTION PERFORMANCE

## PURPOSE



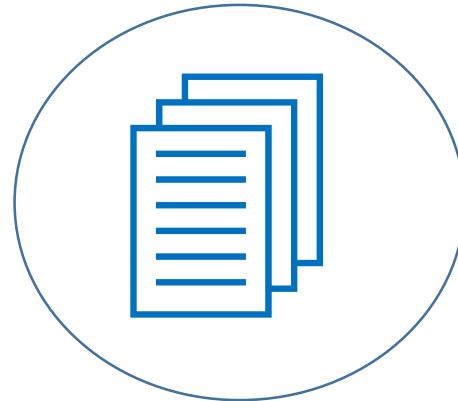
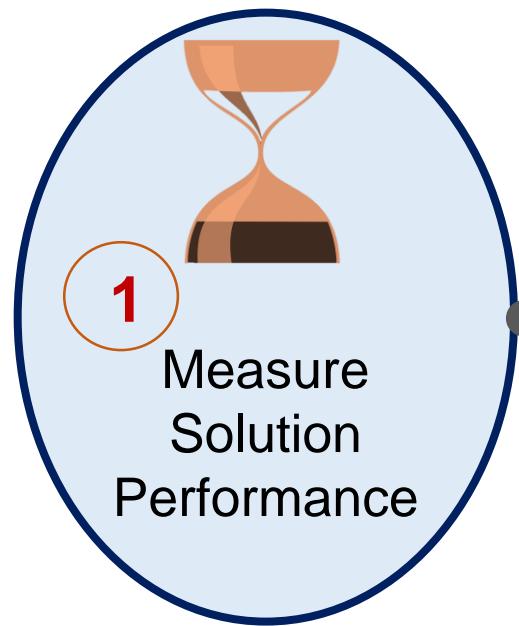
## MEASURE SOLUTION PERFORMANCE (contd.)

### PURPOSE



# MEASURE SOLUTION PERFORMANCE

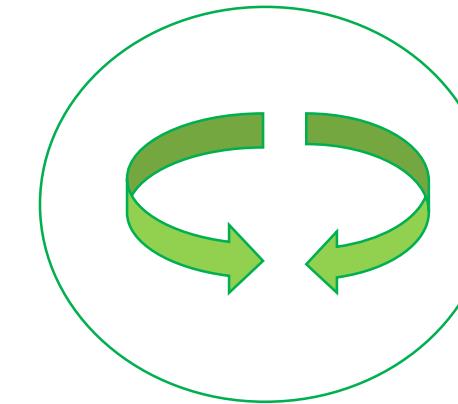
## ELEMENTS



### DEFINE



### VALIDATE



### COLLECT

#### Solution performance measures

- Include:
  - Business goals
  - Objectives
  - Processes
- Can be:
  - Quantitative – Numerical or countable
  - Qualitative - Subjective
  - Both

## MEASURE SOLUTION PERFORMANCE (contd.)

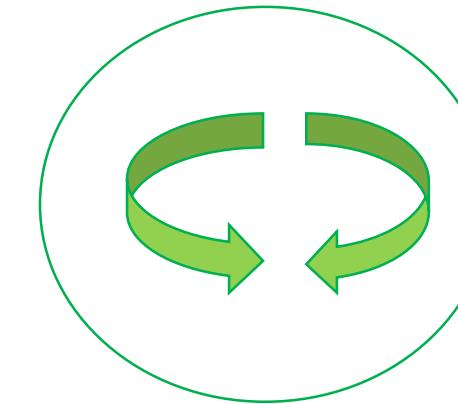
### ELEMENTS



**DEFINE**



**VALIDATE**



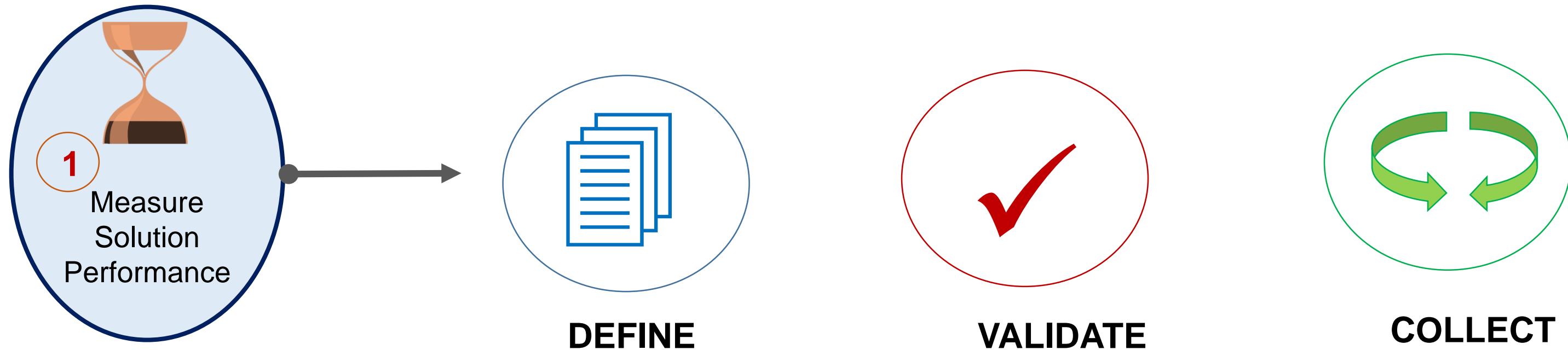
**COLLECT**

Validate performance measures:

- The Solution Performance measures are validated with the stakeholders.
- The decision on the measure to be used resides with the sponsor.

## MEASURE SOLUTION PERFORMANCE (contd.)

### ELEMENTS



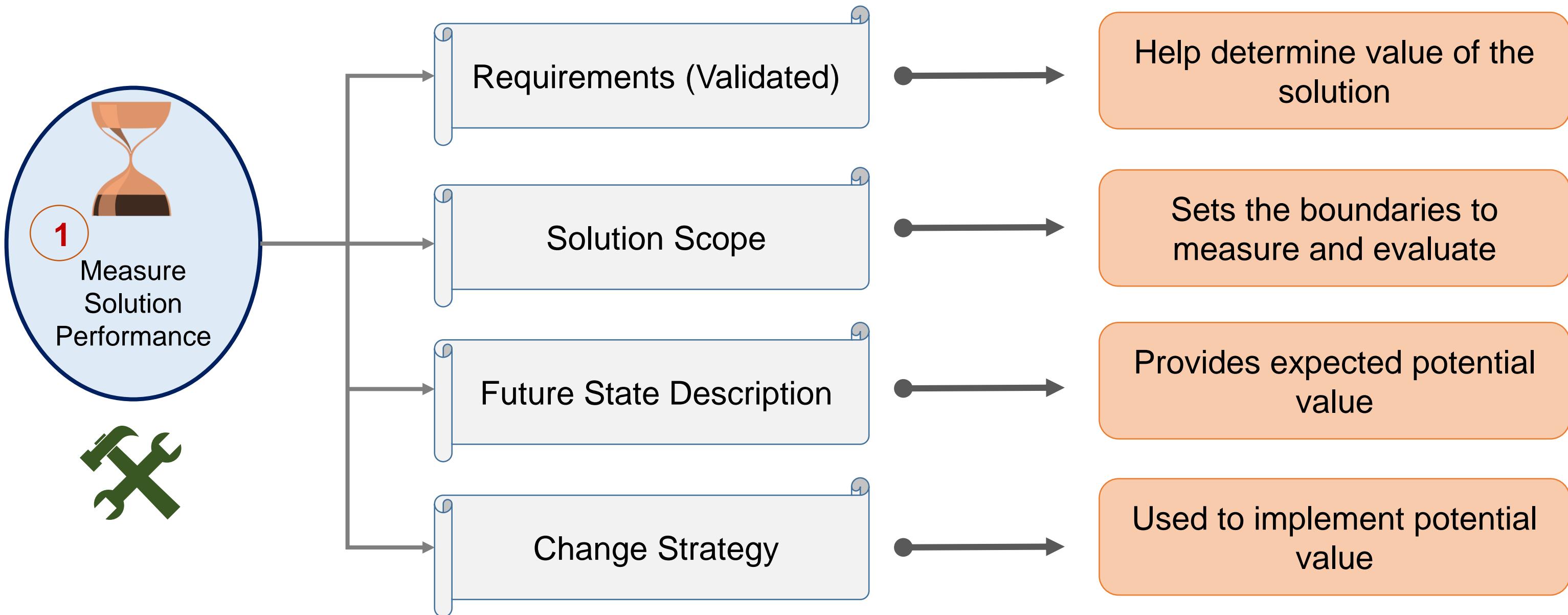
To collect performance measures:

- Consider volume or sample size
- Consider frequency and timing

# MEASURE SOLUTION PERFORMANCE

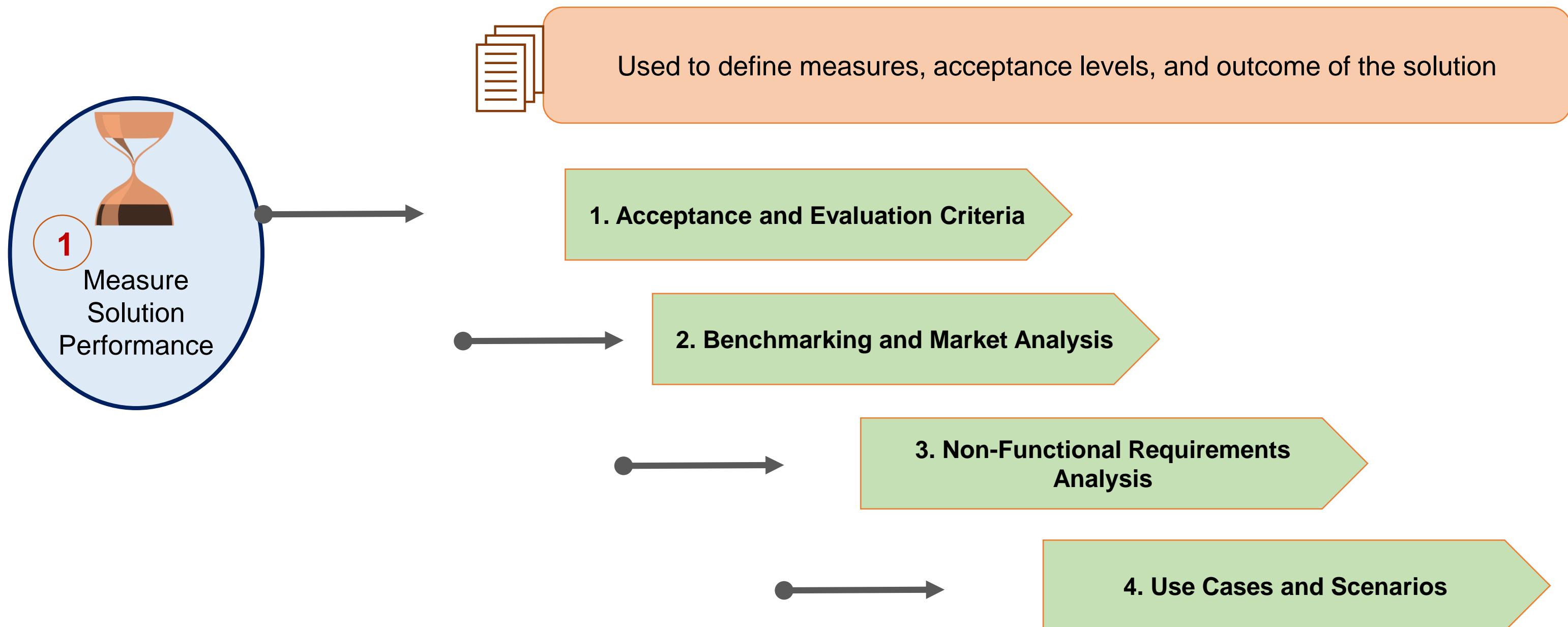
## GUIDELINES AND TOOLS

The business analyst may use the following guidelines and tools.



# MEASURE SOLUTION PERFORMANCE TECHNIQUES

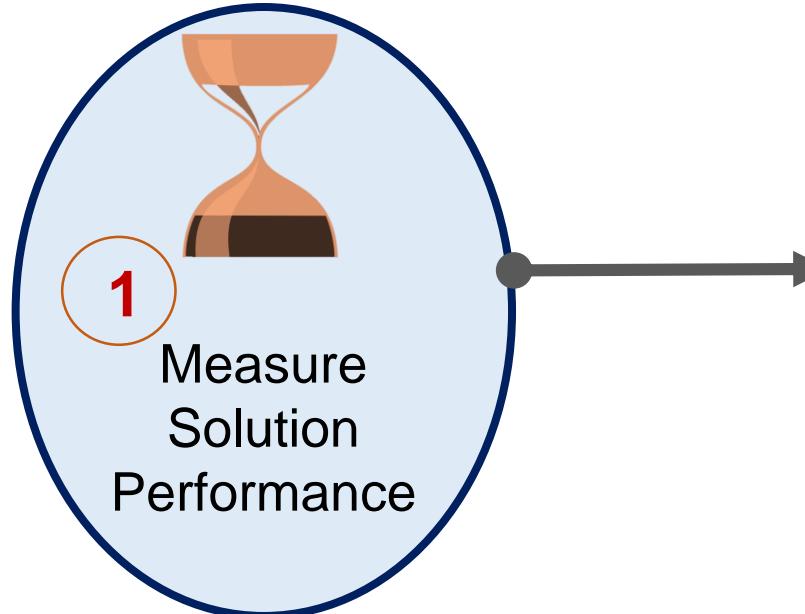
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

There are 13 techniques for measuring solution performance.



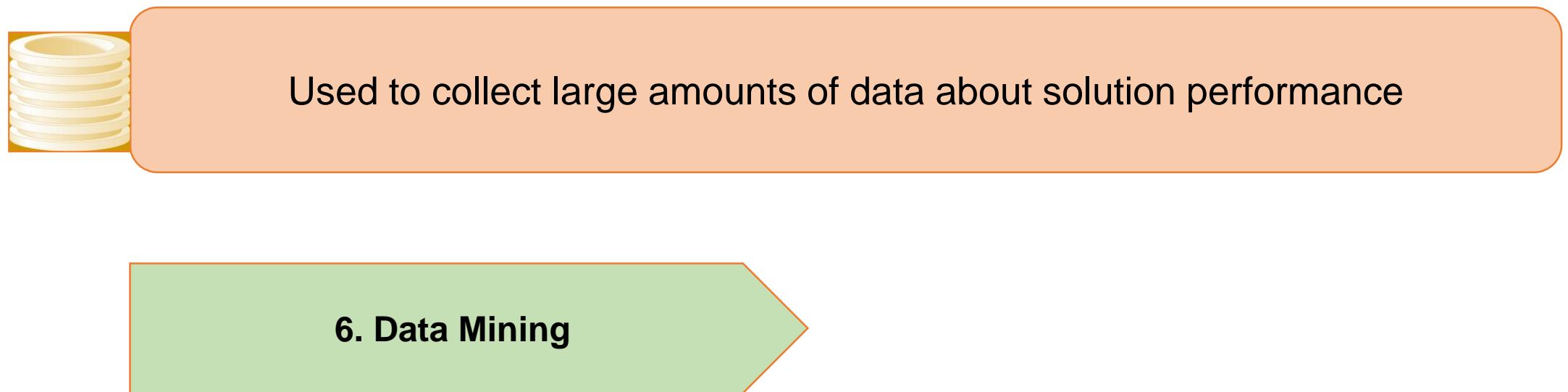
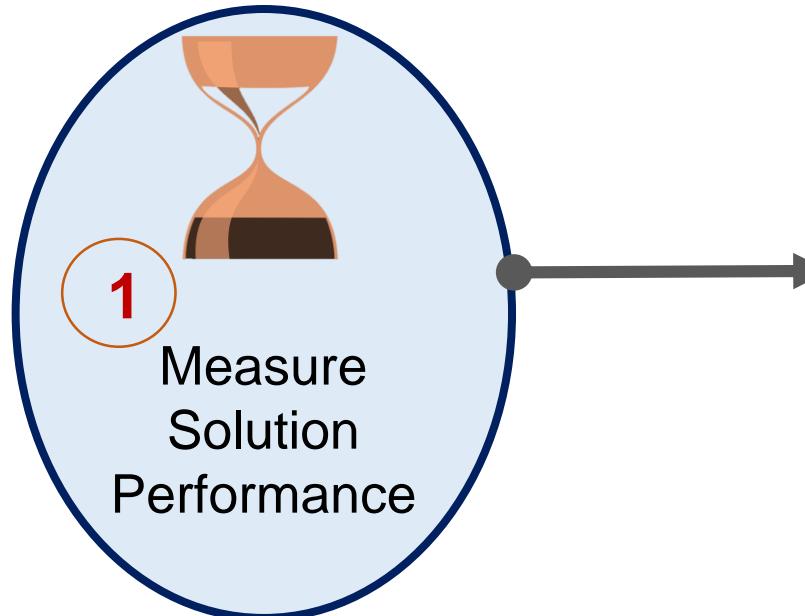
Used to define performance measures for a proposed solution

**5. Business Cases**

# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

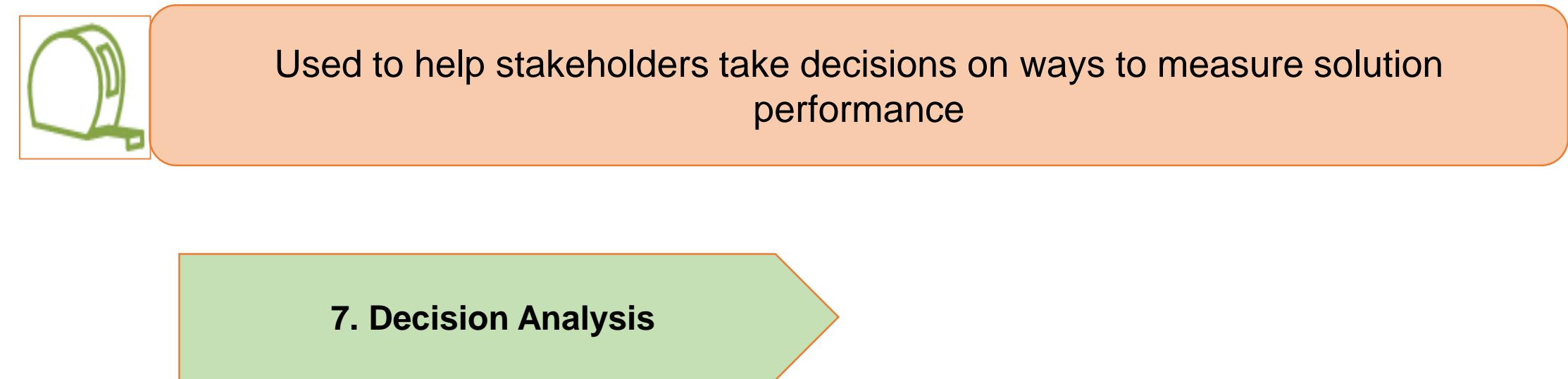
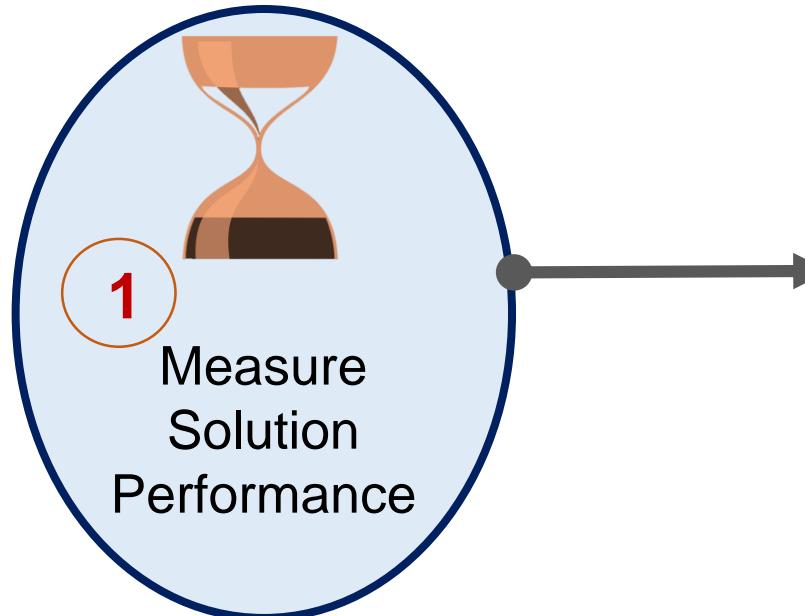
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

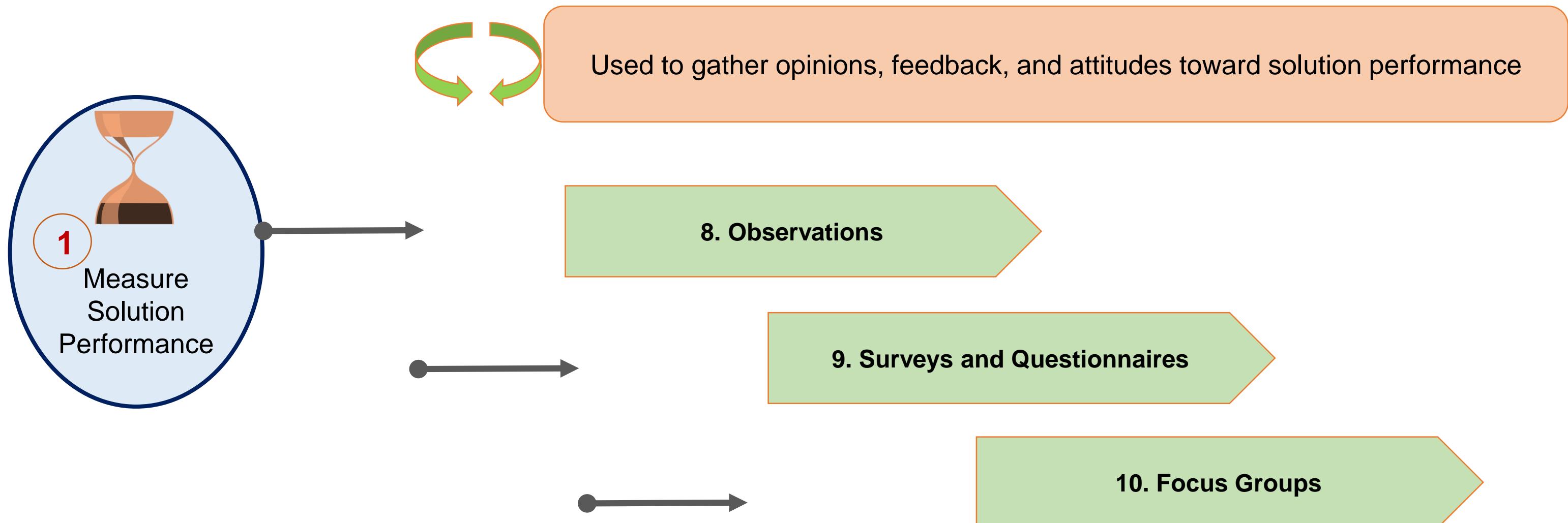
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

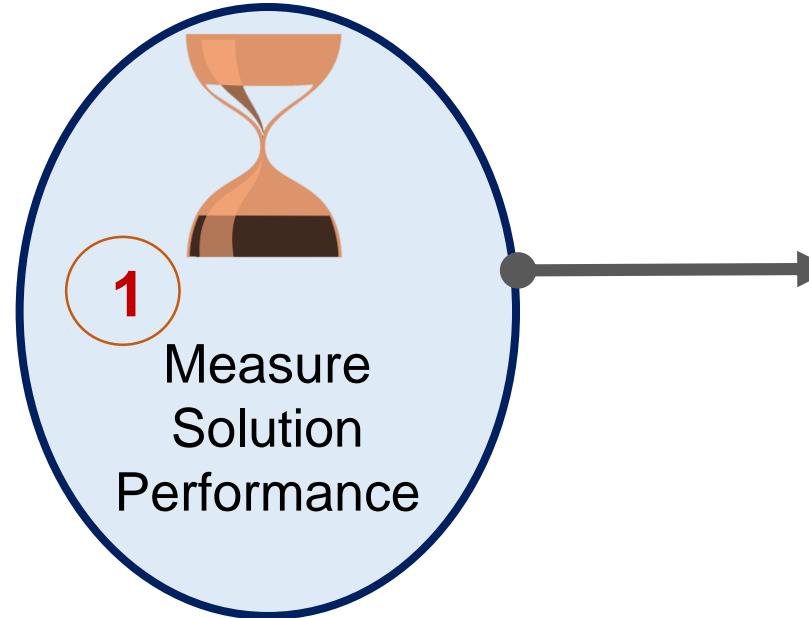
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

There are 13 techniques for measuring solution performance.



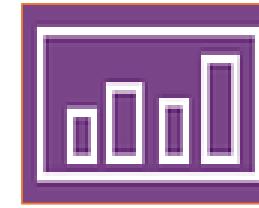
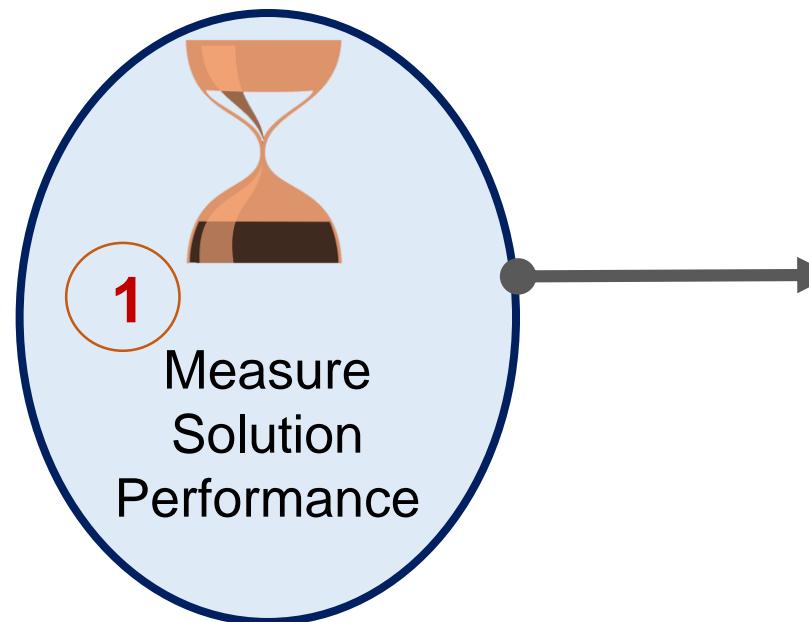
Used to simulate the solution in order to determine solution performance

**11. Prototyping**

# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

There are 13 techniques for measuring solution performance.



Used to measure solution performance

**12. Metrics and Key Performance Indicators**

# MEASURE SOLUTION PERFORMANCE (contd.)

---

## TECHNIQUES

There are 13 techniques for measuring solution performance.

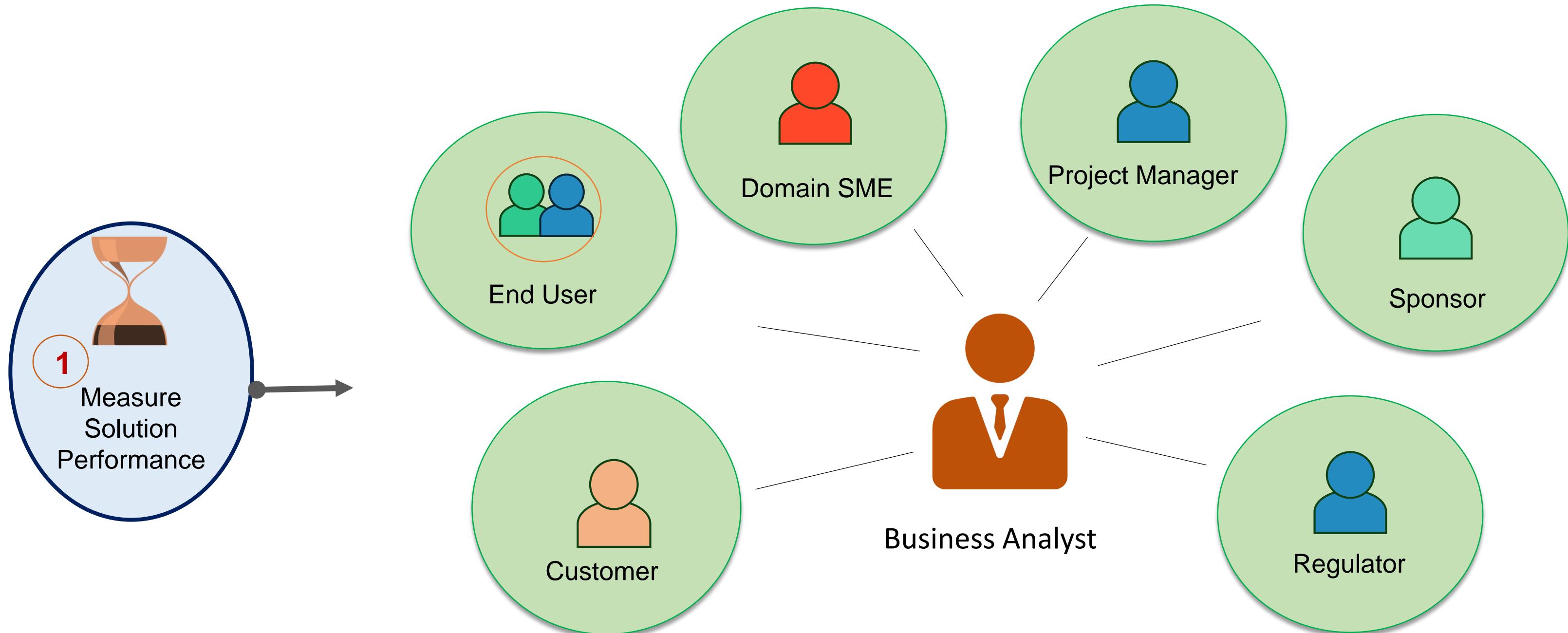


Used to evaluate and select performance measures of vendors that must be included in the solution performance assessment

**13. Vendor Assessment**

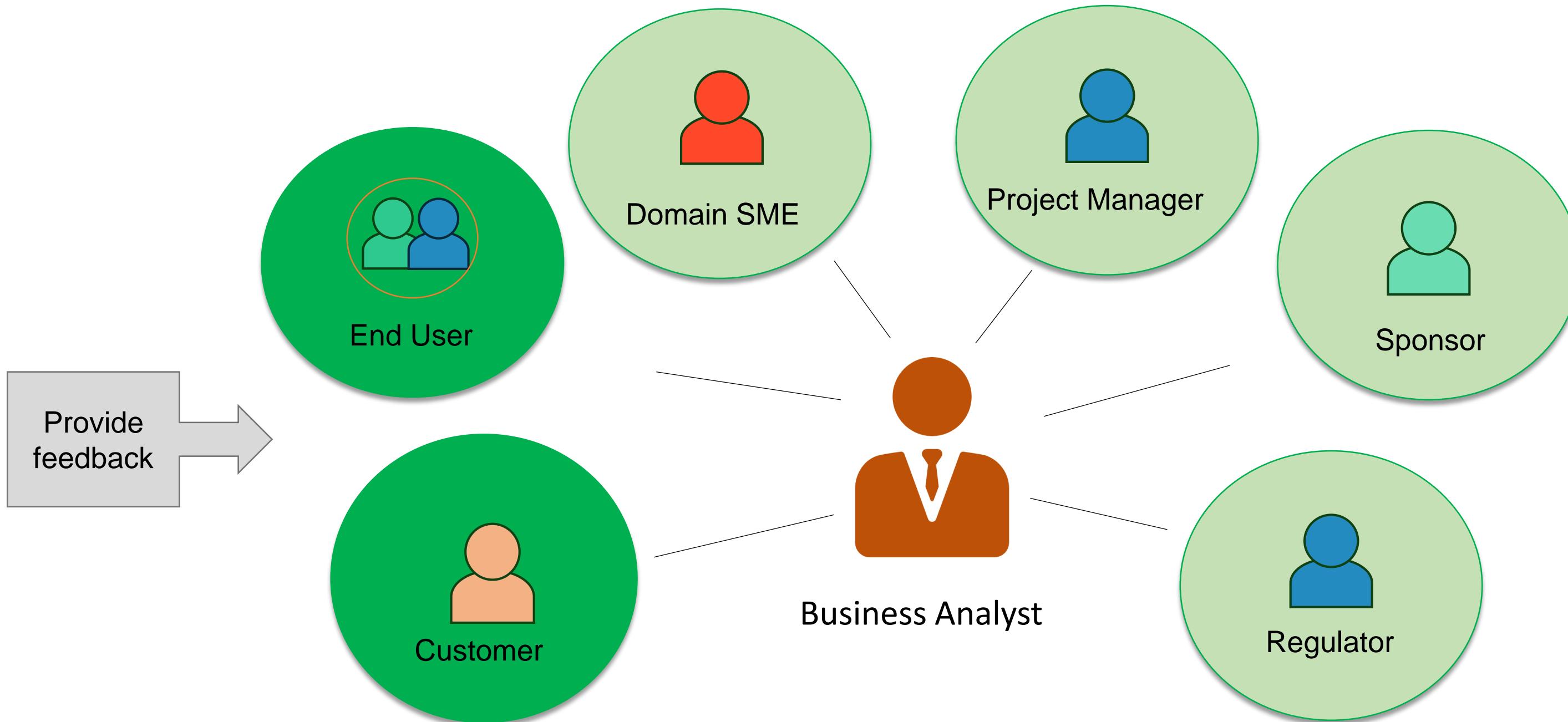
# MEASURE SOLUTION PERFORMANCE

## STAKEHOLDERS

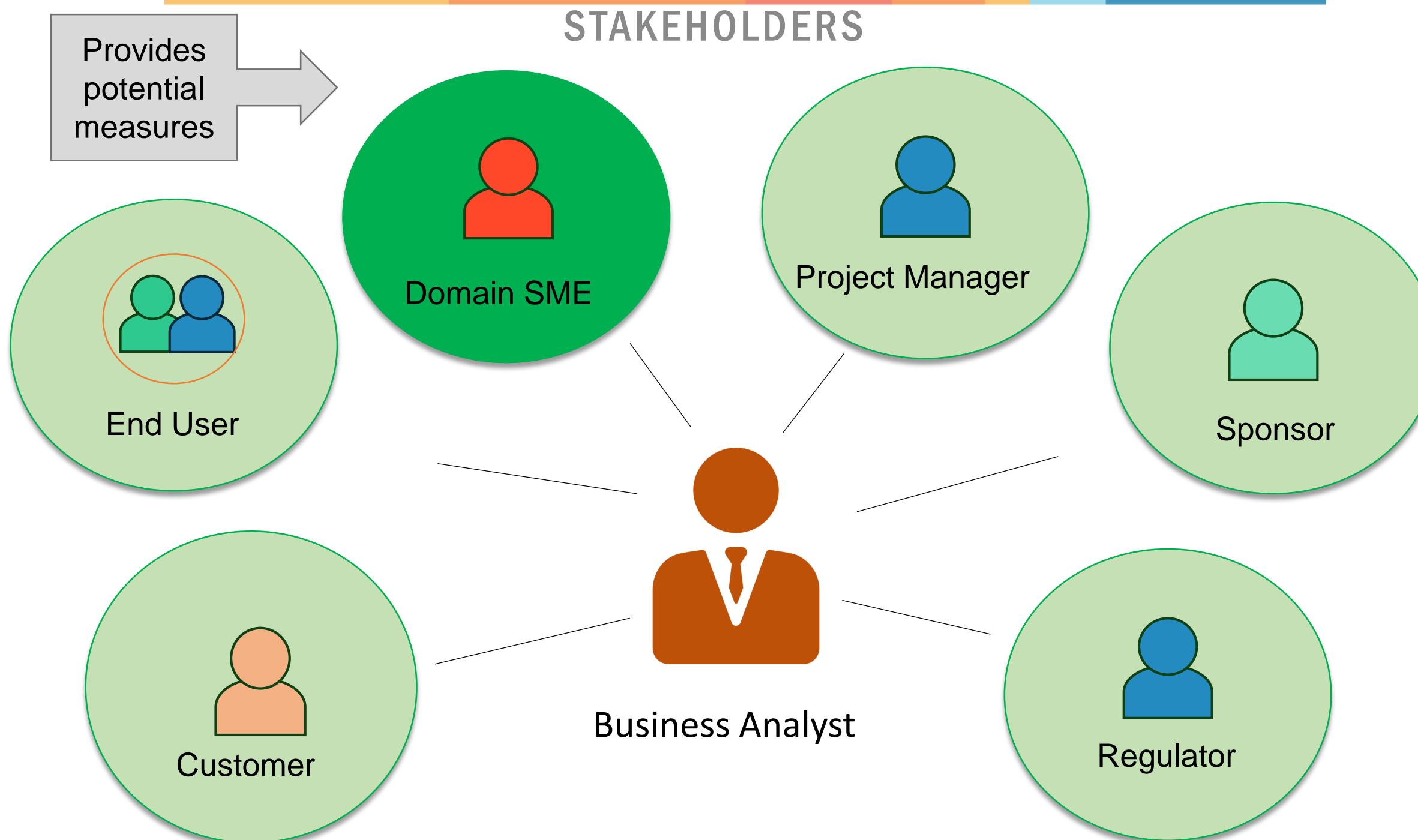


## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS

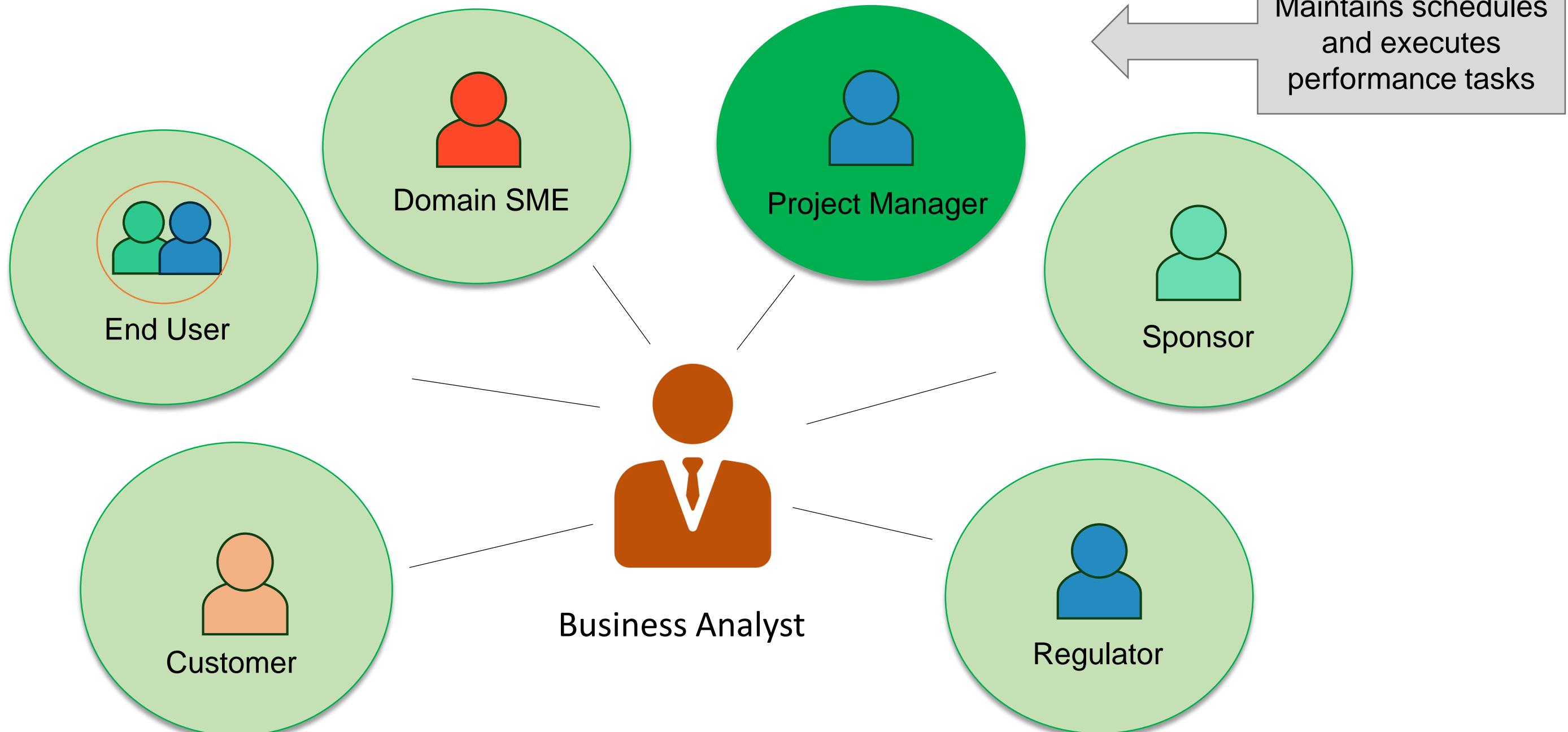


## MEASURE SOLUTION PERFORMANCE (contd.)



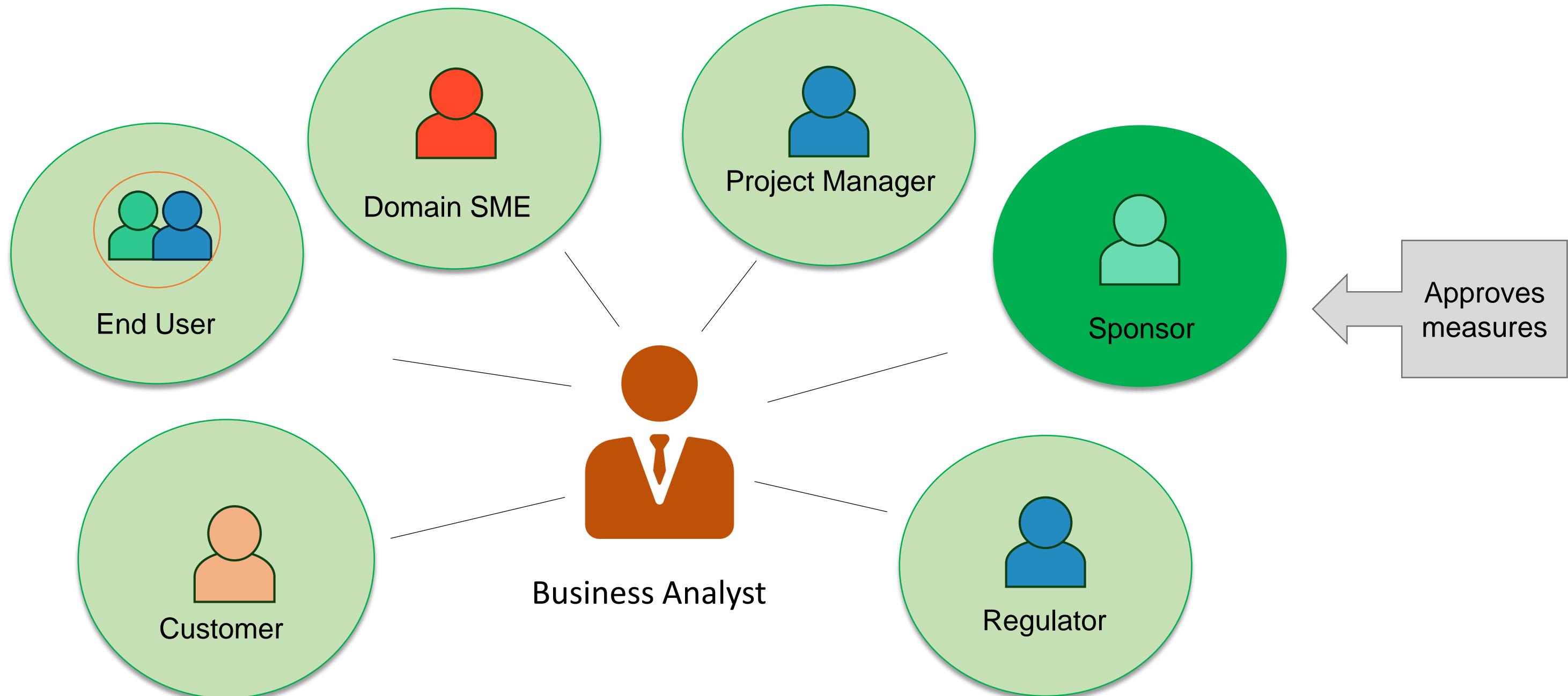
## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS



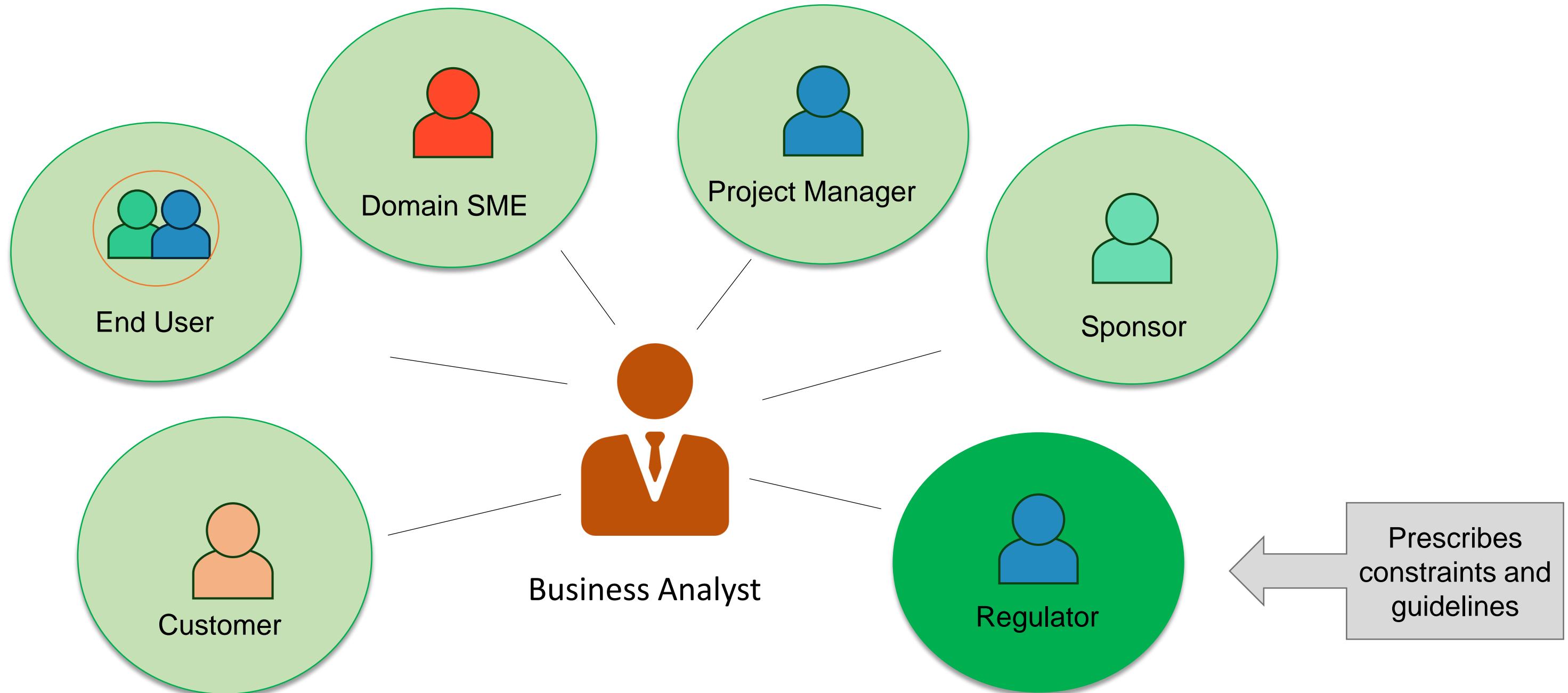
## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS



## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS



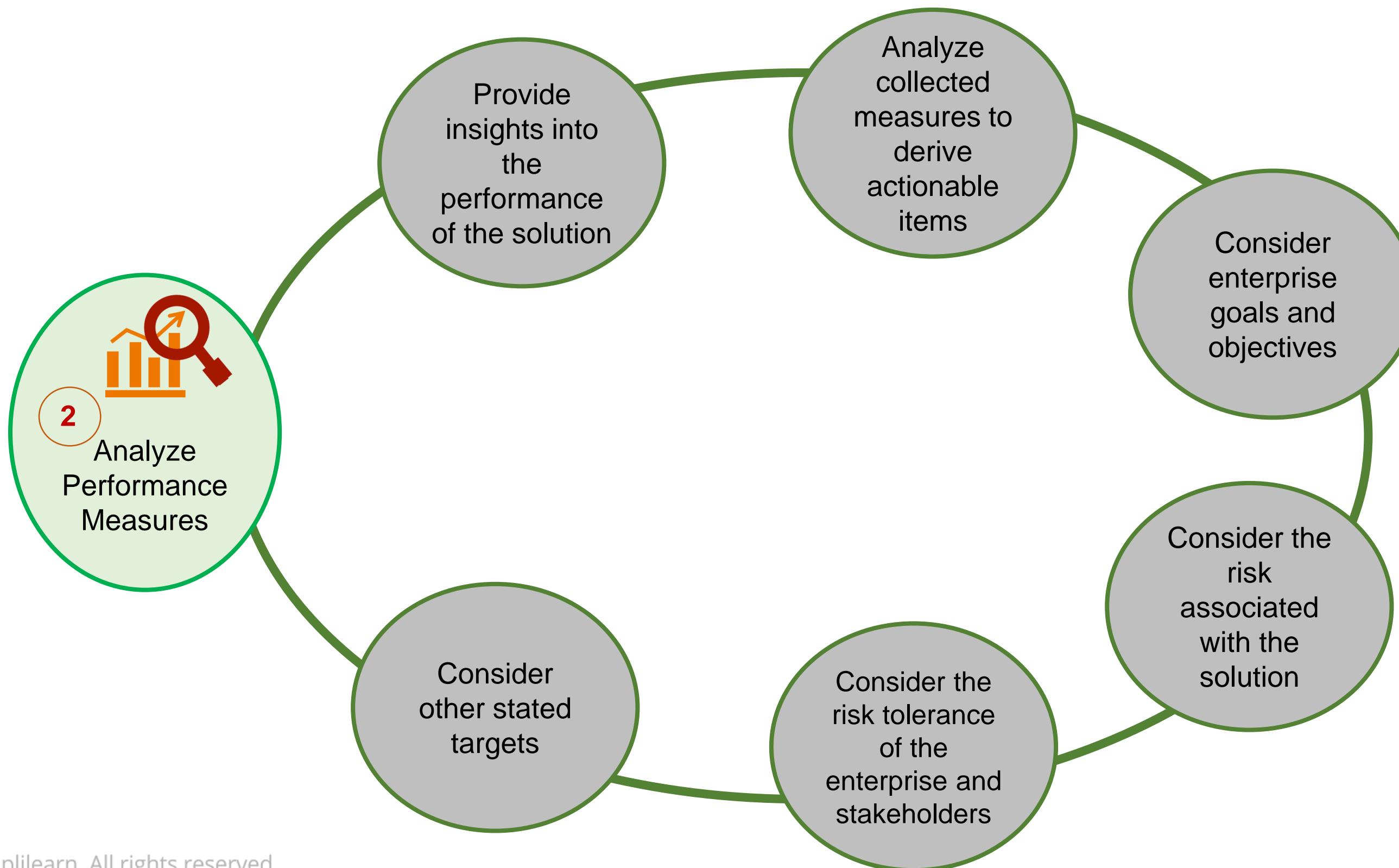
## Topic 8.2: Analyze Performance Measures

# Lesson 8: Solution Evaluation

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

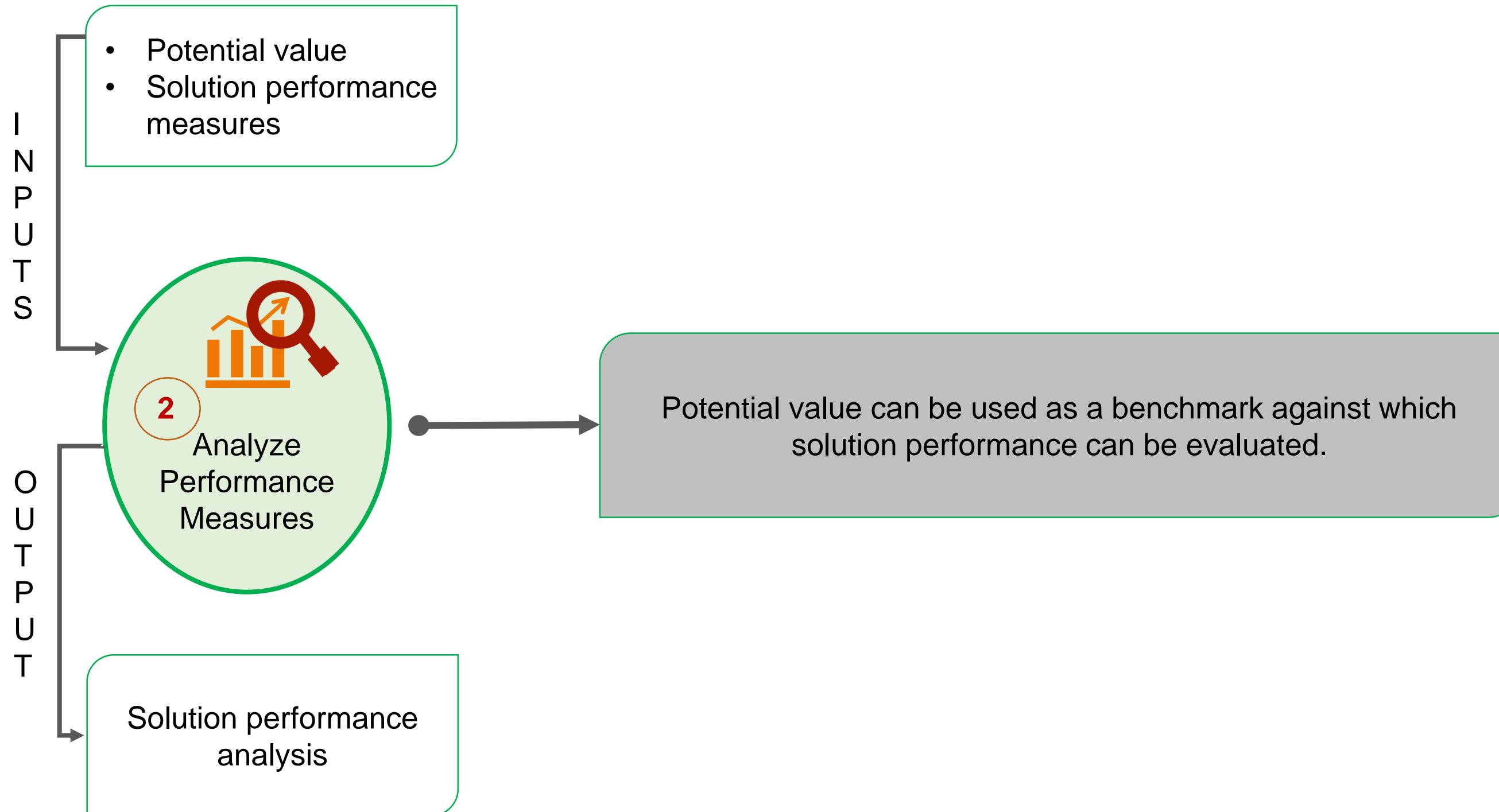
# ANALYZE PERFORMANCE MEASURES

## PURPOSE



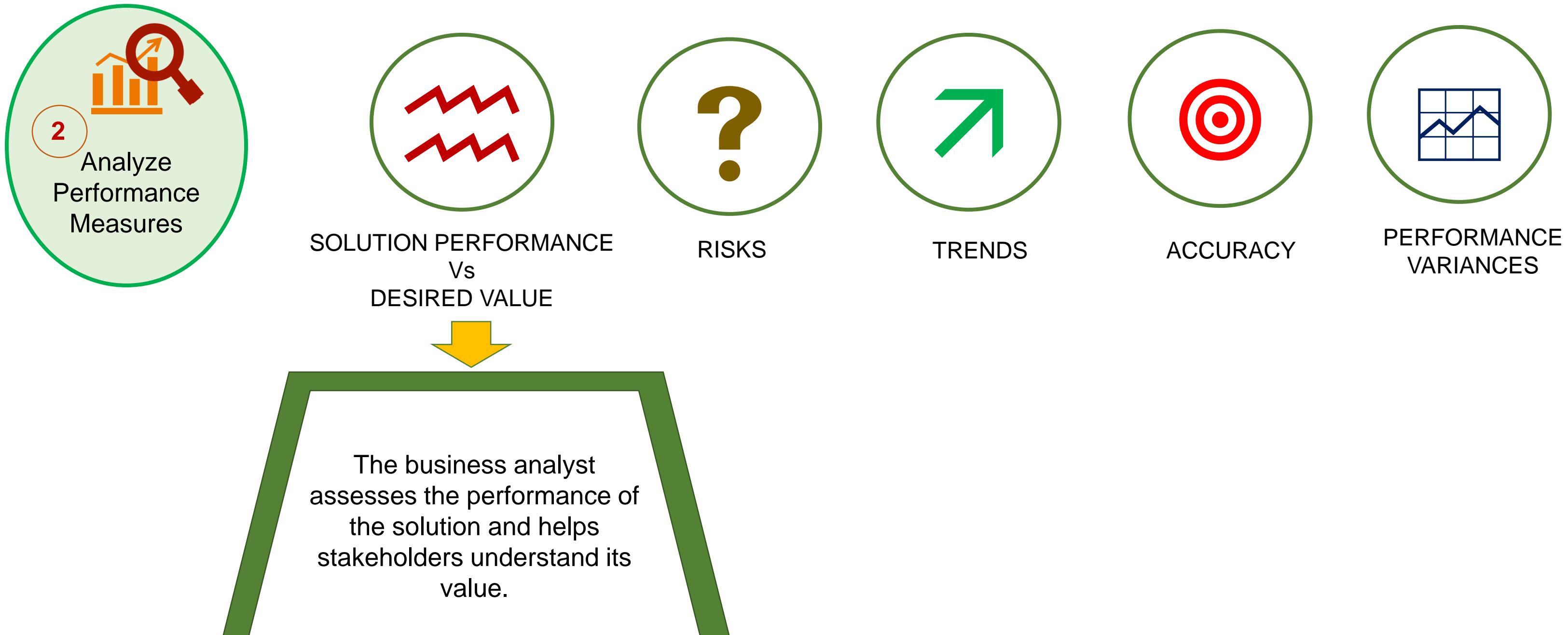
## ANALYZE PERFORMANCE MEASURES

### PURPOSE



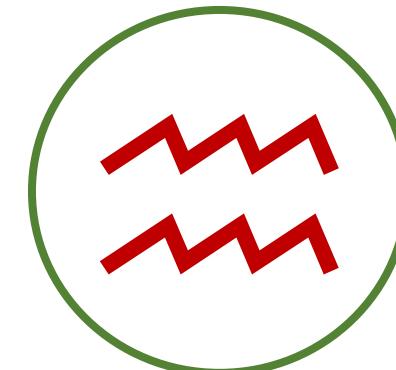
# ANALYZE PERFORMANCE MEASURES

## ELEMENTS



## ANALYZE PERFORMANCE MEASURES (contd.)

### ELEMENTS



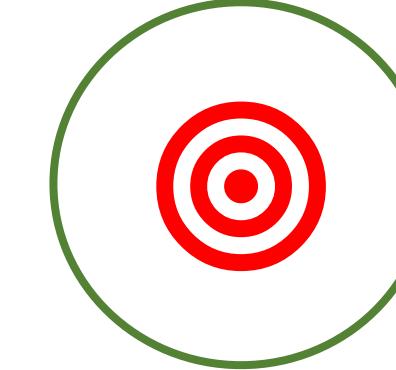
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



RISKS



TRENDS



ACCURACY



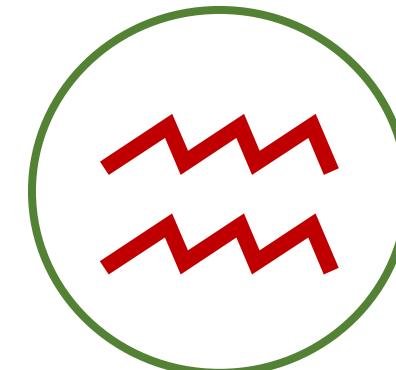
PERFORMANCE  
VARIANCES



New risks may be uncovered  
while assessing solution  
performance and must be  
managed.

## ANALYZE PERFORMANCE MEASURES (contd.)

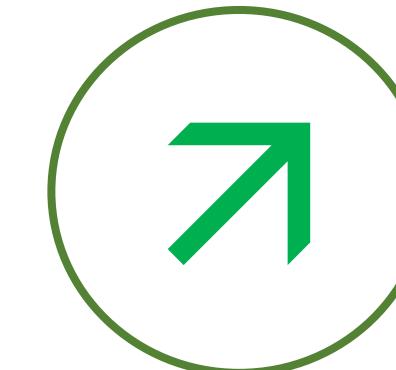
### ELEMENTS



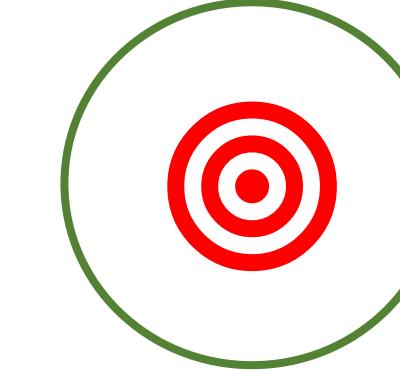
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



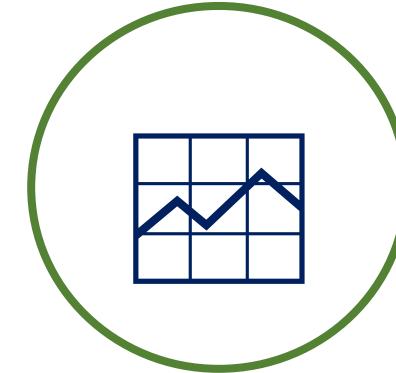
RISKS



TRENDS



ACCURACY

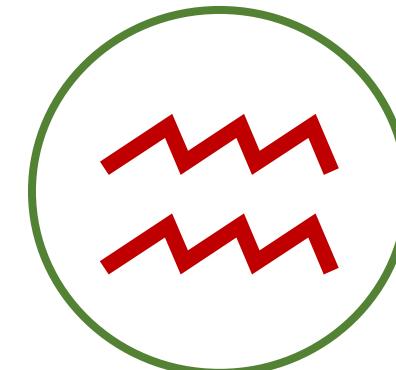


PERFORMANCE  
VARIANCES

The data collection period is an important factor to be considered when analyzing performance data.

## ANALYZE PERFORMANCE MEASURES (contd.)

### ELEMENTS



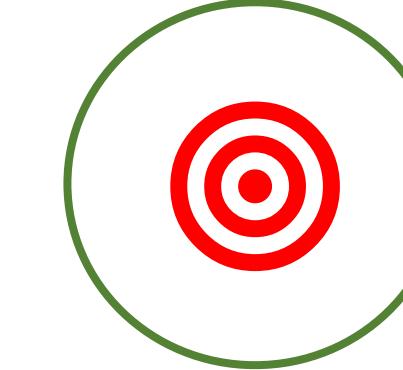
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



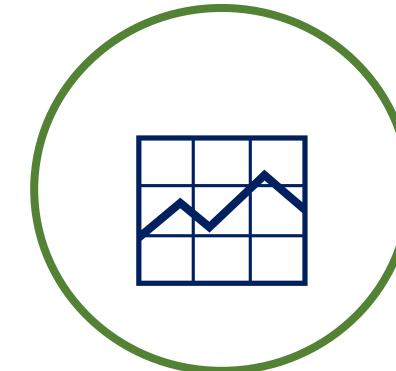
RISKS



TRENDS



ACCURACY



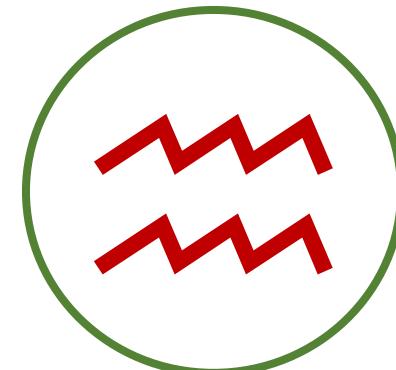
PERFORMANCE  
VARIANCES



The results of performance measures should be reproducible and repeatable to ensure accuracy.

## ANALYZE PERFORMANCE MEASURES (contd.)

### ELEMENTS



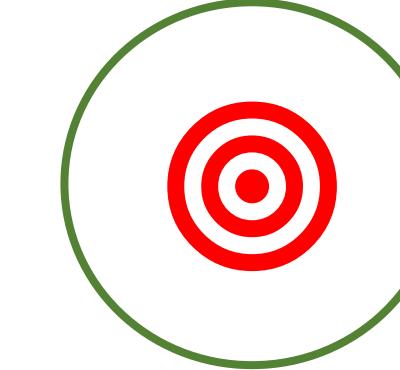
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



RISKS



TRENDS



ACCURACY



PERFORMANCE  
VARIANCES



Variance is the difference between expected and actual performance. To understand the causes of variance, root cause analysis must be performed.

# ANALYZE PERFORMANCE MEASURES

## GUIDELINES AND TOOLS

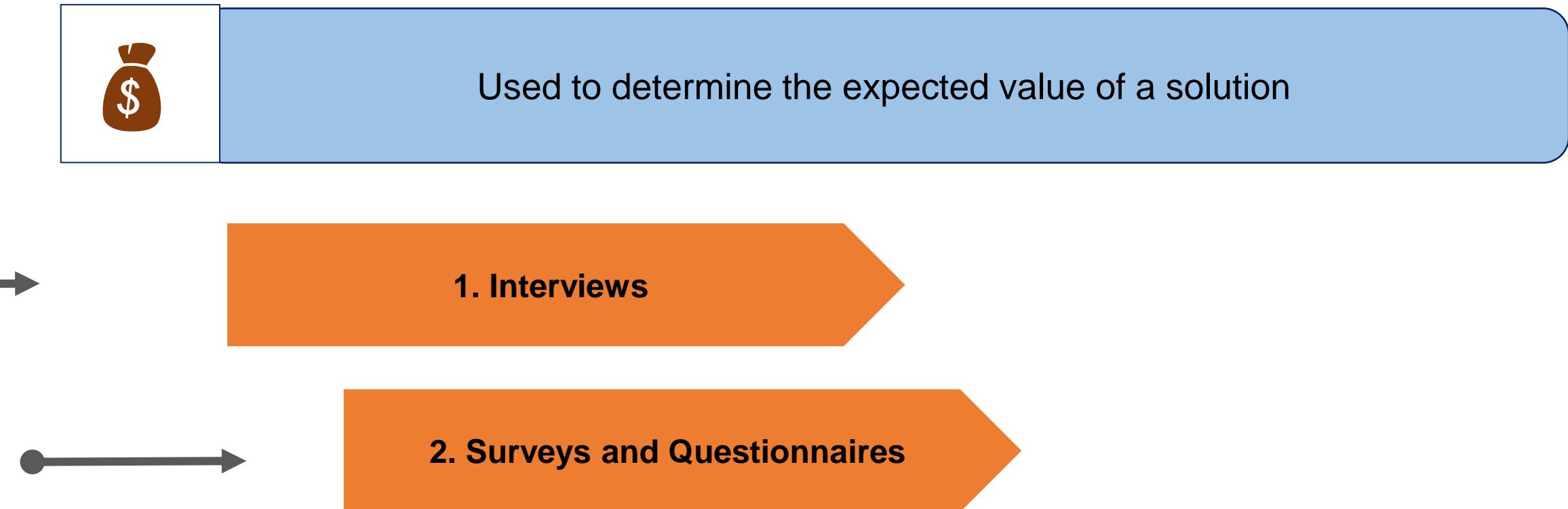
The business analyst may use the following guidelines and tools.



# ANALYZE PERFORMANCE MEASURES

## TECHNIQUES

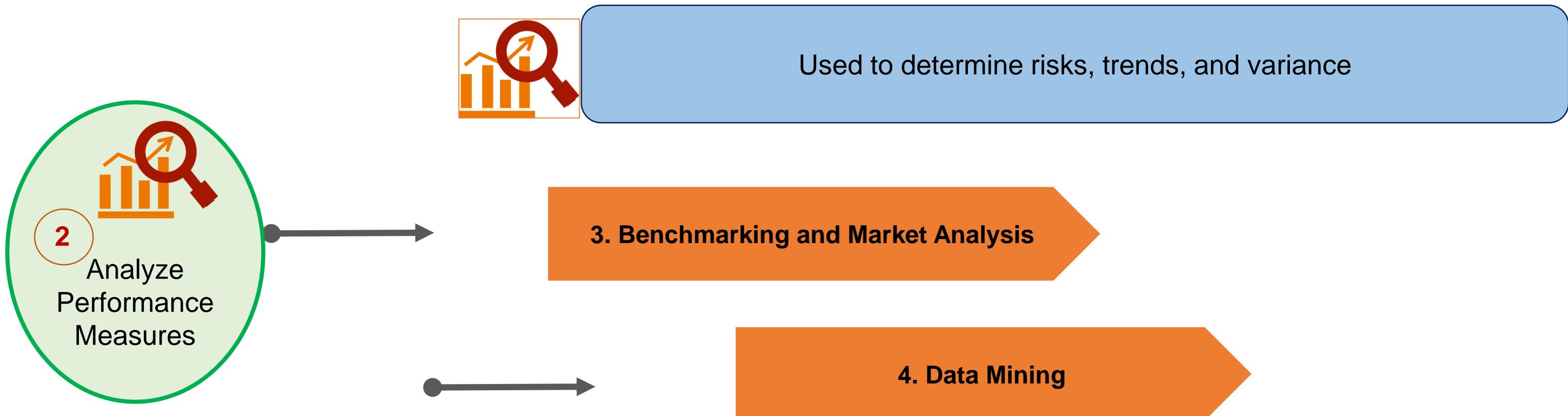
There are 9 techniques for analyzing performance measures.



# ANALYZE PERFORMANCE MEASURES (contd.)

## TECHNIQUES

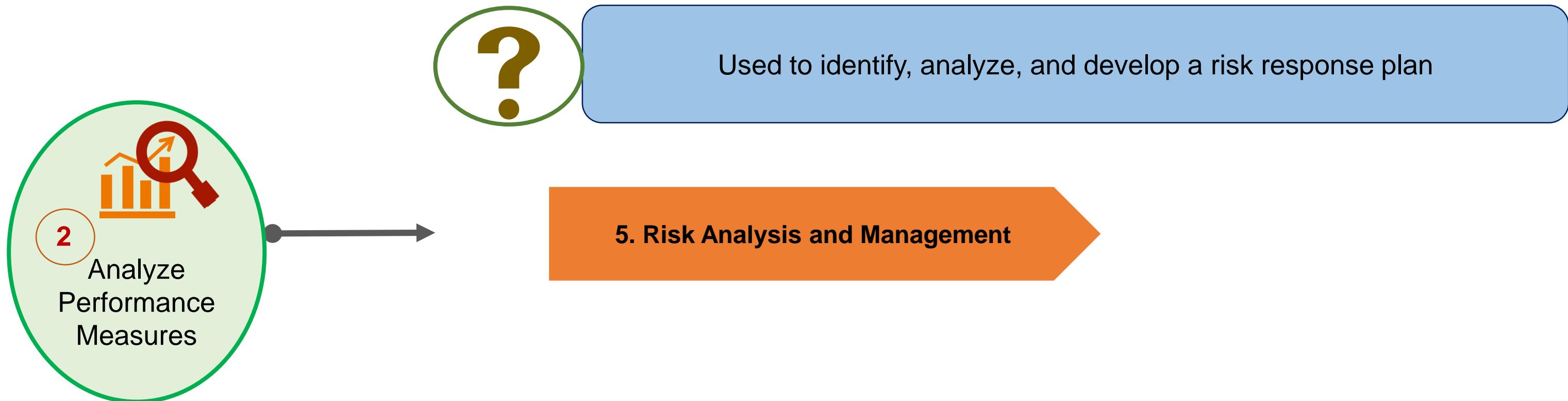
There are 9 techniques for analyzing performance measures.



## ANALYZE PERFORMANCE MEASURES (contd.)

### TECHNIQUES

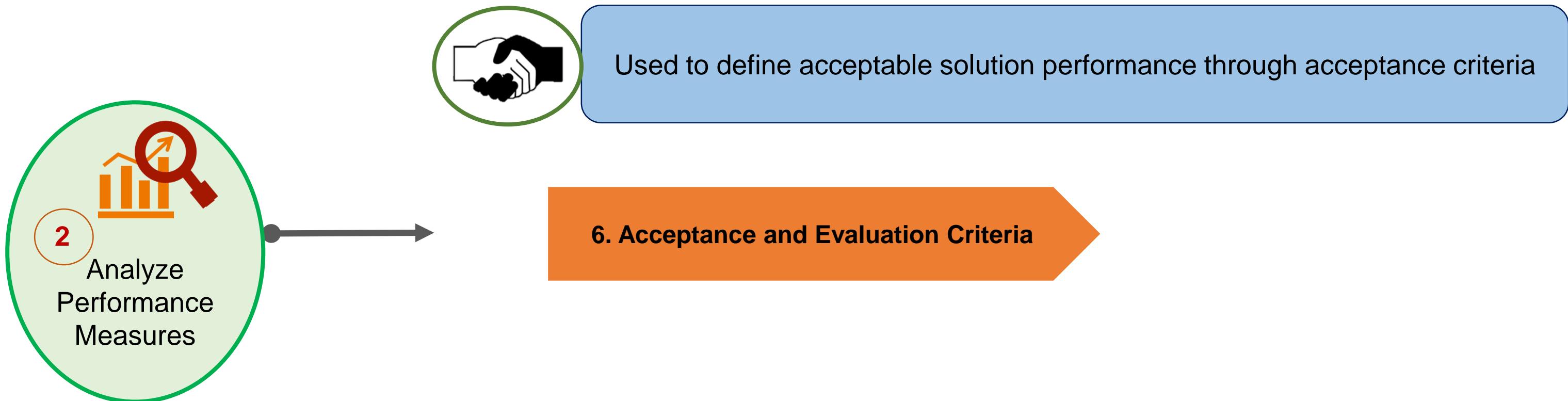
There are 9 techniques for analyzing performance measures.



# ANALYZE PERFORMANCE MEASURES (contd.)

## TECHNIQUES

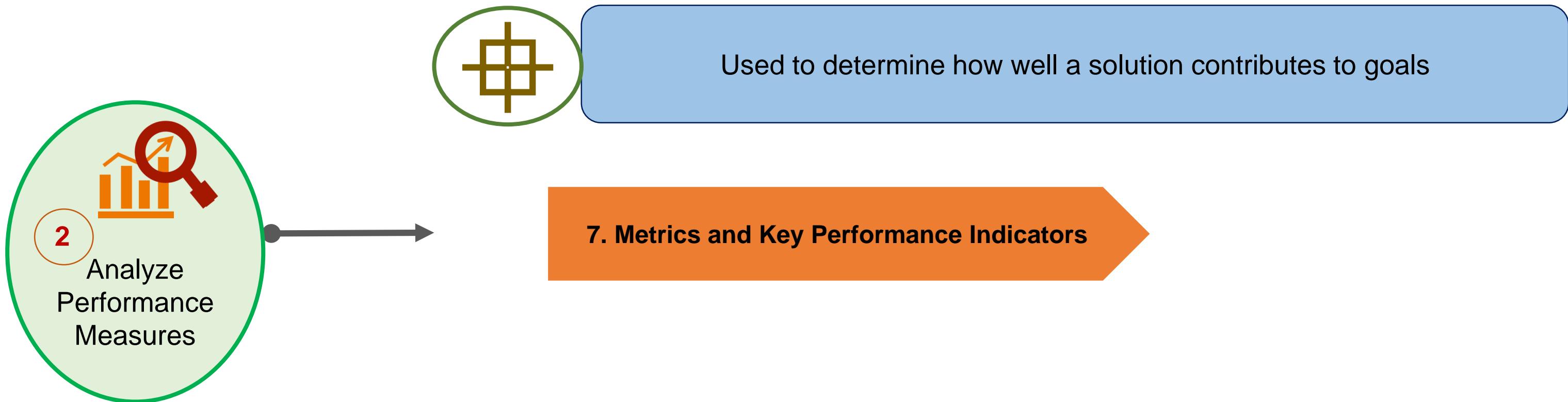
There are 9 techniques for analyzing performance measures.



## ANALYZE PERFORMANCE MEASURES (contd.)

### TECHNIQUES

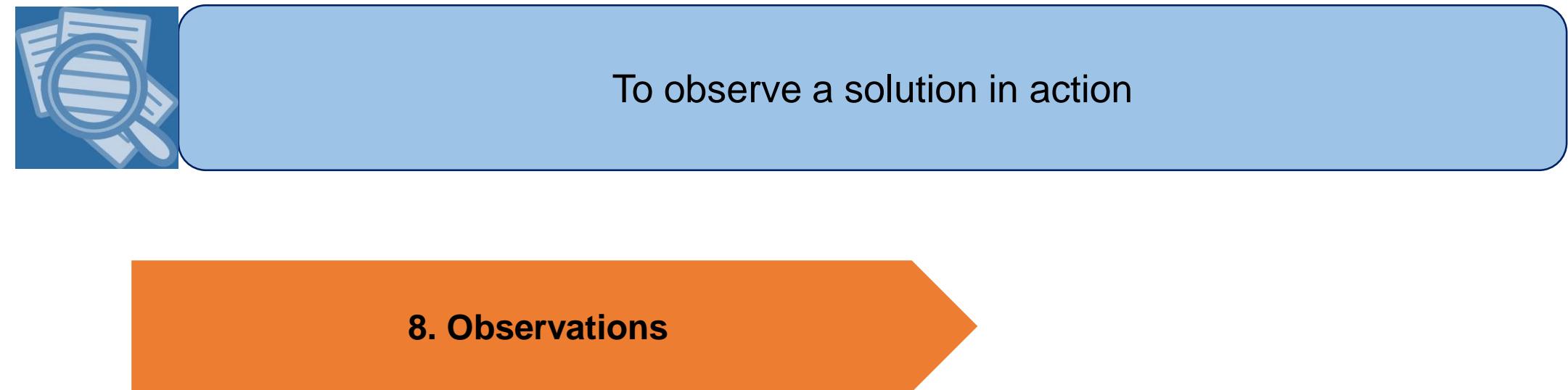
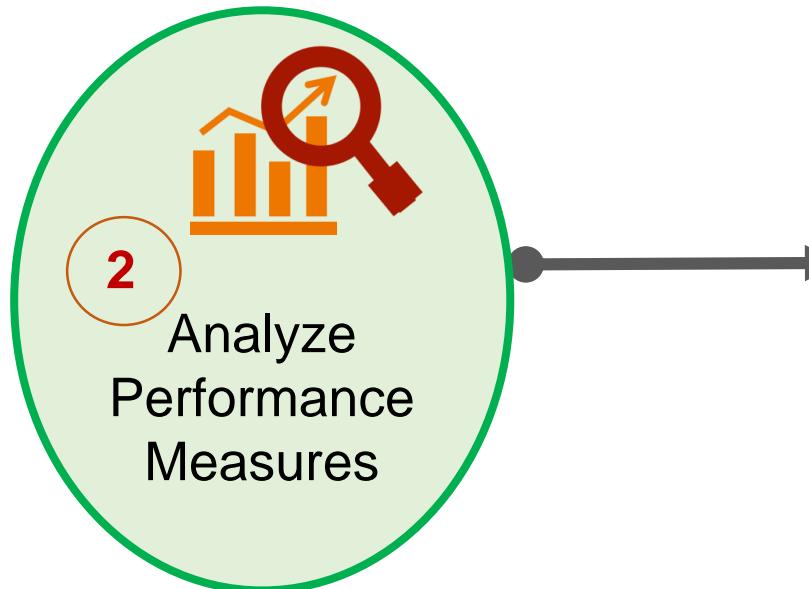
There are 9 techniques for analyzing performance measures.



# ANALYZE PERFORMANCE MEASURES (contd.)

## TECHNIQUES

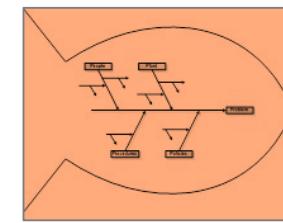
There are 9 techniques for analyzing performance measures.



# ANALYZE PERFORMANCE MEASURES (contd.)

## TECHNIQUES

There are 9 techniques for analyzing performance measures.



Used to determine causes of performance variance

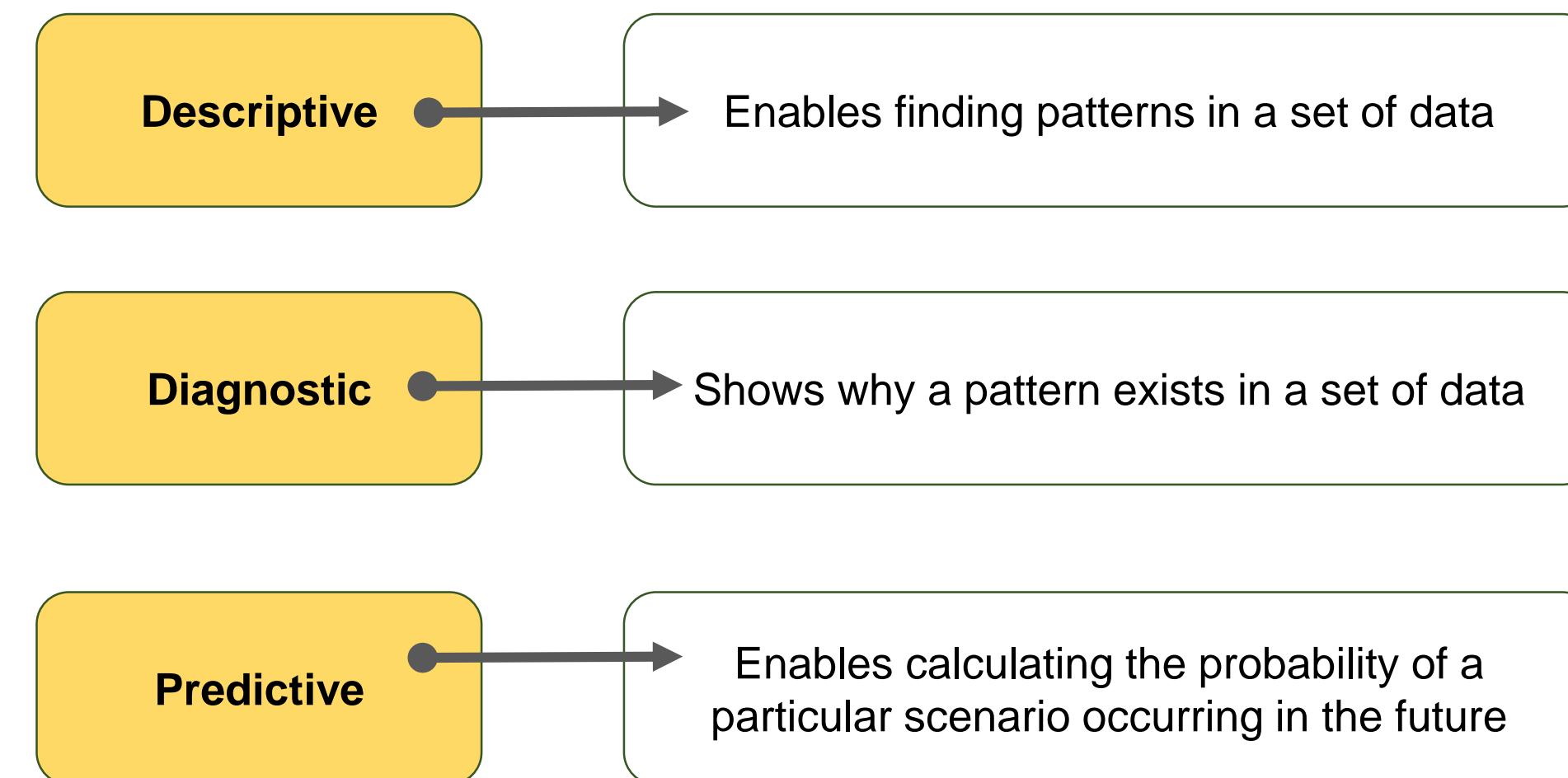
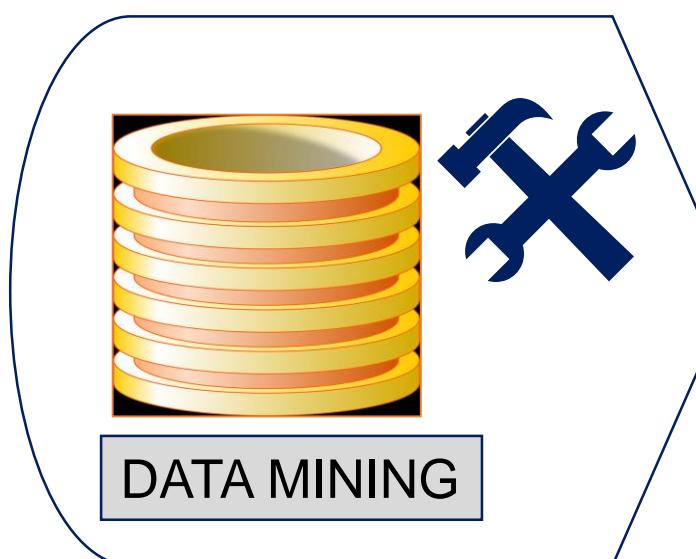
### 9. Root Cause Analysis

# ANALYZE PERFORMANCE MEASURES

## DATA MINING

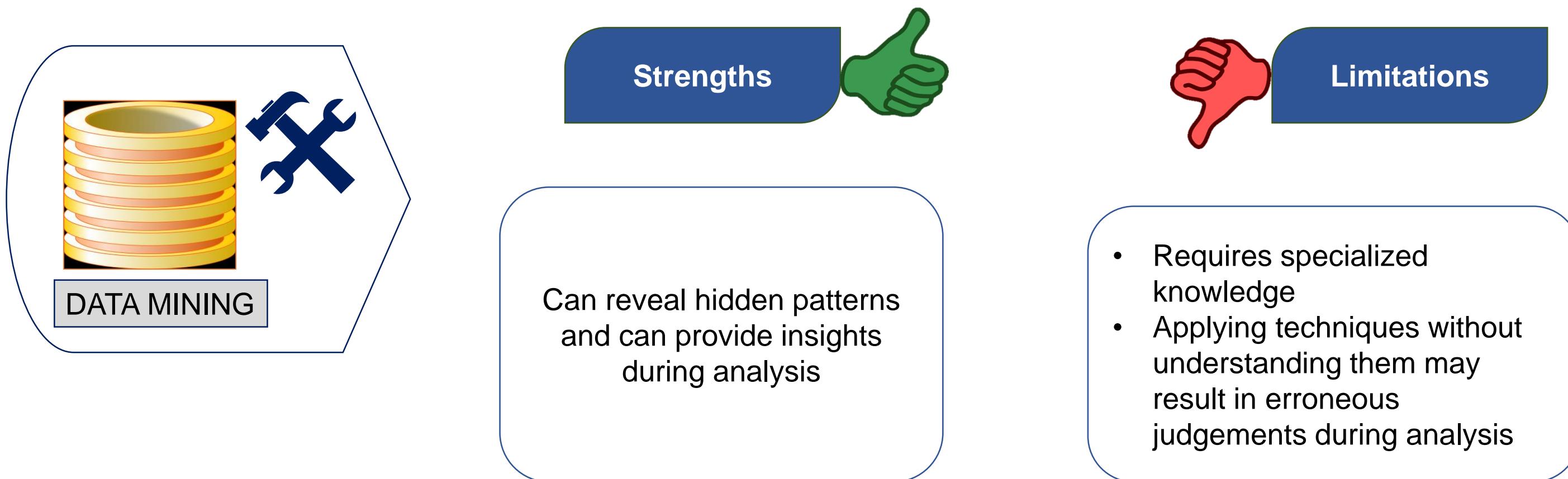
### Data Mining:

- Is an analytical process of examining large amounts of data from different perspectives.
- Results describe the underlying patterns and relationships in the data.
- Is used to improve decision making by finding insights from data.



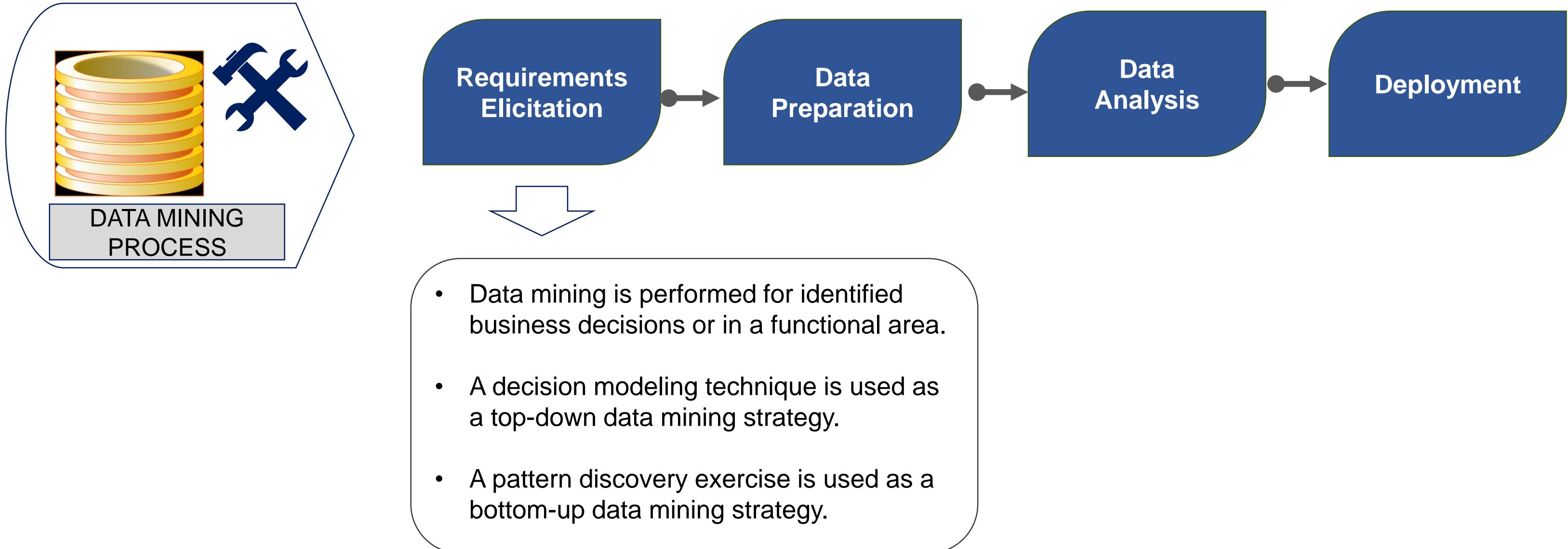
# ANALYZE PERFORMANCE MEASURES

## DATA MINING – STRENGTHS AND LIMITATIONS



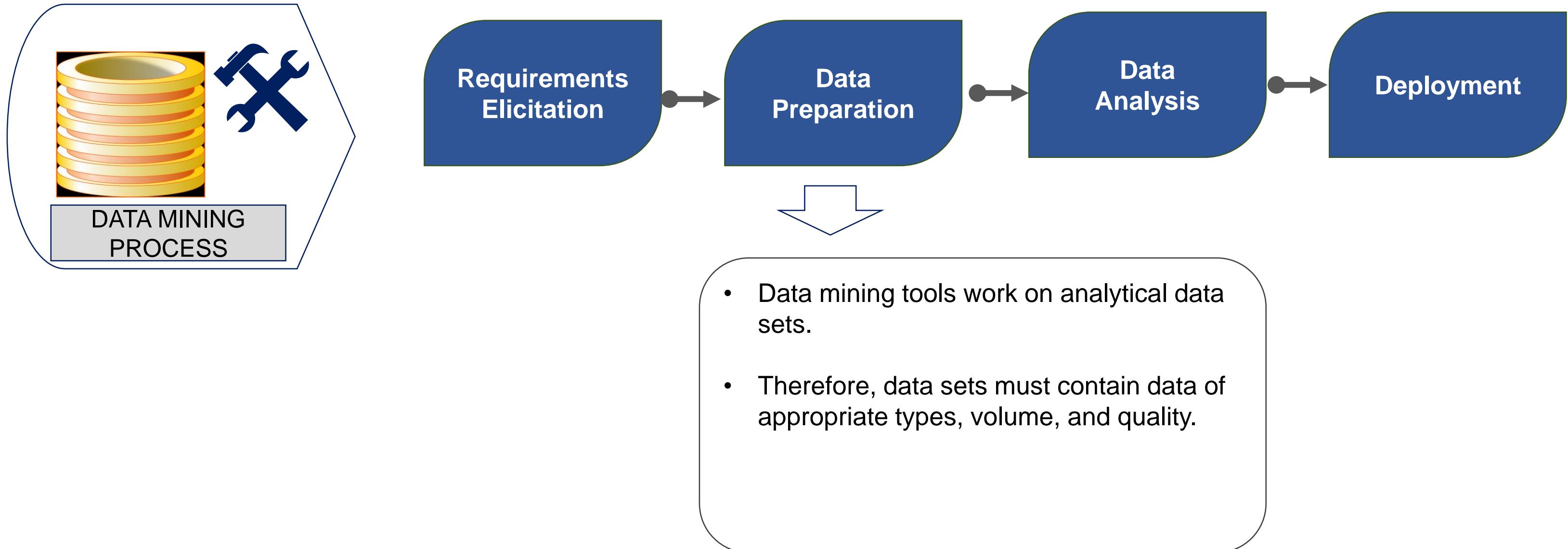
# ANALYZE PERFORMANCE MEASURES

## DATA MINING - PROCESS



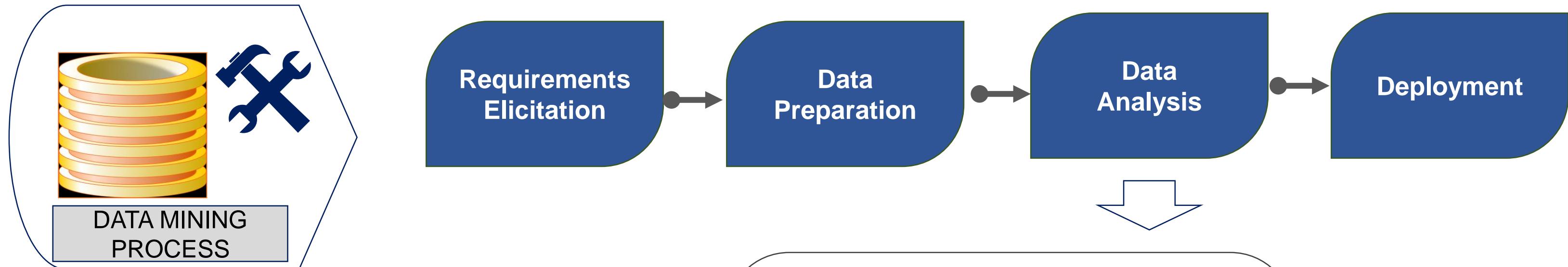
## ANALYZE PERFORMANCE MEASURES (contd.)

### DATA MINING - PROCESS



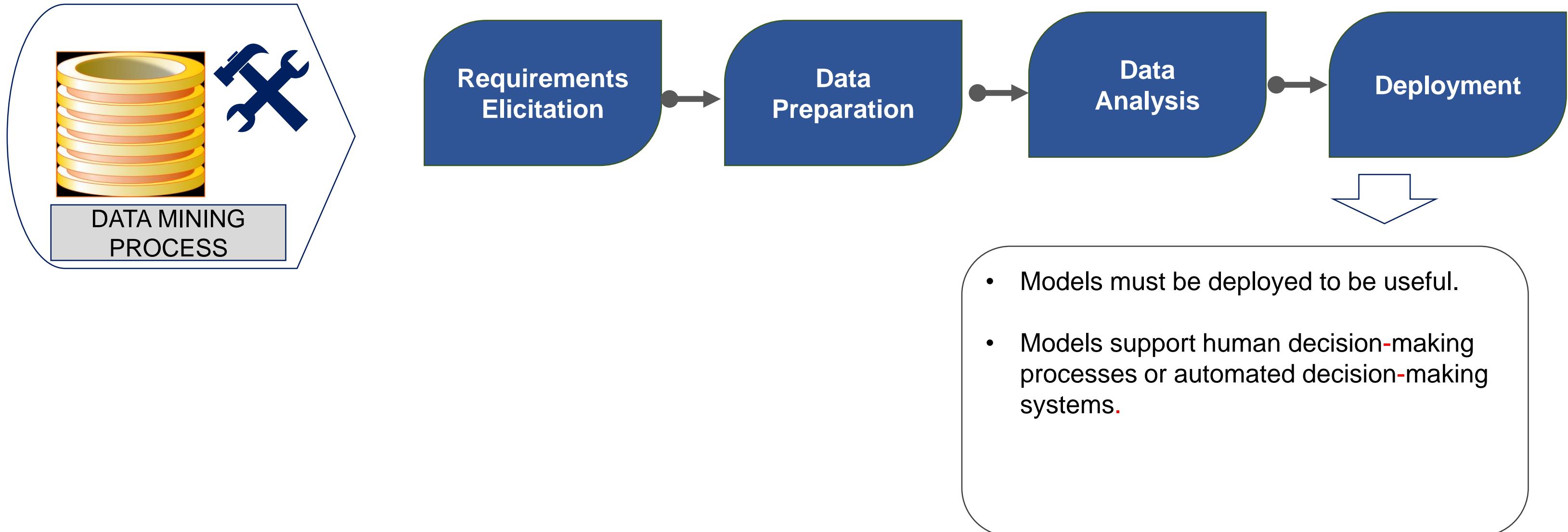
## ANALYZE PERFORMANCE MEASURES (contd.)

### DATA MINING - PROCESS



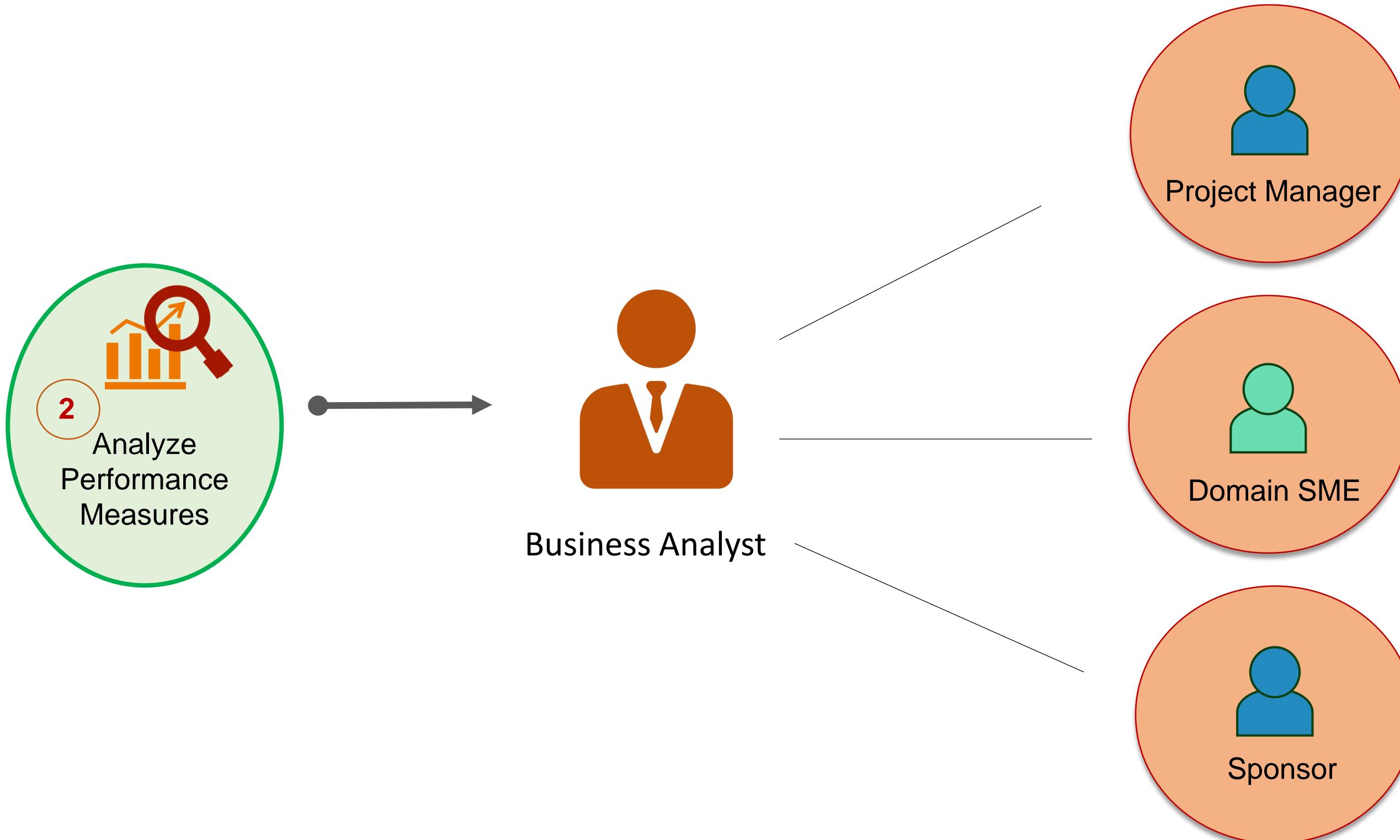
## ANALYZE PERFORMANCE MEASURES (contd.)

### DATA MINING - PROCESS



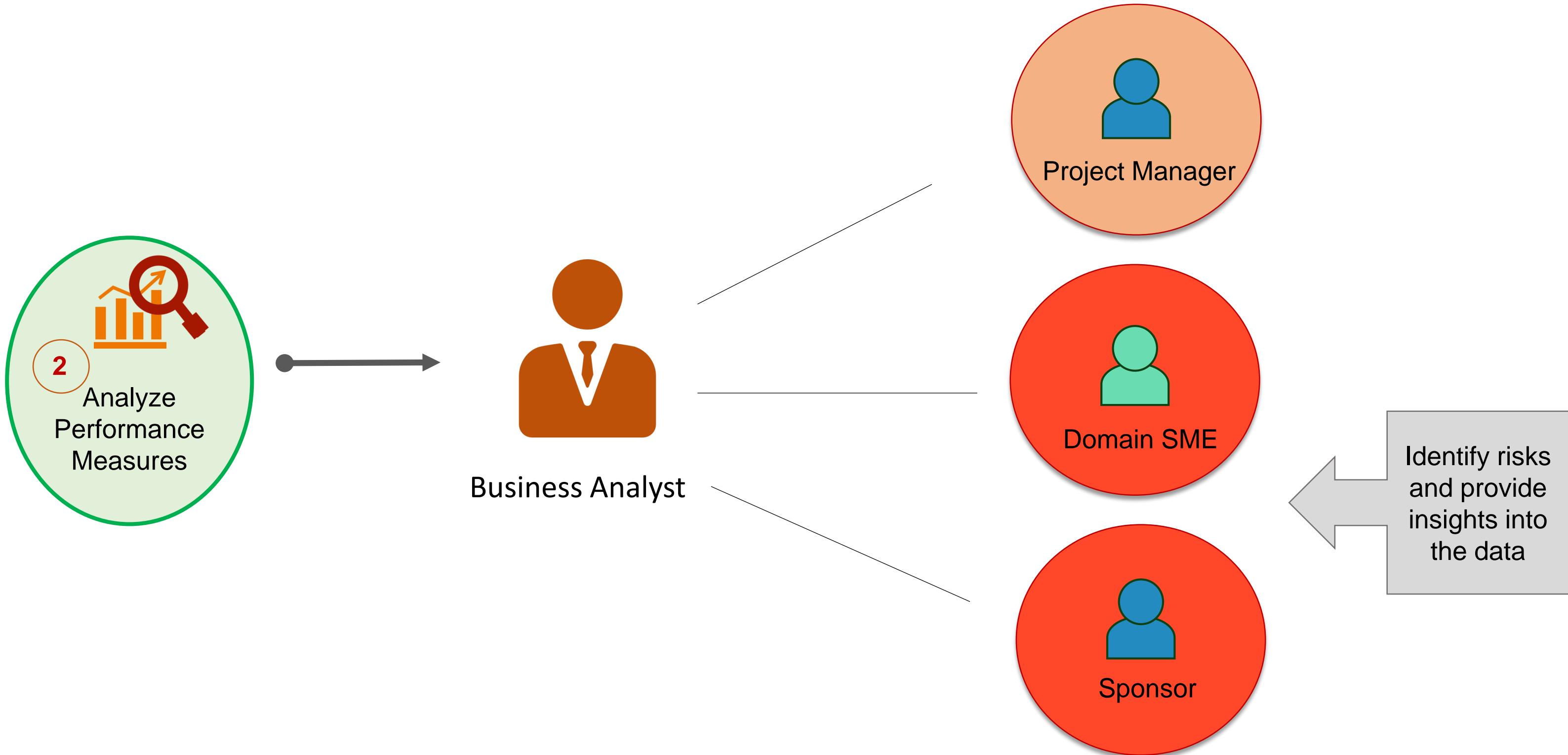
## ANALYZE PERFORMANCE MEASURES

### STAKEHOLDERS



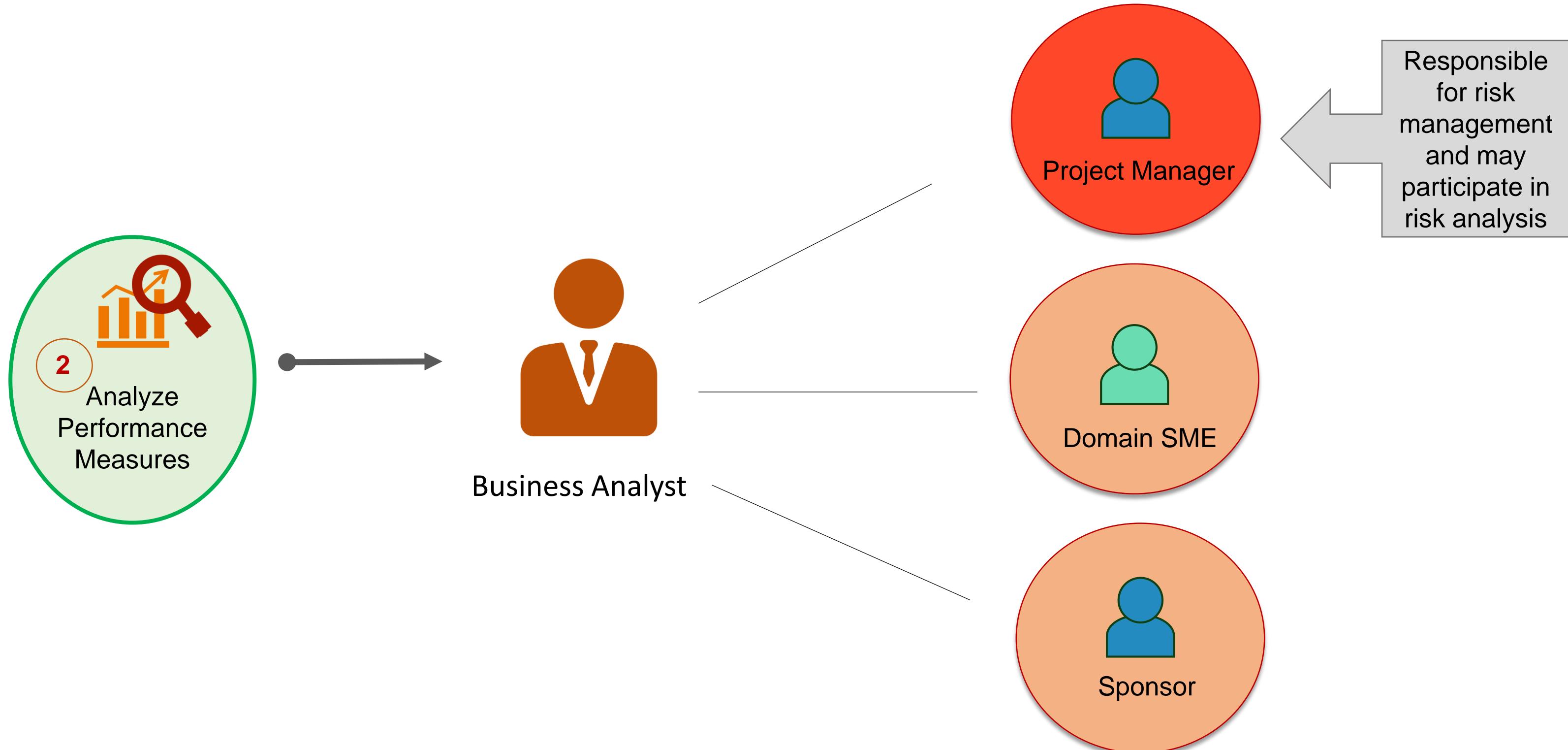
## ANALYZE PERFORMANCE MEASURES (contd.)

### STAKEHOLDERS



## ANALYZE PERFORMANCE MEASURES (contd.)

### STAKEHOLDERS



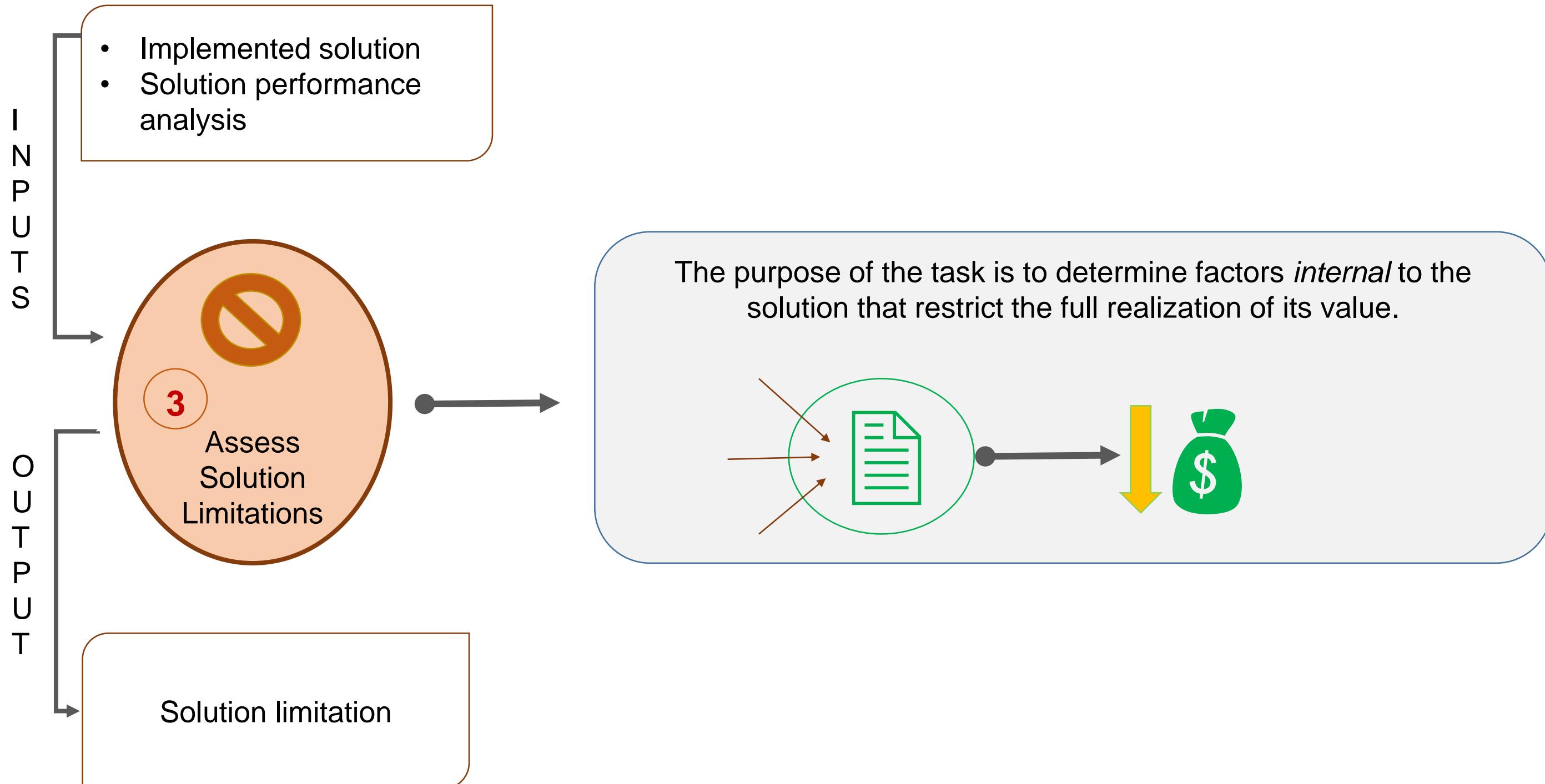
### **Topic 8.3: Assess Solution Limitations**

## **Lesson 8: Solution Evaluation**

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# ASSESS SOLUTION LIMITATIONS

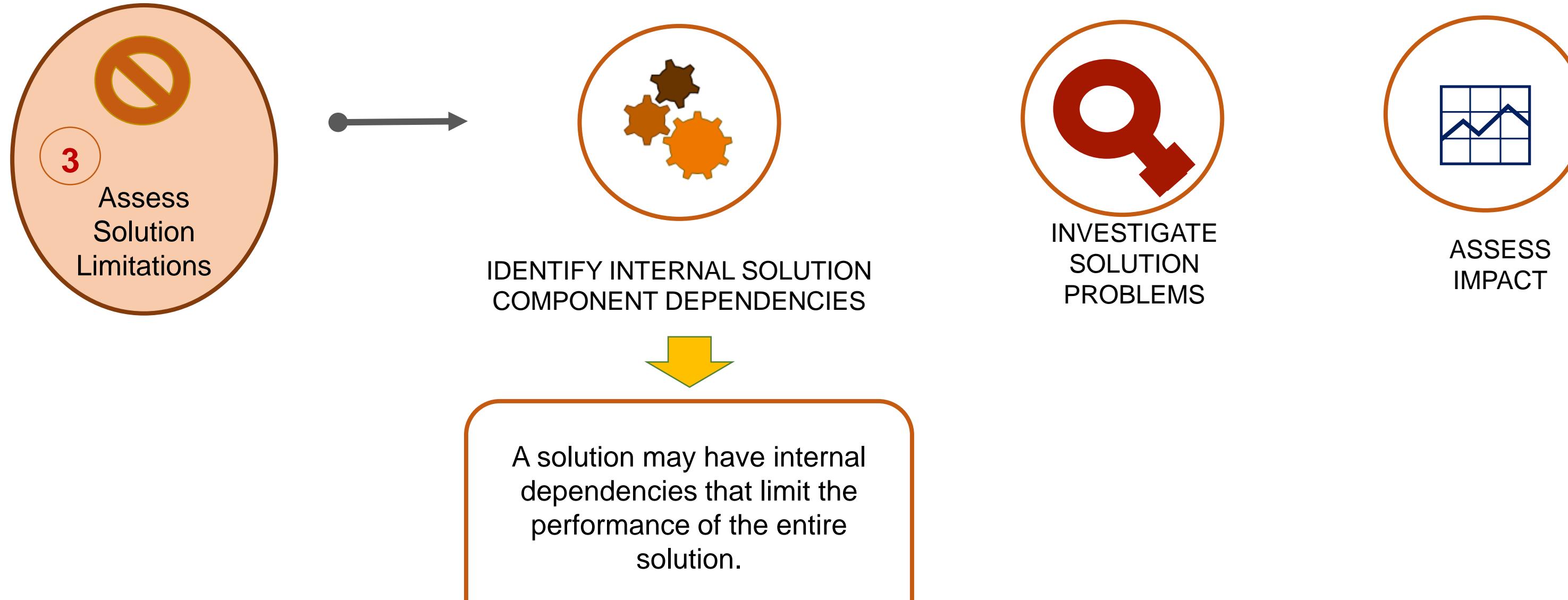
## PURPOSE



## ASSESS SOLUTION LIMITATIONS

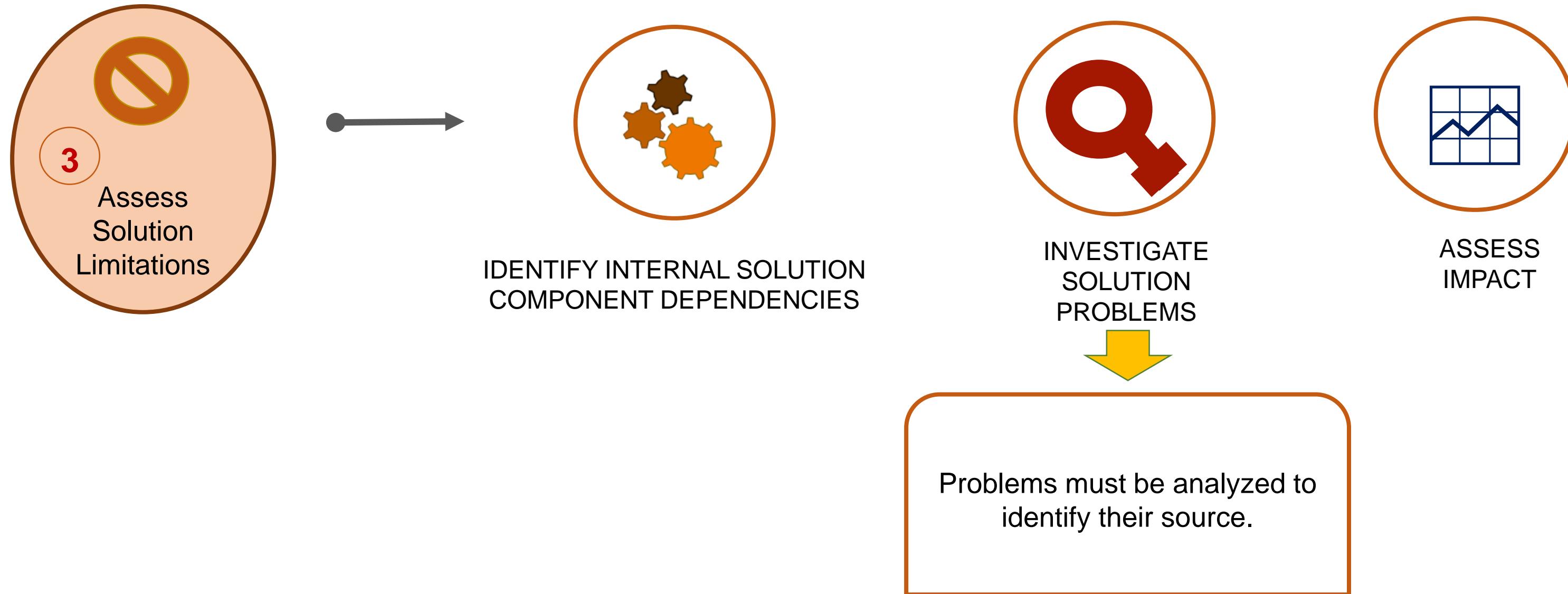
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### ELEMENTS



## ASSESS SOLUTION LIMITATIONS (contd.)

### ELEMENTS



## ASSESS SOLUTION LIMITATIONS (contd.)

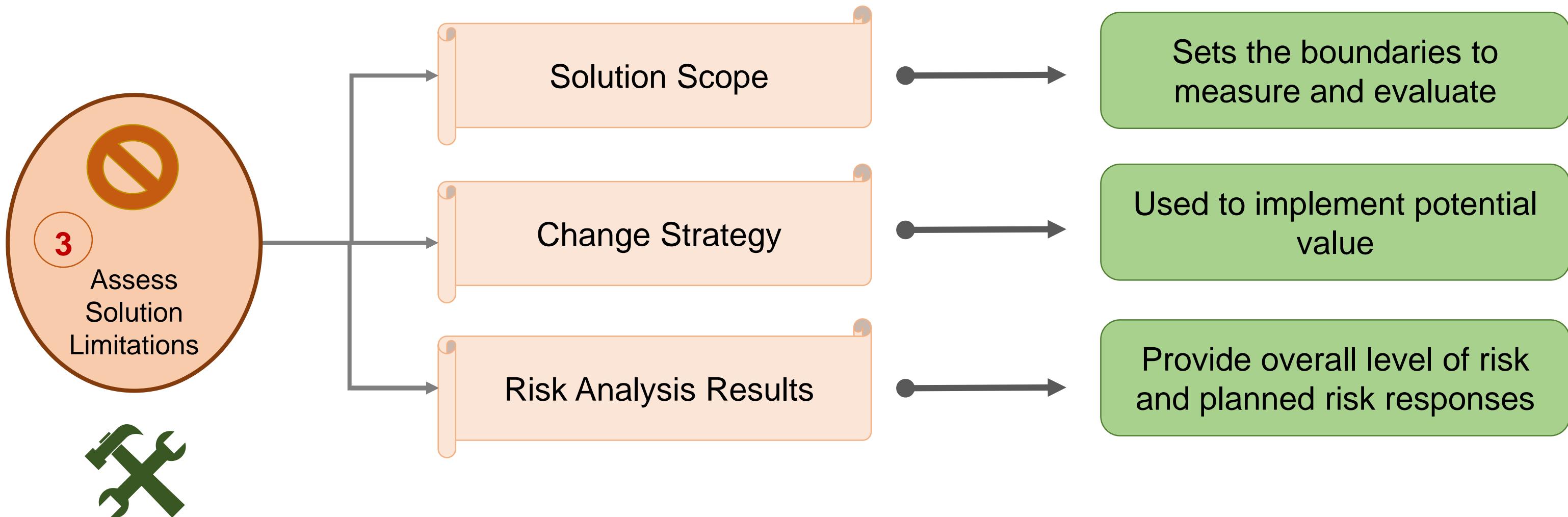
### ELEMENTS



## ASSESS SOLUTION LIMITATIONS

### GUIDELINES AND TOOLS

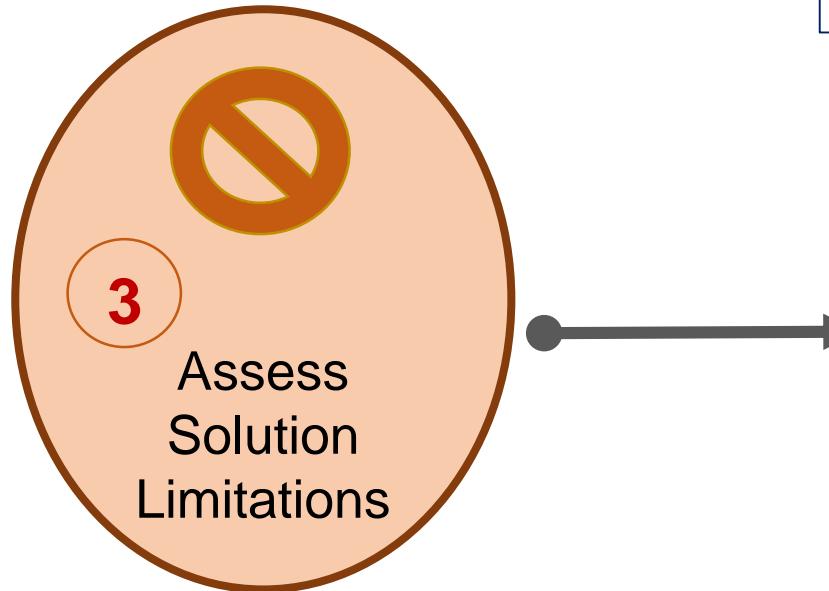
The business analyst may use the following guidelines and tools.



# ASSESS SOLUTION LIMITATIONS

## TECHNIQUES

There are 11 techniques for assessing solution limitations.



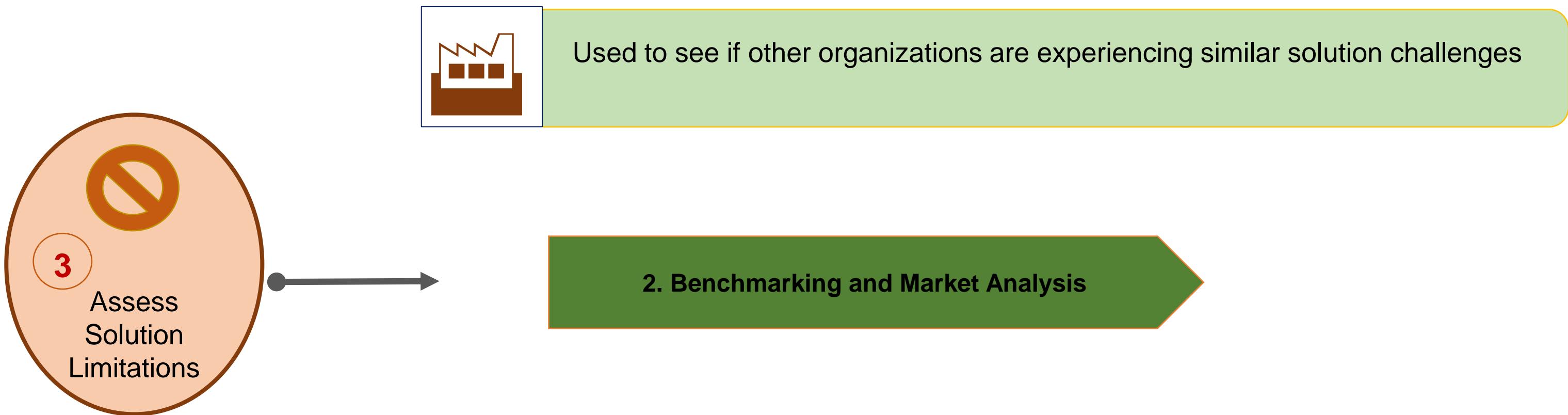
Used to see up to what level the solution meets the defined acceptance criteria

**1. Acceptance and Evaluation Criteria**

## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

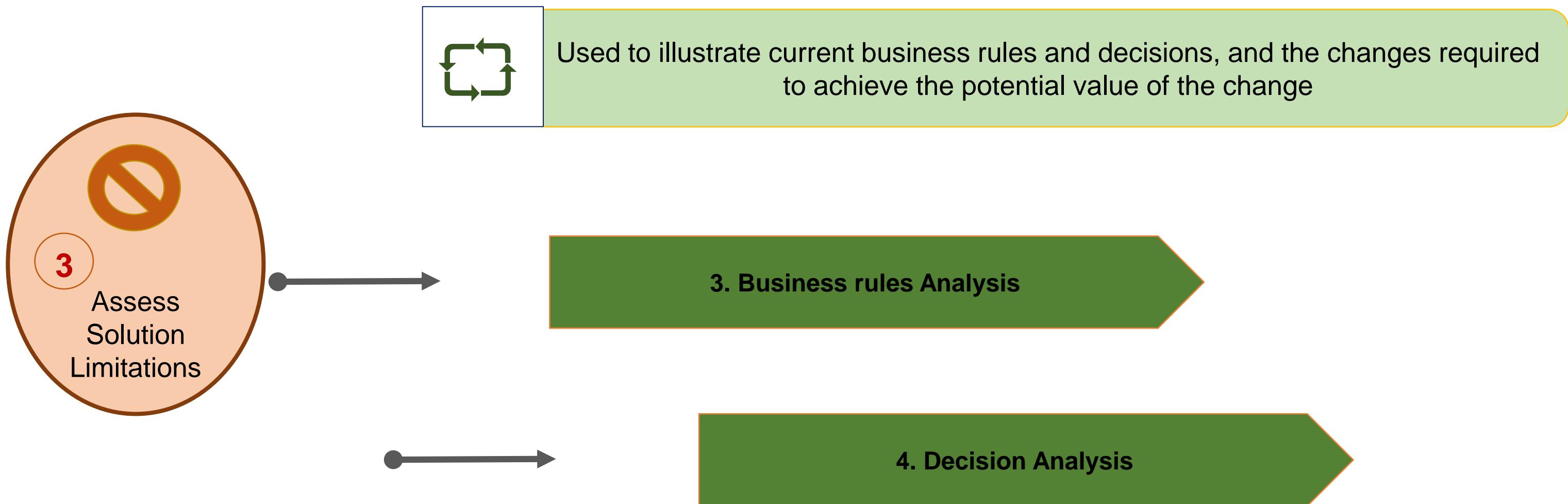
There are 11 techniques for assessing solution limitations.



# ASSESS SOLUTION LIMITATIONS (contd.)

## TECHNIQUES

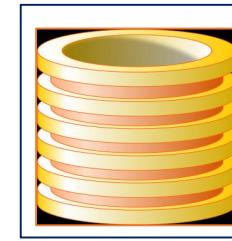
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

There are 11 techniques for assessing solution limitations.



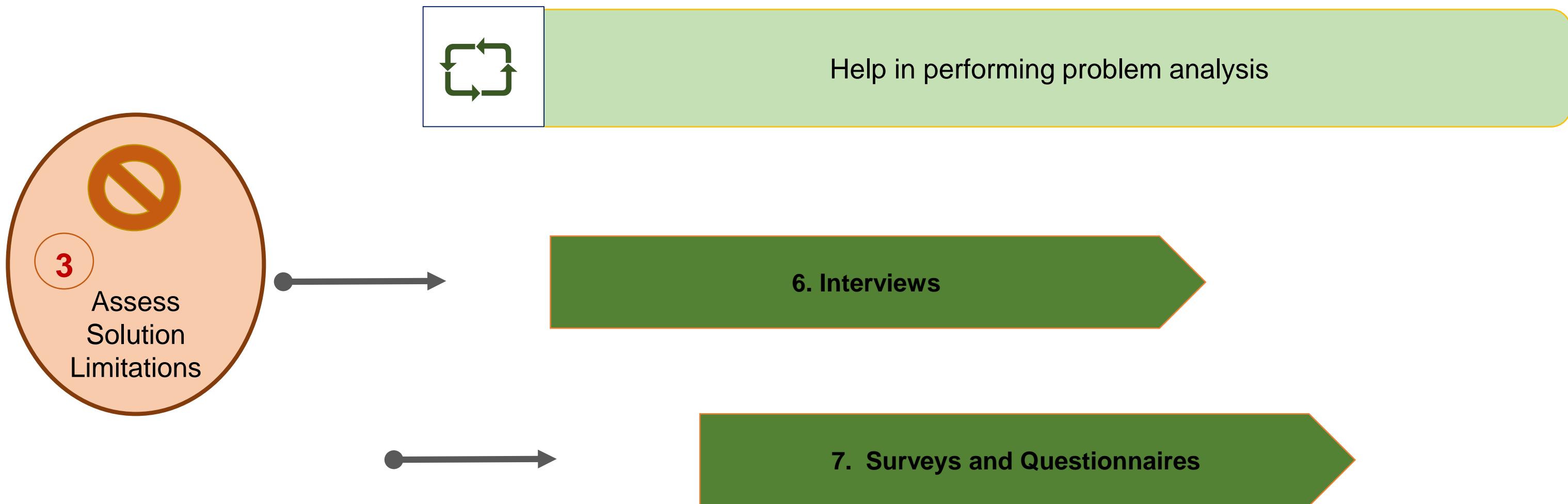
Used to identify the factors constraining the solution

5. Data Mining

## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

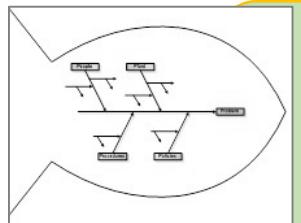
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

There are 11 techniques for assessing solution limitations.



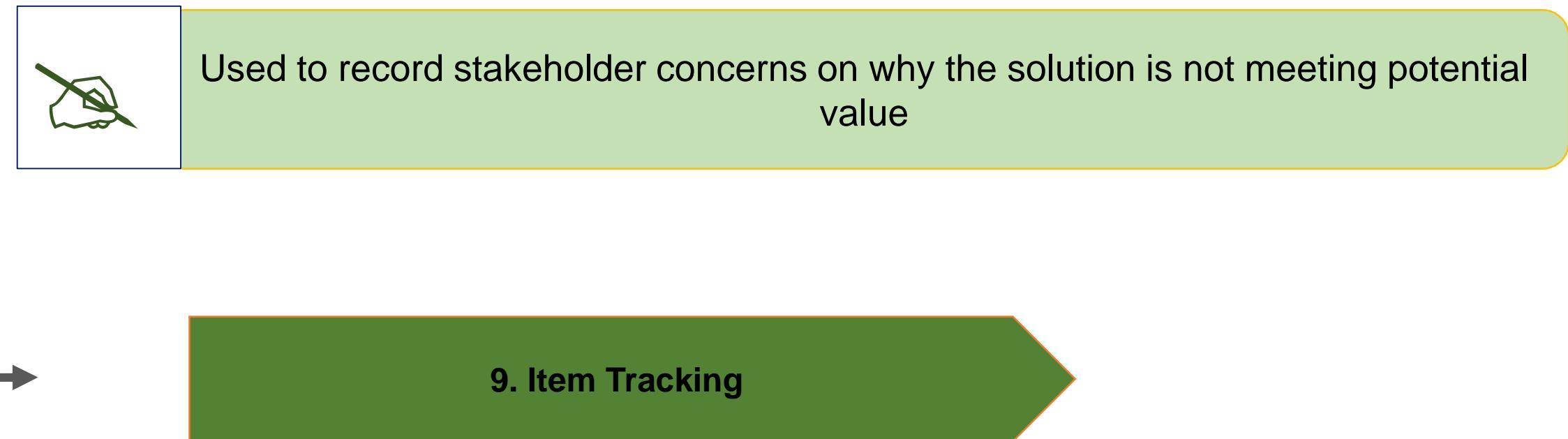
Used to identify underlying causes of the solution problems

#### 8. Root Cause Analysis

## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

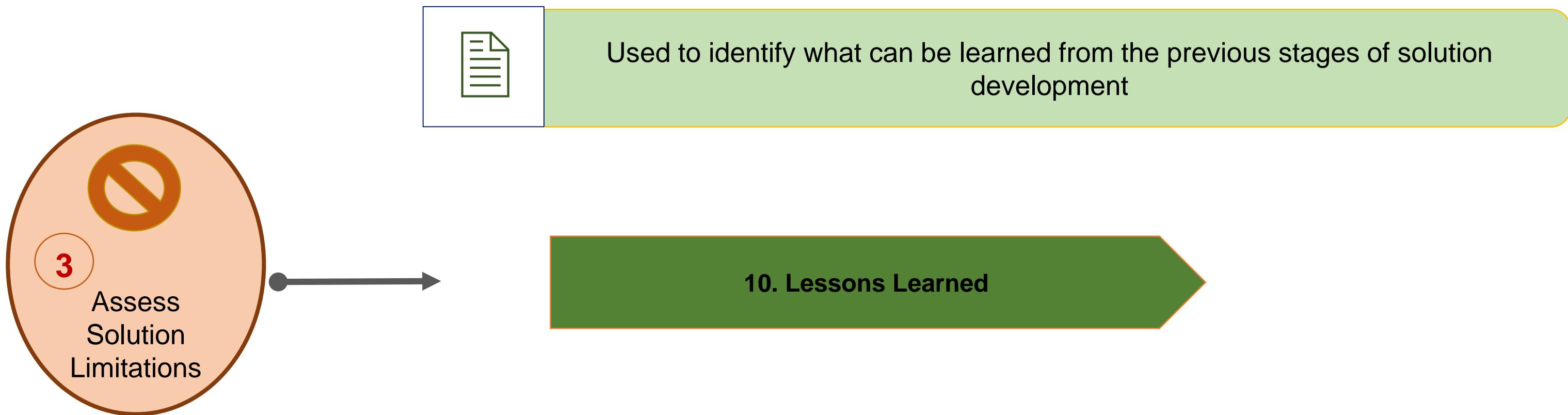
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

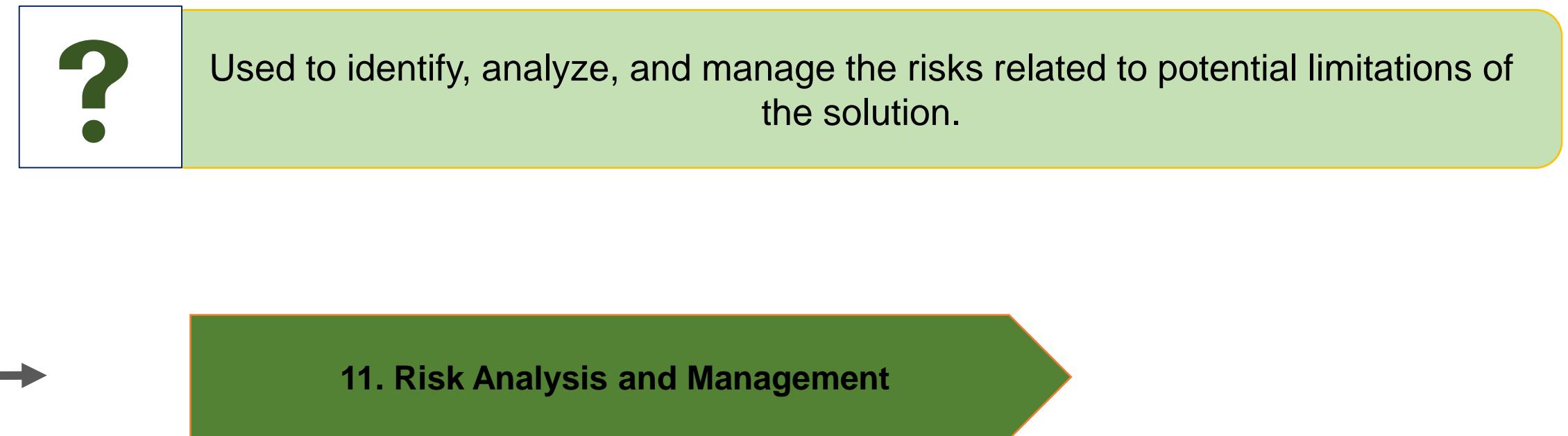
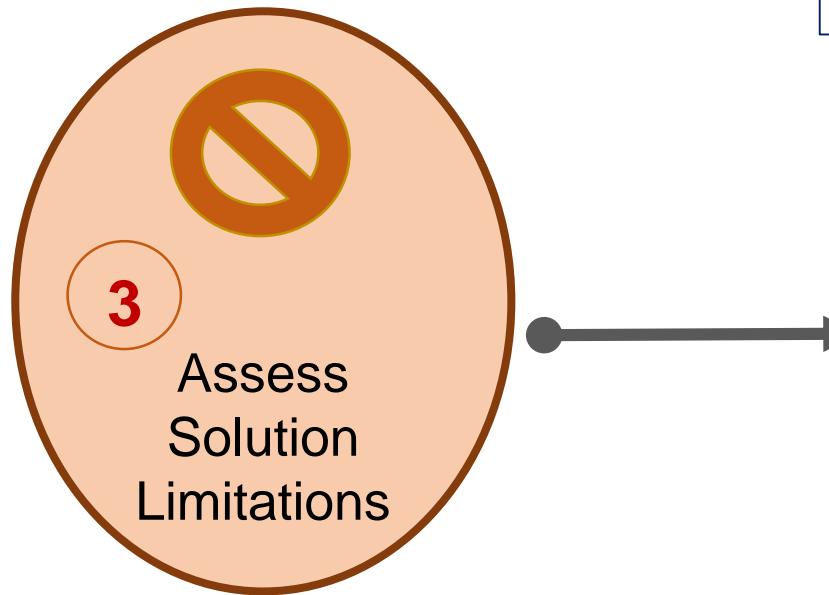
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

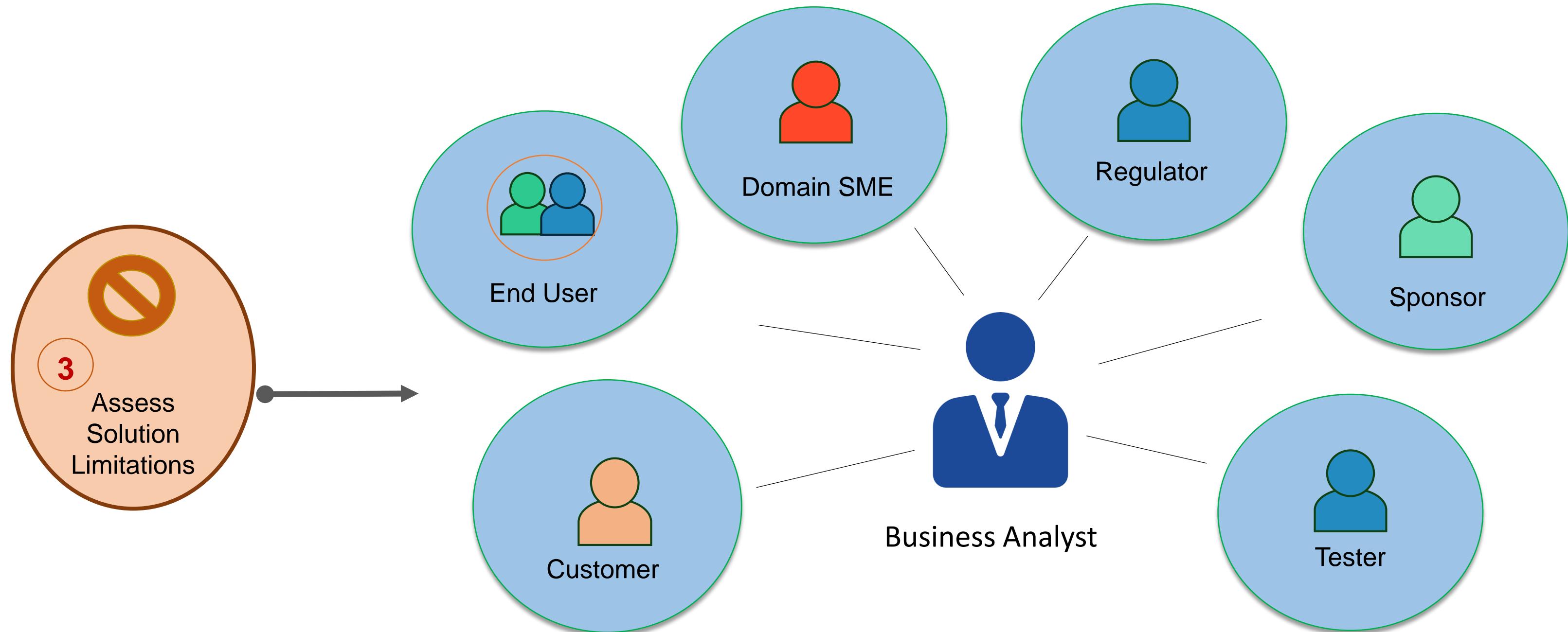
### TECHNIQUES

There are 11 techniques for assessing solution limitations.



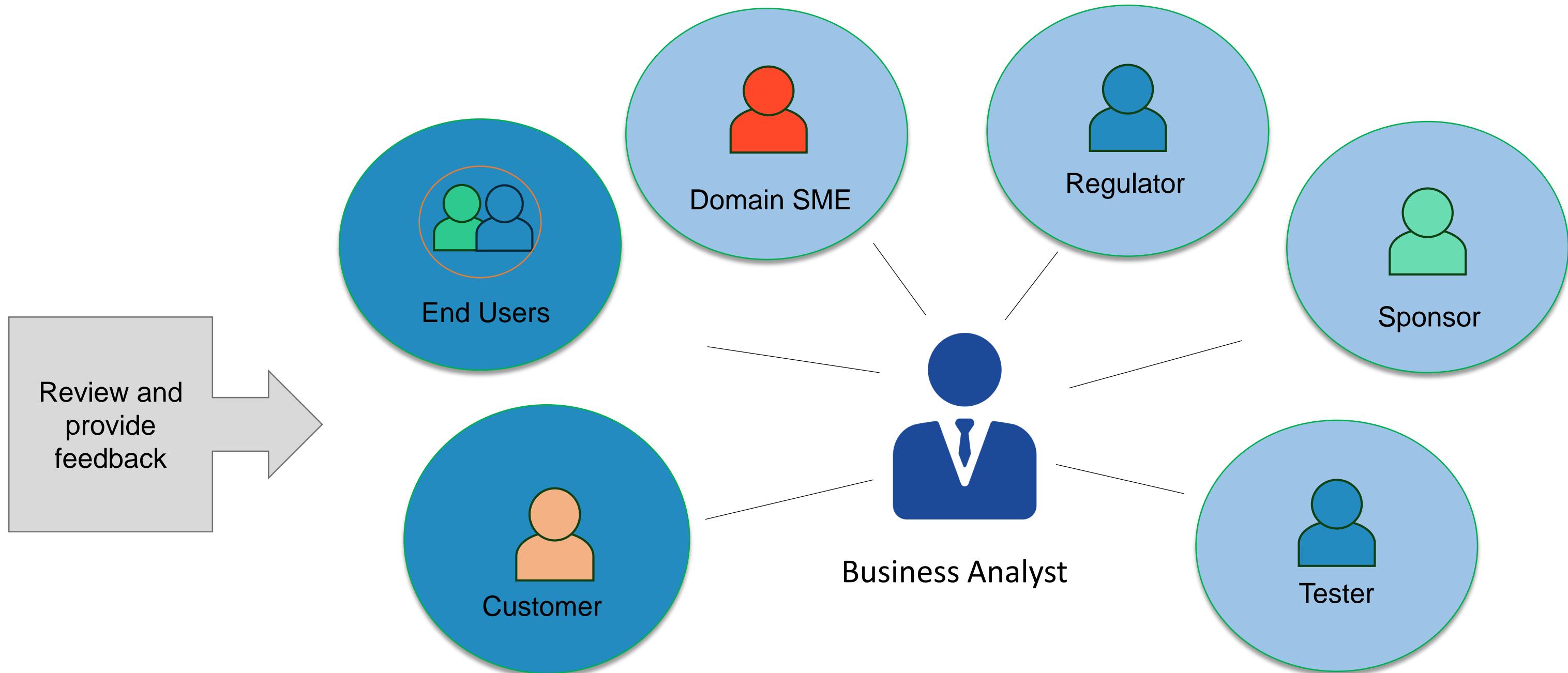
# ASSESS SOLUTION LIMITATIONS

## STAKEHOLDERS

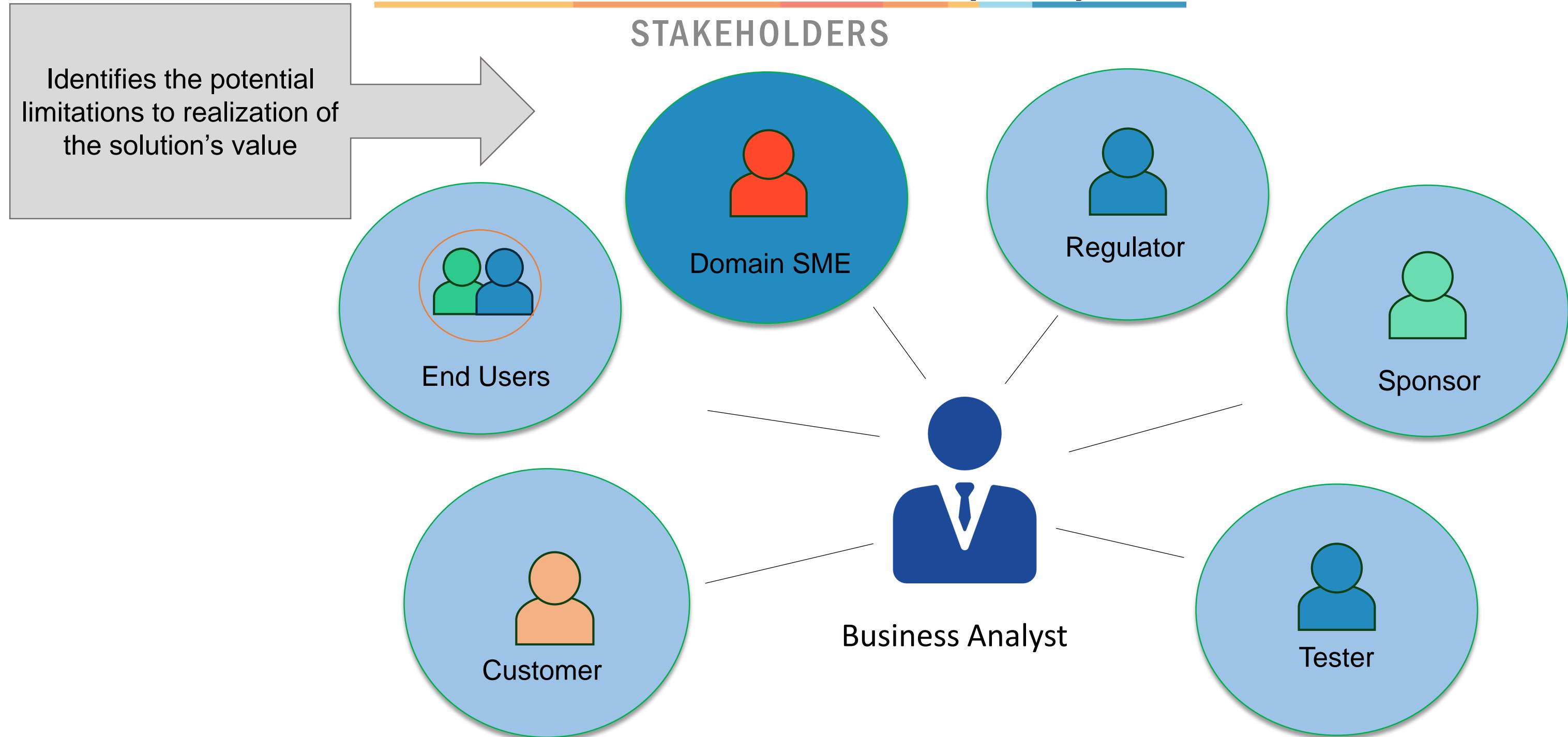


## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS

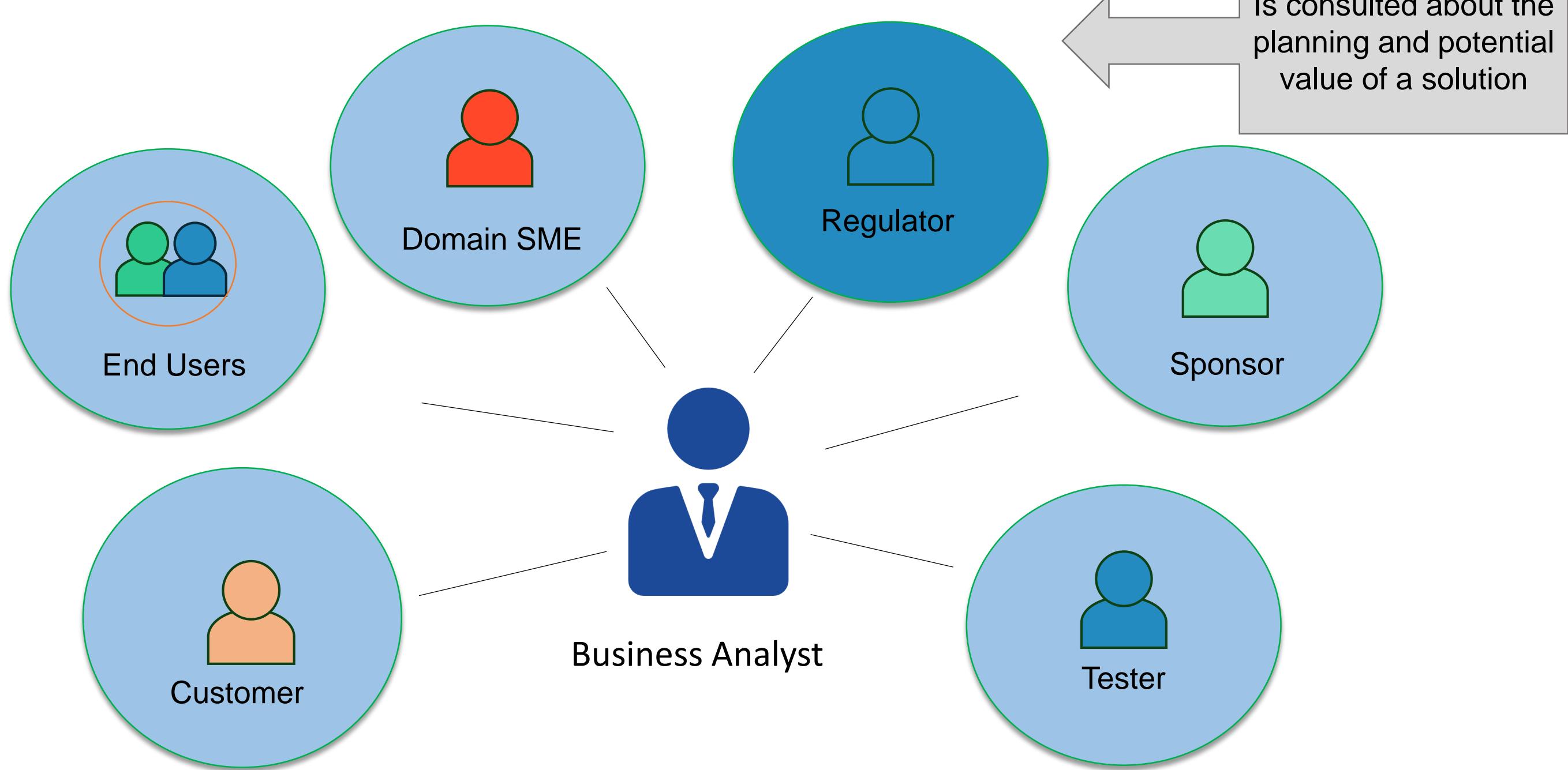


## ASSESS SOLUTION LIMITATIONS (contd.)



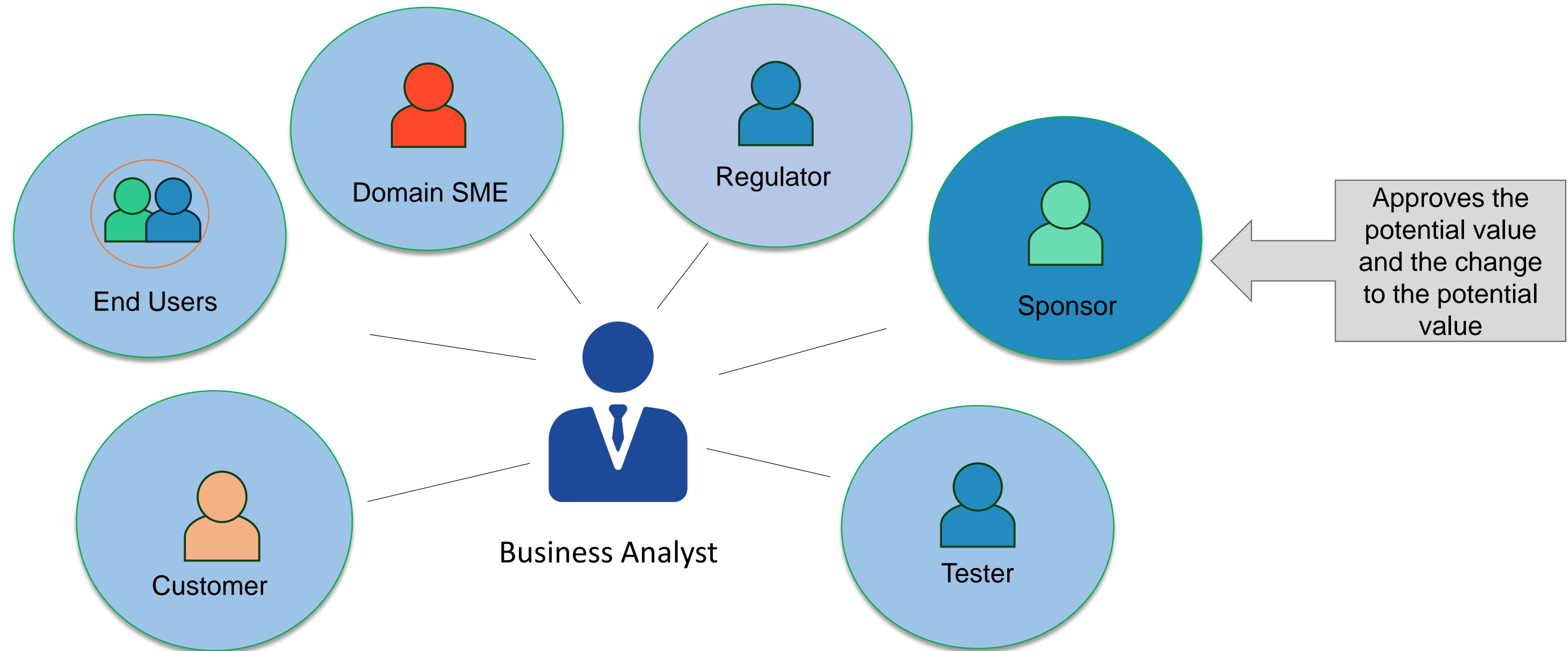
## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS



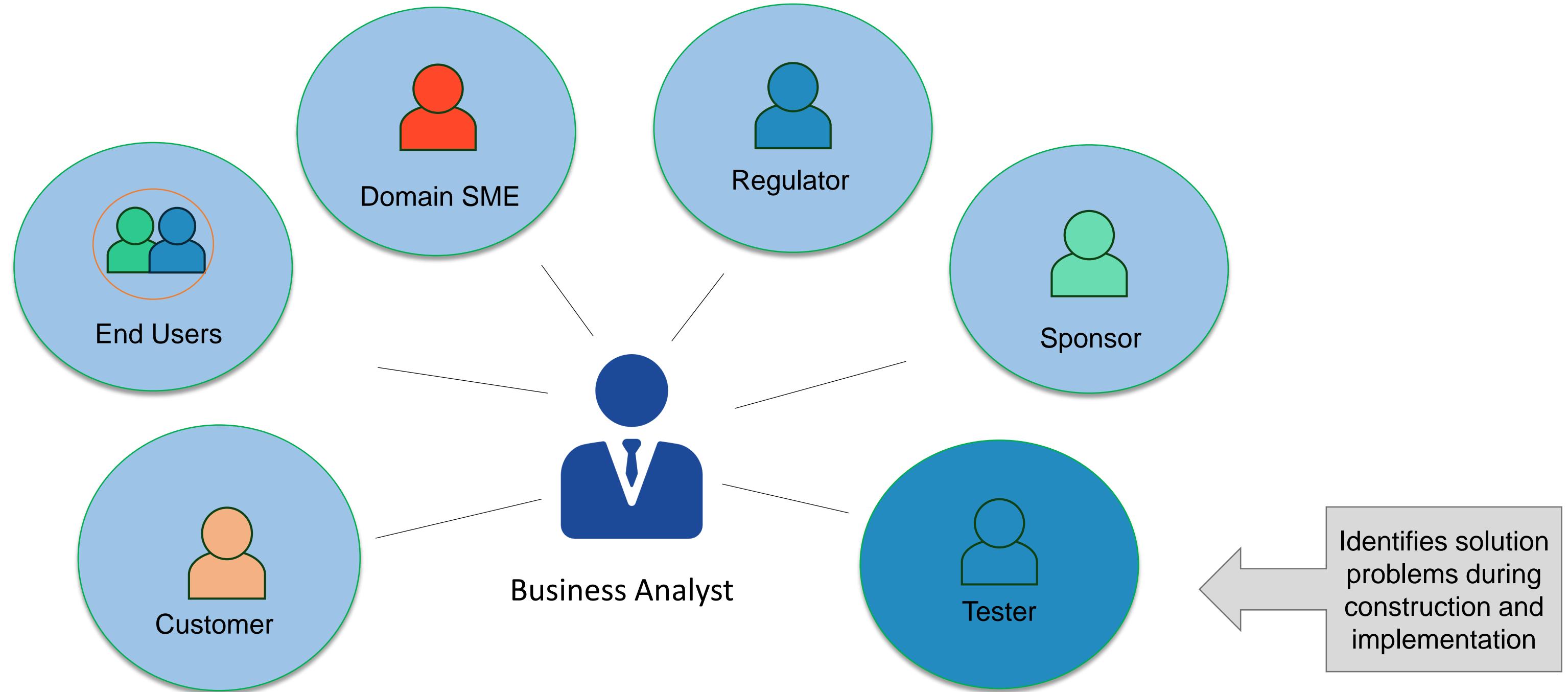
## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS



## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS



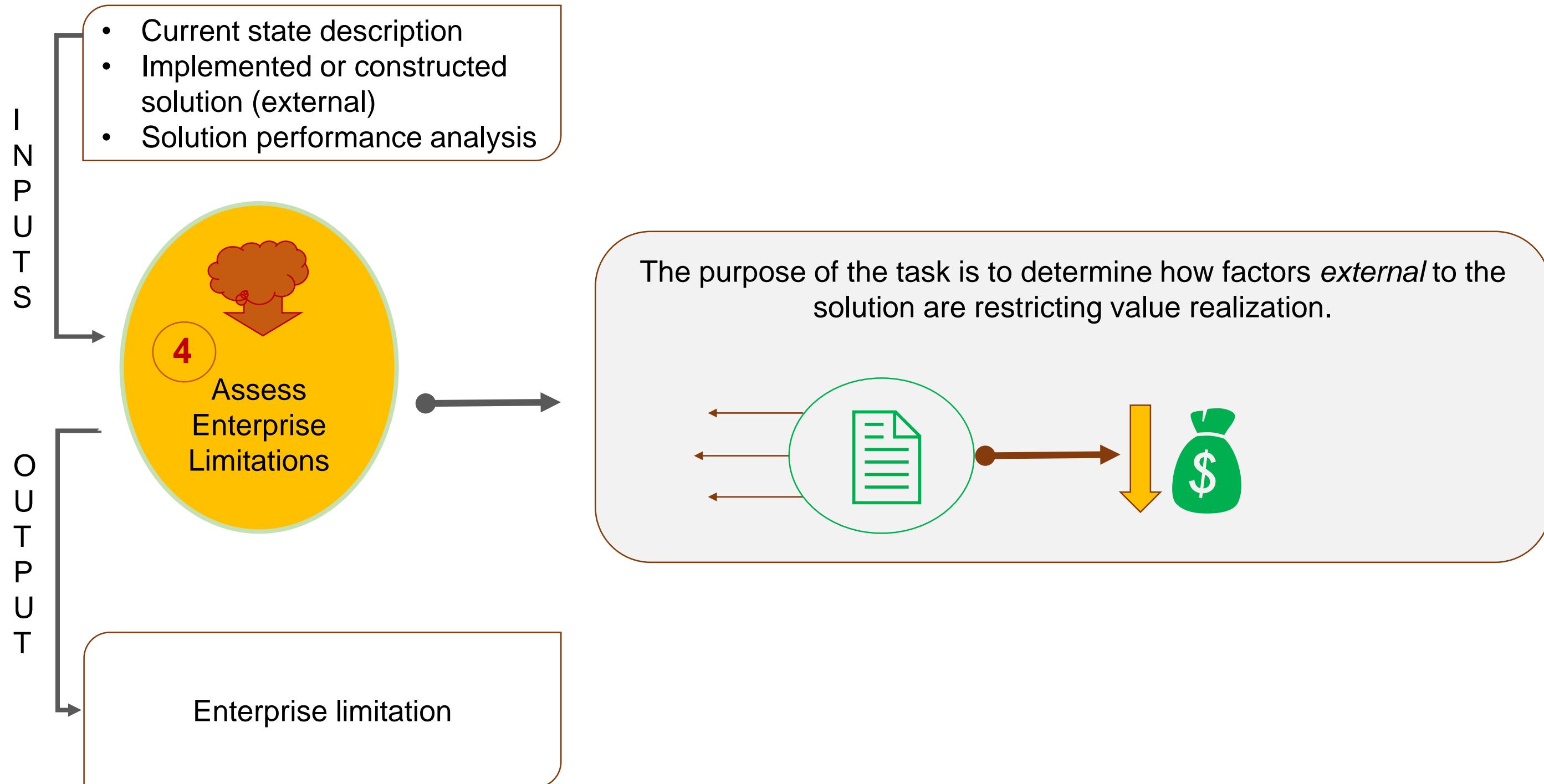
## Topic 8.4: Assess Enterprise Limitations

# Lesson 8: Solution Evaluation

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# ASSESS ENTERPRISE LIMITATIONS

## PURPOSE



## ASSESS ENTERPRISE LIMITATIONS

### ELEMENTS



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### ELEMENTS



This element provides information on how the solution will affect a particular stakeholder group.

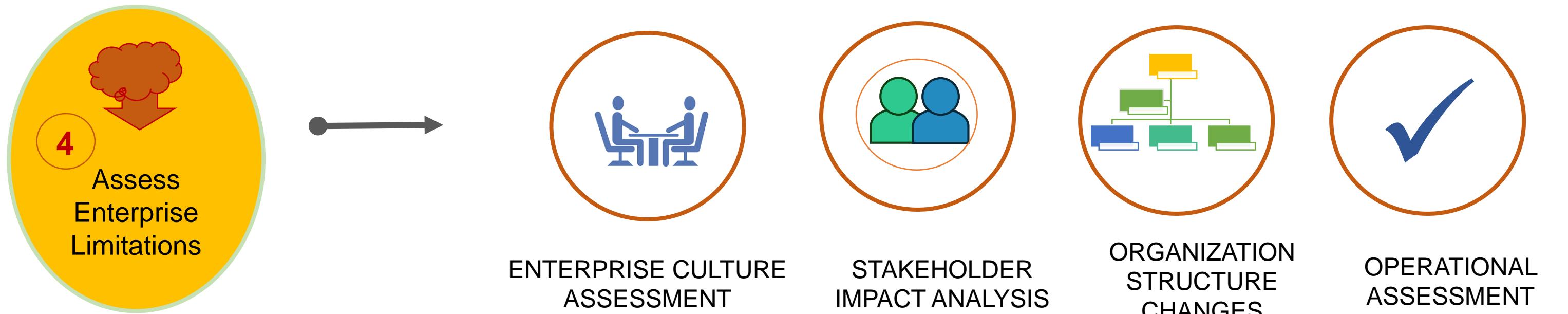
## ASSESS ENTERPRISE LIMITATIONS (contd.)

### ELEMENTS



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### ELEMENTS

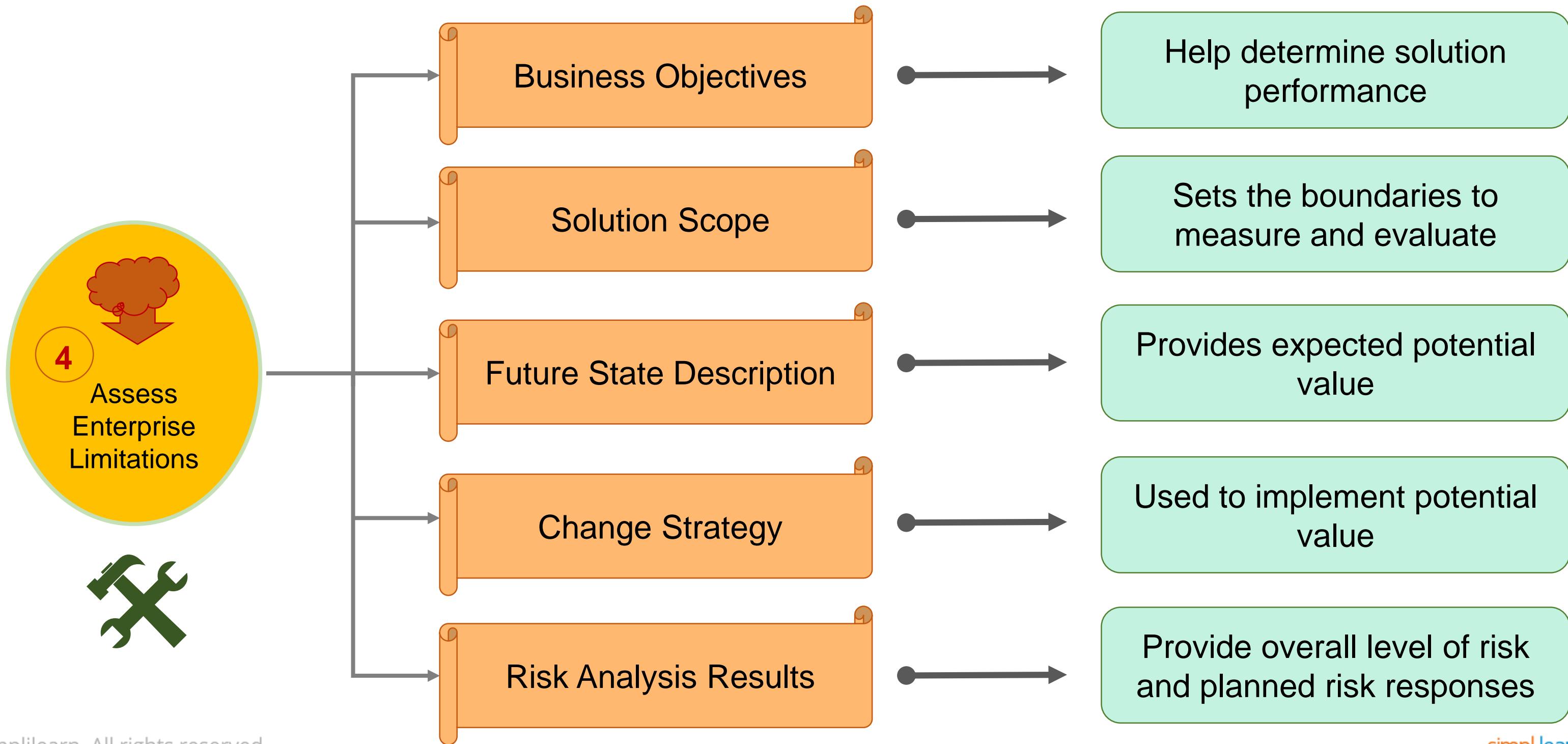


This element helps to determine if the enterprise will be able to adapt or effectively use a solution.

## ASSESS ENTERPRISE LIMITATIONS

### GUIDELINES AND TOOLS

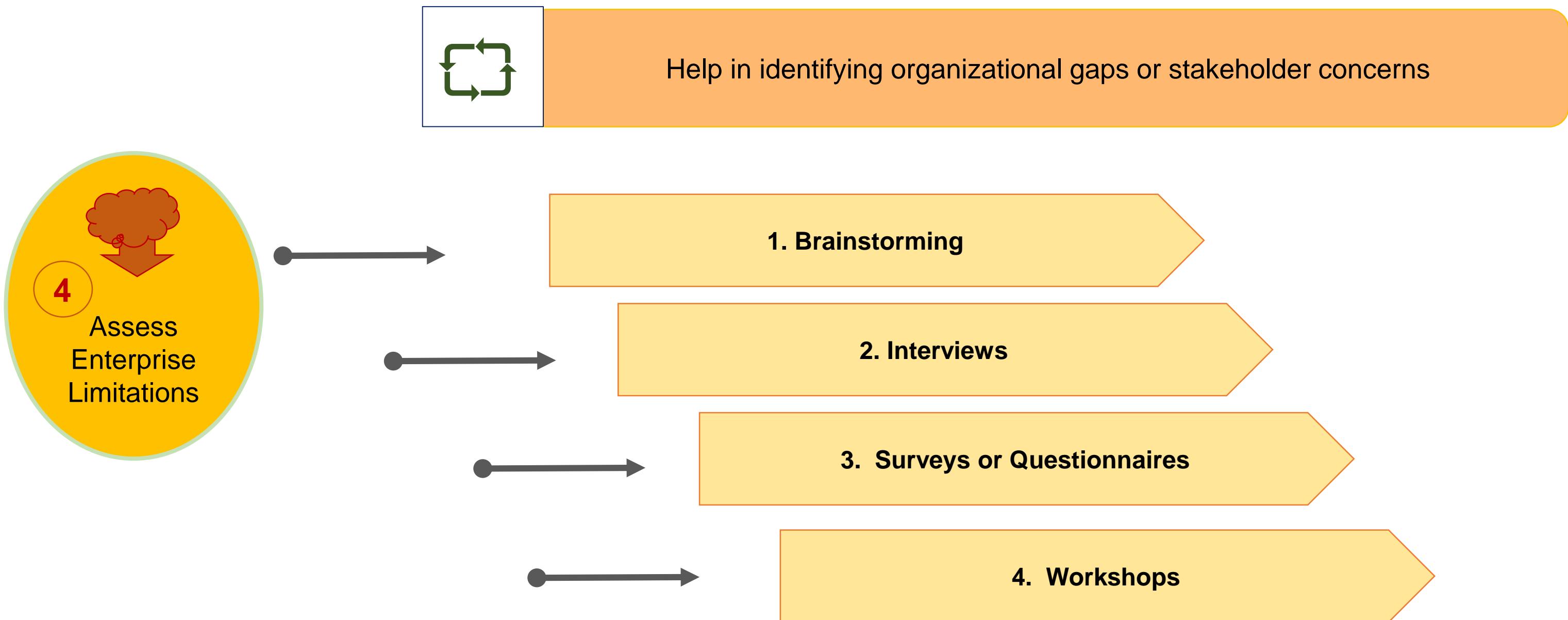
The business analyst may use the following guidelines and tools.



# ASSESS ENTERPRISE LIMITATIONS

## TECHNIQUES

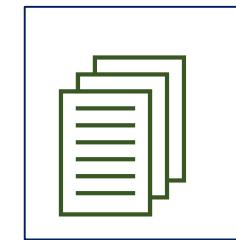
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



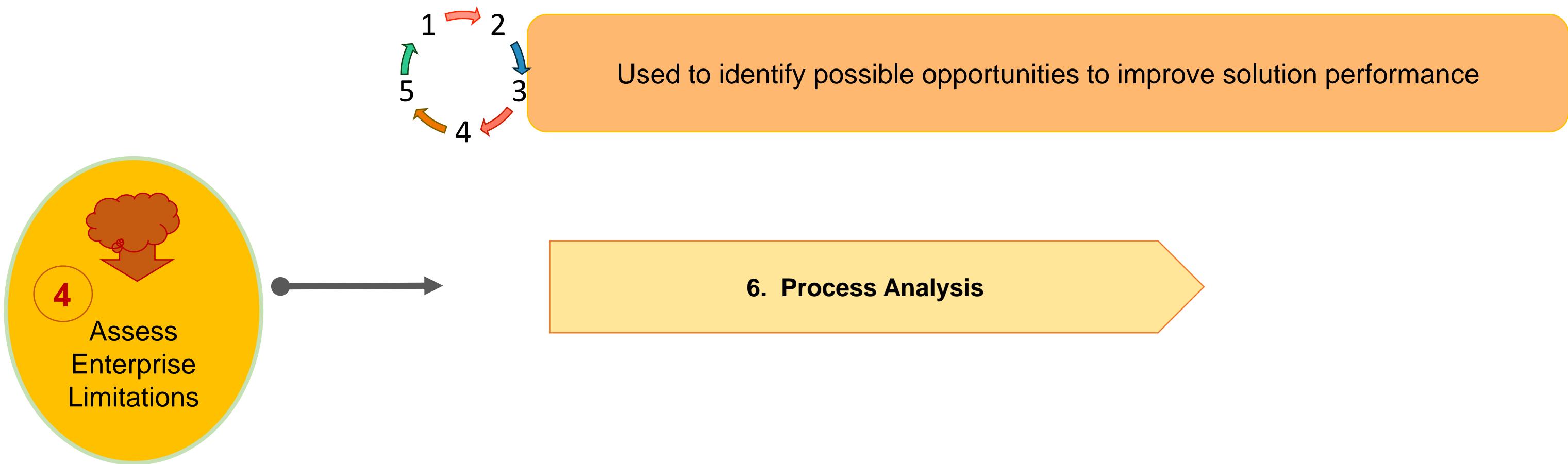
Used to understand the organization structure, its culture, and its operations

#### 5. Document Analysis

# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

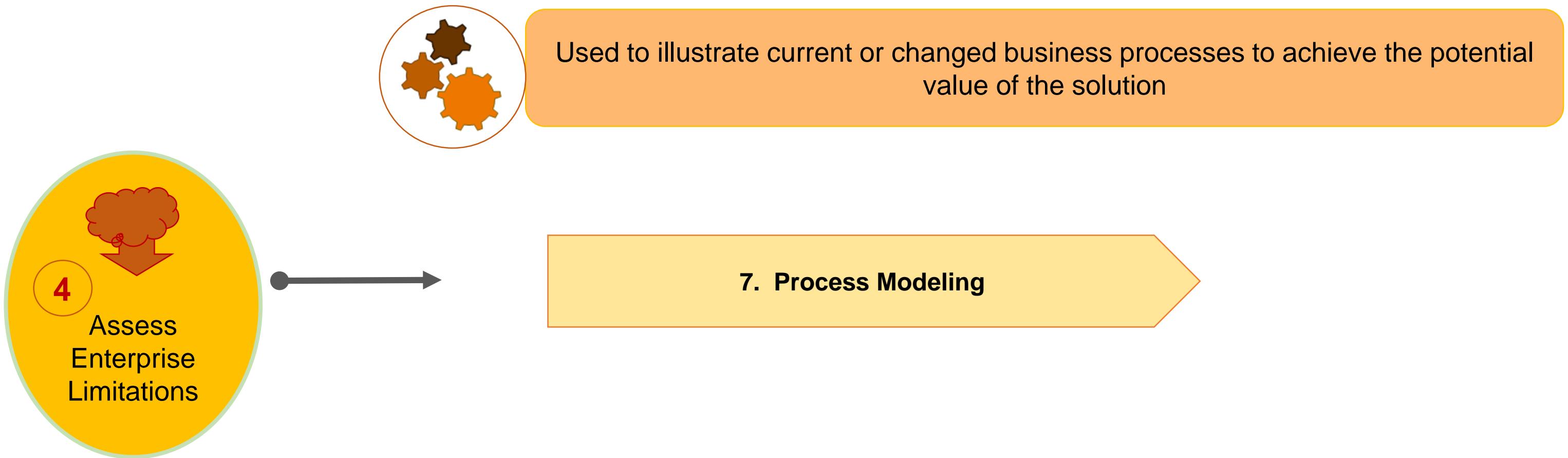
There are 18 techniques for assessing enterprise limitations.



# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

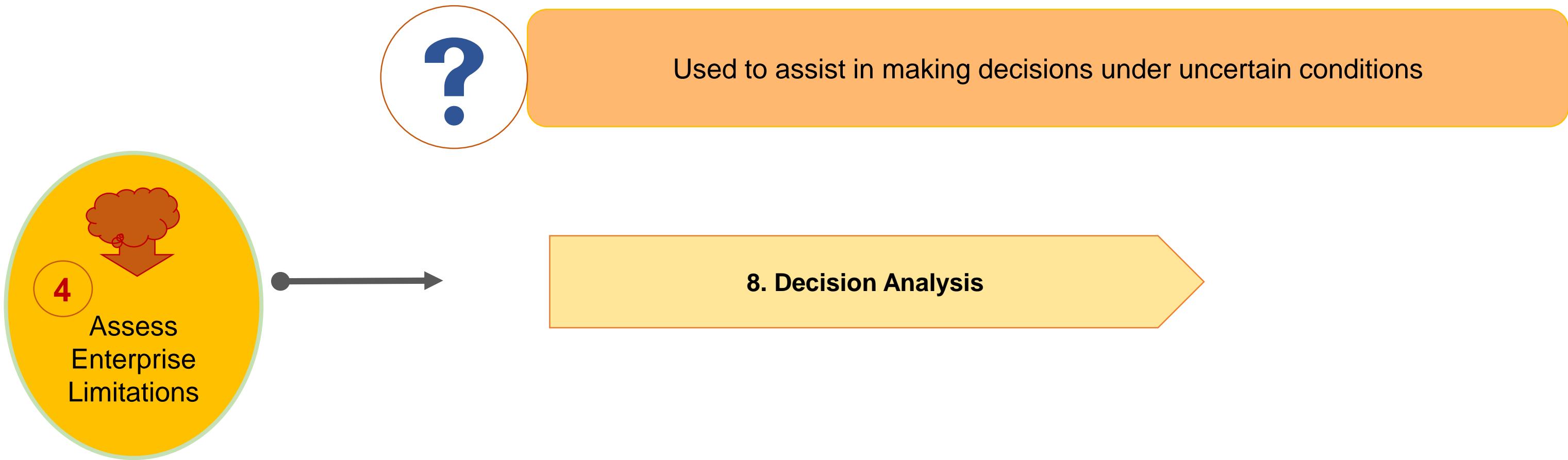
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

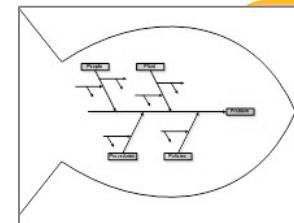
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



Used to identify the underlying causes of enterprise limitations

#### 9. Root Cause Analysis

## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



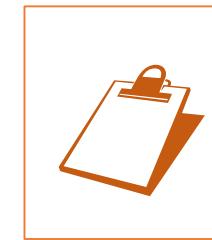
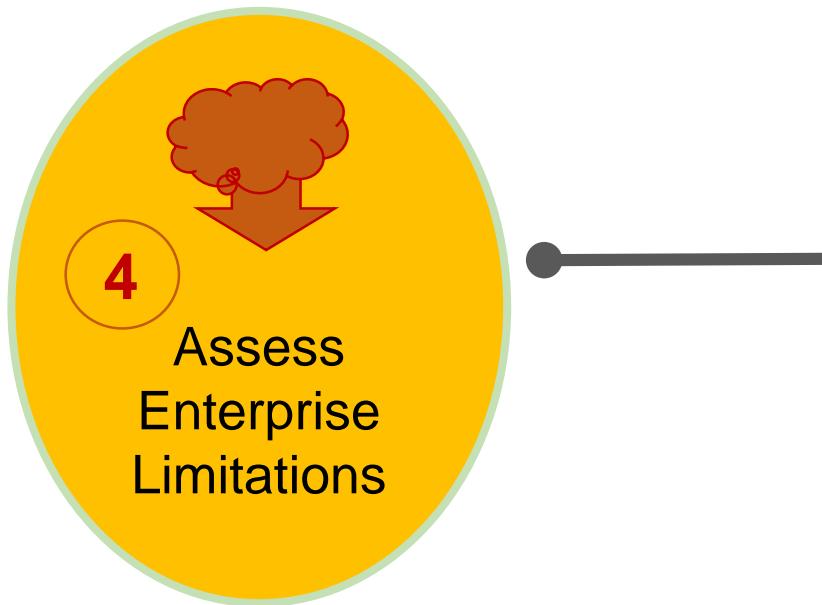
Used to ensure that issues identified during assessments are tracked and resolved

#### 10. Item Tracking

# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



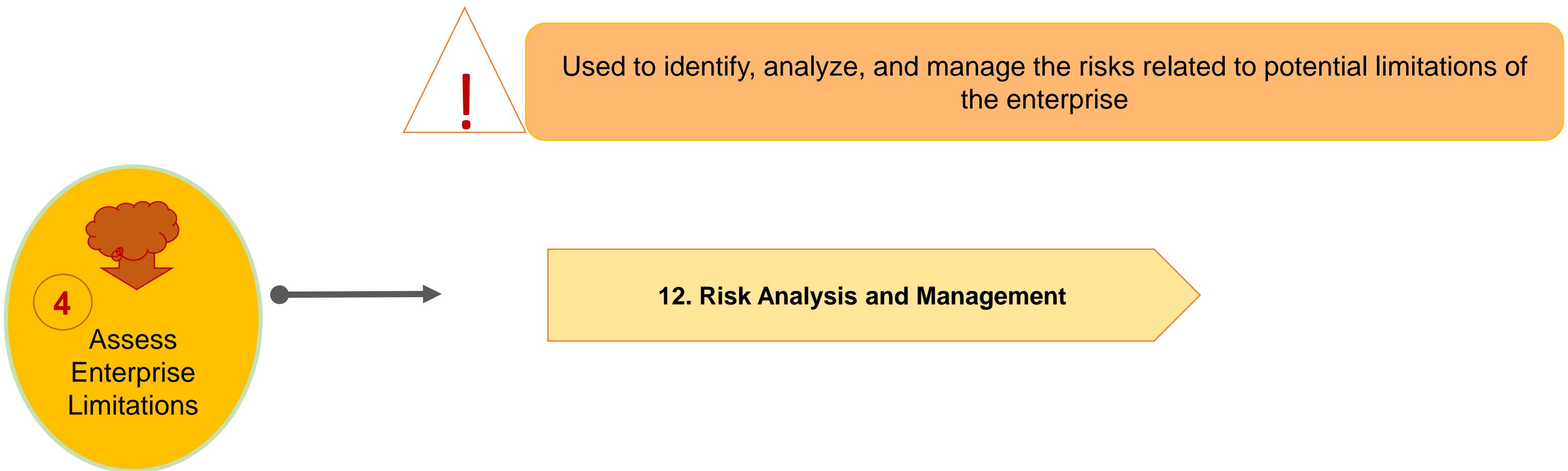
Used to identify previous initiatives and enterprise interactions with the solution

**11. Lessons Learned**

## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

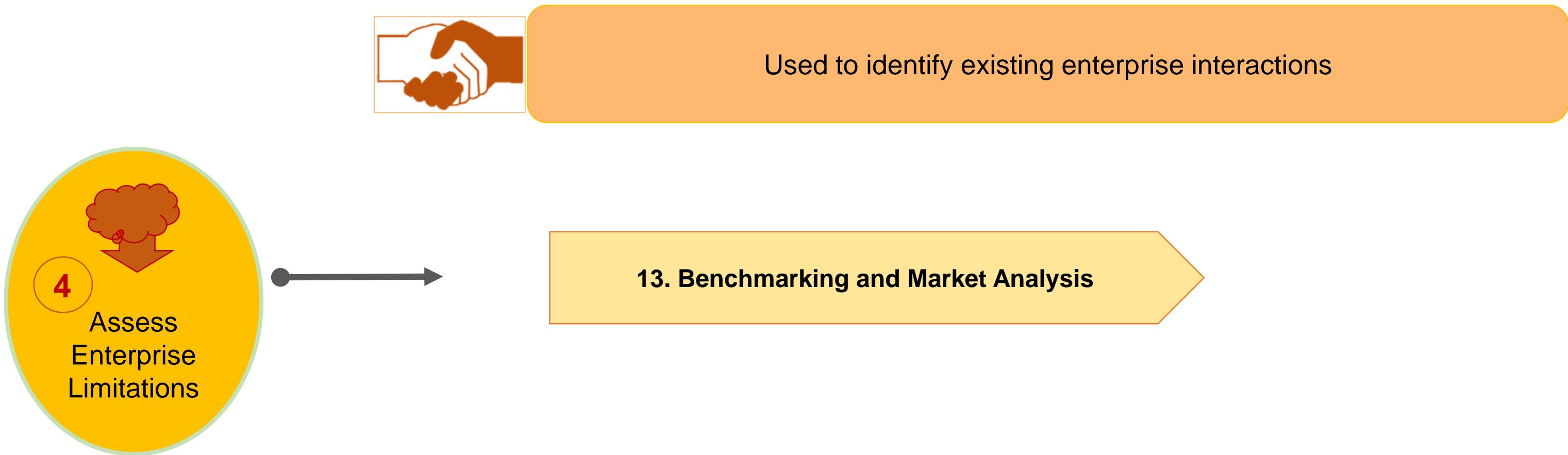
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

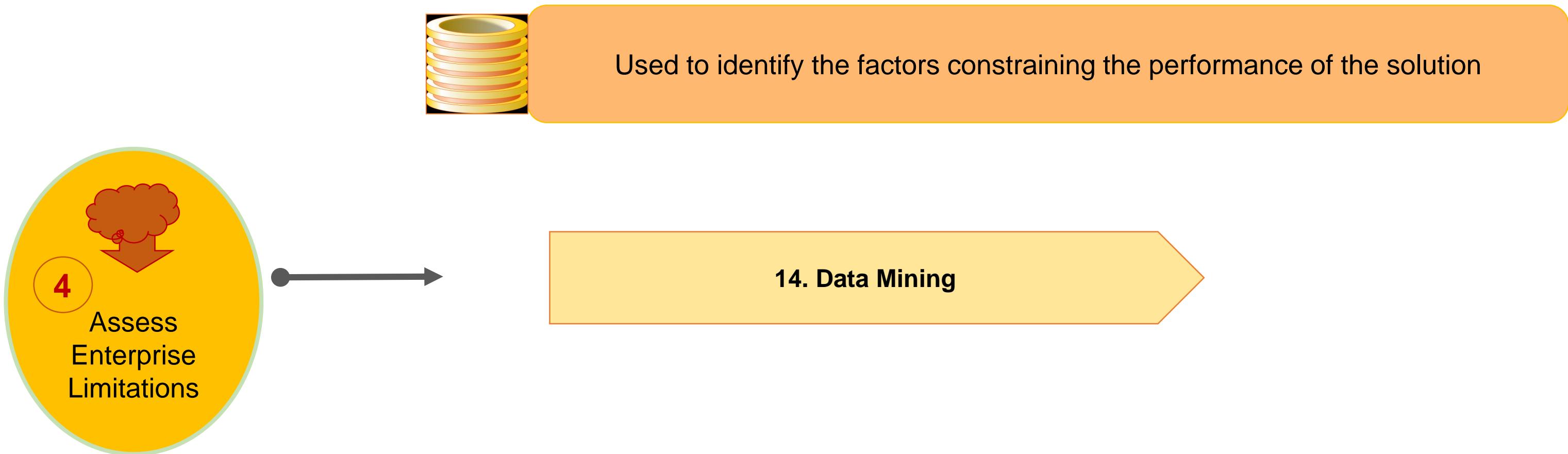
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

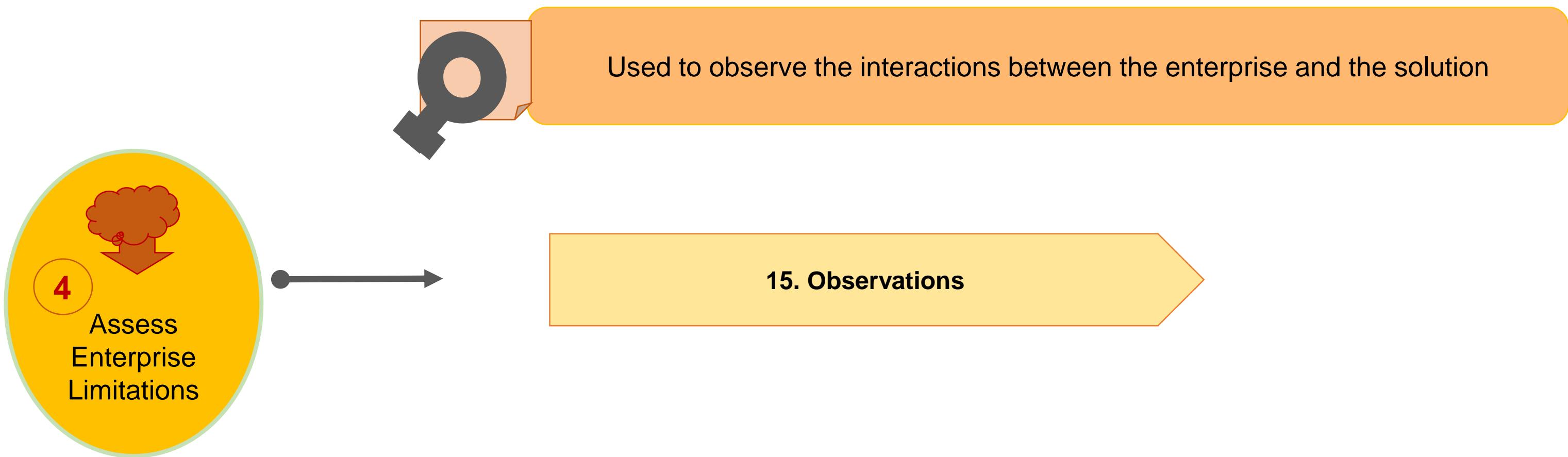
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

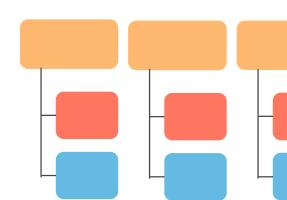
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



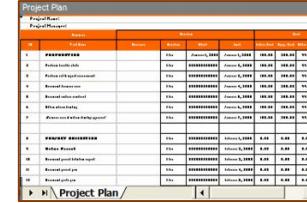
Used to identify the required changes to the organization's structure



# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



Used to determine stakeholder roles and permissions

### 17. Roles and Permissions Matrix

# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



|   |   |
|---|---|
| S | W |
| O | T |

Used to demonstrate how a change will help the organization maximize its strengths and minimize its weaknesses

### 18. SWOT Analysis

# ASSESS ENTERPRISE LIMITATIONS

## ROLES AND PERMISSIONS MATRIX

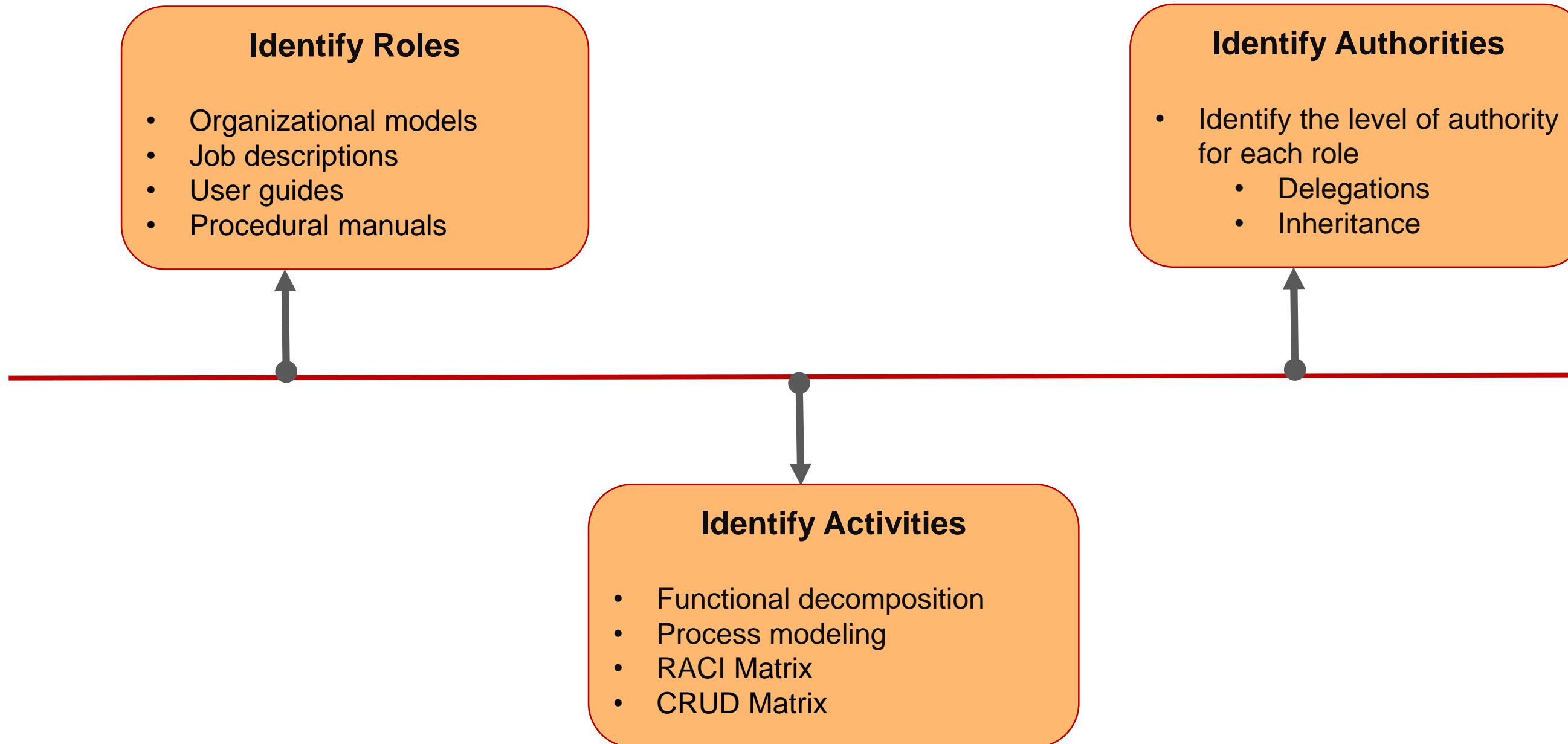
| Activities          | Roles and Permissions Matrix | Purchase Manager | Purchase Officer | Accounts Manager | Accounts Officer | Stores Officer |
|---------------------|------------------------------|------------------|------------------|------------------|------------------|----------------|
| Create Account      |                              |                  |                  | X                | X                |                |
| Modify Account      |                              |                  |                  | X                |                  |                |
| Create Organization |                              |                  |                  | X                |                  |                |
| Create Order        |                              | X                | X                |                  |                  |                |
| Edit Order          |                              | X                | X                |                  |                  |                |
| View Order          |                              | X                | X                | X                | X                | X              |

- Is used to ensure **that** all the activities are covered by **delineating responsibilities** and identifying roles
- Provides procedural checks and balances and data security

# ASSESS ENTERPRISE LIMITATIONS

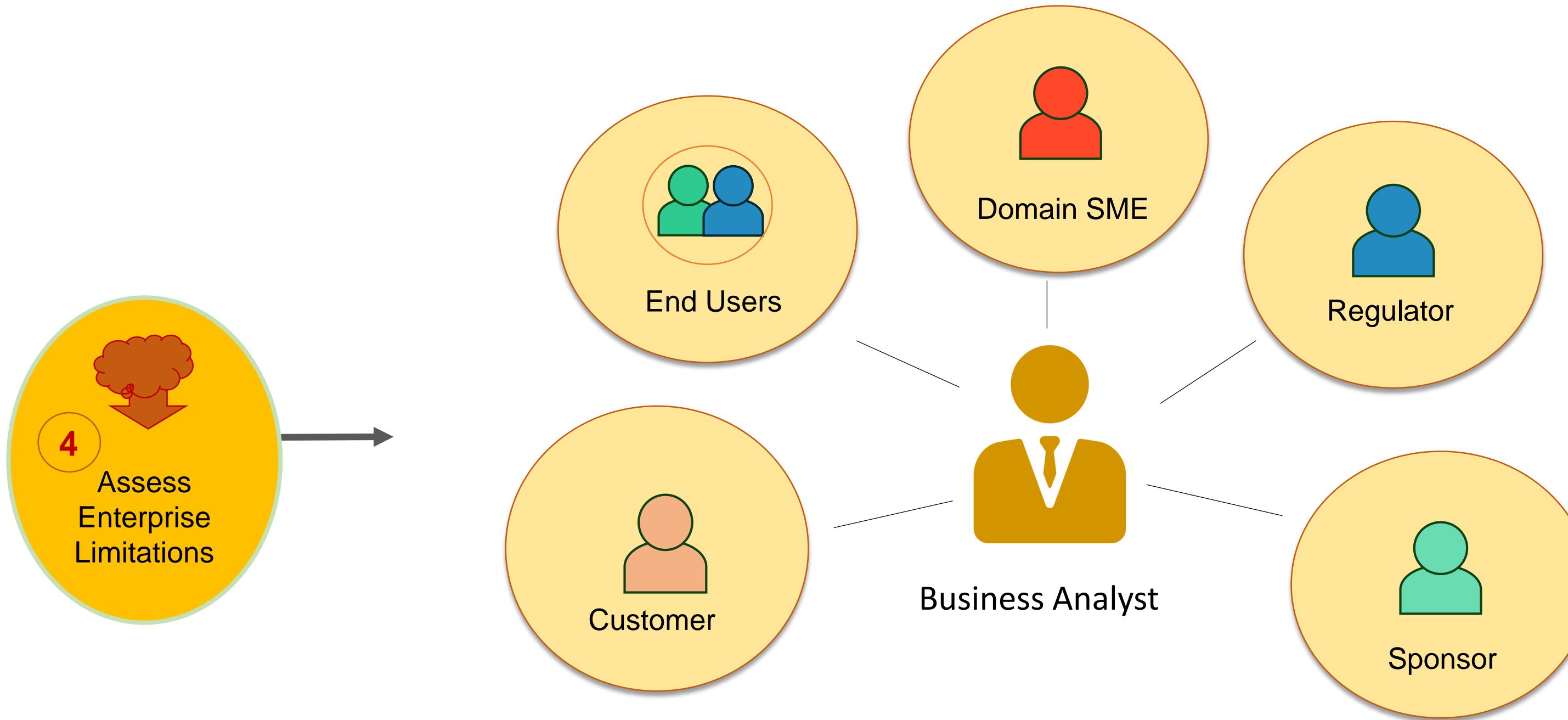
## ROLES AND PERMISSIONS MATRIX - ELEMENTS

To create the Roles and Permissions Matrix, the business analyst needs to perform the following:



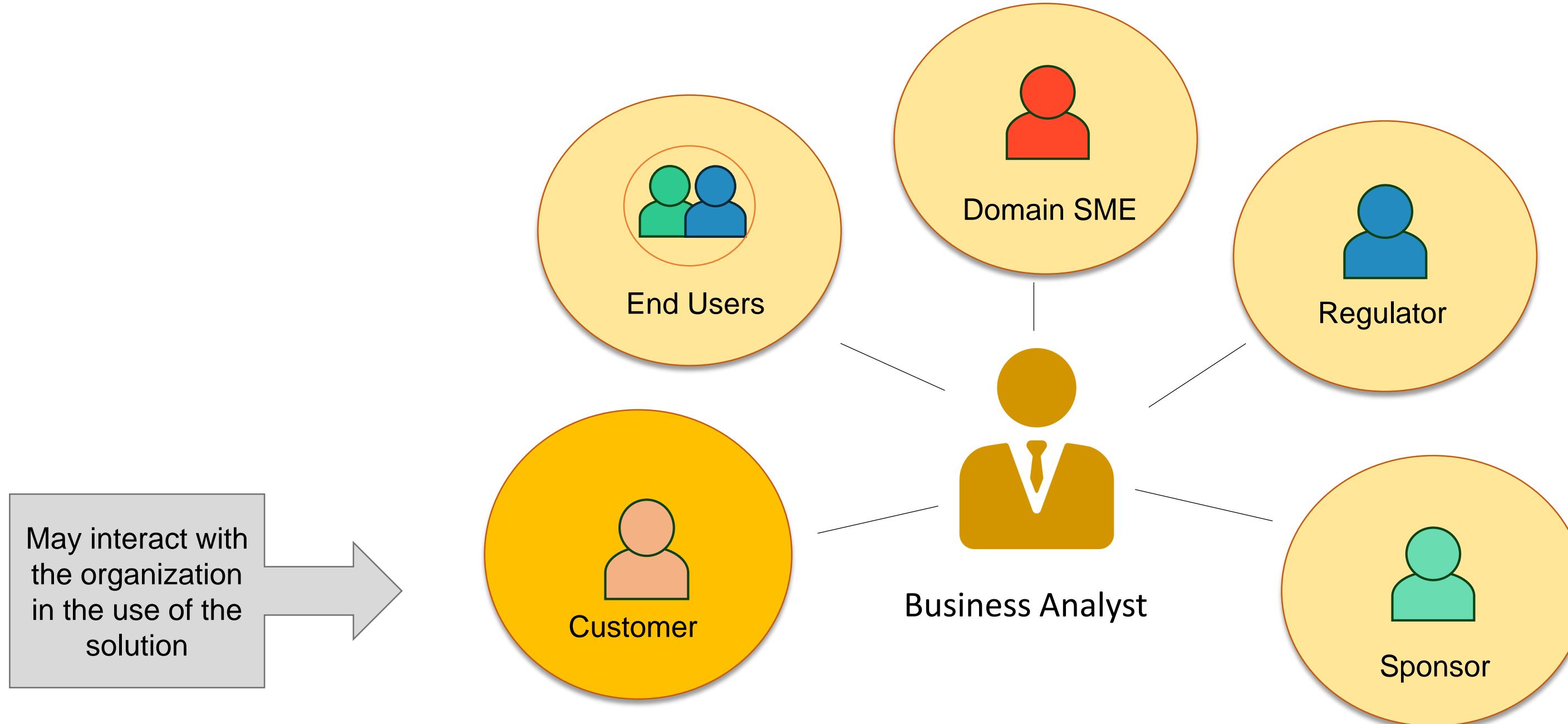
# ASSESS ENTERPRISE LIMITATIONS

## STAKEHOLDERS



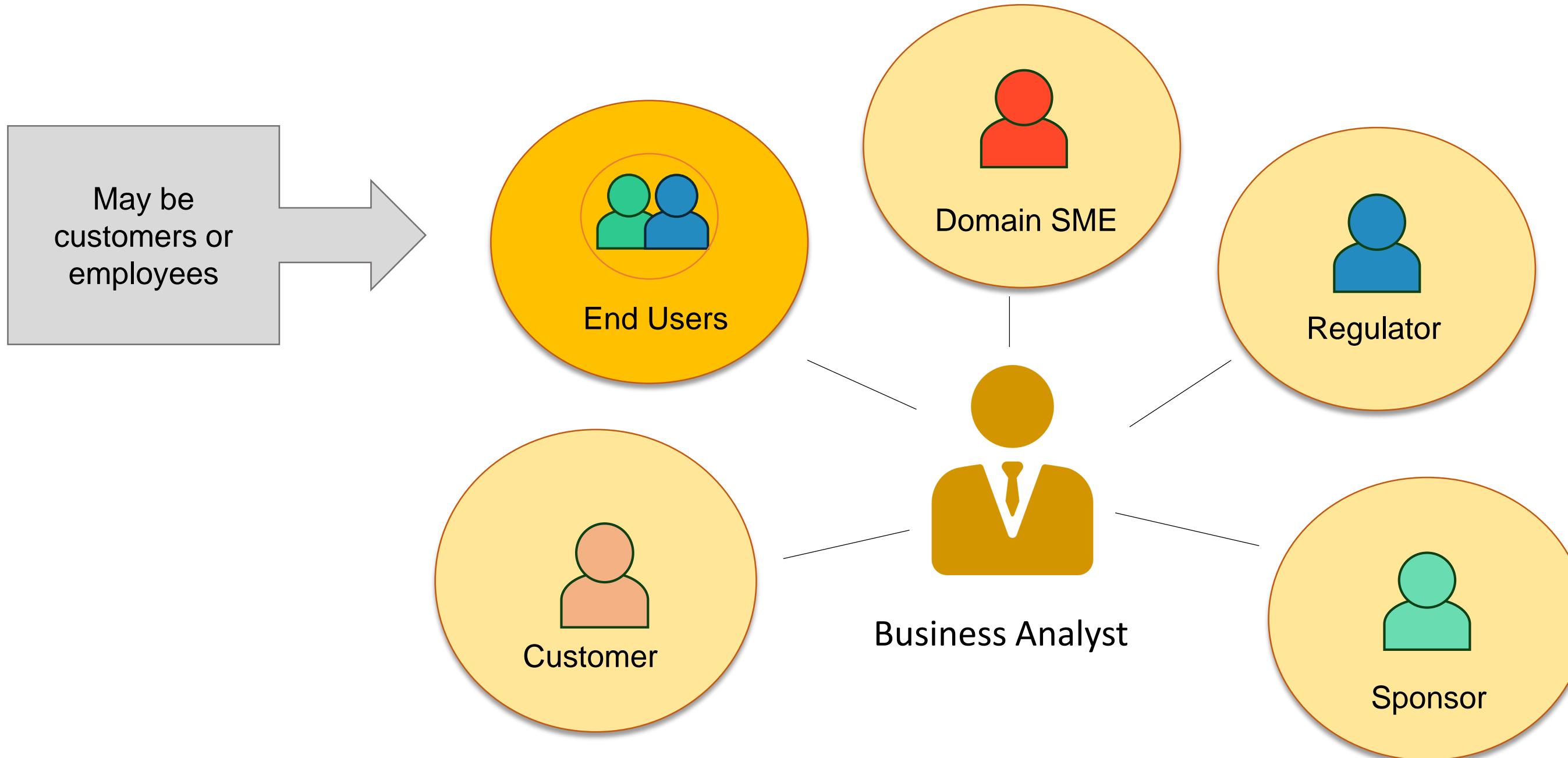
# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS



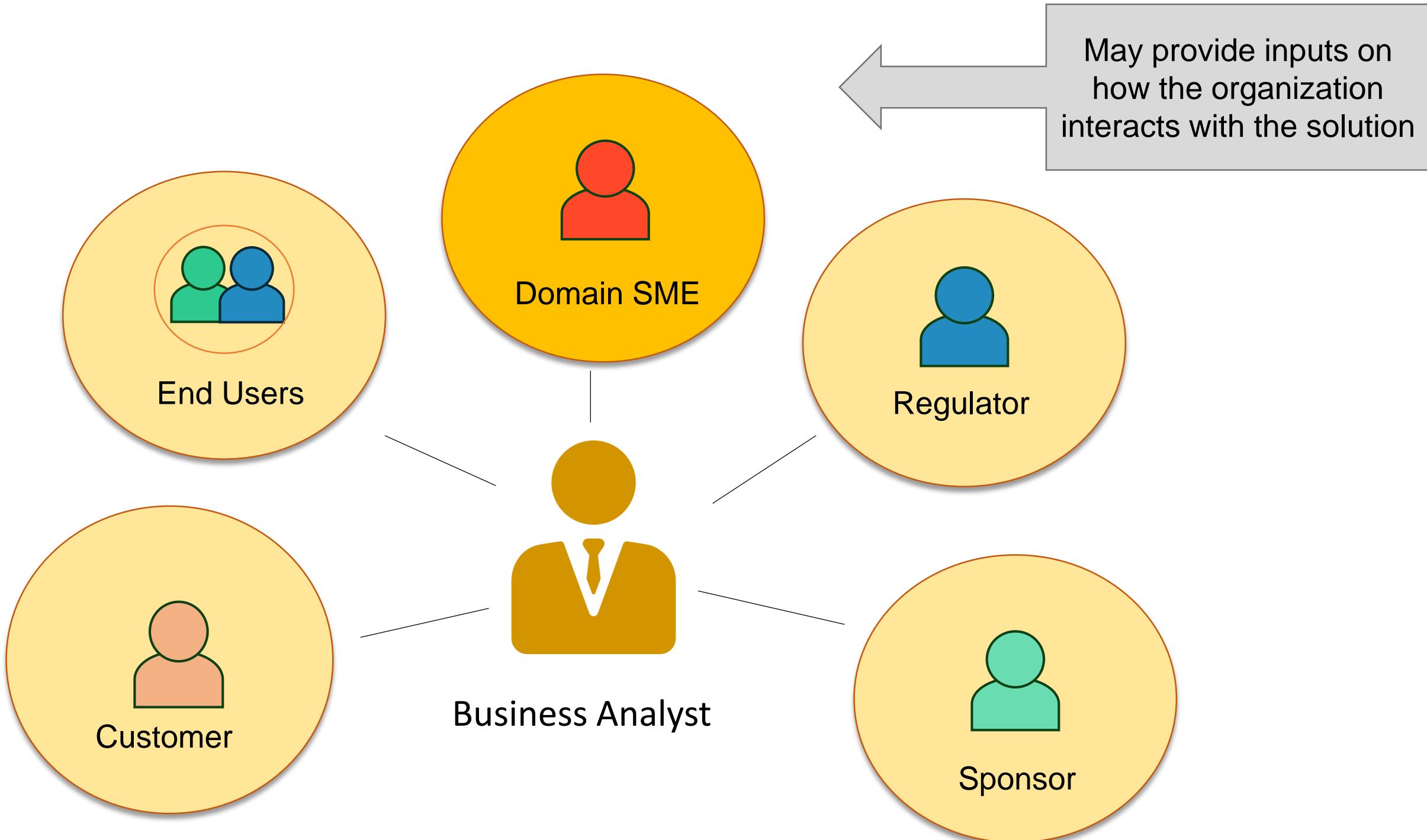
# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS



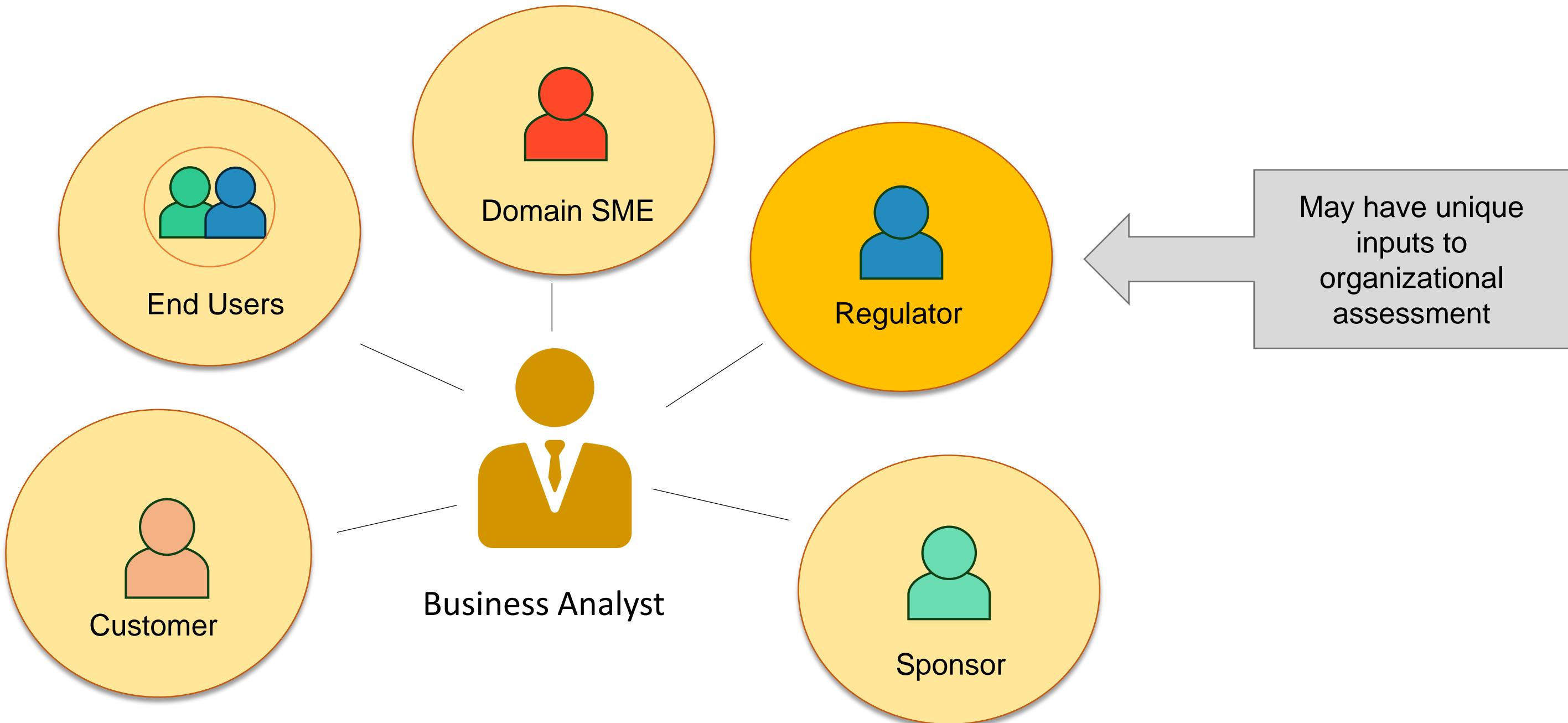
## ASSESS ENTERPRISE LIMITATIONS (contd.)

### STAKEHOLDERS



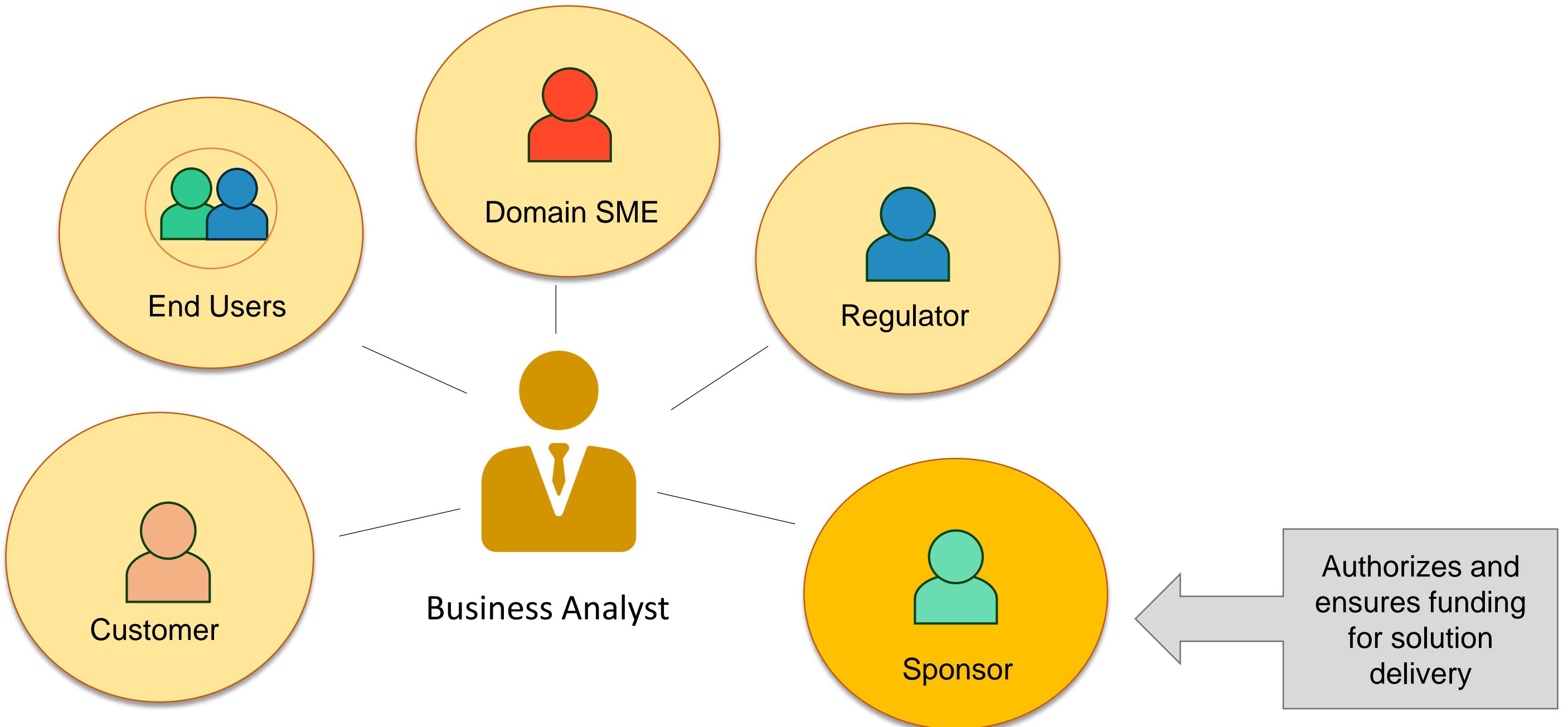
# ASSESS ENTERPRISE LIMITATIONS (contd.)

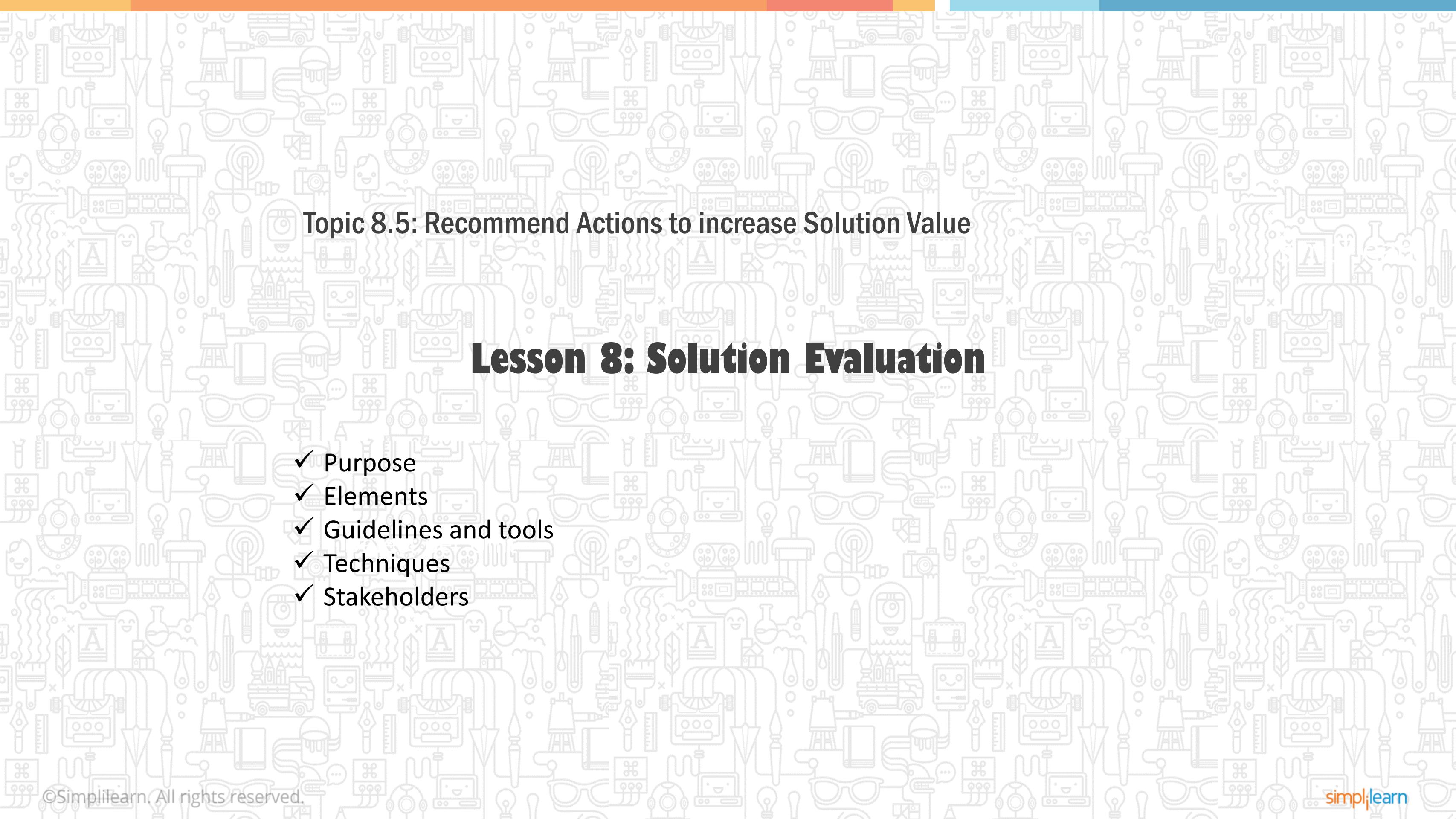
## STAKEHOLDERS



# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS





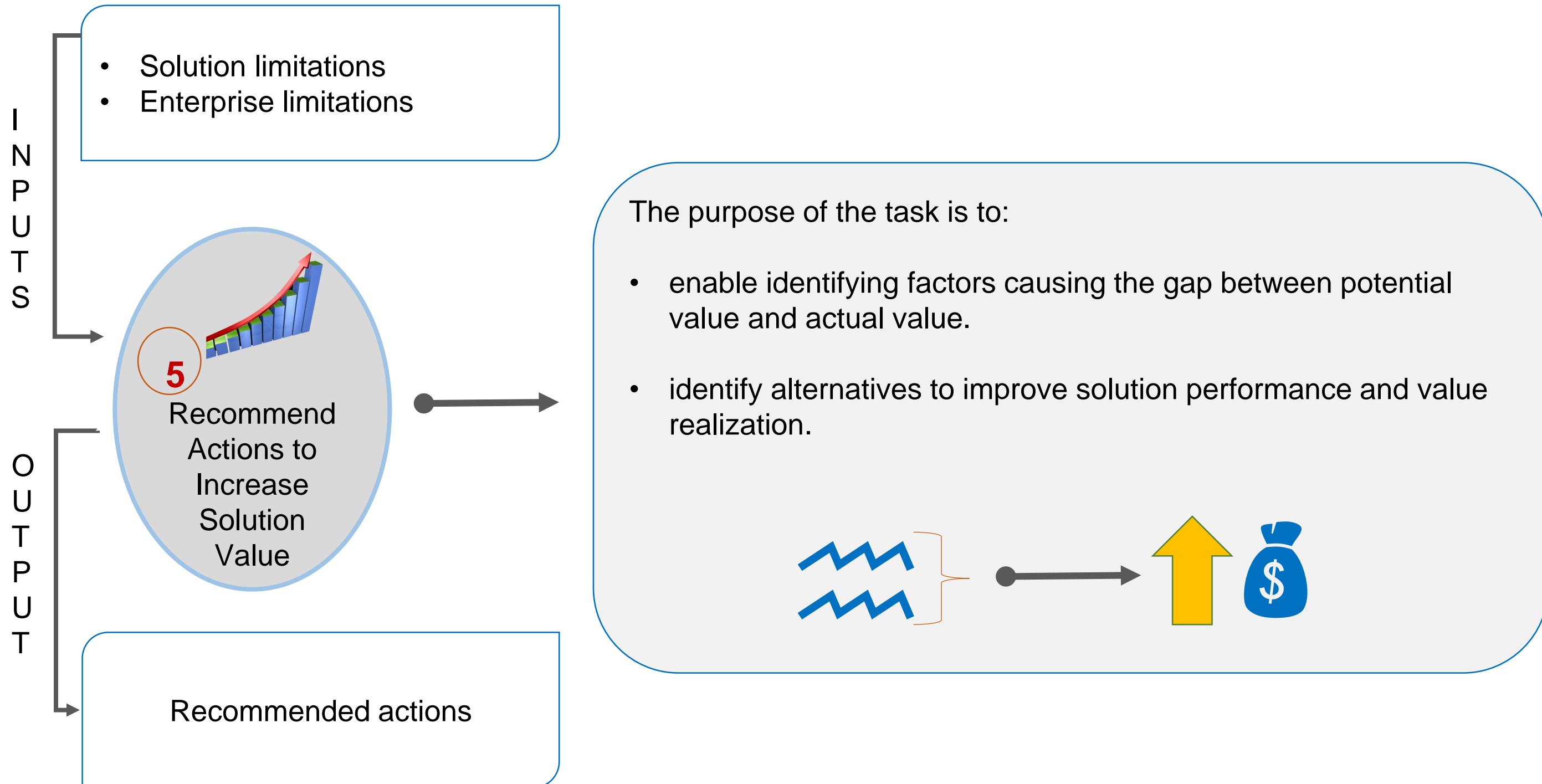
**Topic 8.5: Recommend Actions to increase Solution Value**

## **Lesson 8: Solution Evaluation**

- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and tools
- ✓ Techniques
- ✓ Stakeholders

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## PURPOSE



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## ELEMENTS



## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### ELEMENTS



To increase solution performance, recommendations may include:

- Do nothing
- Make an organizational change
- Reduce complexity of interfaces
- Eliminate redundancy
- Avoid waste
- Identify additional capabilities
- Retire the solution

## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### ELEMENTS



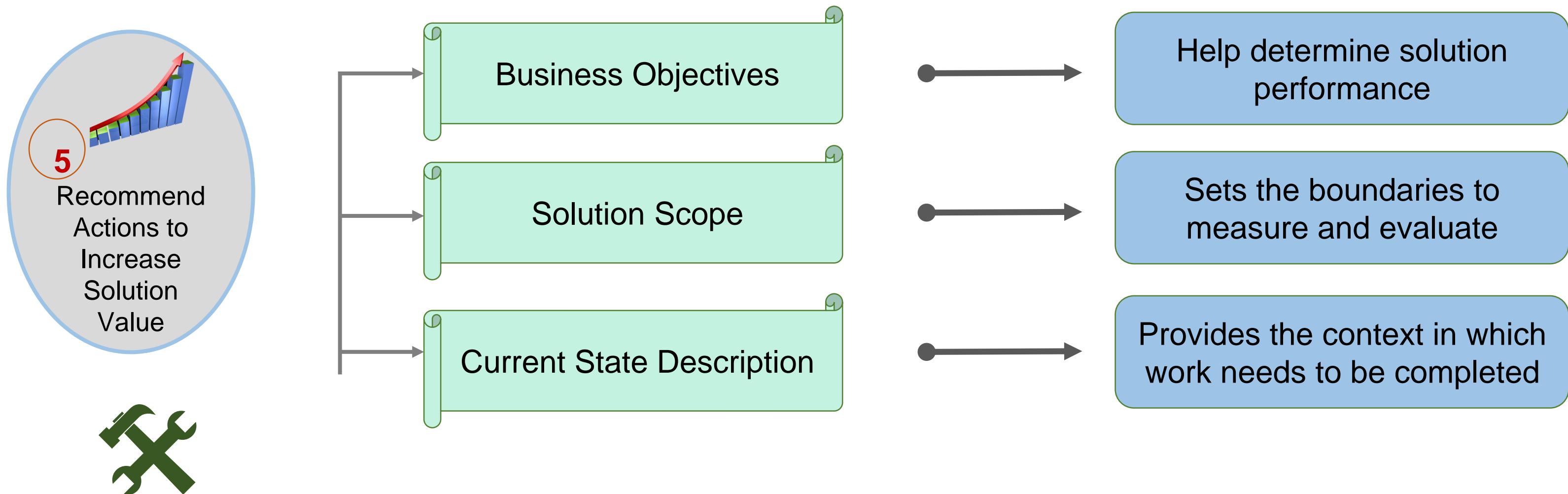
Factors that impact the decision:

- Ongoing cost versus initial investment
- Opportunity cost
- Necessity
- Sunk cost

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## GUIDELINES AND TOOLS

The business analyst may use the following guidelines and tools.



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.



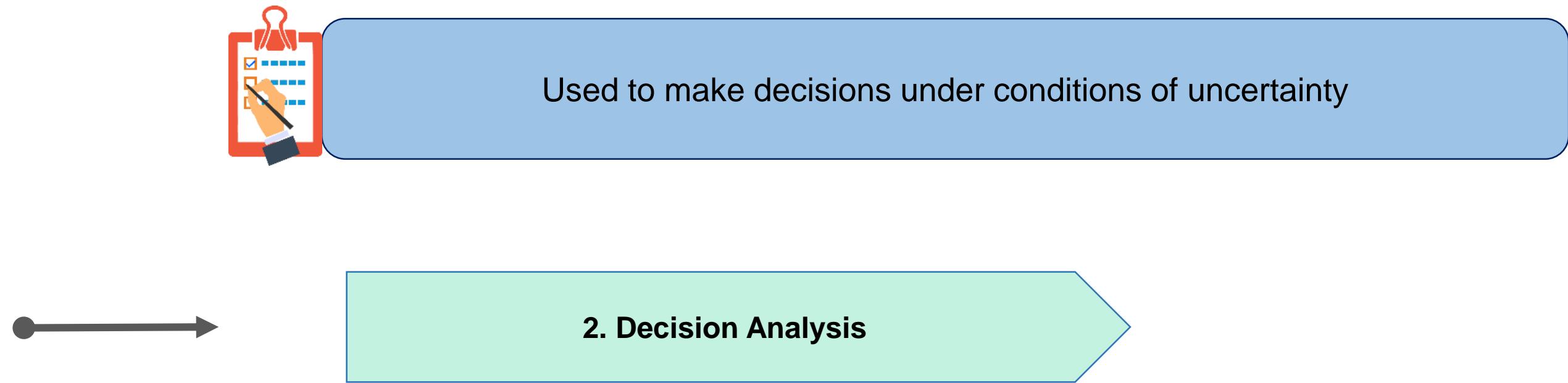
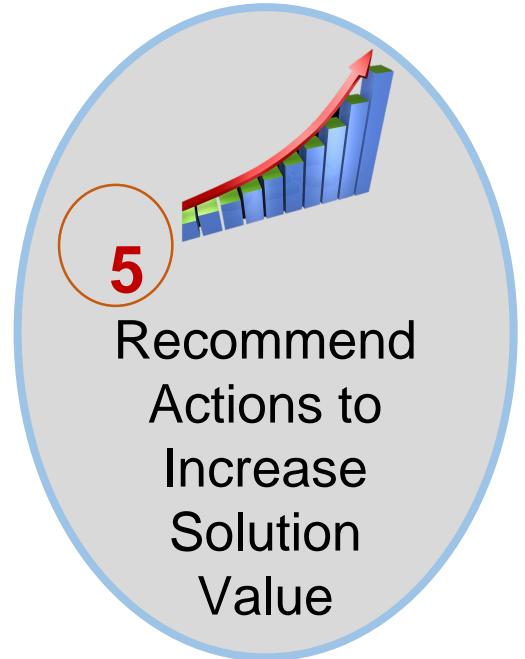
Used to identify the factors constraining the performance of the solution

1. Data Mining

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

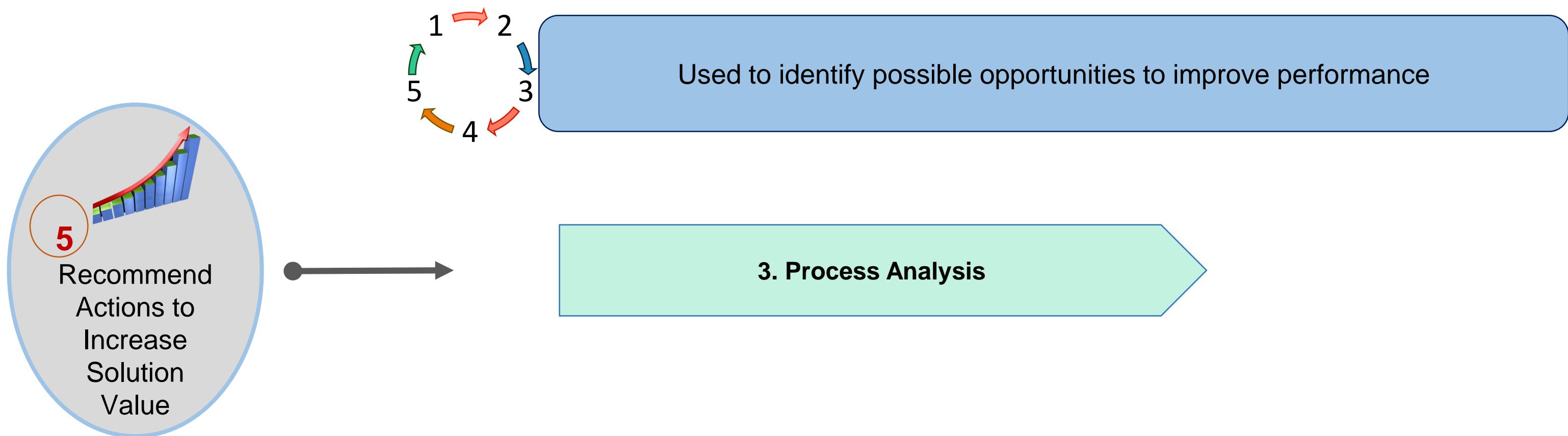
There are 9 techniques for recommending actions to increase solution value.



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.



Used to assess the potential costs and benefits of a change

### 4. Financial Analysis

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.



Used to gather opinions, feedback, and attitudes to determine if value has been met or exceeded

### 5. Focus Groups

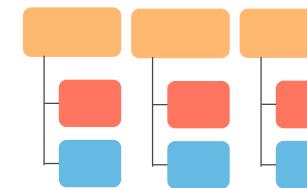


### 6. Surveys and Questionnaires

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.



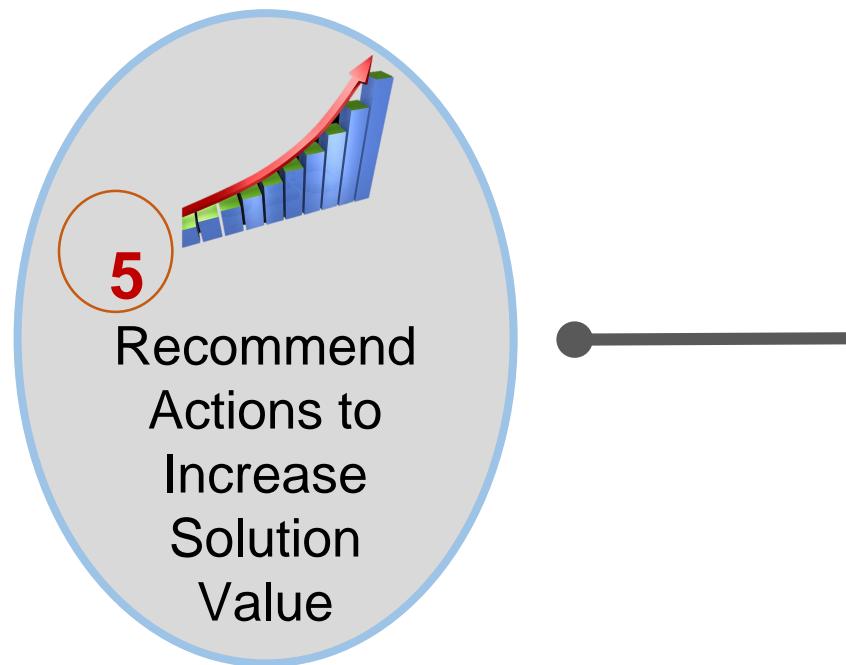
Used to ensure identification of the required changes to the organization structure

### 7. Organizational Modeling

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.



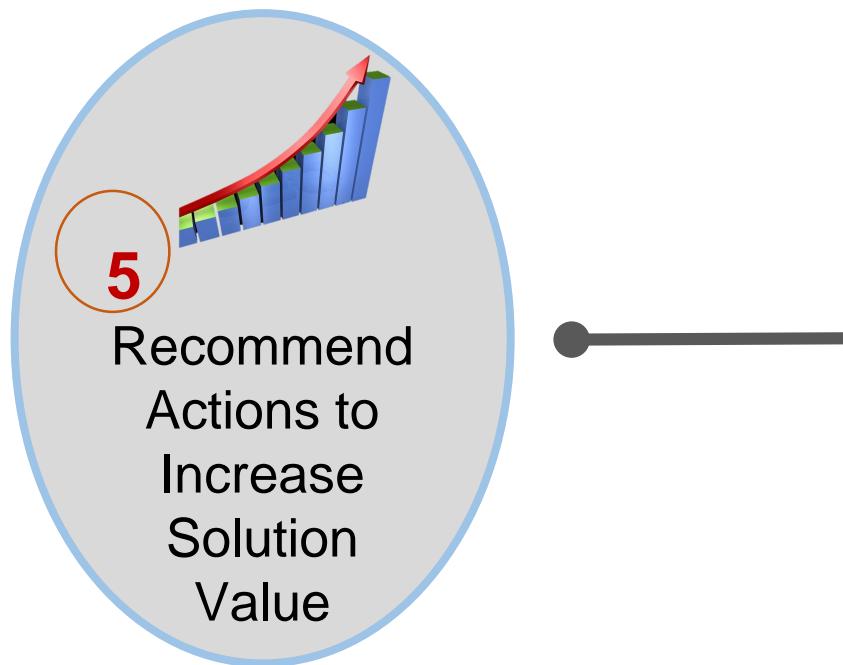
Used to identify the relative value of different actions to improve solution performance

**8. Prioritization**

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

There are 9 techniques for recommending actions to increase solution value.

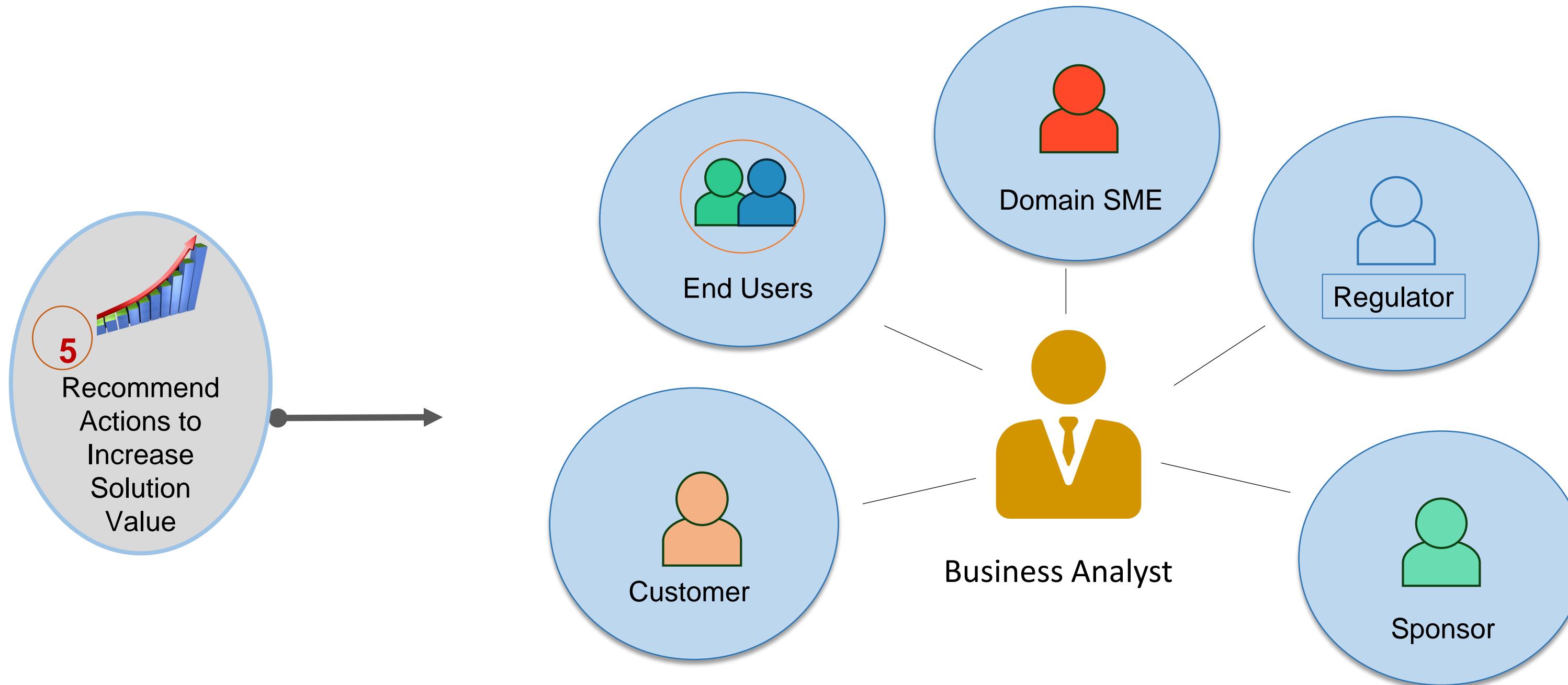


Used to identify, analyze, and manage the risks related to potential limitations of the solution

### 9. Risk Analysis and Management

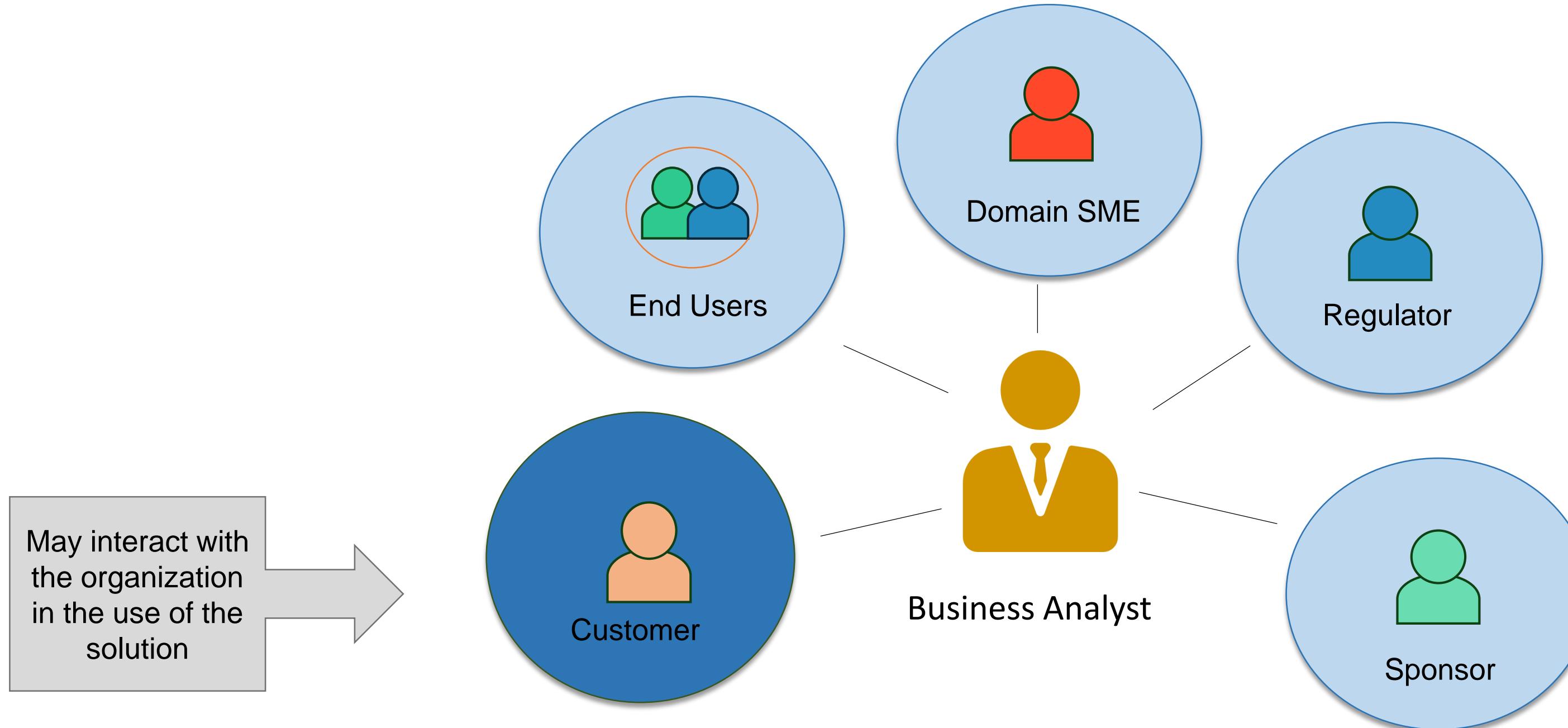
# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## STAKEHOLDERS



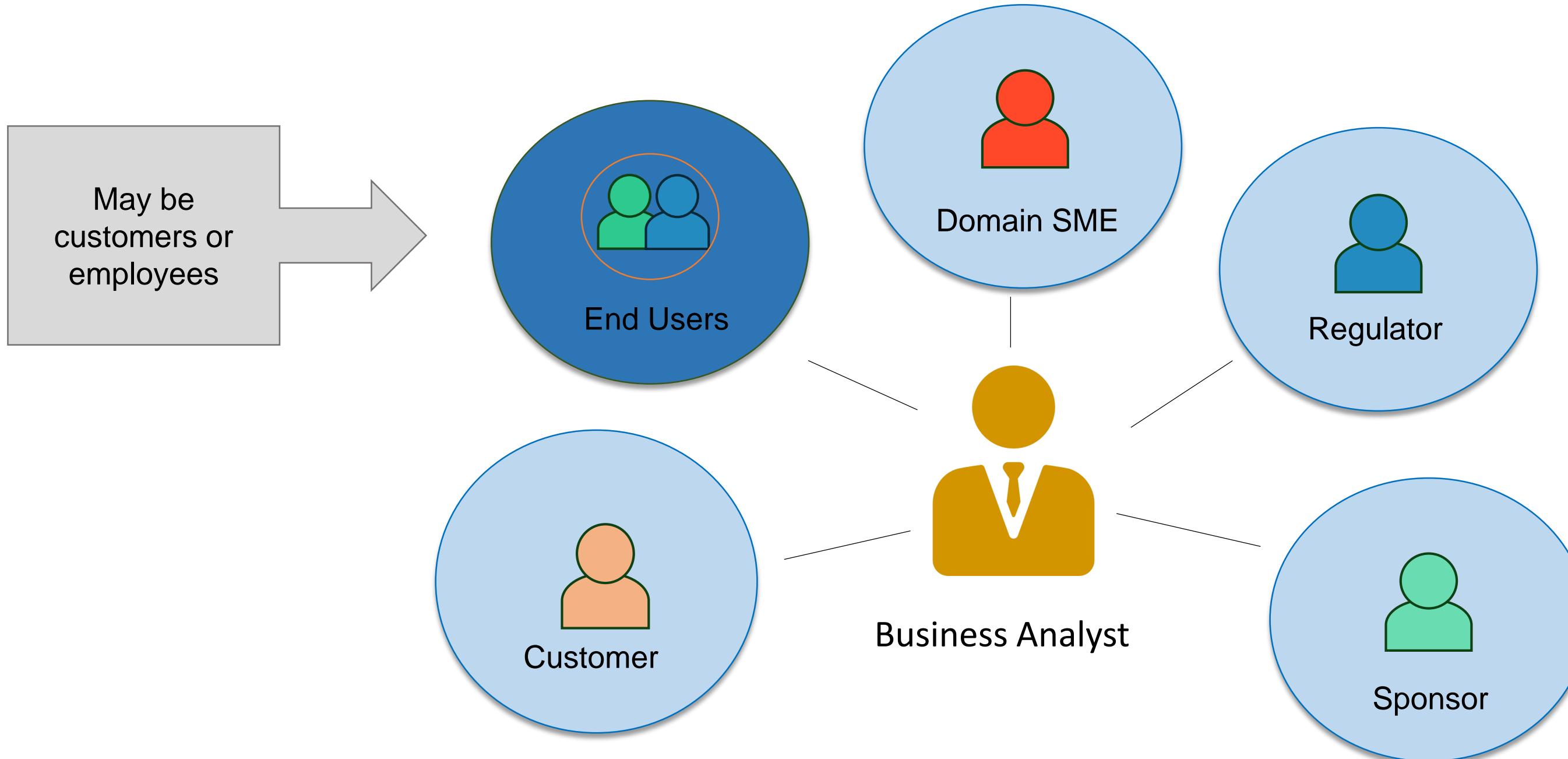
# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## STAKEHOLDERS



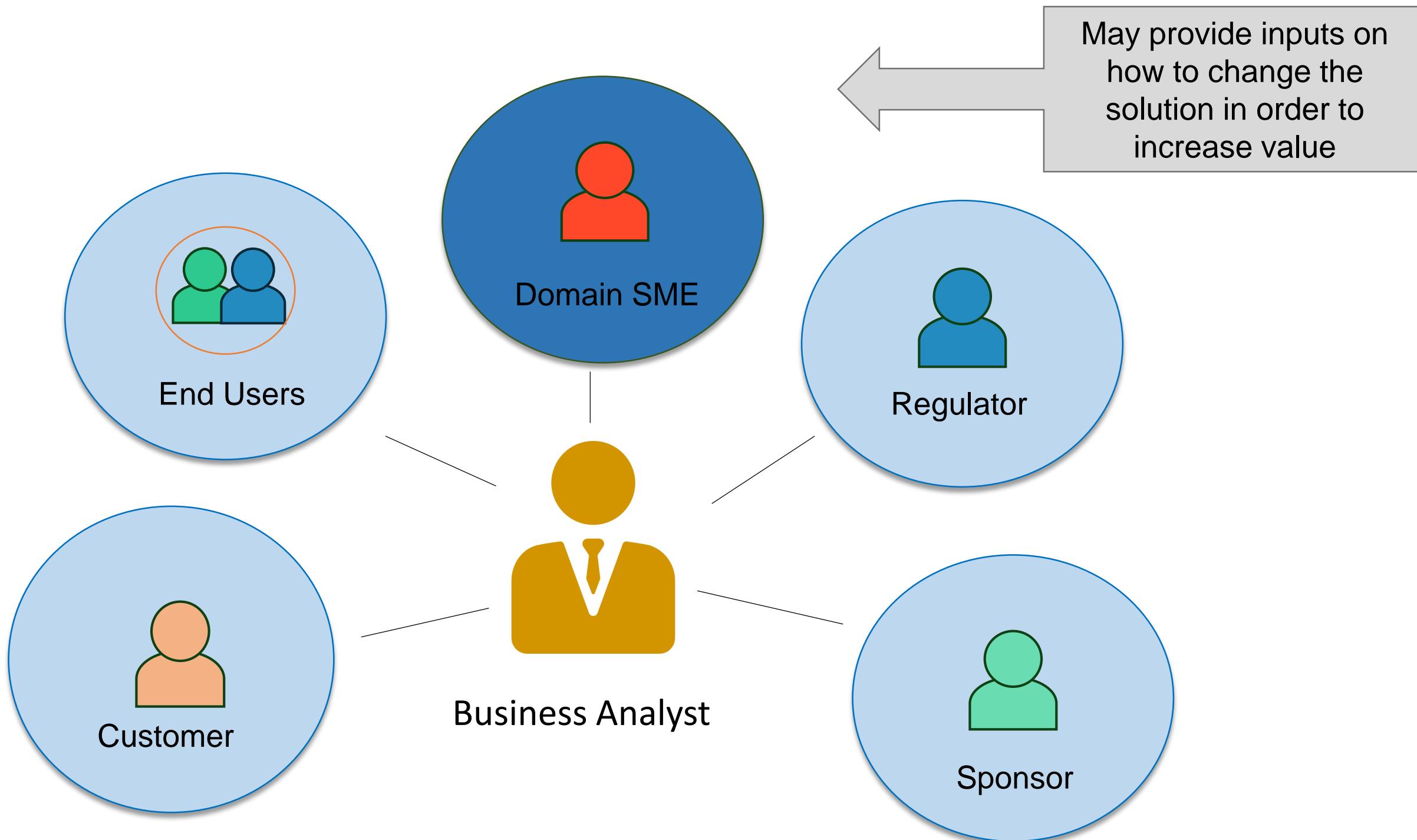
## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### STAKEHOLDERS



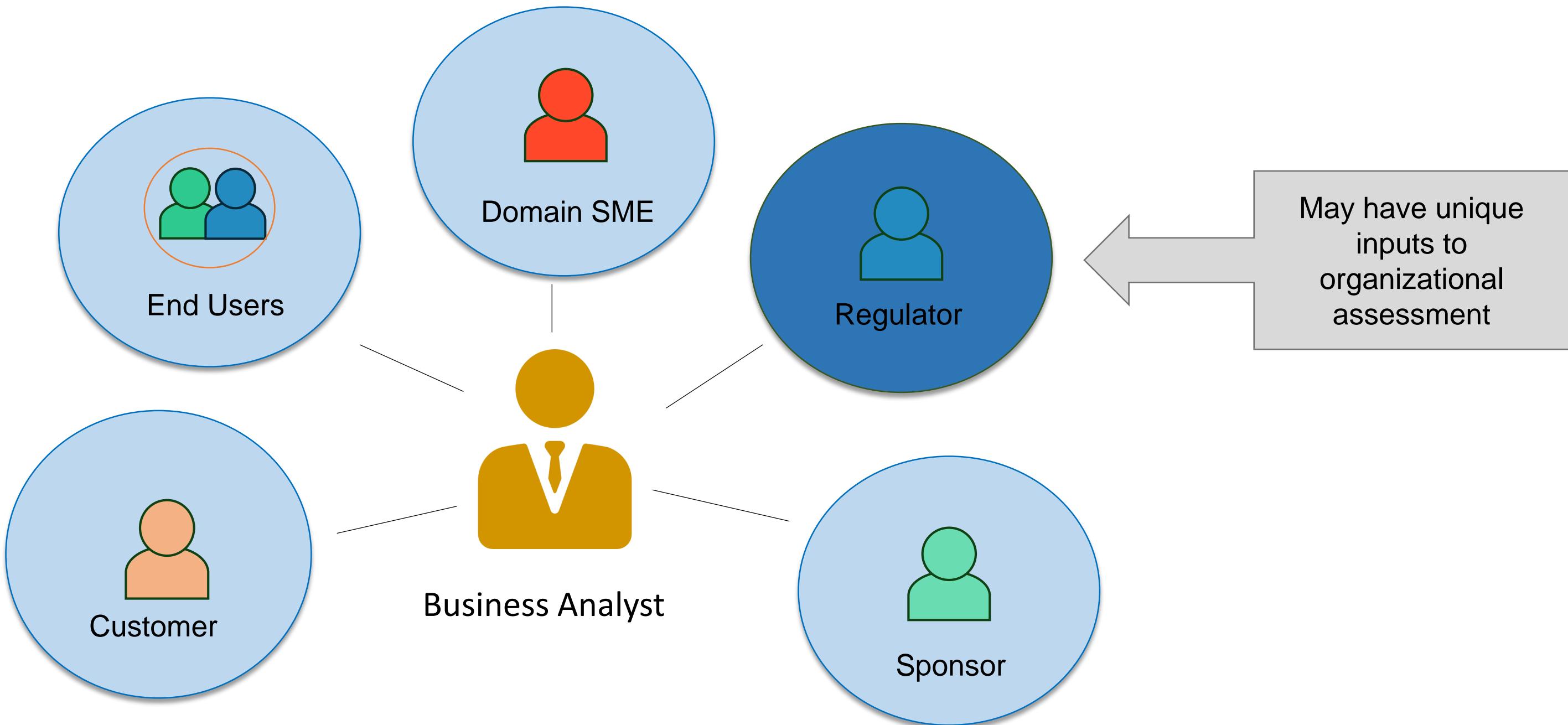
## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### STAKEHOLDERS



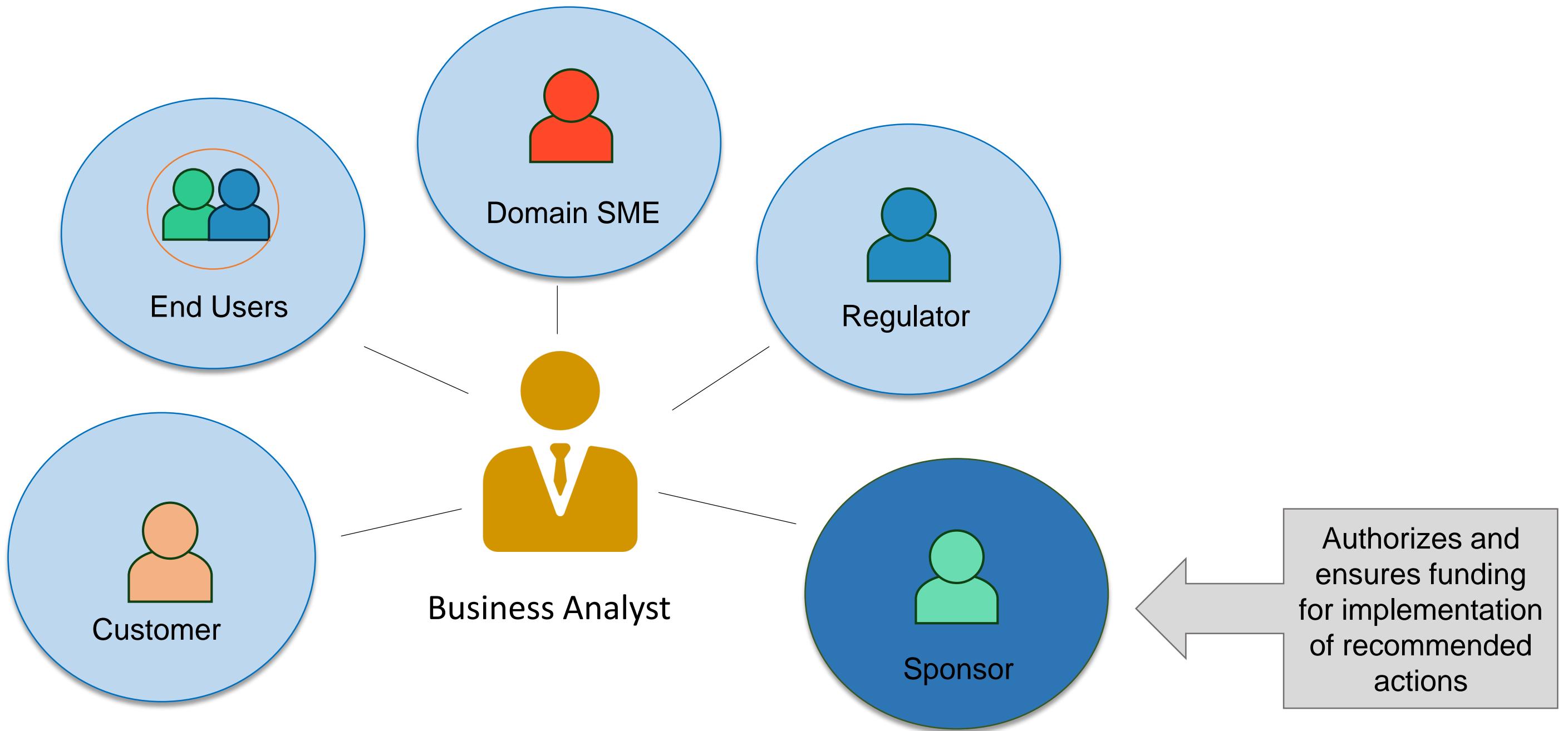
## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### STAKEHOLDERS



## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### STAKEHOLDERS

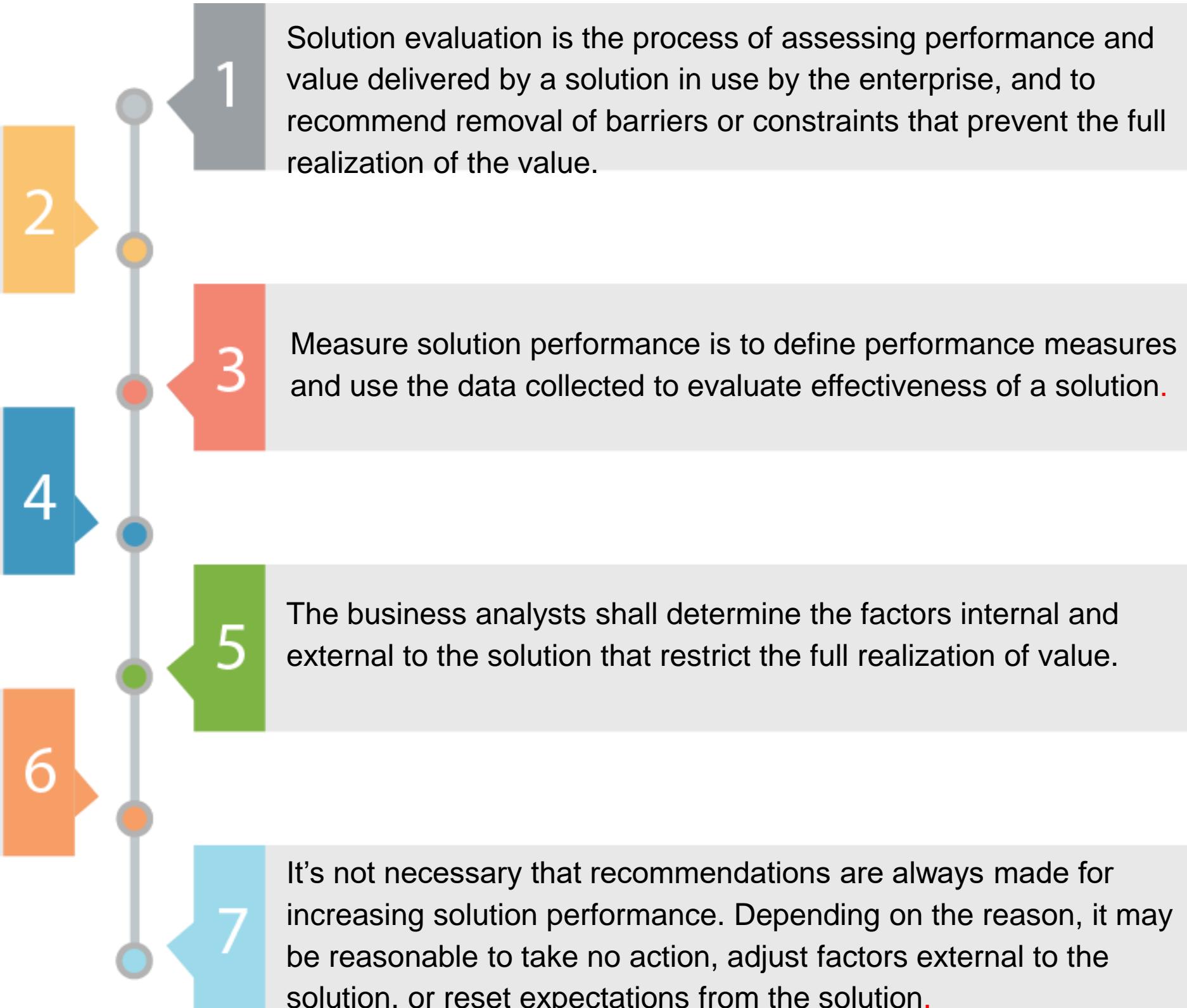


## KEY TAKEAWAYS

Solution or a solution component may be in any form - prototype or proof of concept, pilot or beta release, or operational release.

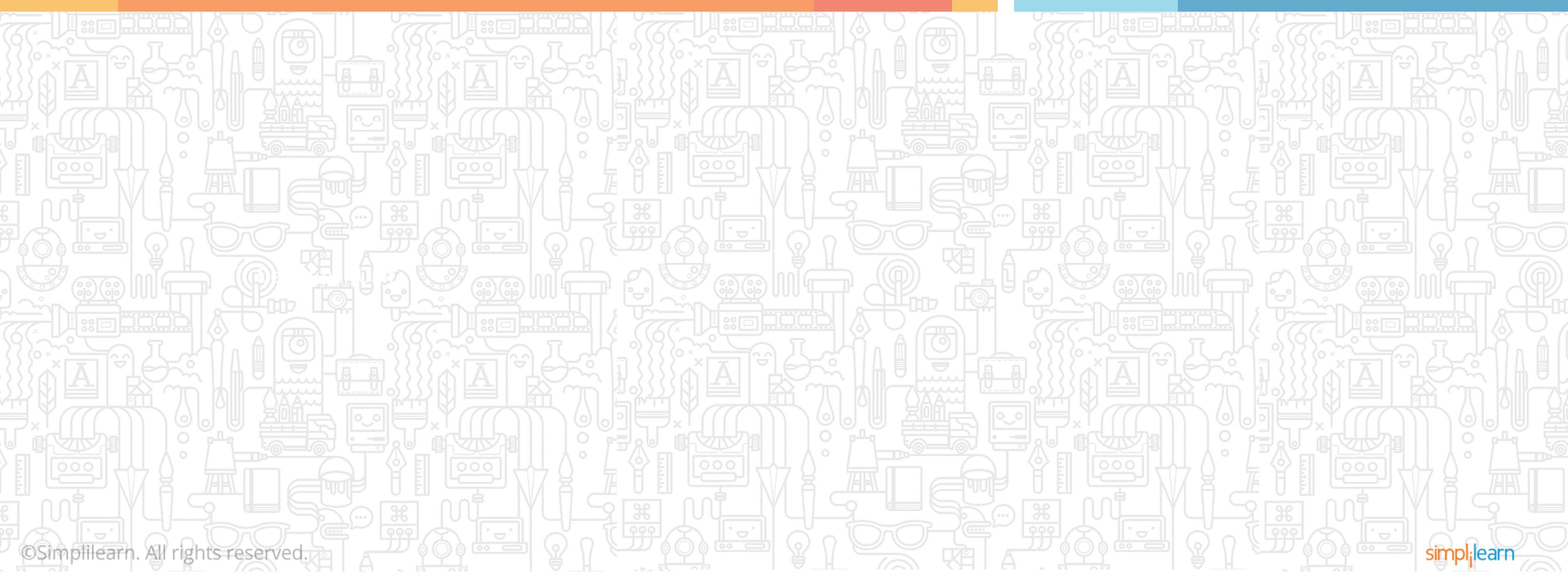
The collected measures are analyzed to derive meaning and actionable items.

The business analyst shall recommend appropriate actions to increase solution value, keeping in mind solution and enterprise limitations.



# **Lesson 8: SOLUTION EVALUATION**

## **CASE STUDY EXERCISE**



# CASE STUDY

## OVERVIEW



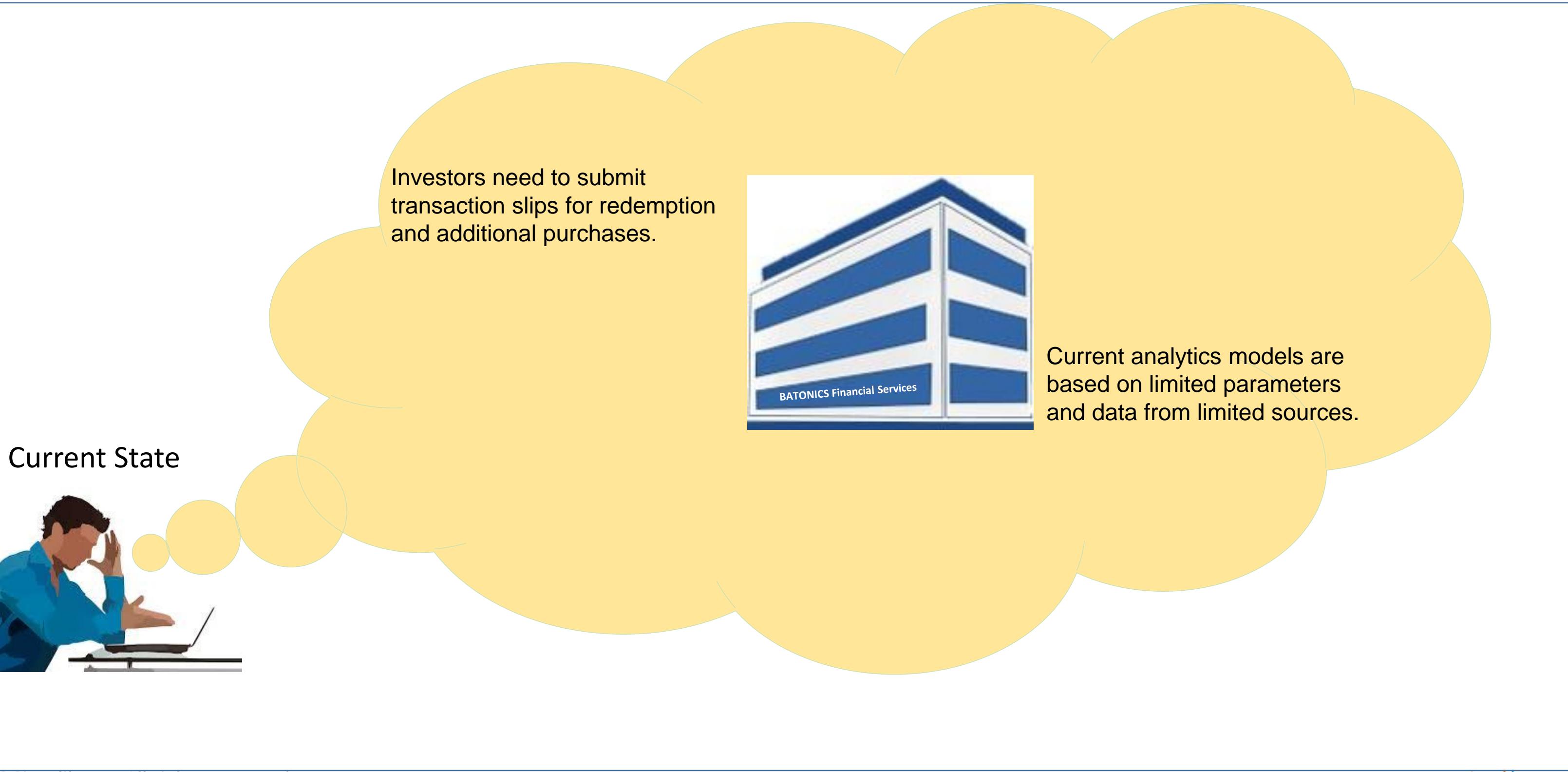
### Quick facts:

- ✓ Established in 1990
- ✓ Leading Mutual Funds business
- ✓ Has one of the largest teams of research analysts
- ✓ Diversified and sector specific equity schemes
- ✓ Services through distributors



# CASE STUDY

## OVERVIEW – CURRENT STATE



# CASE STUDY

## OVERVIEW – FUTURE STATE

### Future State



Investors are able to submit request online for redemption and additional purchases.



Distributor services to existing and new investors improves using CRM capability and digital marketing tools.

Fund Managers proactively manage funds using analytics model based on multiple parameters.

# CASE STUDY

## BUSINESS ANALYSIS ACTIVITIES

### Activities in Elicitation, Analysis, and Design:



Business analyst identifies solution options, analyzes potential value, and recommends a solution.



Requirements are elicited, analyzed, specified, modeled, verified, validated, and allocated to solution components.



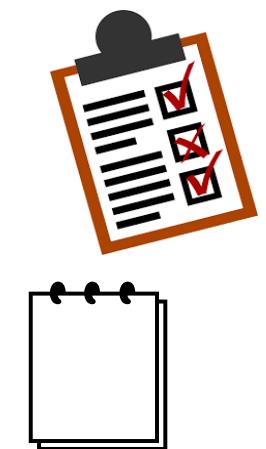
Implementation team is develops the solution incrementally to enhance investor and distributor services.



Vendors provide analytics solutions to the fund managers.



The in-house team integrates the analytics solution with the existing solution.



# CASE STUDY

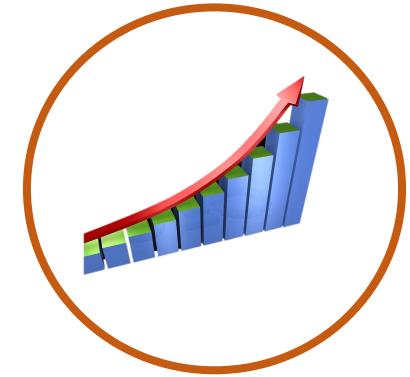
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## BUSINESS ANALYSIS ACTIVITIES

Activities in **Requirements Management** and **Communication** and **Solution Evaluation**:



The business analyst prioritizes the requirements and communicates them iteratively.



The business analyst analyzes performance measures and assesses the solution and enterprise limitations.



The business analyst is also involved in validating the incremental solution to ensure value delivery.

## CASE STUDY

### EXERCISE

|   | Questions                                                                                                                                        | Response                                                                                                                                                                                                              |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | In the case study, what is the type of solution approach used?                                                                                   | <input type="radio"/> Create<br><input type="radio"/> Purchase<br><input type="radio"/> A combination of both<br><input type="radio"/> None of the above                                                              |
| 2 | Which of the following should a business analyst know to recommend actions to increase solution value?                                           | <input type="radio"/> Solution limitation<br><input type="radio"/> Current state description<br><input type="radio"/> Enterprise limitation<br><input type="radio"/> All of the above                                 |
| 3 | Which one of the following is most likely a factor limiting the vendor solution performance?                                                     | <input type="radio"/> Existing system interfaces<br><input type="radio"/> Fund manager skills<br><input type="radio"/> Distributor skills<br><input type="radio"/> None of the above                                  |
| 4 | Which one of the following is not a likely to be considered while performing operational assessment in the task 'Assess Enterprise Limitations'? | <input type="radio"/> Skill and Training Needs<br><input type="radio"/> Tools and Technology that support a solution<br><input type="radio"/> Policies and Procedures<br><input type="radio"/> Organizational Culture |

## CASE STUDY

### ANSWERS

| Questions                                                                                                                                          | Answers                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 1 In the case study, what is the type of solution approach used?                                                                                   | A combination of both      |
| 2 Which of the following should a business analyst know to recommend actions to increase solution value?                                           | All of the above           |
| 3 Which one of the following is most likely a factor limiting the vendor solution performance?                                                     | Existing system interfaces |
| 4 Which one of the following is not a likely to be considered while performing operational assessment in the task 'Assess Enterprise Limitations'? | Organizational Culture     |



**QUIZ**

1

**Which one of the following should the business analyst not consider when collecting performance measures?**

- a. Sample Size
- b. Objective
- c. Frequency
- d. Timing



**QUIZ**

1

**Which one of the following should the business analyst not consider when collecting performance measures?**

- a. Sample Size
- b. Objective
- c. Frequency
- d. Timing



The correct answer is

**b.**

**Explanation:** The business analyst need not consider the objective when collecting performance measures. The business analyst shall consider Volume or Sample Size, Frequency, and Timing when collecting performance measures.

**QUIZ****2**

**What does CRUD stand for?**

- a. Create, Restore, Update, Delete
- b. Create, Read, Update, Delete
- c. Create, Restore, Upload, Download
- d. Customer, Regulator, User, Developer



**QUIZ****2****What does CRUD stand for?**

- a. Create, Restore, Update, Delete
- b. Create, Read, Update, Delete
- c. Create, Restore, Upload, Download
- d. Customer, Regulator, User, Developer

**The correct answer is****b.****Explanation: CRUD Stands for Create, Read, Update, Delete**

**QUIZ****3**

**Which one of the following should not be considered while taking decisions regarding replacing a solution?**

- a. Necessity
- b. Sunk Cost
- c. Ongoing Cost
- d. All of the above



## QUIZ

3

Which one of the following should not be considered while taking decisions regarding replacing a solution?

- a. Necessity
- b. Sunk Cost
- c. Ongoing Cost
- d. All of the above



The correct answer is

**b.**

**Explanation:** Sunk Cost should not be considered while taking decisions regarding replacing a solution.

Sunk Cost is the money and effort already committed to an initiative, which cannot be recovered. So, the business analyst should not consider sunk cost when considering future action.

**QUIZ****4**

**Which one of the following is a common input to the tasks solution limitations and enterprise limitations?**

- a. Current State Description
- b. Future State Description
- c. Potential Value
- d. Solution Performance Measure



**QUIZ****4**

**Which one of the following is a common input to the tasks solution limitations and enterprise limitations?**

- a. Current State Description
- b. Future State Description
- c. Potential Value
- d. Solution Performance Measure



The correct answer is

**d.**

**Explanation: Solution Performance Measure is an input to both the tasks, solution limitations and enterprise limitations.**

**QUIZ****5**

**Which one of the following is not a type of data mining techniques?**

- a. Prescriptive
- b. Descriptive
- c. Predictive
- d. Diagnostic



**QUIZ****5**

**Which one of the following is not a type of data mining techniques?**

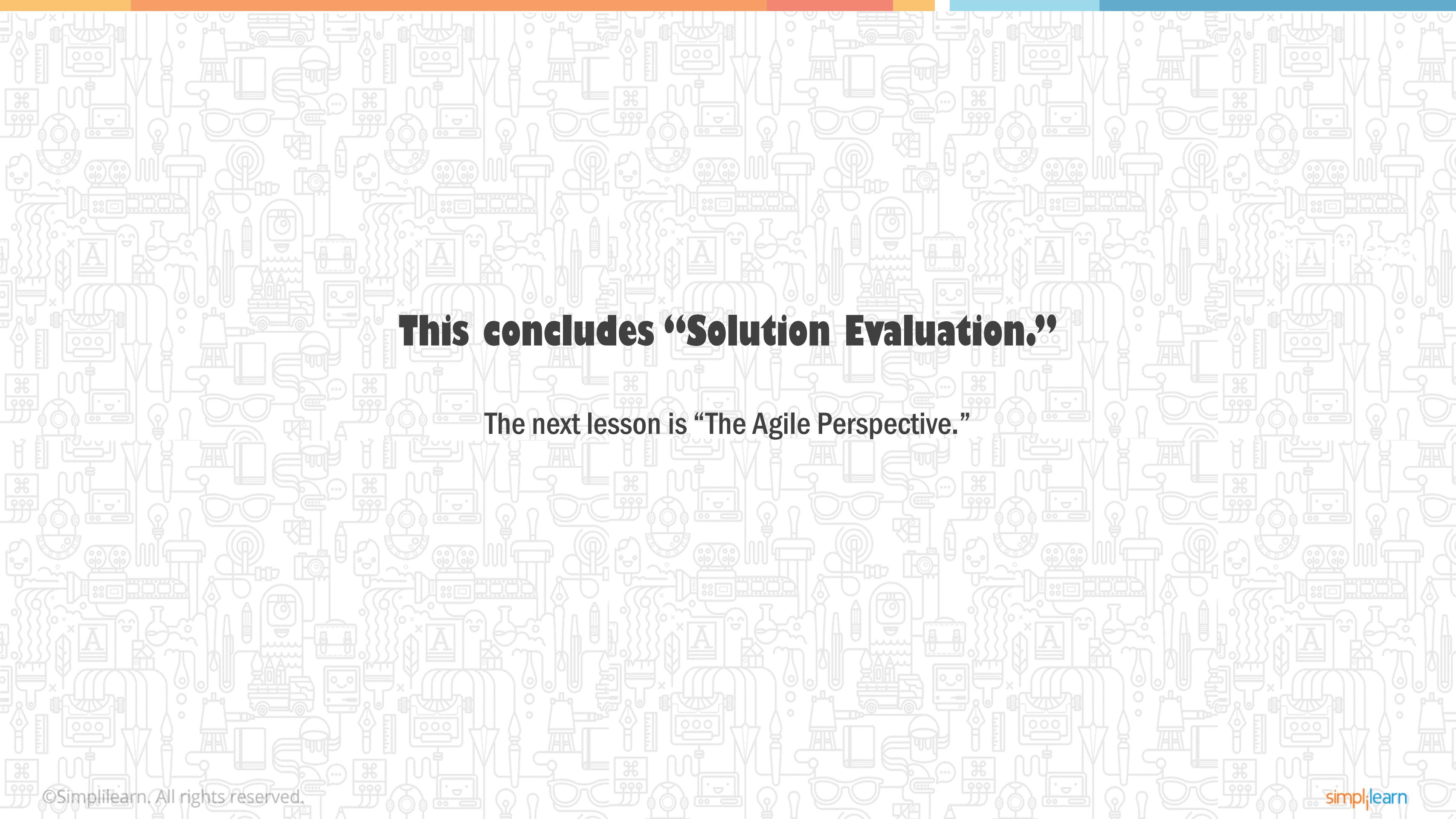
- a. Prescriptive
- b. Descriptive
- c. Predictive
- d. Diagnostic



The correct answer is

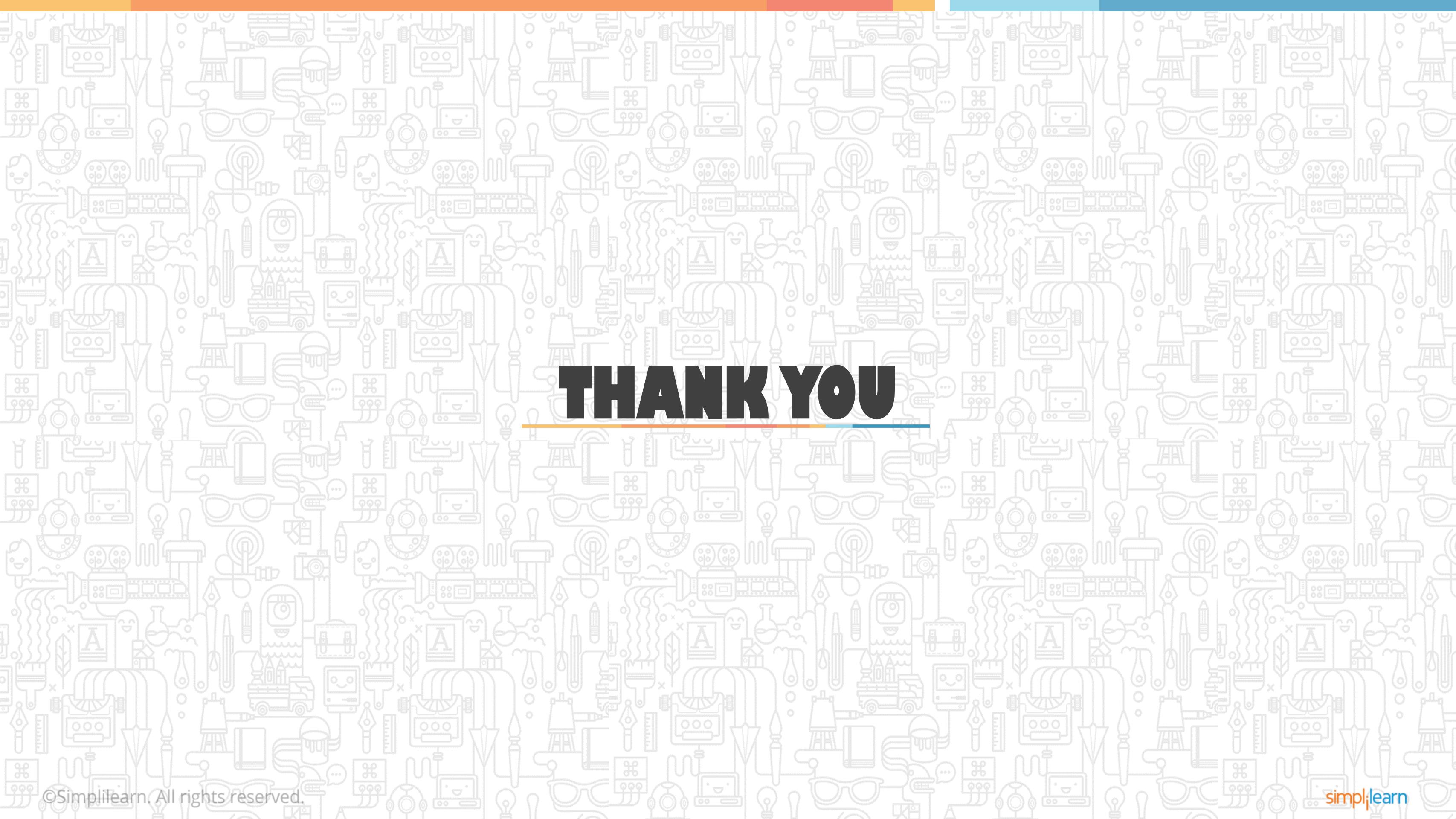
**a.**

**Explanation: Data mining is a general term that covers three types of techniques - Descriptive, Diagnostic, and Predictive .**



**This concludes “Solution Evaluation.”**

**The next lesson is “The Agile Perspective.”**



# THANK YOU