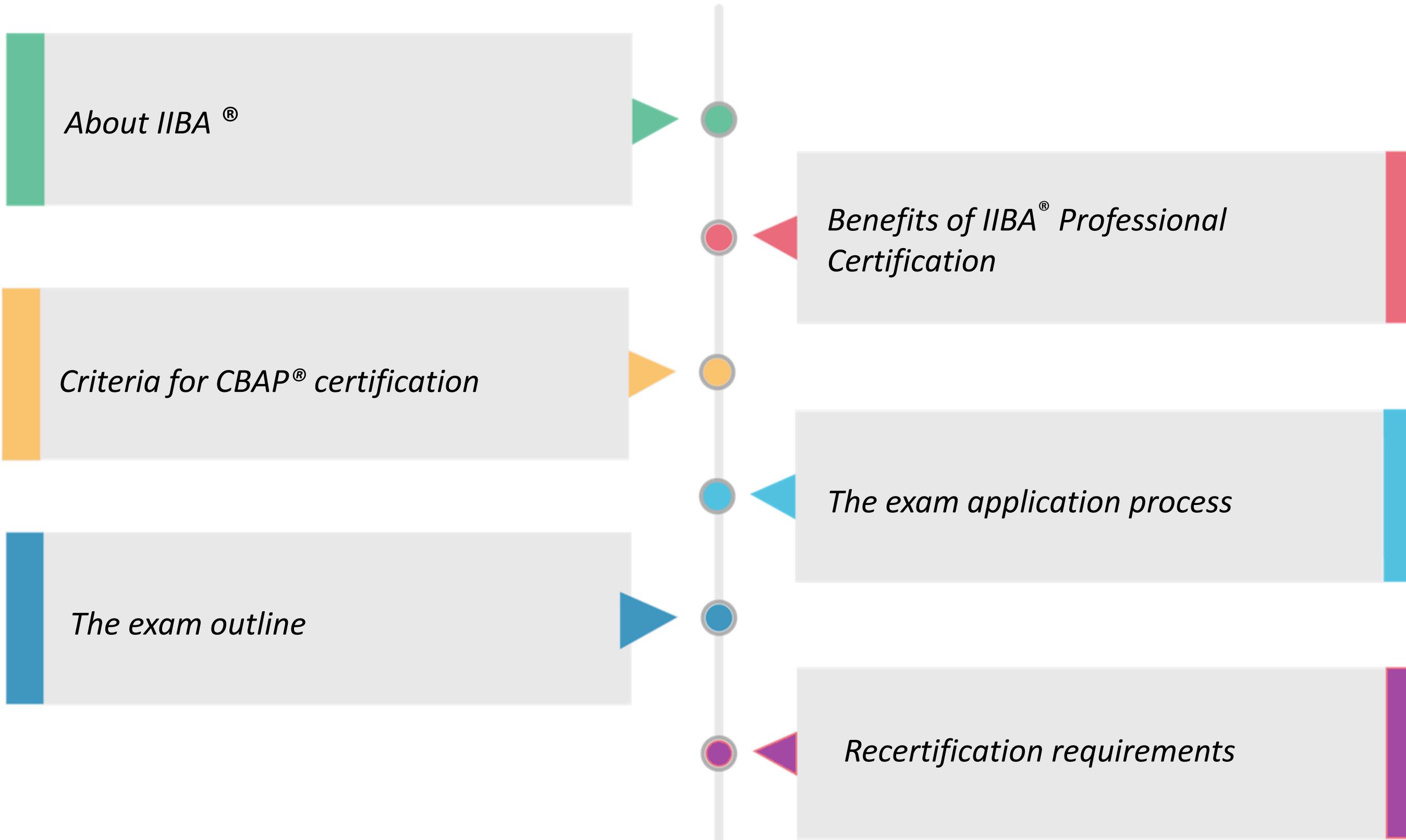


CBAP® Exam Preparation Course

Lesson 1 – Introduction to CBAP® Certification



WHAT'S IN IT FOR ME



Green marker: About IIBA®

Orange marker: Criteria for CBAP® certification

Blue marker: The exam outline

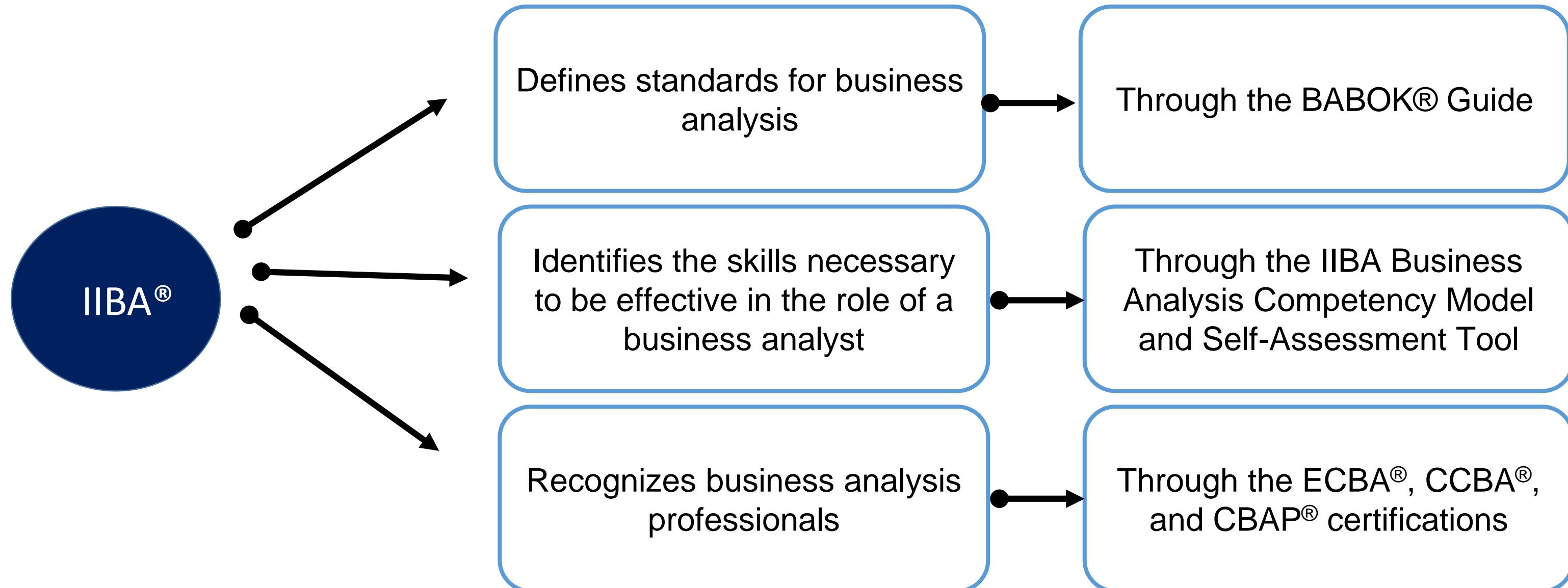
Red marker: Benefits of IIBA® Professional Certification

Purple marker: The exam application process

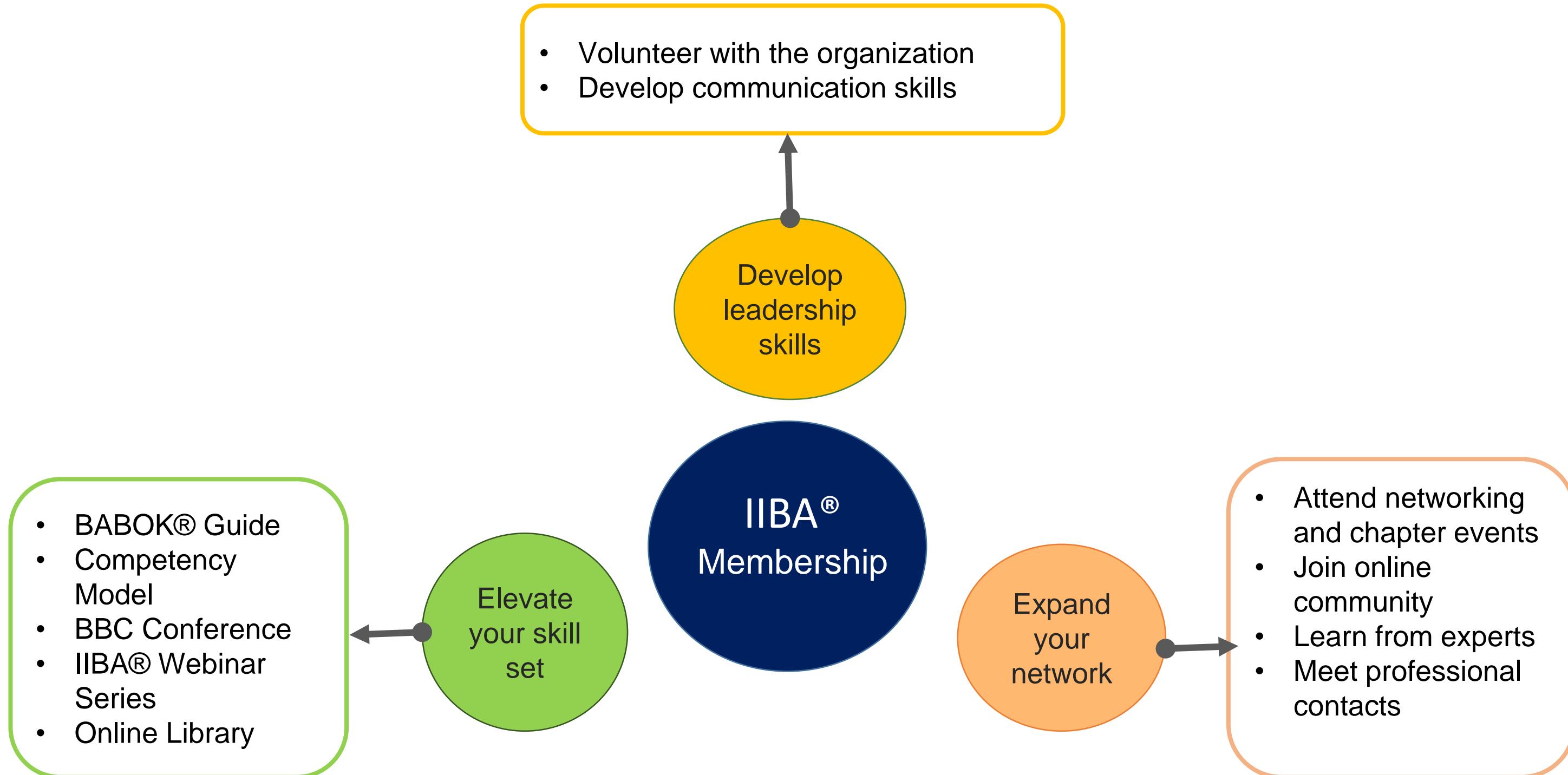
Purple marker: Recertification requirements

ABOUT IIBA®

International Institute of Business Analysis



IIBA® MEMBERSHIP BENEFITS

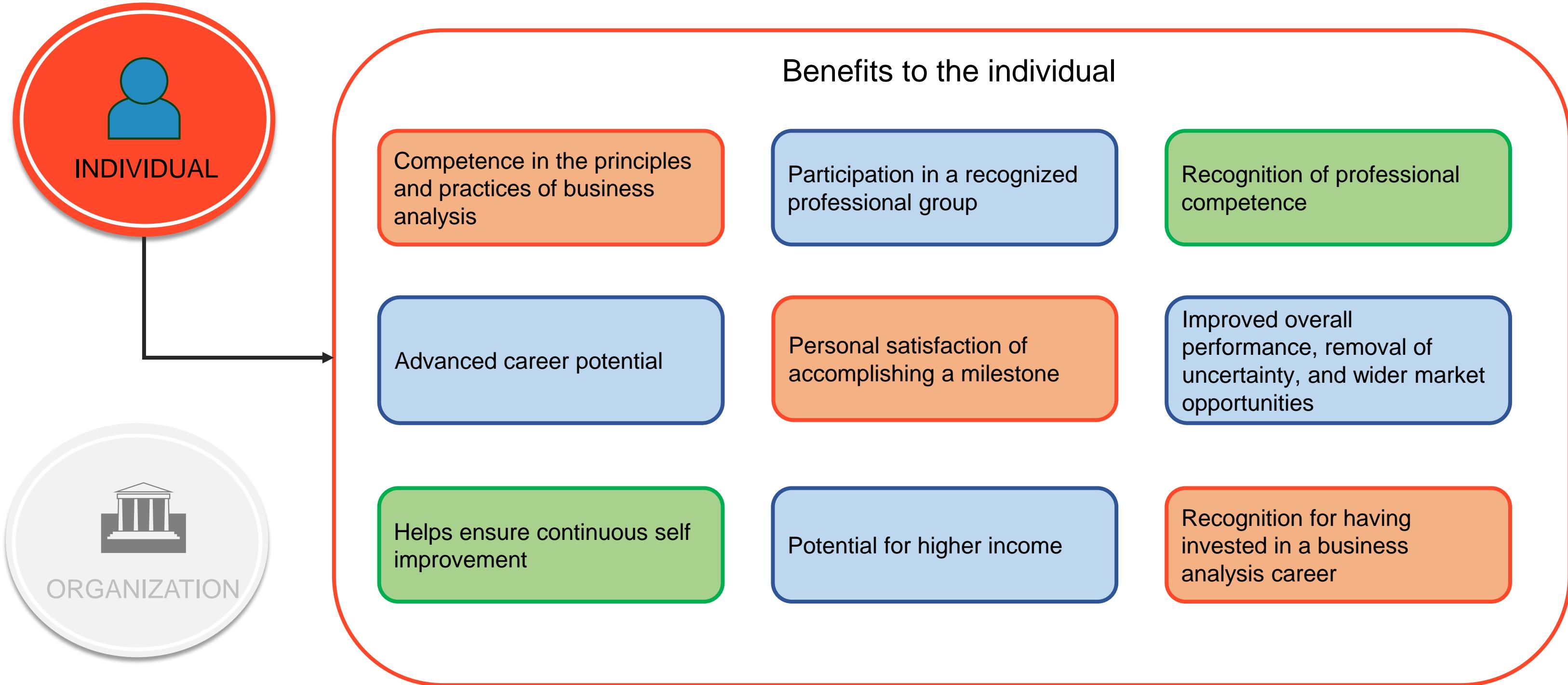


BENEFITS OF CBAP® CERTIFICATION



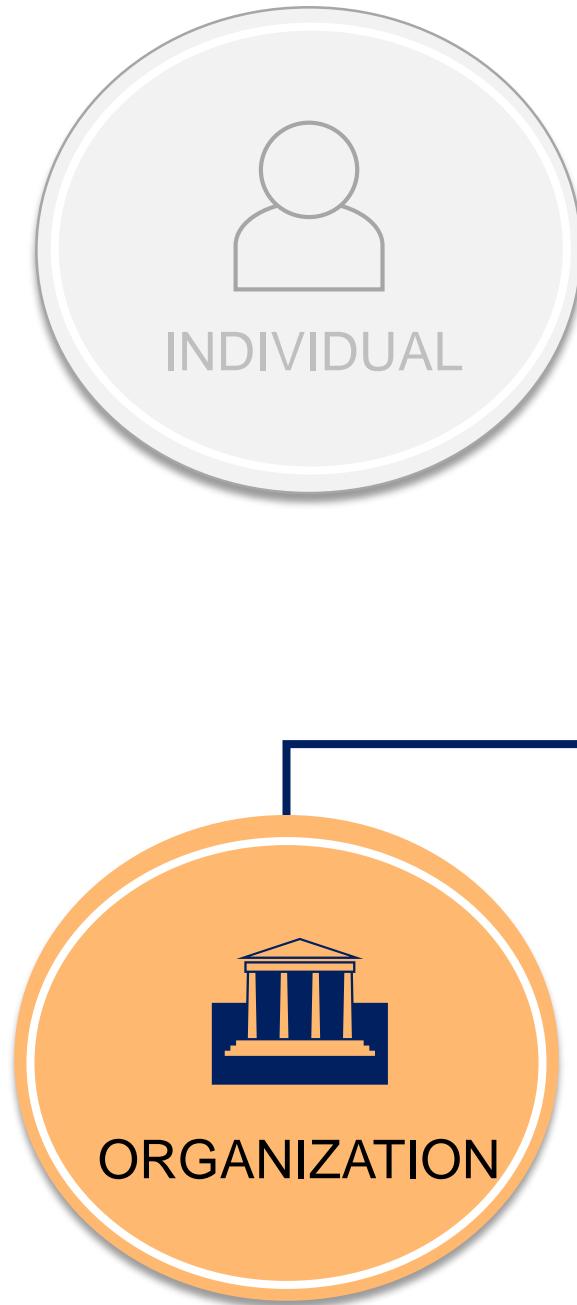
BENEFITS OF CBAP® CERTIFICATION (contd.)

INDIVIDUAL



BENEFITS OF CBAP® CERTIFICATION (contd.)

ORGANIZATION



Benefits to the organization

Professional development, advancement, and recognition for staff

Helps in 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 to the stakeholders that business is run effectively

Enables to identify professional business analysts to clients and business partners

Improves staff responsibility, commitment, and motivation

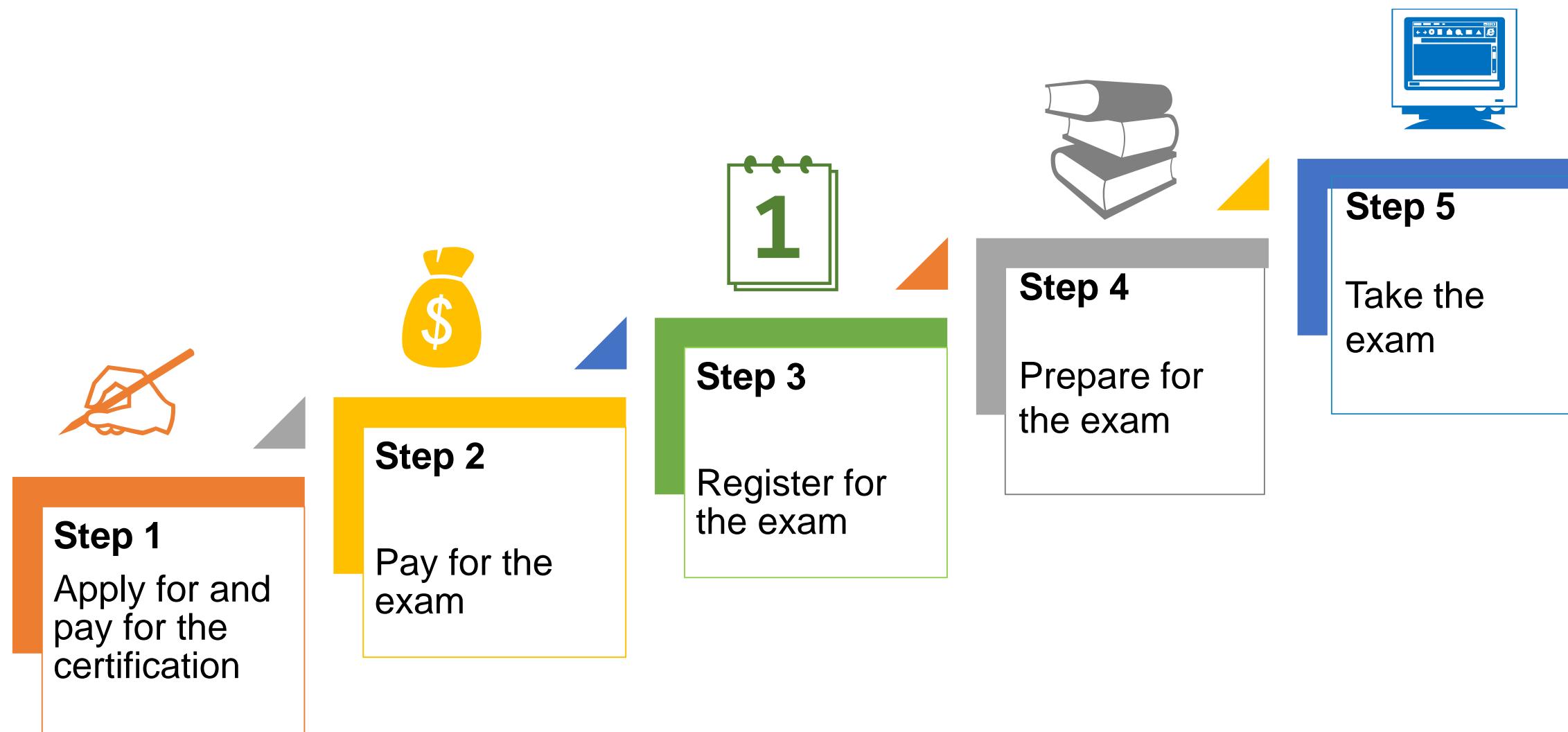
Demonstrates commitment to the field of business analysis

ELIGIBILITY CRITERIA

CBAP® CERTIFICATION

Criteria	Requirements for CBAP®® Certification
Work Experience	Minimum 7500 Hours of Business Analysis experience in the last 10 years
Knowledge Area Expertise	Minimum 900 hours in four of the six knowledge areas
Professional Development	35 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 CBAP® 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)

CBAP® EXAM BLUEPRINT

Domain	Percentage of Questions
Business Analysis Planning and Monitoring	14%
Elicitation and Collaboration	12%
Requirements Life Cycle Management	15%
Strategy Analysis	15%
Requirements Analysis and Design Definition	30%
Solution Evaluation	14%

RECERTIFICATION

REASONS

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



Ensures that the Business Analysis Professional is keeping up with changes in the profession

Ensures that the Business Analysis Professional contributes to the profession

RECERTIFICATION

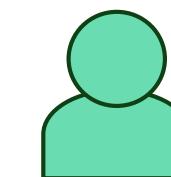
PURPOSE

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



Encourages the ongoing professional development of CBAP® recipients

Recertification Program



Encourages and recognizes individualized learning



Encourages the efforts of CBAP® recipients to give back to the profession



Offers a standard and objective mechanism for recording professional development activities



Sustains the global recognition and value of the CBAP® designation

RECERTIFICATION

NOTES

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

CERTIFICATION RENEWAL

IIBA® certification to be renewed every three years

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

ADDITIONAL NOTES

To ensure receiving all IIBA® communication:

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

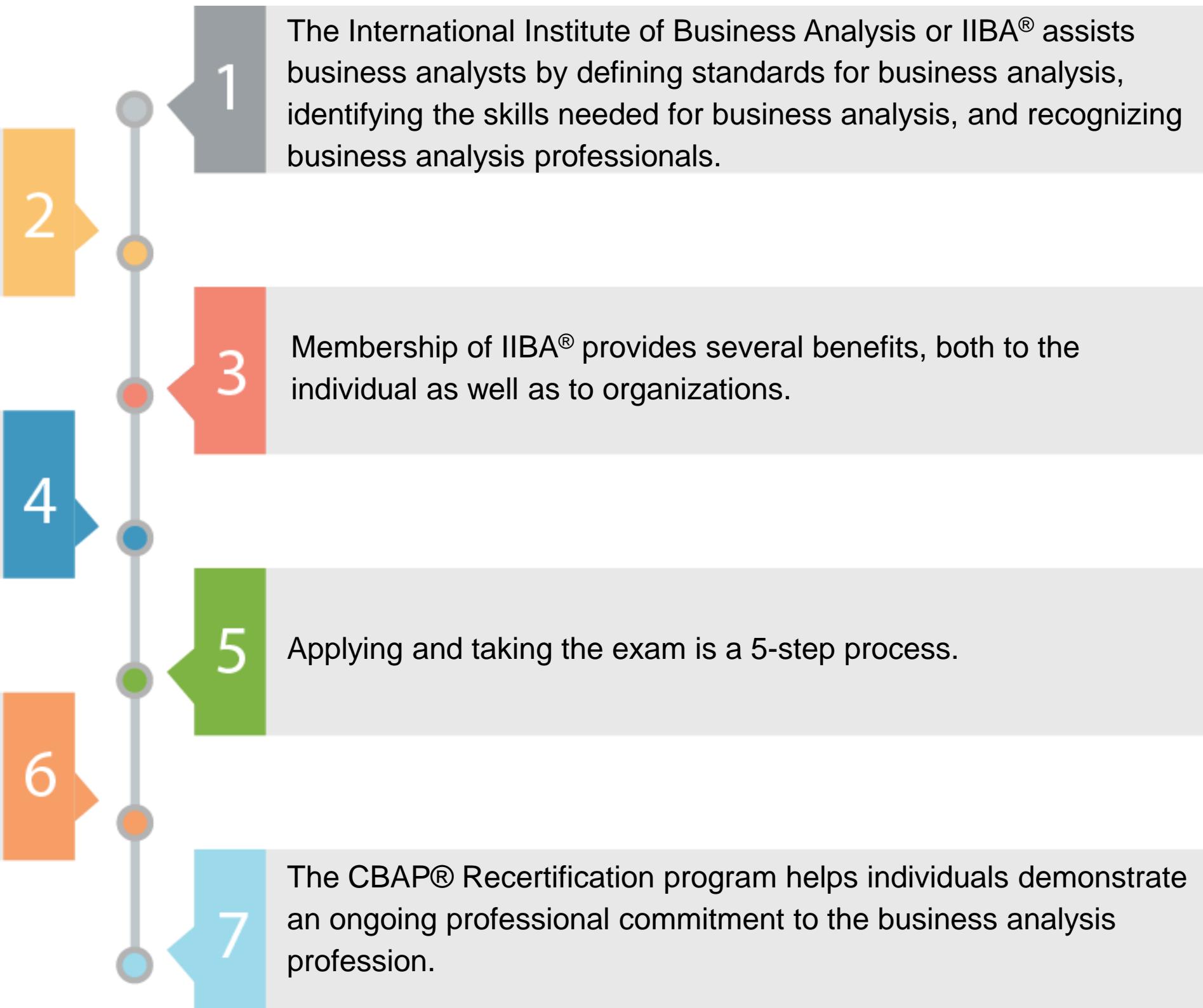
6. Professional Experience

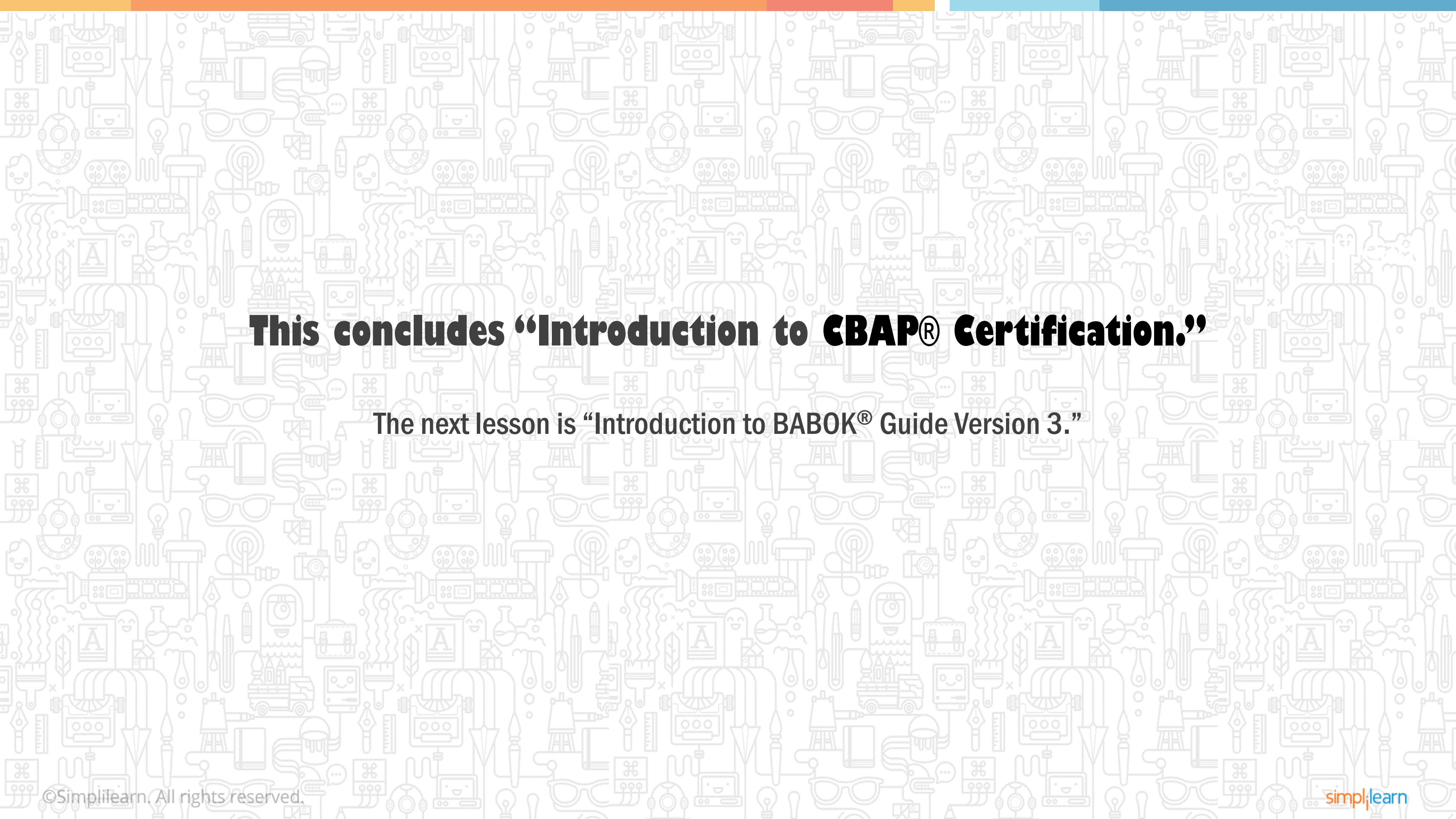
KEY TAKEAWAYS

With an IIBA® membership, you can elevate your skill set, develop leadership skills, and expand your network.

To prepare for the exam, 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.

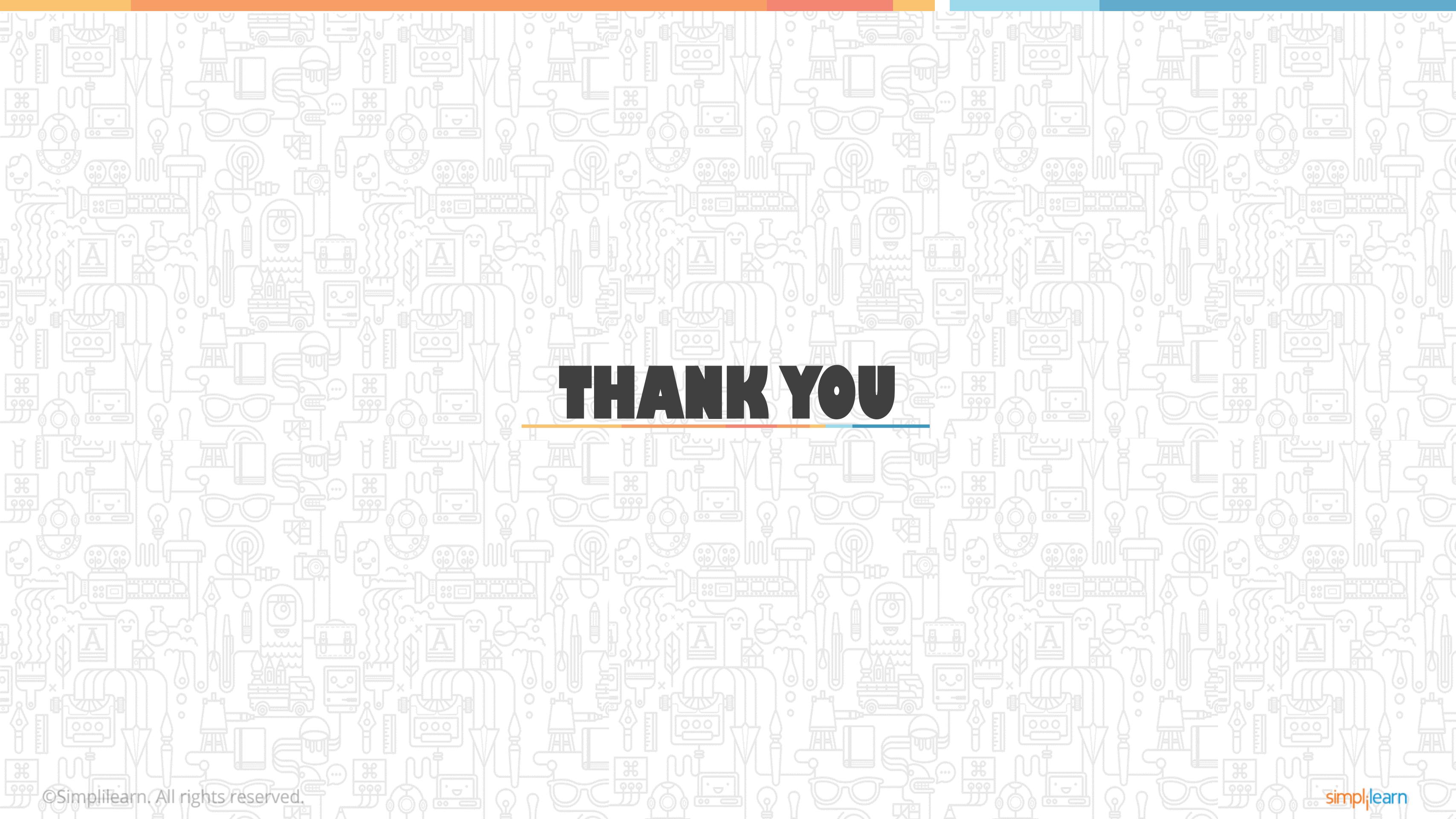
The CBAP® exam is a 3.5-hours long exam and consists of 150 multiple choice questions with four possible answers to select from.





This concludes “Introduction to CBAP® Certification.”

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



THANK YOU

CBAP® Exam Preparation Course

Lesson 2 - Introduction to BABOK® V3



WHAT'S IN IT FOR ME



What is business analysis?



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



Techniques and perspectives in business analysis



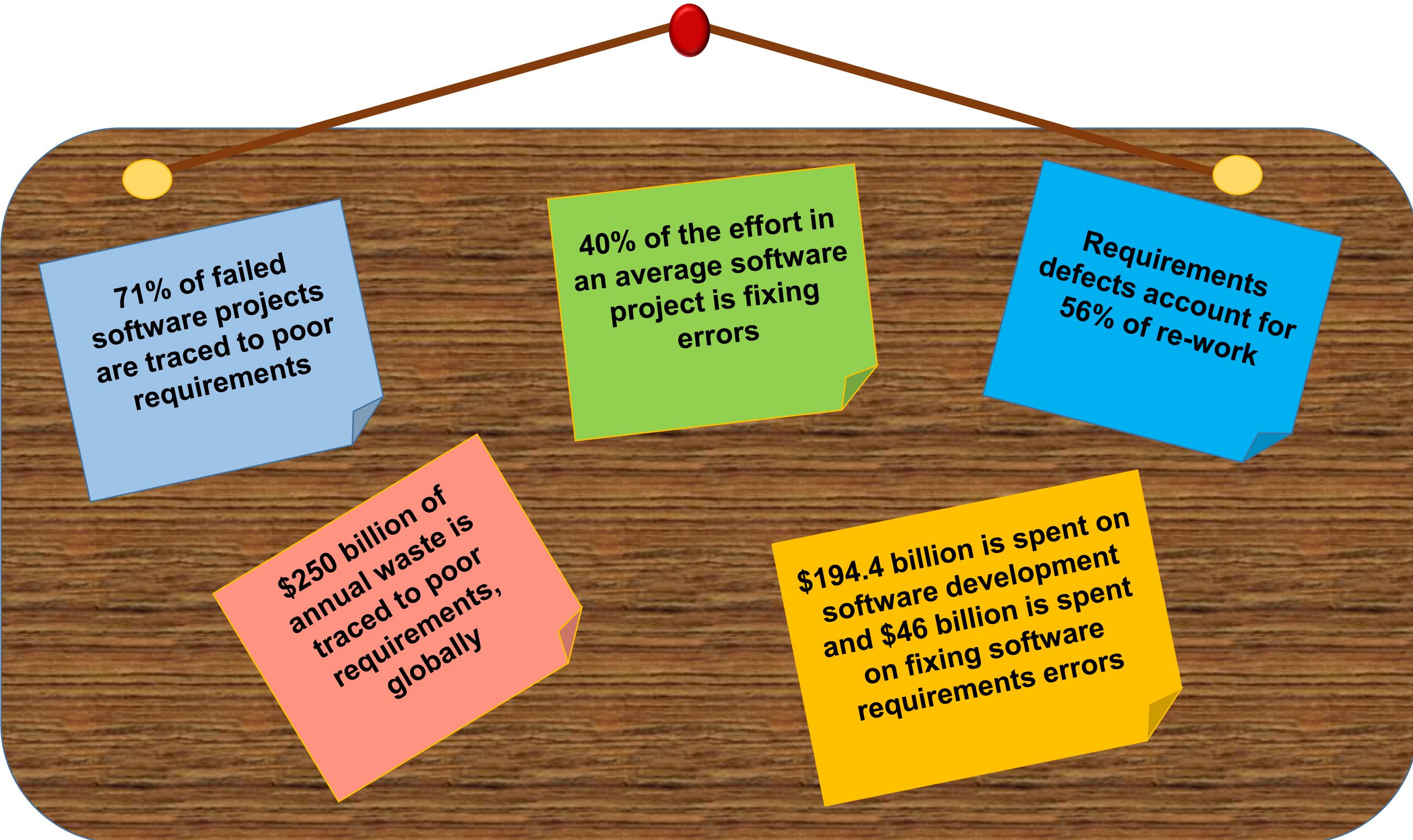
What does a business analyst do?



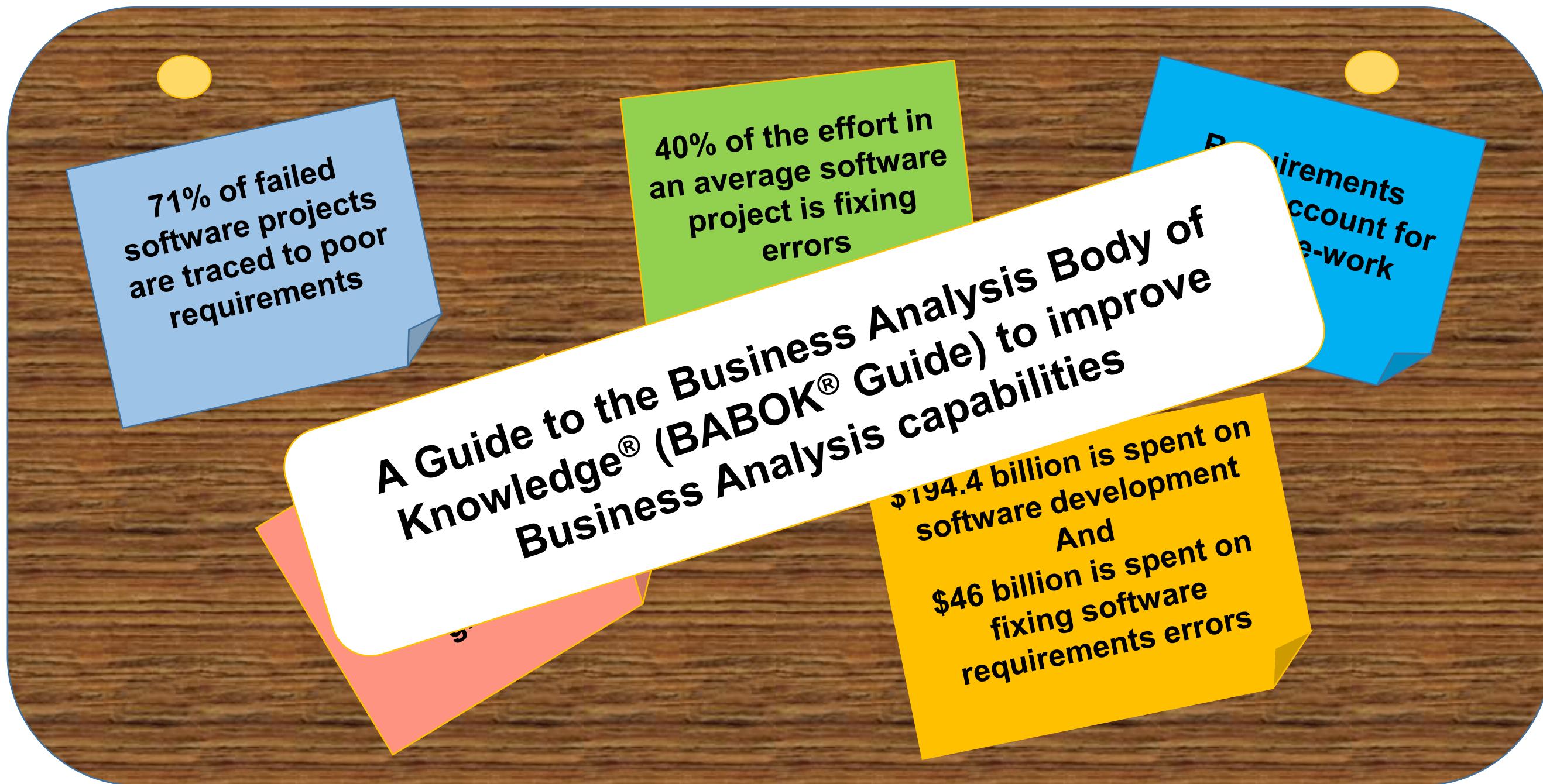
What are the underlying competencies of a business analyst?



INTRODUCTION – WHY BUSINESS ANALYSIS



INTRODUCTION – WHY BUSINESS ANALYSIS (contd.)



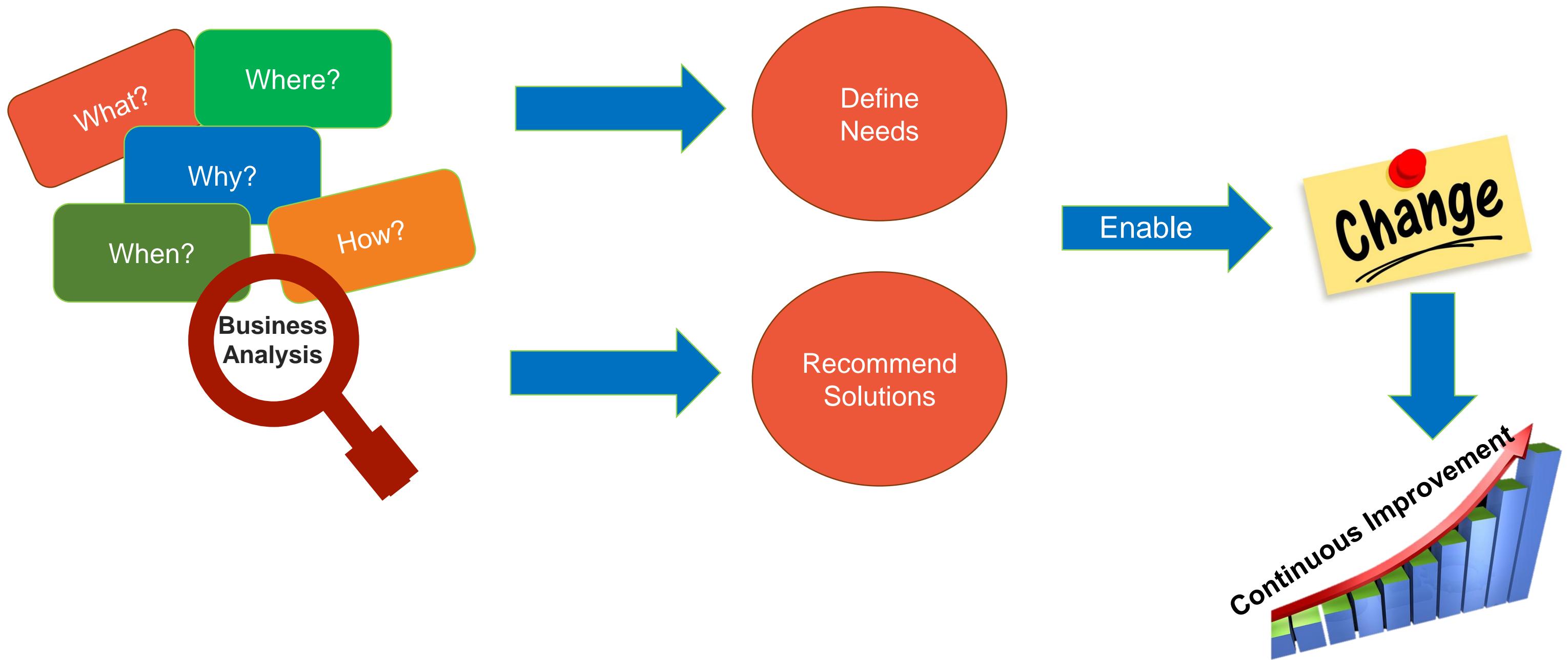
Lesson 2: Introduction to BABOK® V3

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?

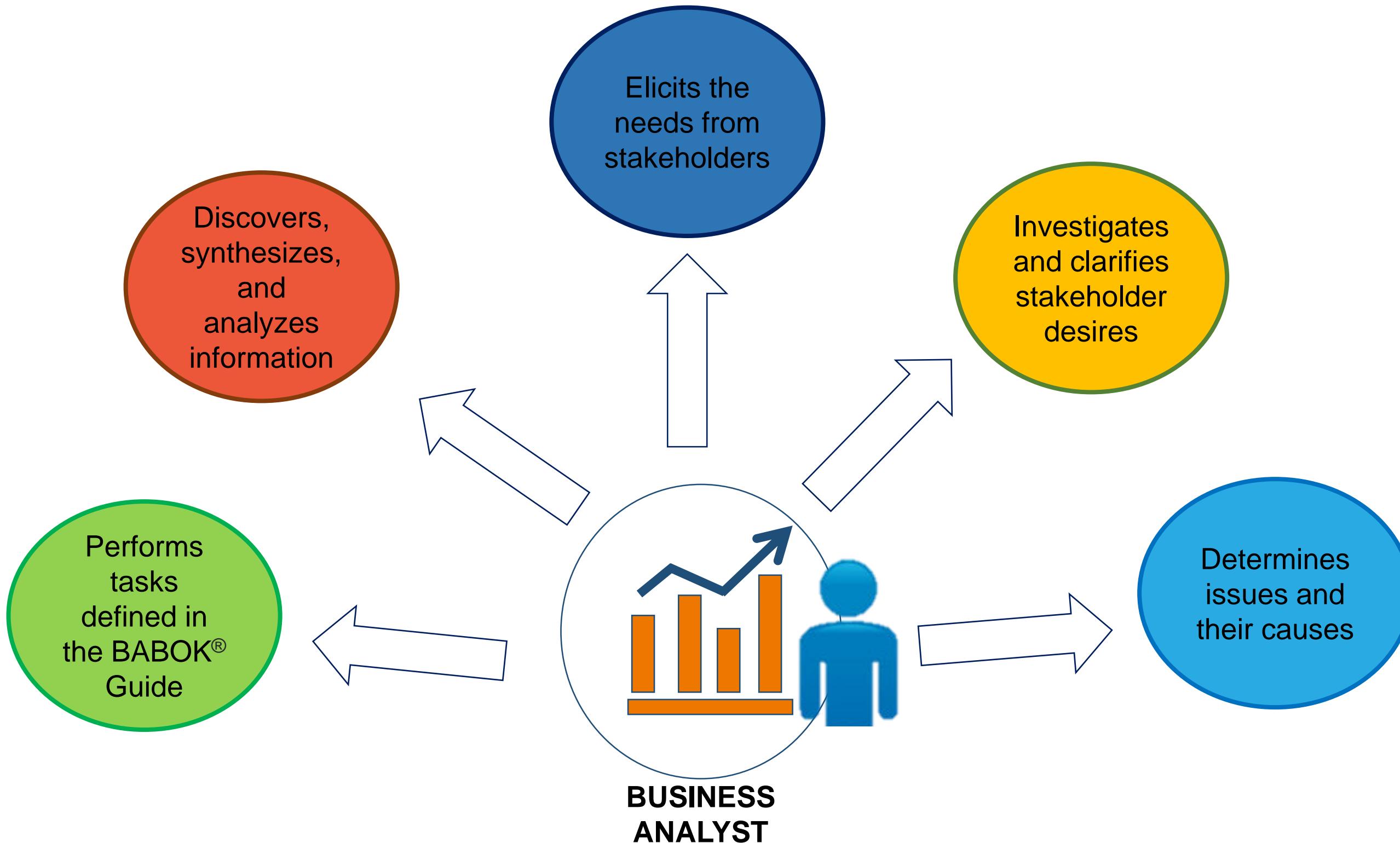
BUSINESS ANALYSIS

WHAT IS BUSINESS ANALYSIS



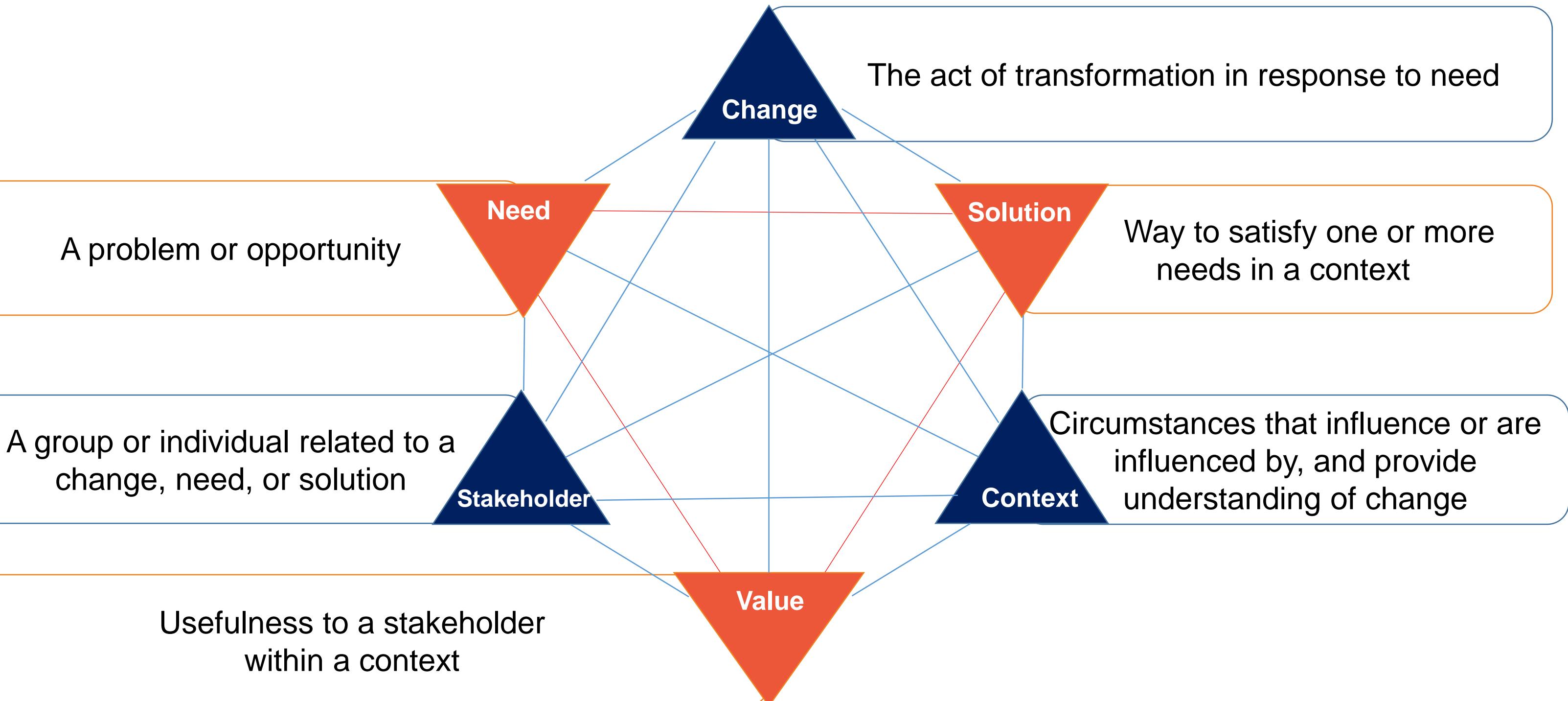
BUSINESS ANALYSIS

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

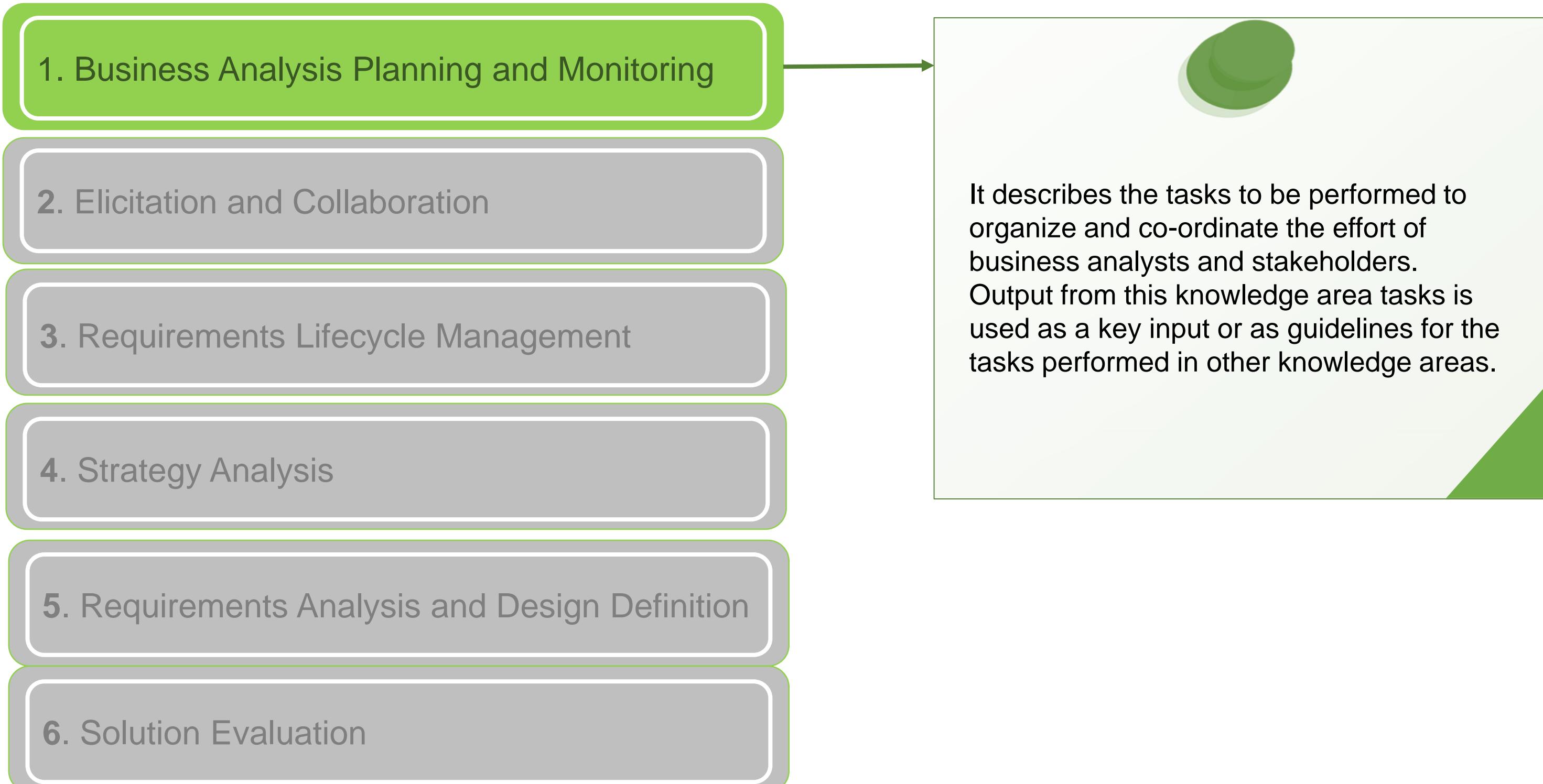
4. Strategy Analysis

5. Requirements Analysis and Design Definition

6. Solution Evaluation

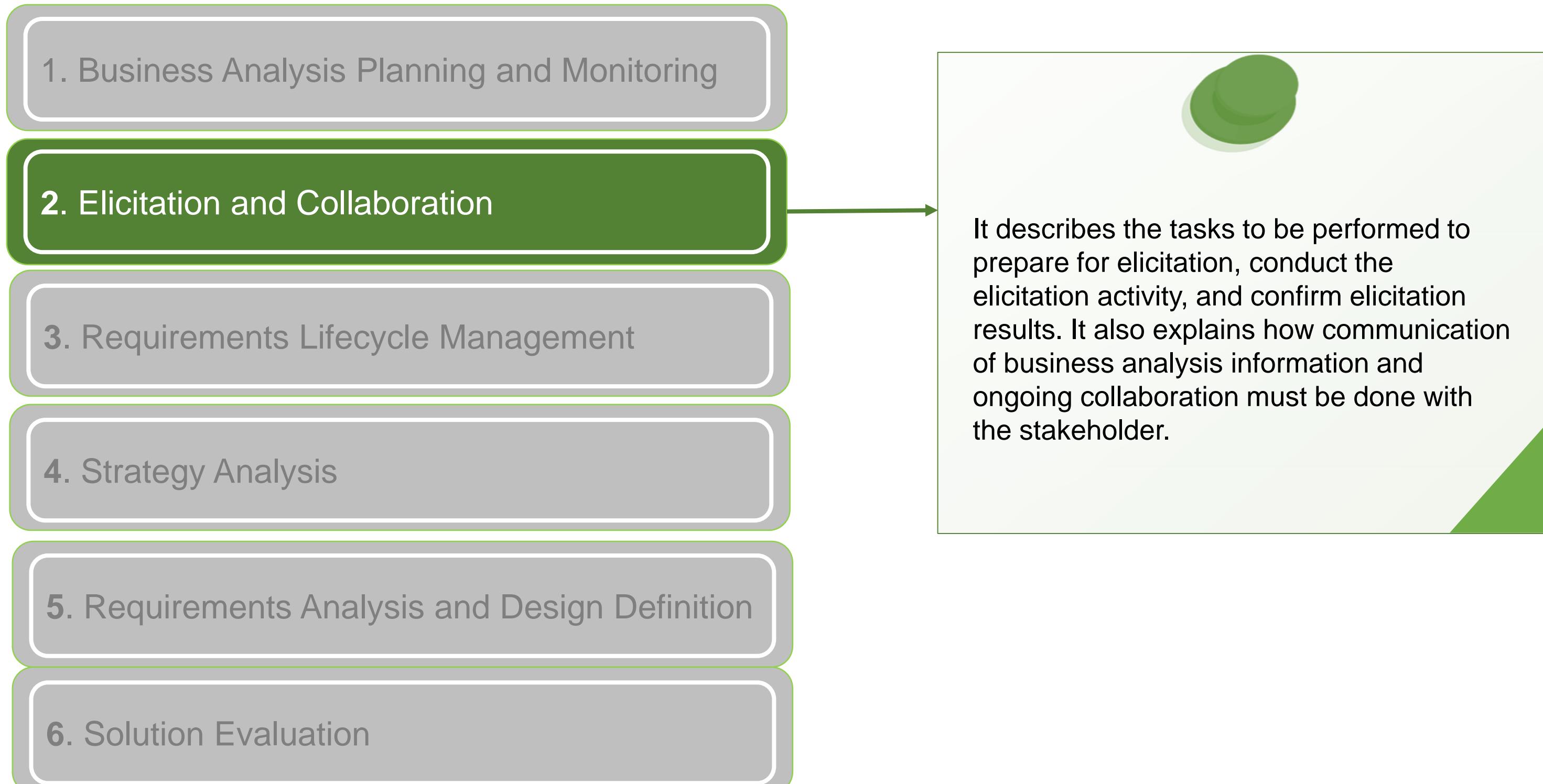
BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



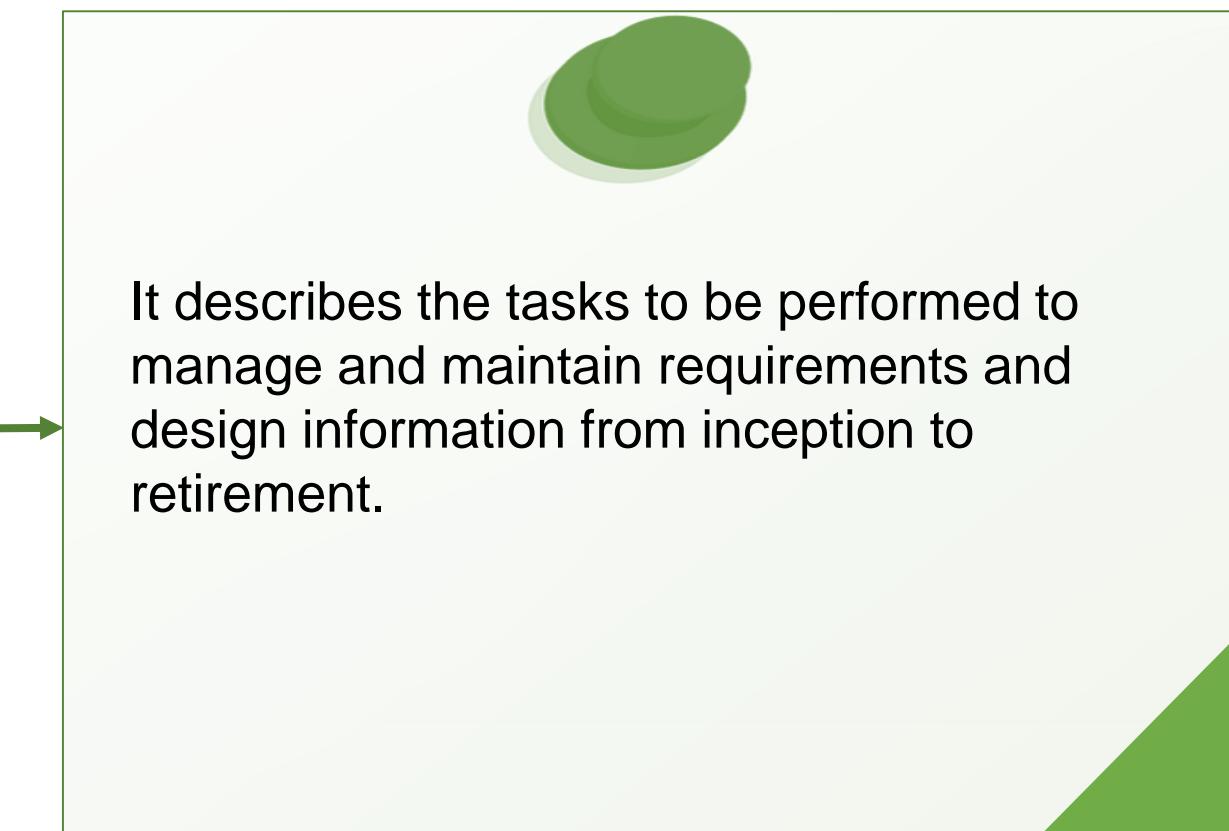
BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS



BUSINESS ANALYSIS BODY OF KNOWLEDGE (contd.)

KNOWLEDGE AREAS

1. Business Analysis Planning and Monitoring

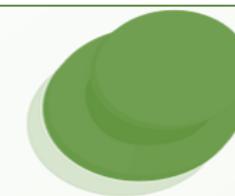
2. Elicitation and Collaboration

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

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 structure and organize requirements discovered during the elicitation activity, specify and model requirements and design, validate and verify information, and identify solution options that meet the business need.

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

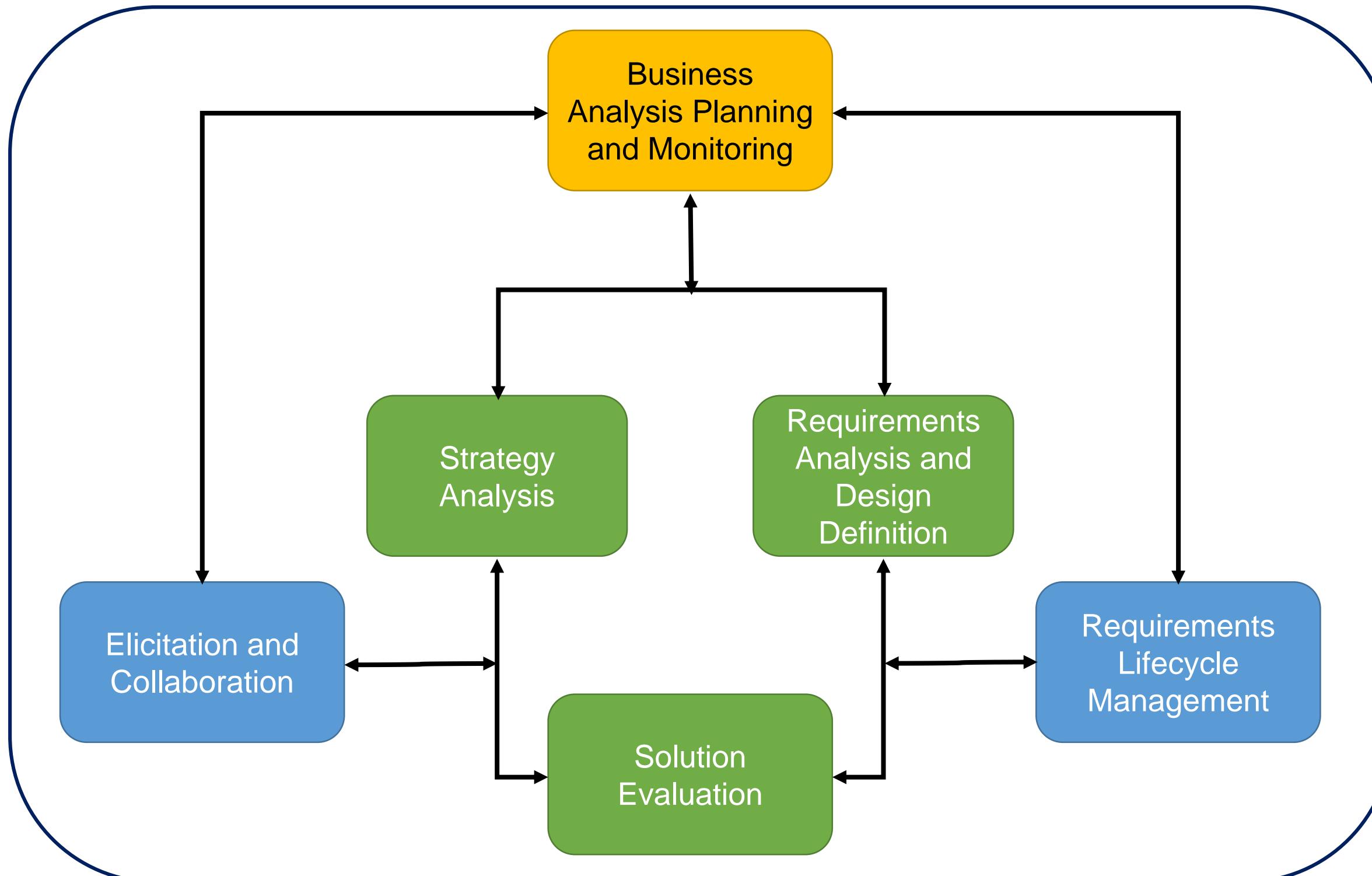
6. Solution Evaluation



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

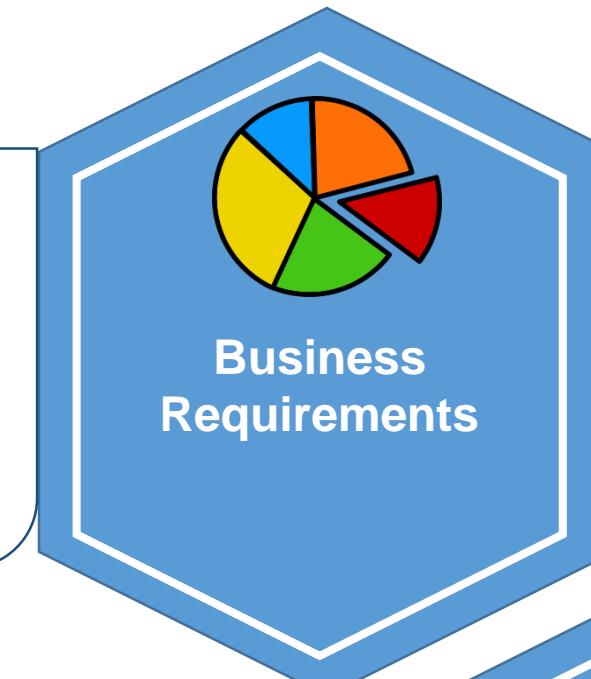
KNOWLEDGE AREAS – RELATIONSHIPS



REQUIREMENTS

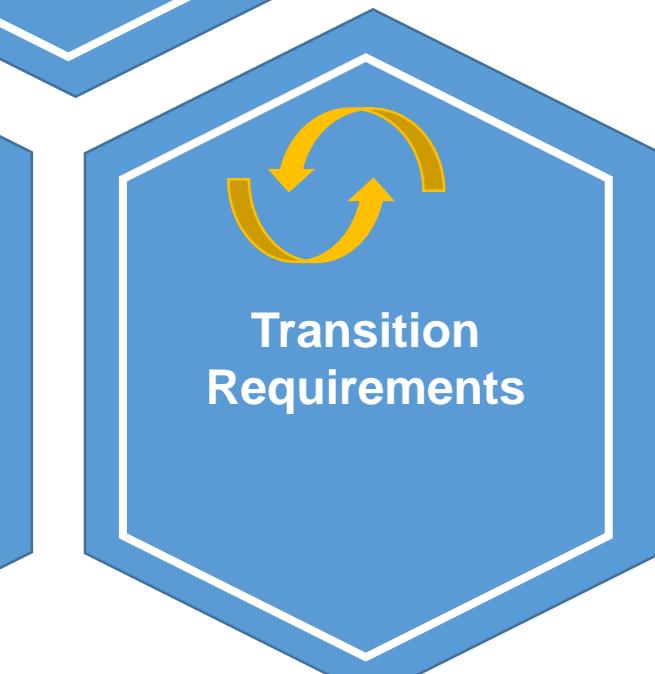
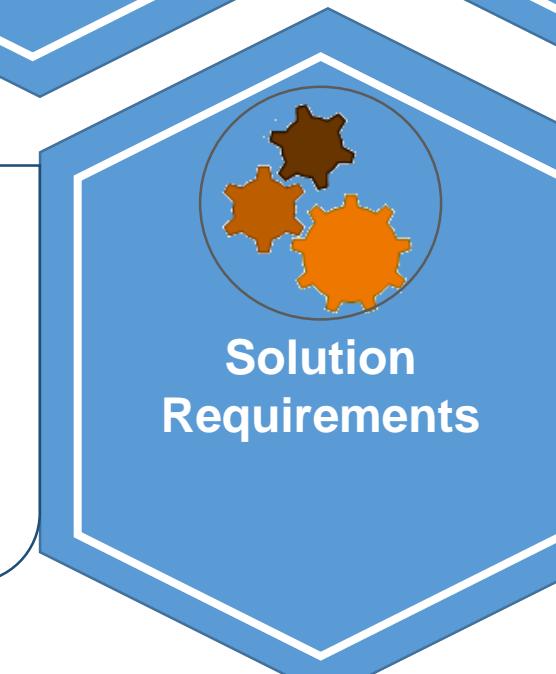
REQUIREMENTS CLASSIFICATION

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

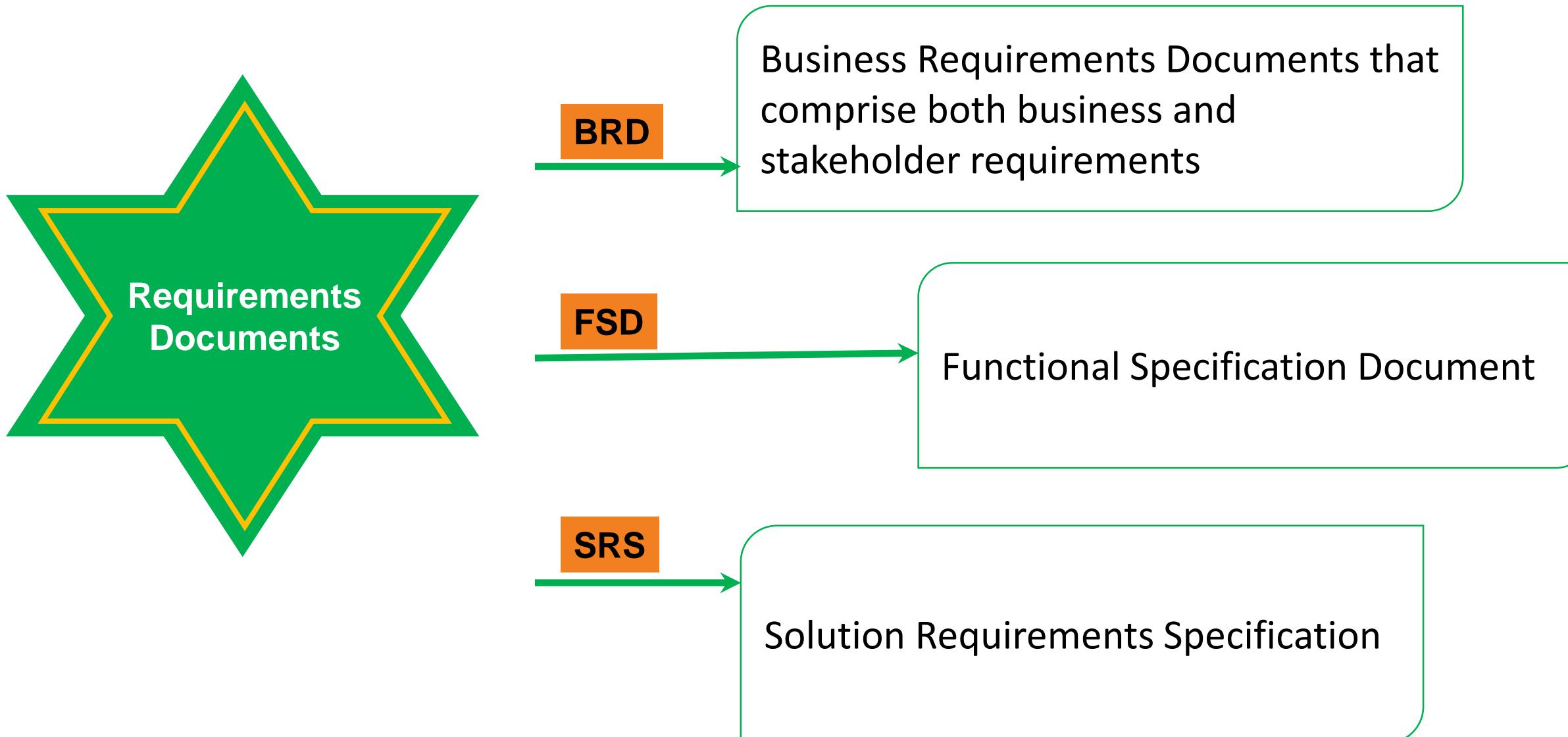
Describe the capabilities and qualities of a solution that meets stakeholder requirements; can be *Functional requirements* or *Non-functional requirements*



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

REQUIREMENTS (contd.)

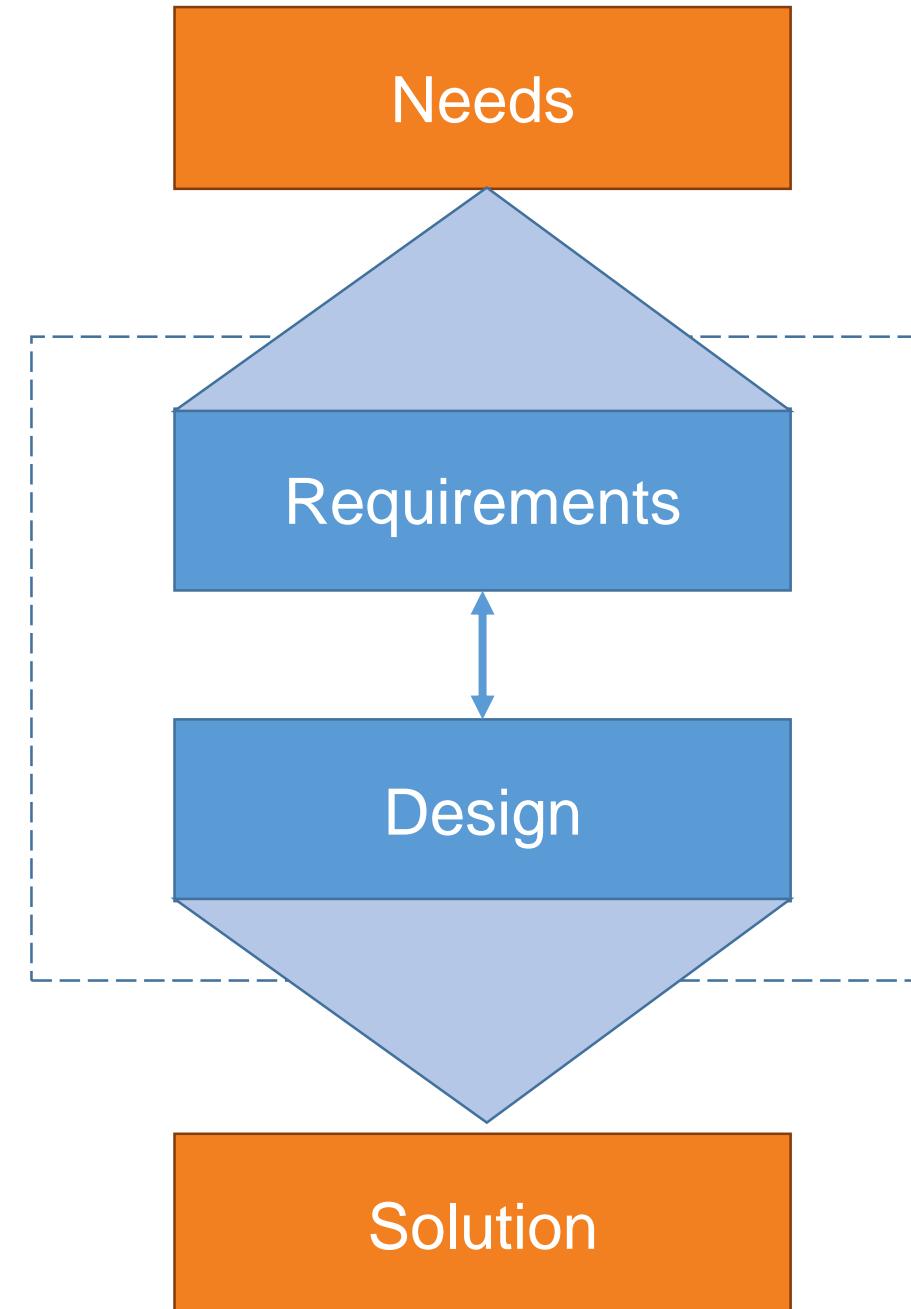
REQUIREMENTS DOCUMENTS



REQUIREMENTS AND DESIGN

DESIGN CYCLE

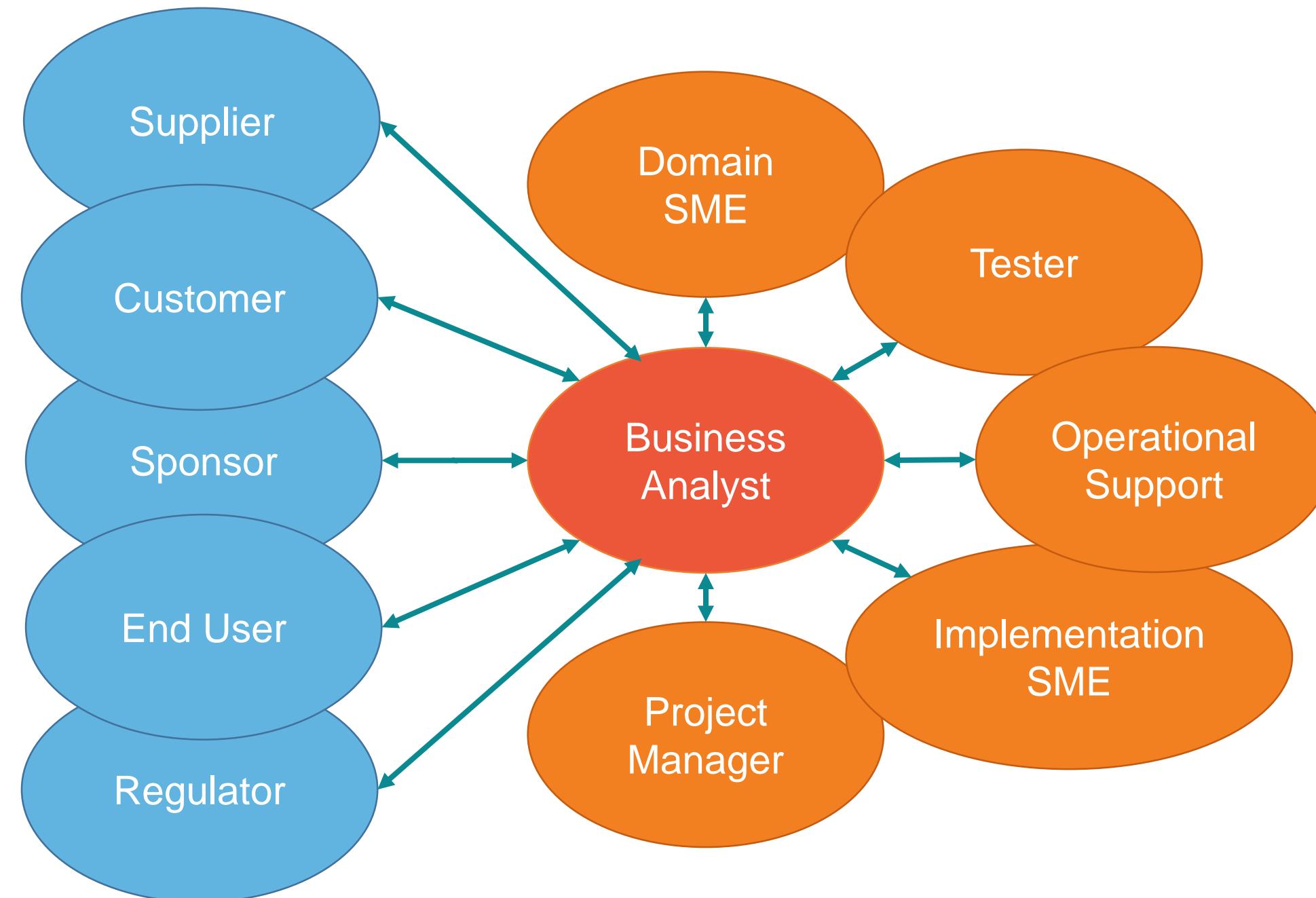
	<p>Requirements lead to design.</p>	
	<p>Requirements may be used to define design.</p>	
	<p>Requirements are focused on needs and design is focused on the solution.</p>	
	<p>Requirements and design could be recursive.</p>	
	<p>A Business Analyst reviews designs to ensure they align with the requirements.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



BABOK® GUIDE SPECIFICATIONS

STAKEHOLDERS

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



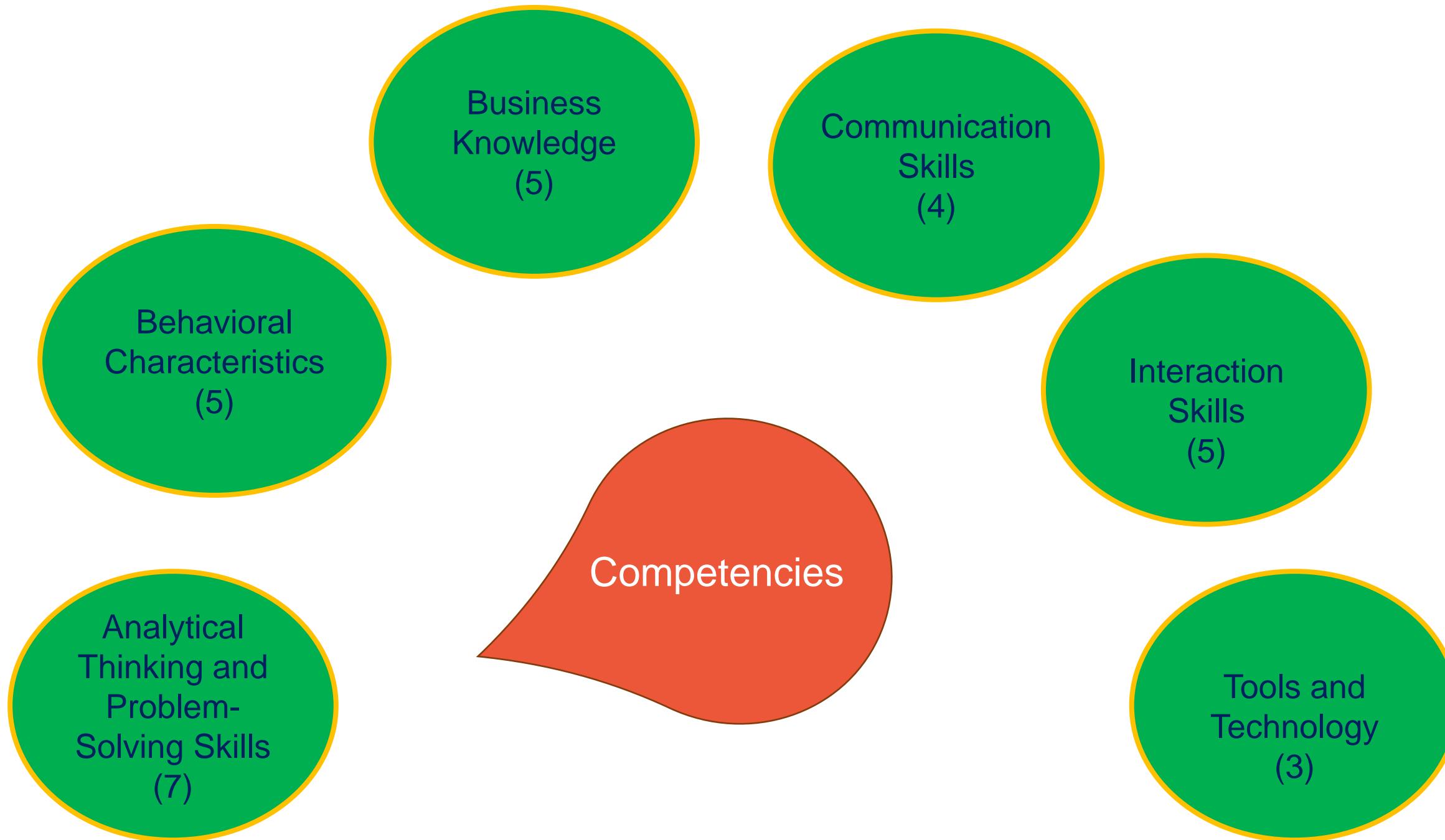
Lesson 2: Introduction to BABOK® V3

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

Analytical Thinking and Problem-Solving Skills

Creative Thinking

Ability to generate new ideas and approaches to solve problems

Decision Making

Ability to understand the criteria needed to make decisions

Learning

Ability to quickly absorb new and different types of information

Problem Solving

Ability to understand the underlying cause of a problem and use problem-solving techniques

System Thinking

Ability to understand the interactions between people, process, and technology

Conceptual Thinking

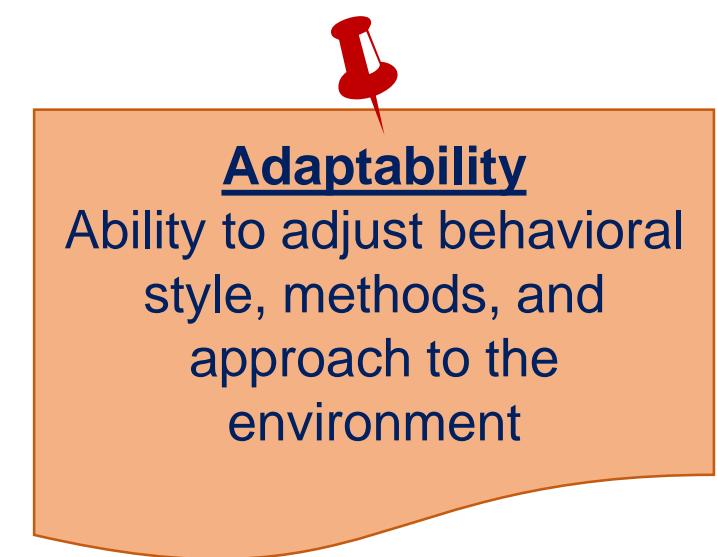
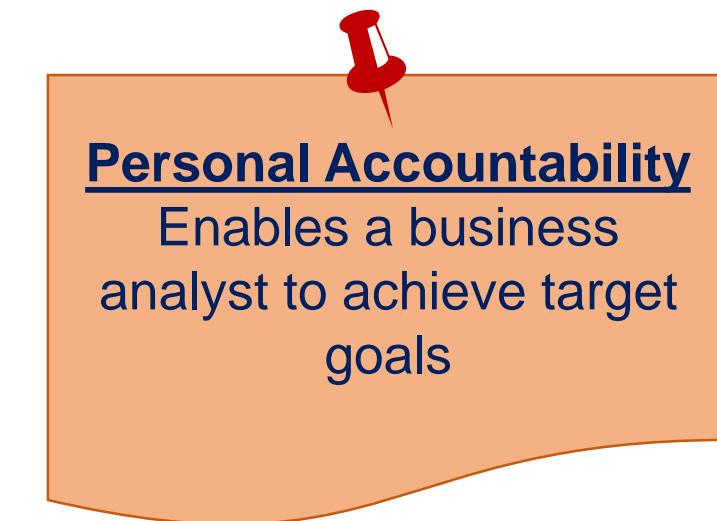
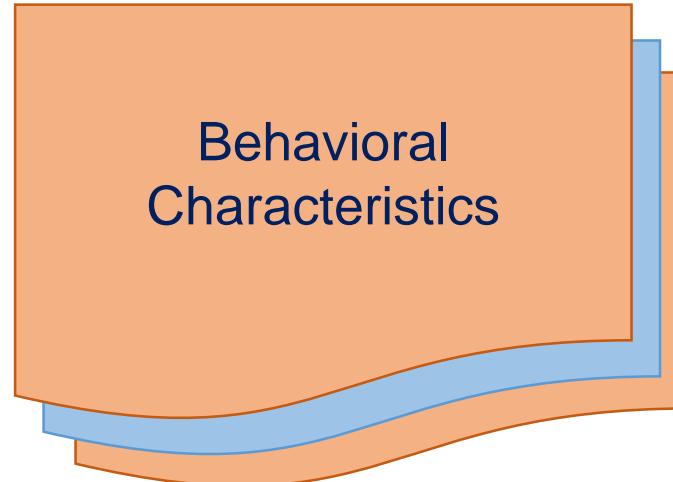
Ability to understand how disparate information fits into a larger picture

Visual Thinking

Ability to visually communicate complex concepts and models to stakeholders

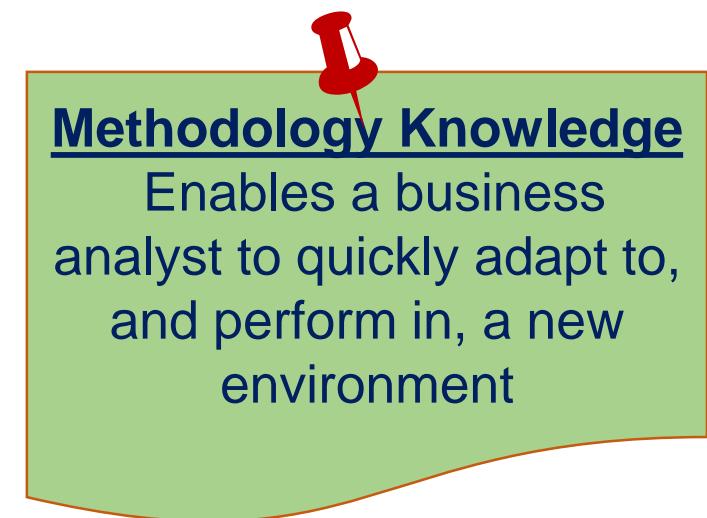
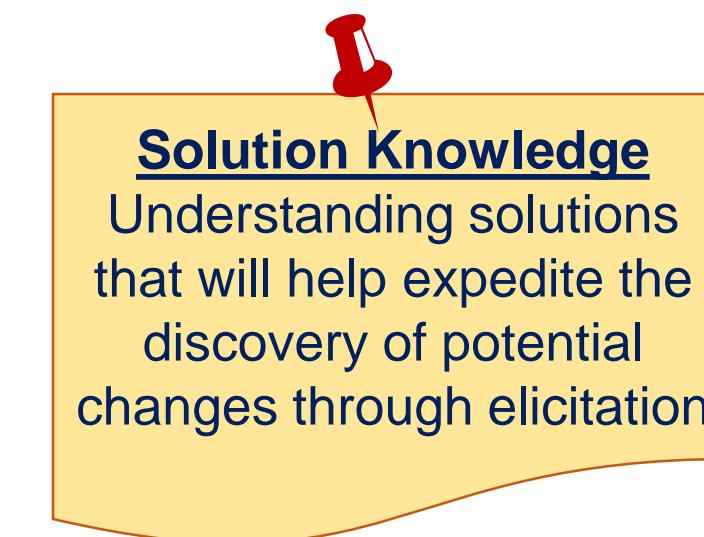
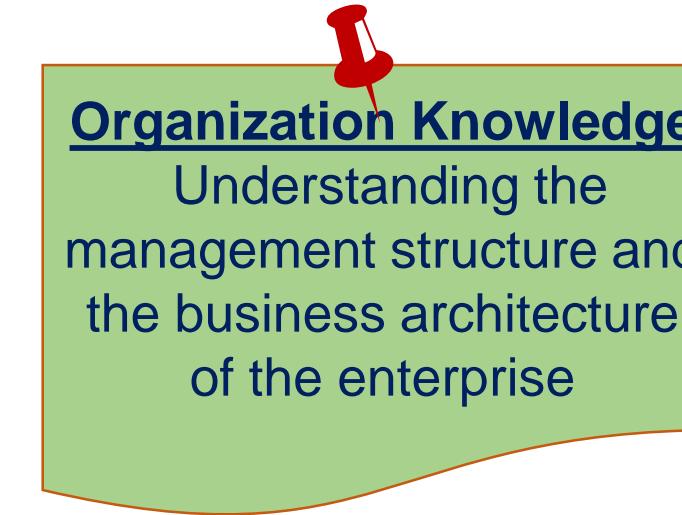
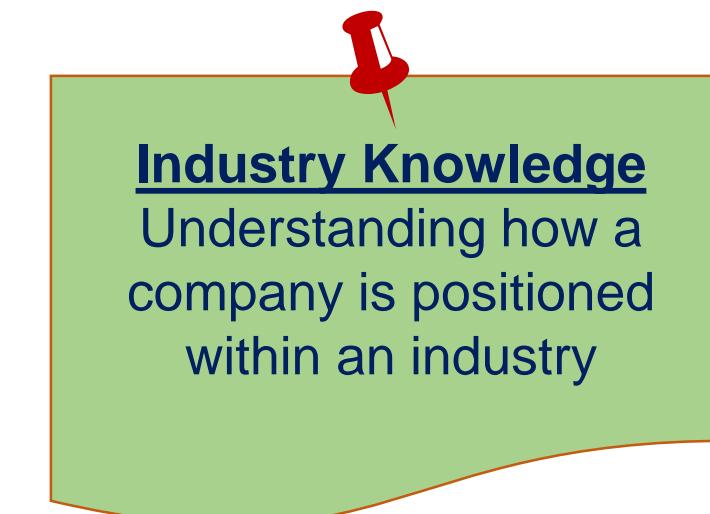
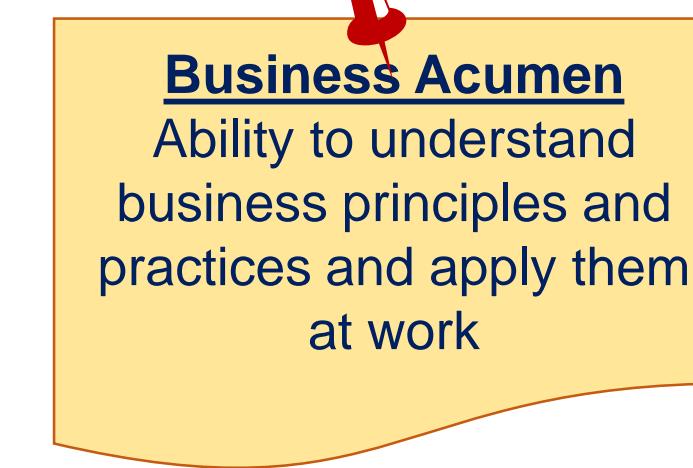
COMPETENCIES OF A BUSINESS ANALYST (contd.)

BEHAVIORAL CHARACTERISTICS



COMPETENCIES OF A BUSINESS ANALYST (contd.)

BUSINESS KNOWLEDGE

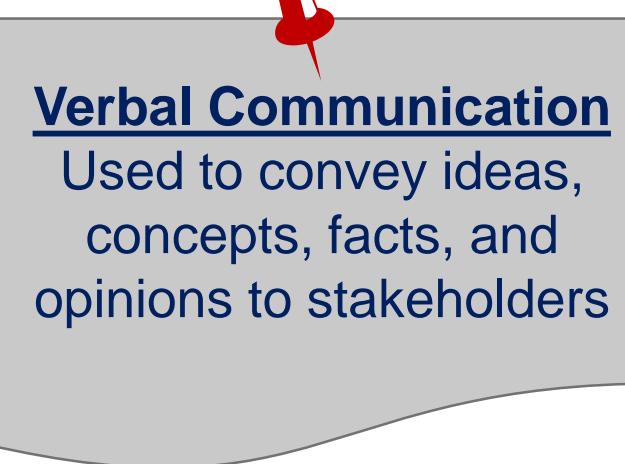


COMPETENCIES OF A BUSINESS ANALYST (contd.)

COMMUNICATION SKILLS

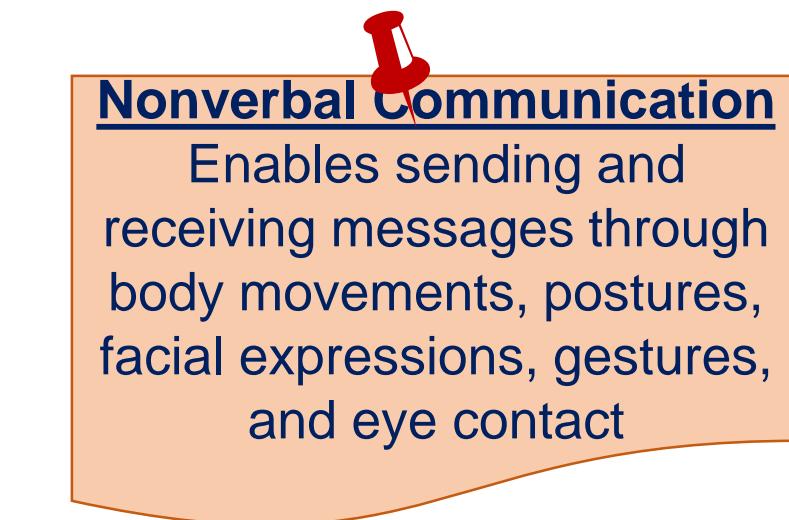


Communication skills refers to the ability to communicate effectively.



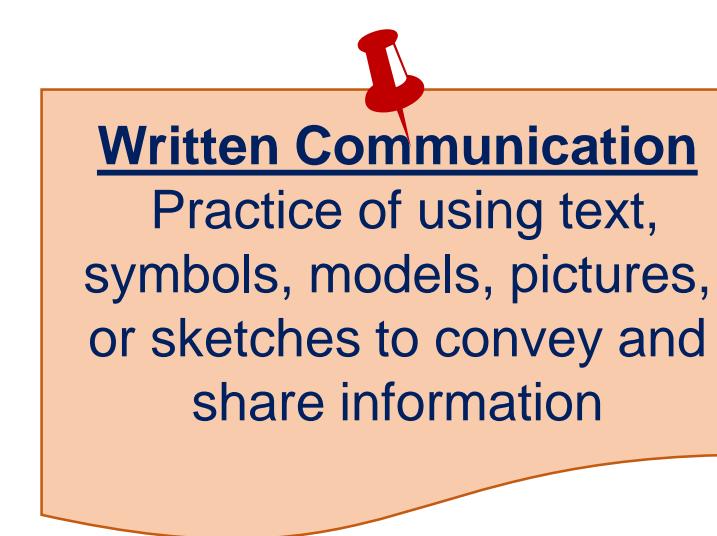
Verbal Communication

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



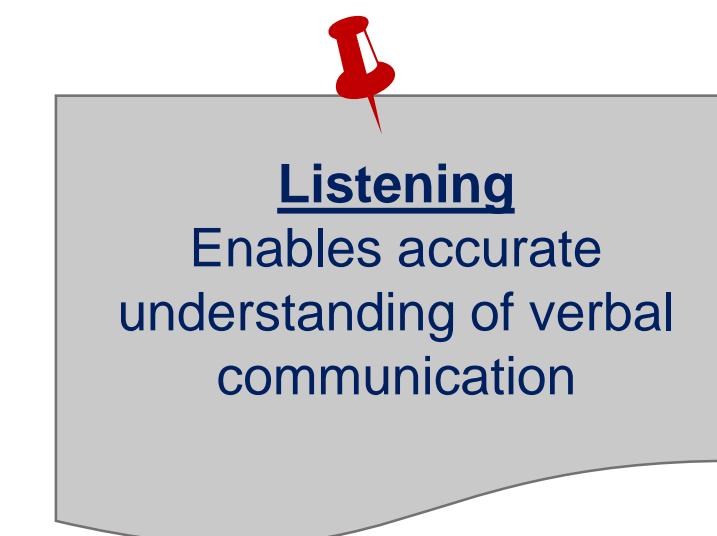
Nonverbal Communication

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

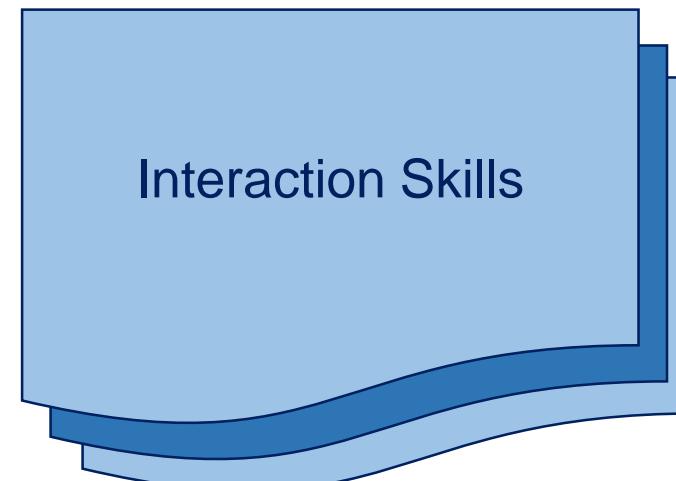


Listening

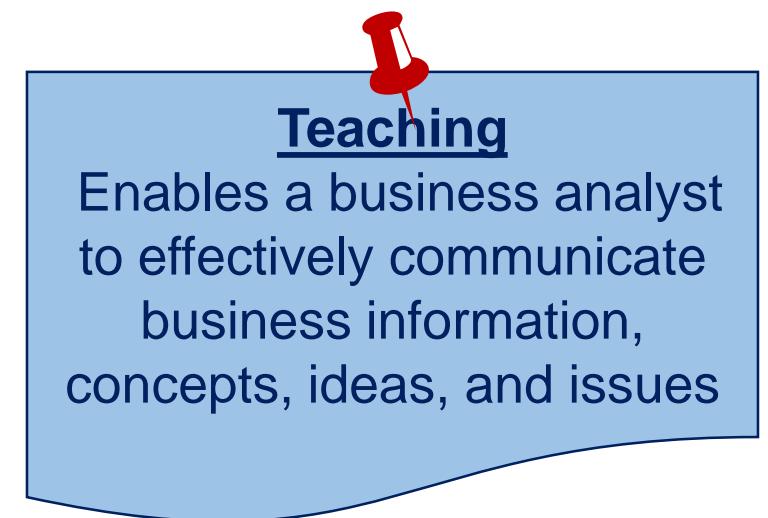
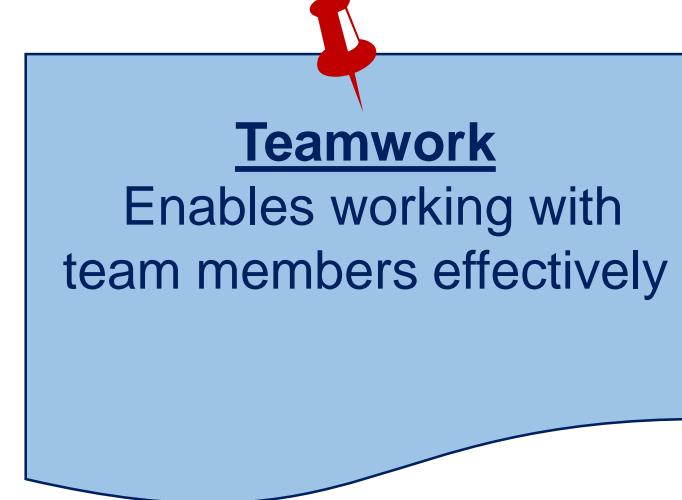
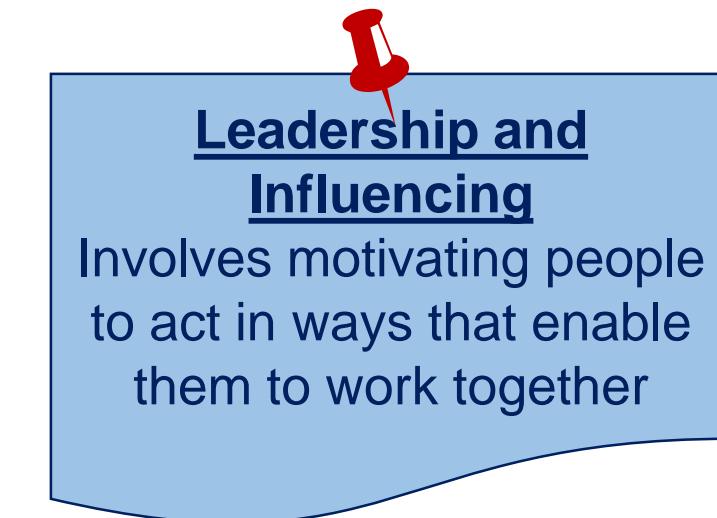
Enables accurate understanding of verbal communication

COMPETENCIES OF A BUSINESS ANALYST (contd.)

INTERACTION SKILLS



Interaction Skills include the ability to relate to and cooperate and communicate with different kinds of people.



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

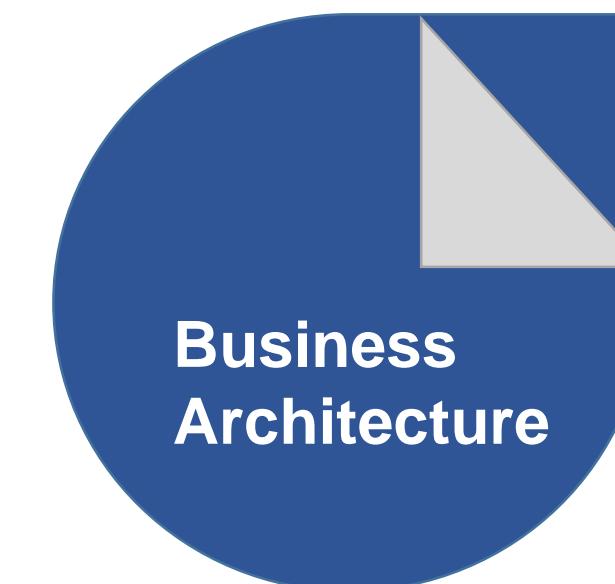
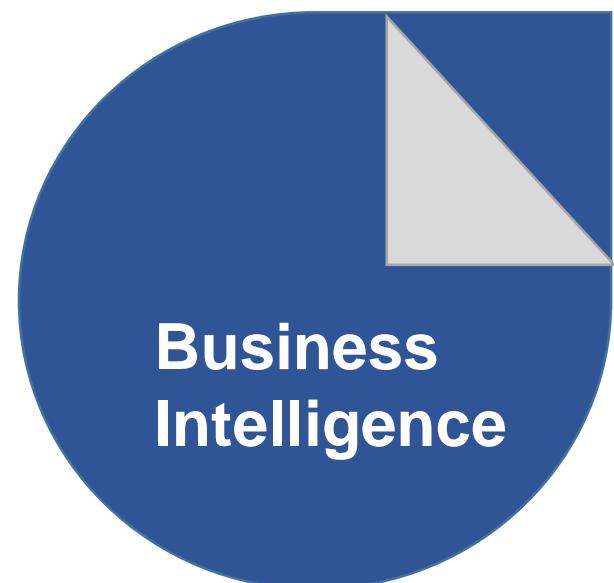
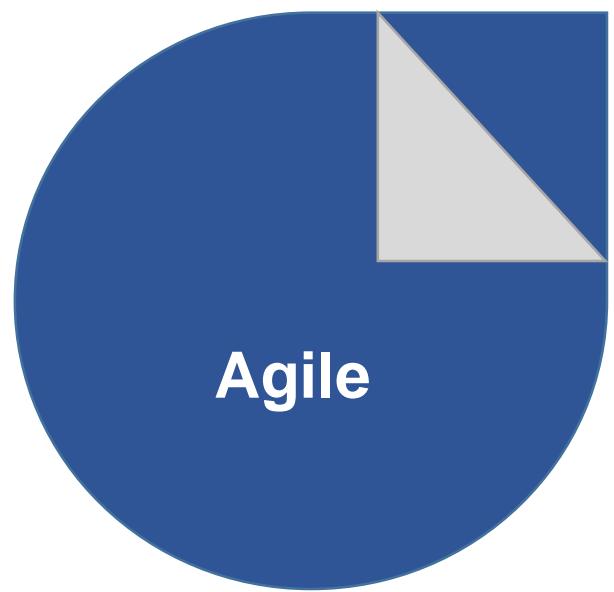
BUSINESS ANALYSIS PERSPECTIVES

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



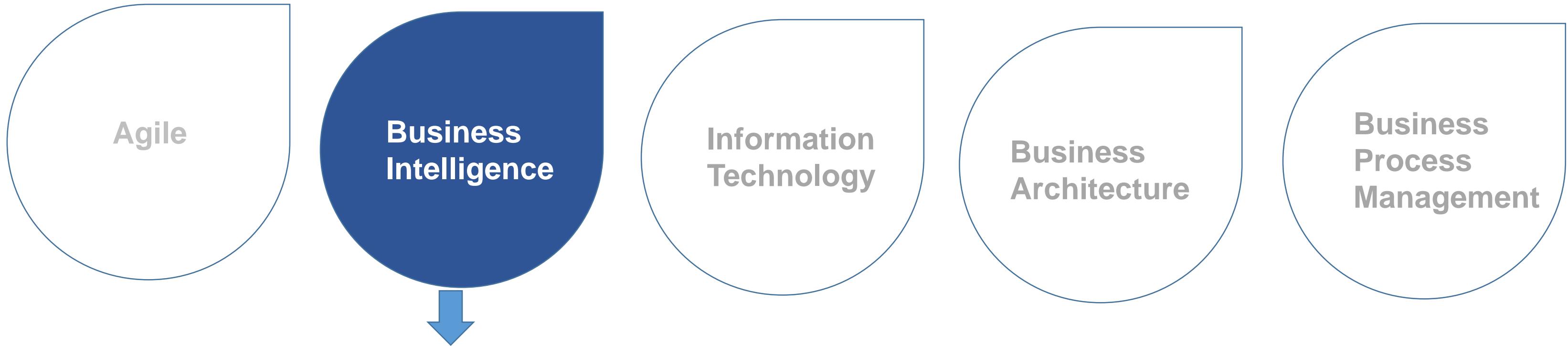
An Agile initiative involves:

- An agile mindset
- Agile values and principles
- Progressive elaboration of business planning, elicitation, analysis, design, and construction of solution

A Business Analyst is an active member of an Agile team.

BUSINESS ANALYSIS PERSPECTIVES (contd.)

FIVE BUSINESS ANALYSIS PERSPECTIVES

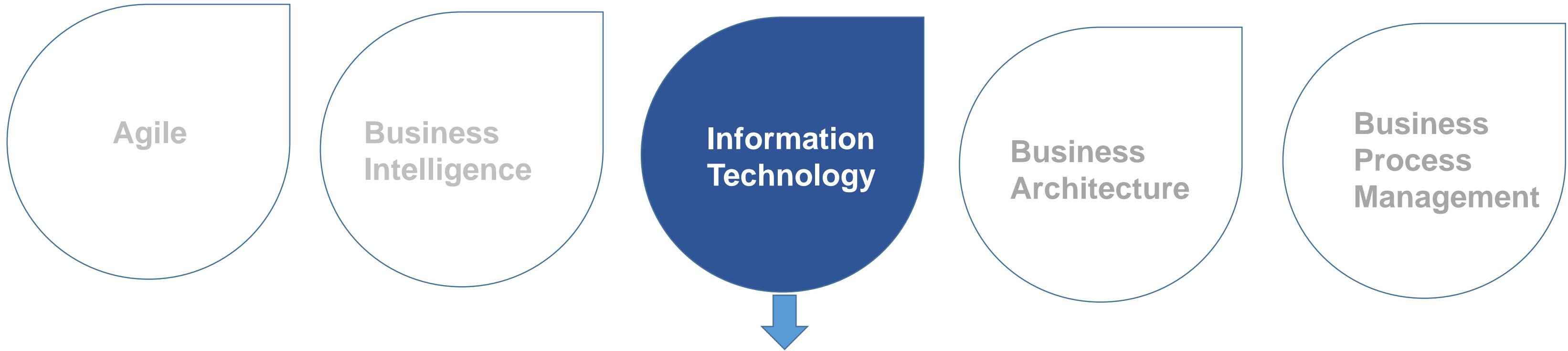


Business Intelligence:

- 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

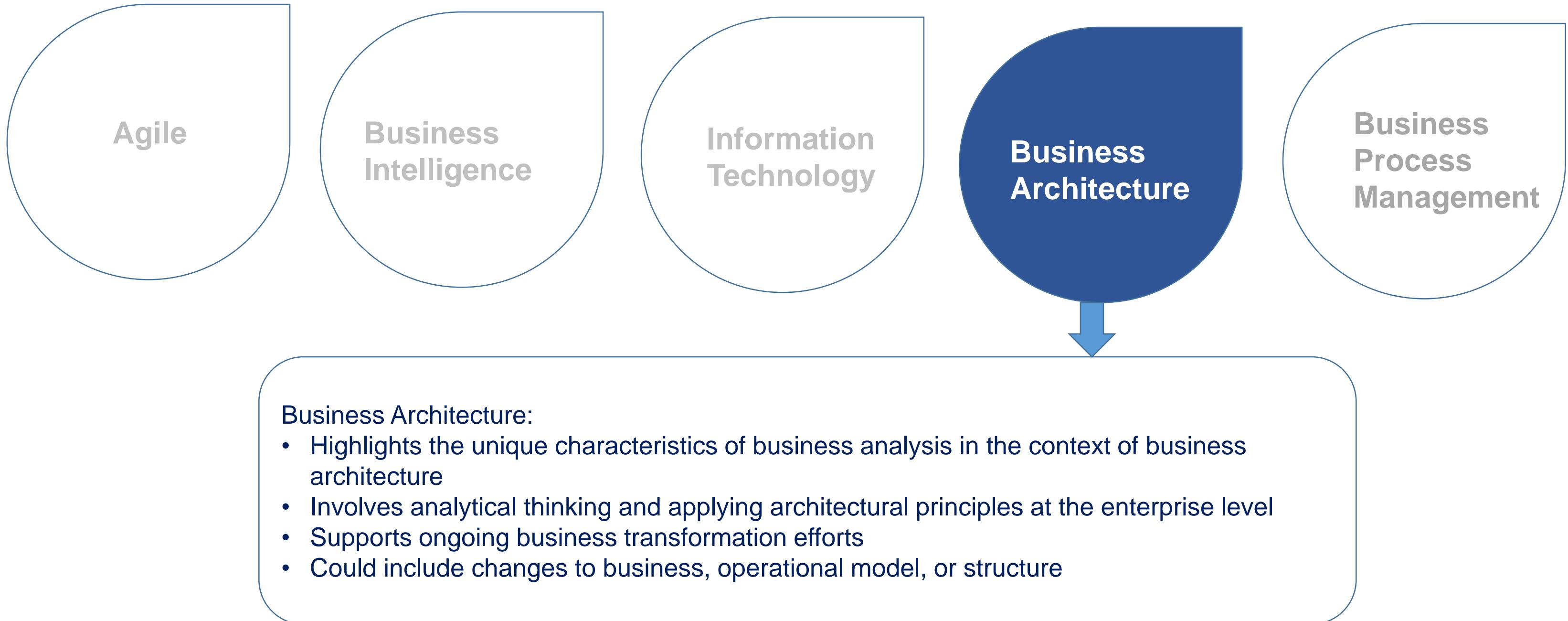


Information Technology:

- 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.

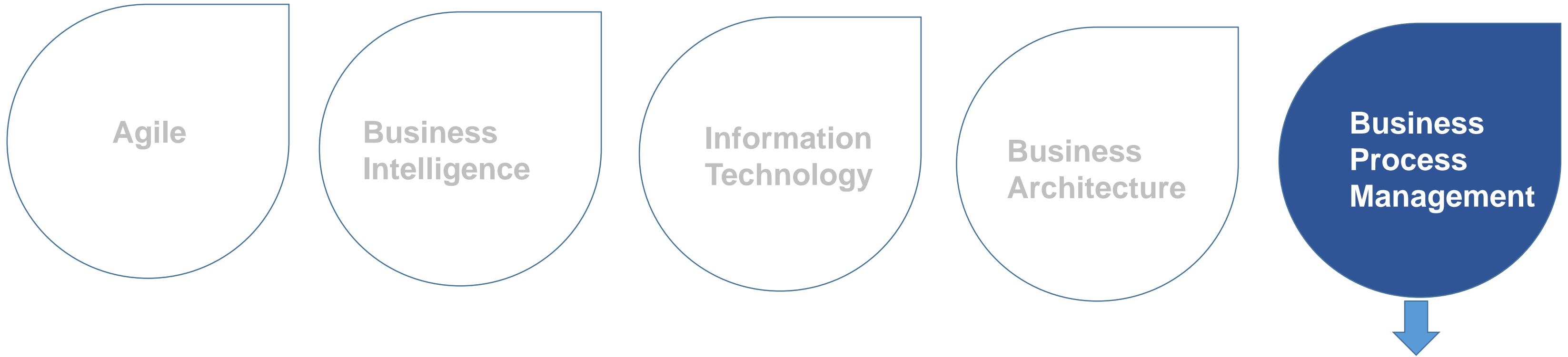
BUSINESS ANALYSIS PERSPECTIVES (contd.)

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.

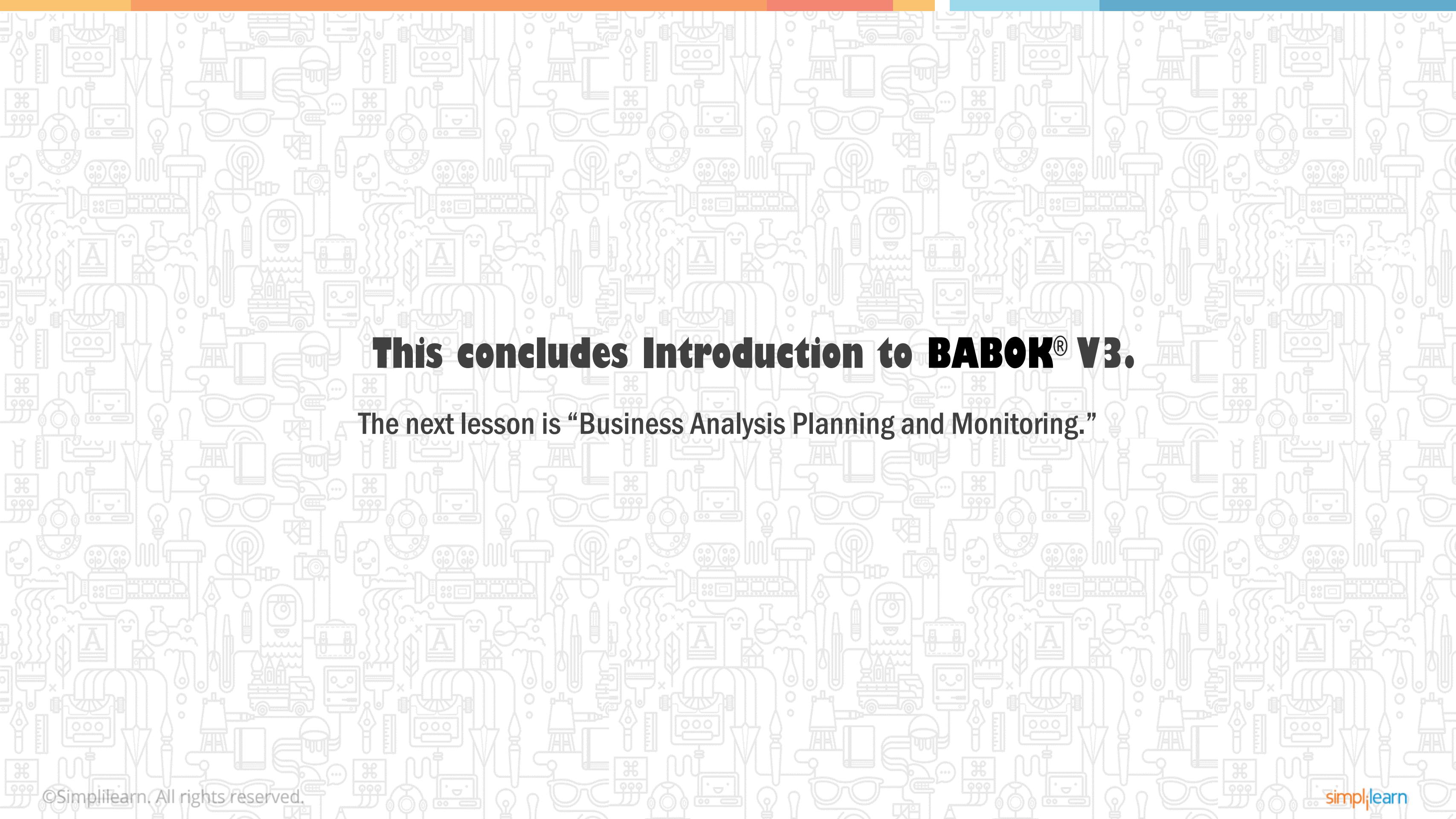
KEY TAKEAWAYS



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

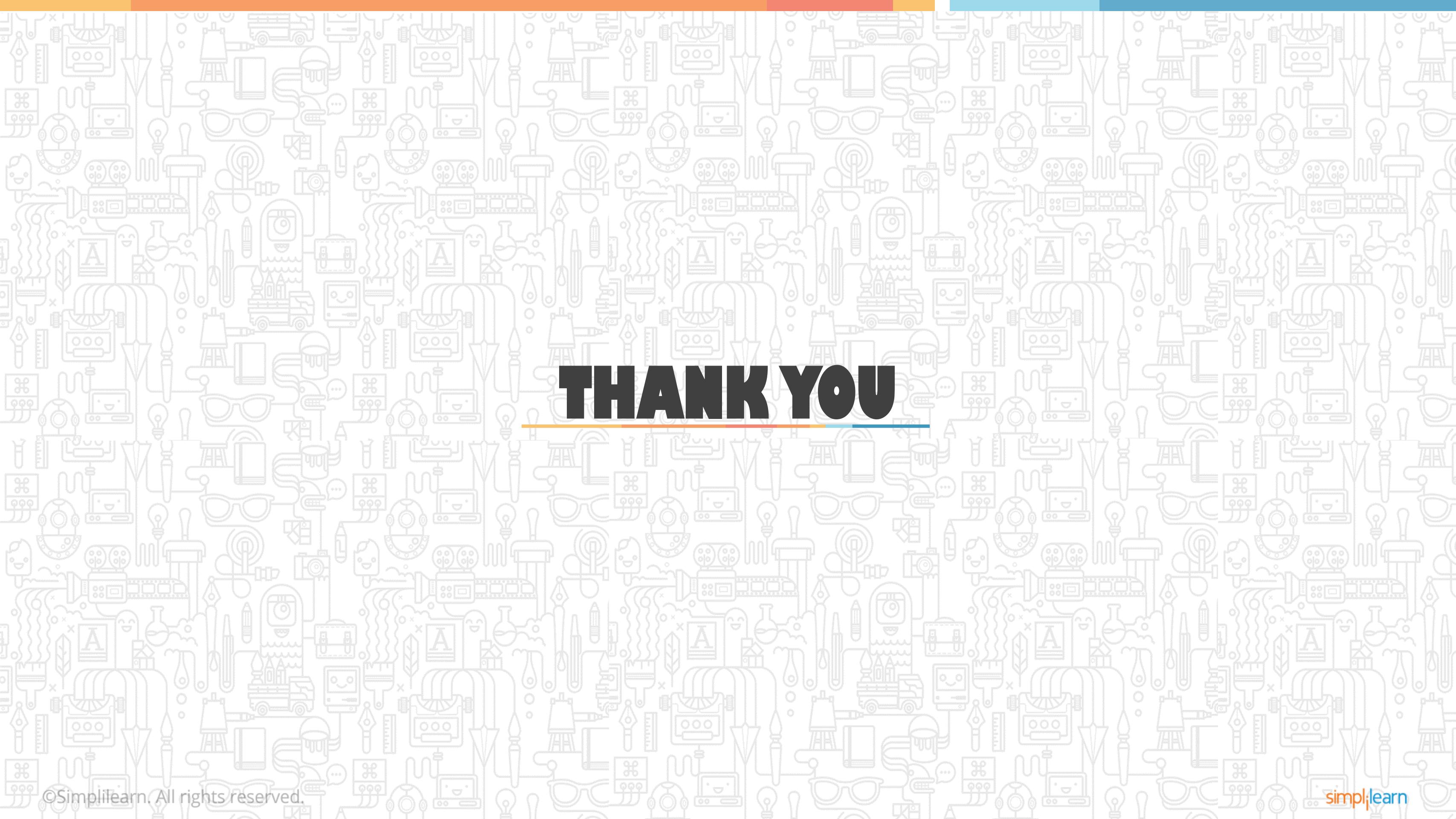
The BABOK® Guide groups business analysis tasks into six knowledge areas.

- 
- 1 A business analyst is a person who performs business analysis tasks described in the BABOK® Guide.
 - 2
 - 3 The Business Analysis Core Concept Model™ (BACCM™) defines the conceptual framework for the practice of business analysis.
 - 4
 - 5 The BABOK® GUIDE describes 29 business analysis competencies, 50 techniques, and 5 perspectives.



This concludes Introduction to BABOK® V3.

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



THANK YOU

CBAP® 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

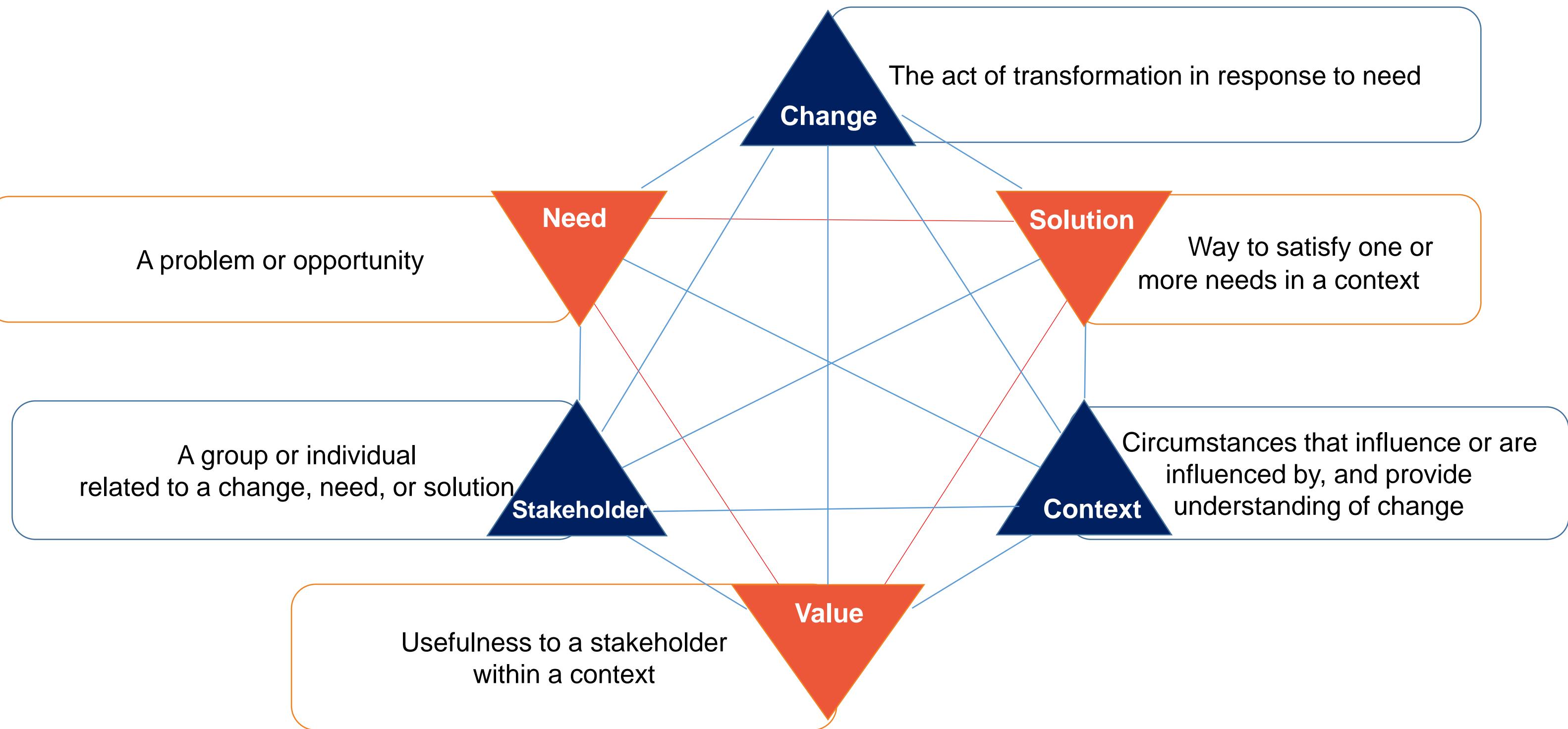
How to identify Business Analysis Performance Improvements

INTRODUCTION



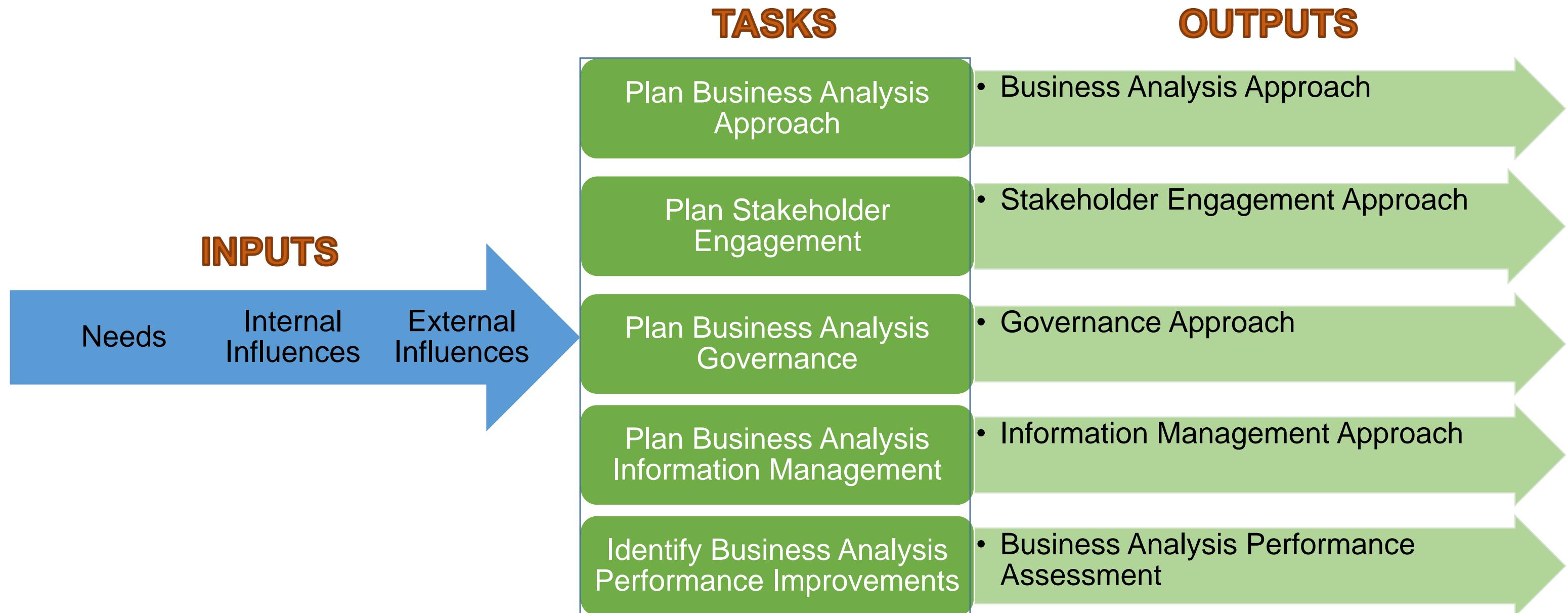
BUSINESS ANALYSIS PLANNING AND MONITORING

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

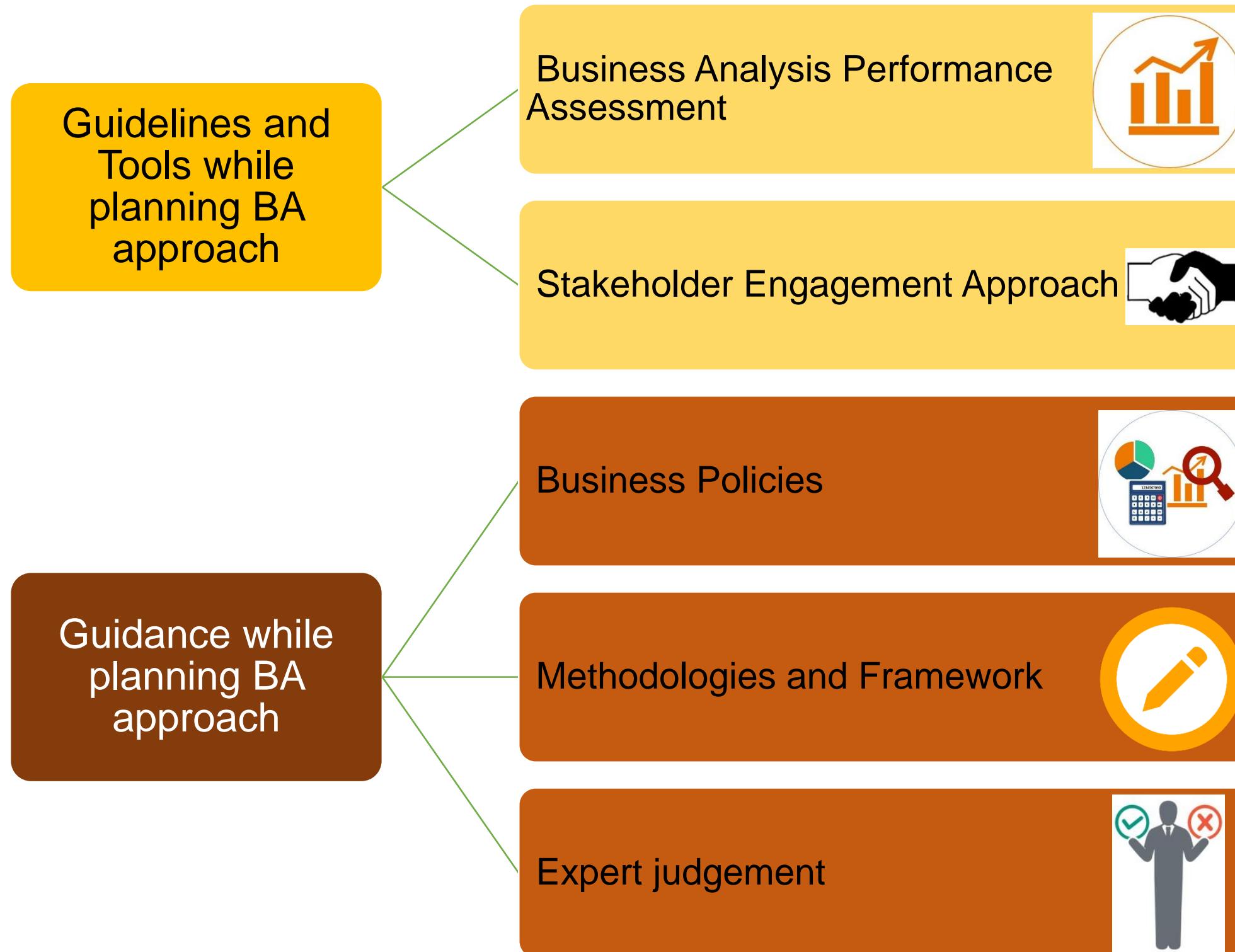
Timing for the business analysis tasks to be performed

Complexity and size of the change, and overall risk

Business analysis approach reviewed and agreed upon by key stakeholders

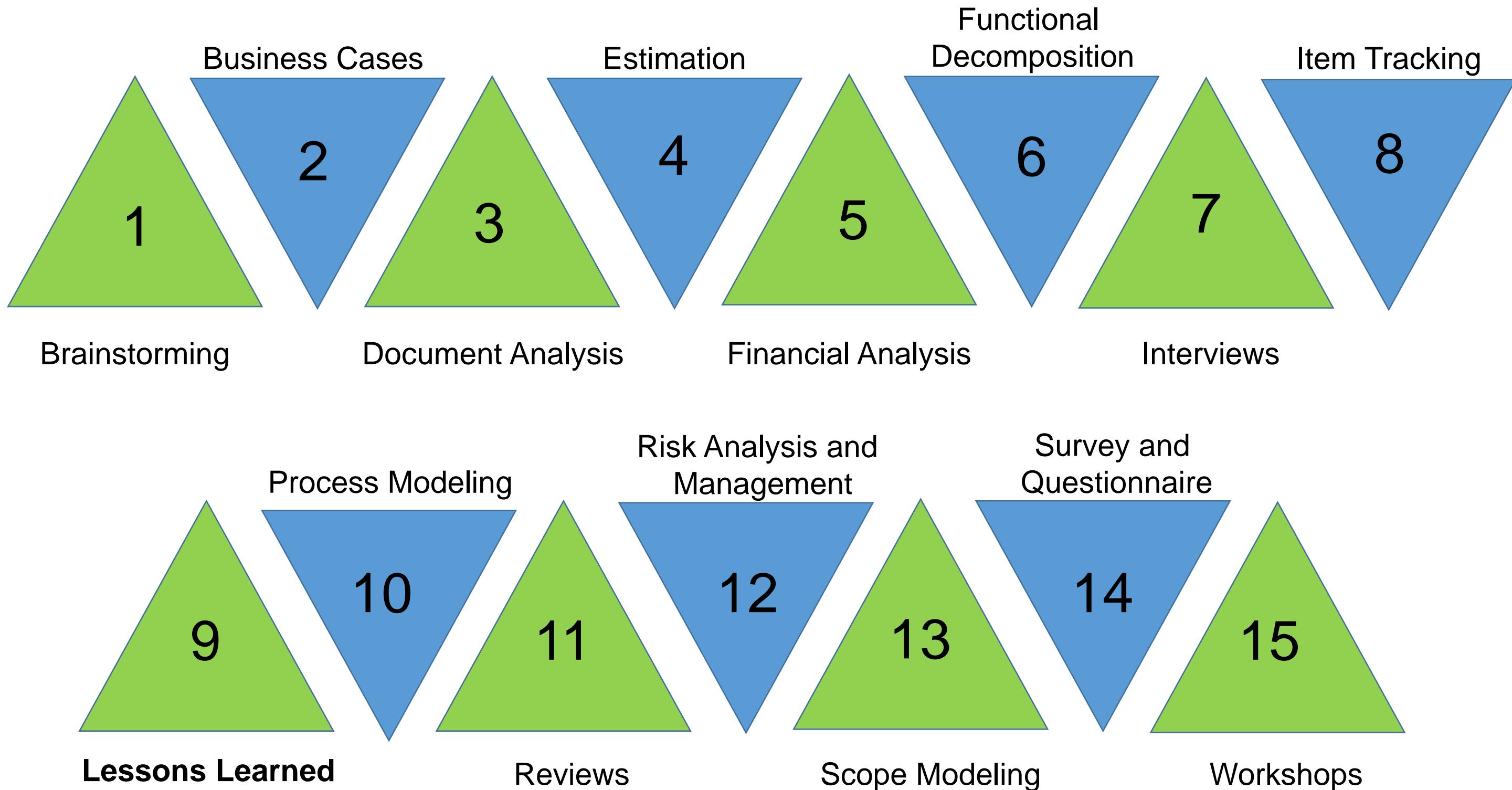
PLAN BUSINESS ANALYSIS APPROACH

GUIDELINES AND TOOLS



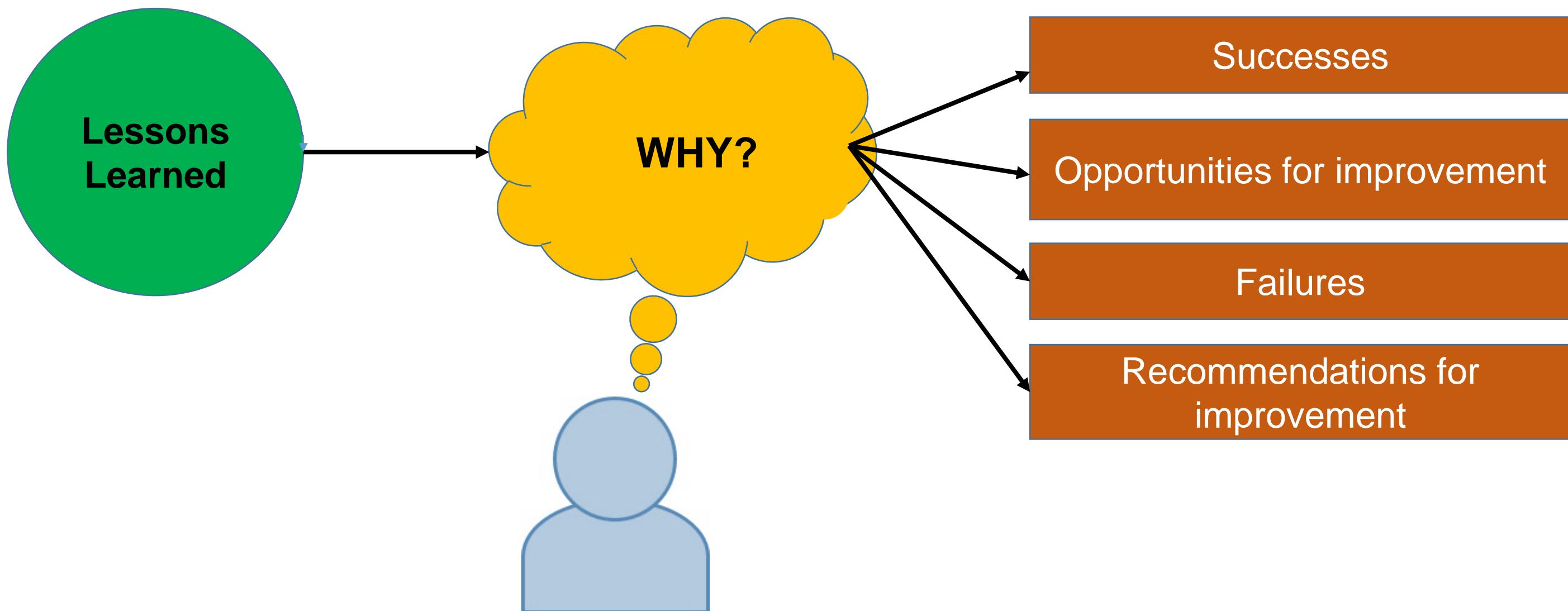
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUES



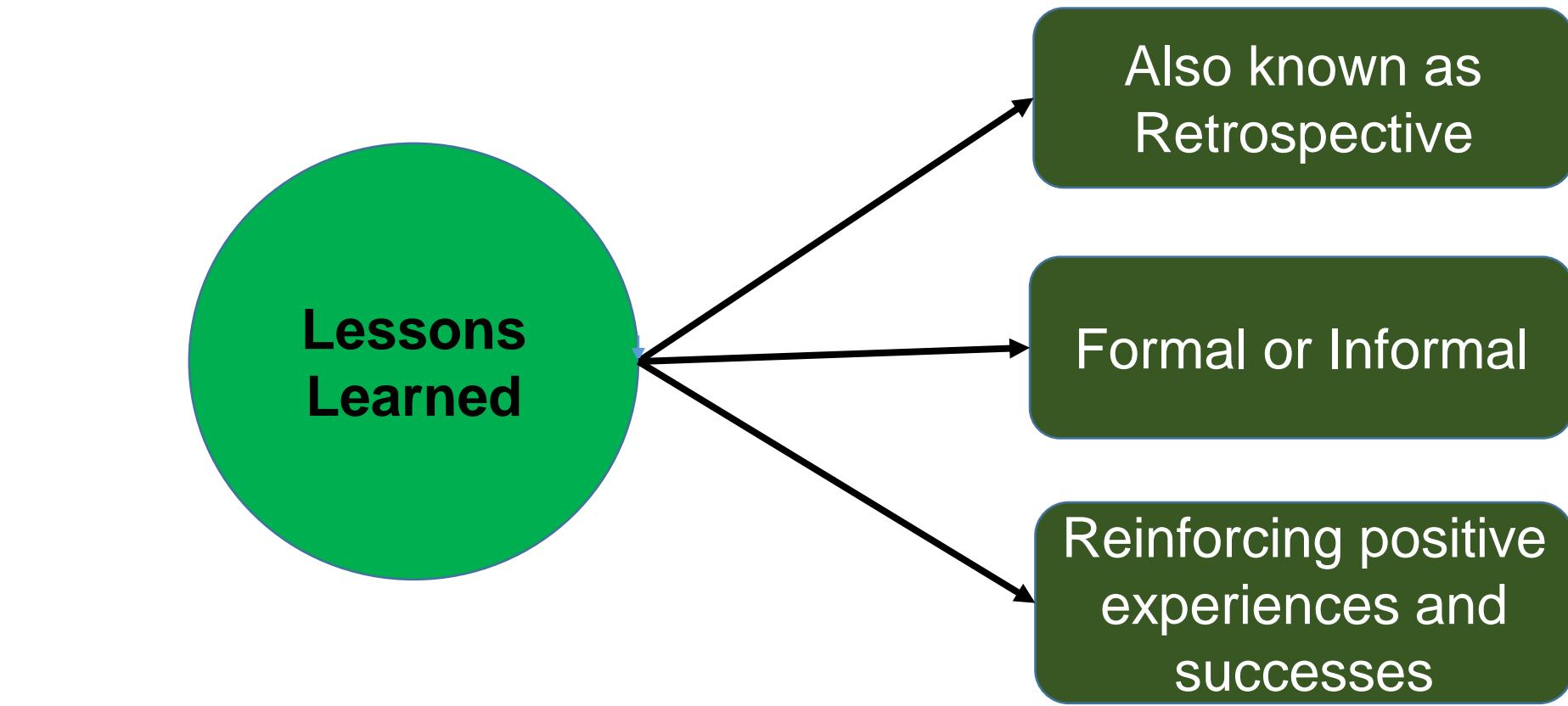
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUE – LESSONS LEARNED – WHY?



PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUE – LESSONS LEARNED - OVERVIEW



!

Participants may be reluctant to document and discuss problems. Honest discussion may not occur.

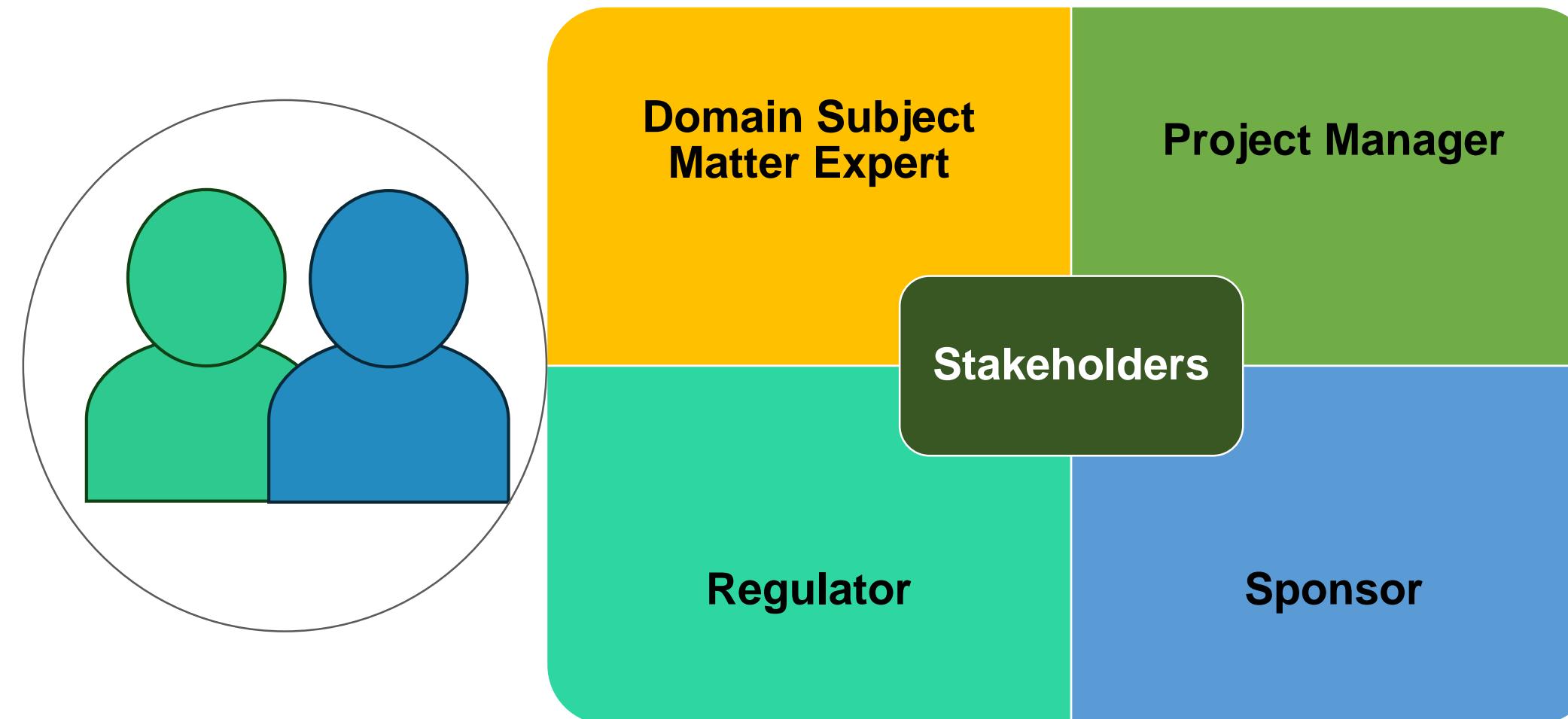
PLAN BUSINESS ANALYSIS APPROACH

TECHNIQUE – LESSONS LEARNED - ELEMENTS



PLAN BUSINESS ANALYSIS APPROACH

STAKEHOLDERS



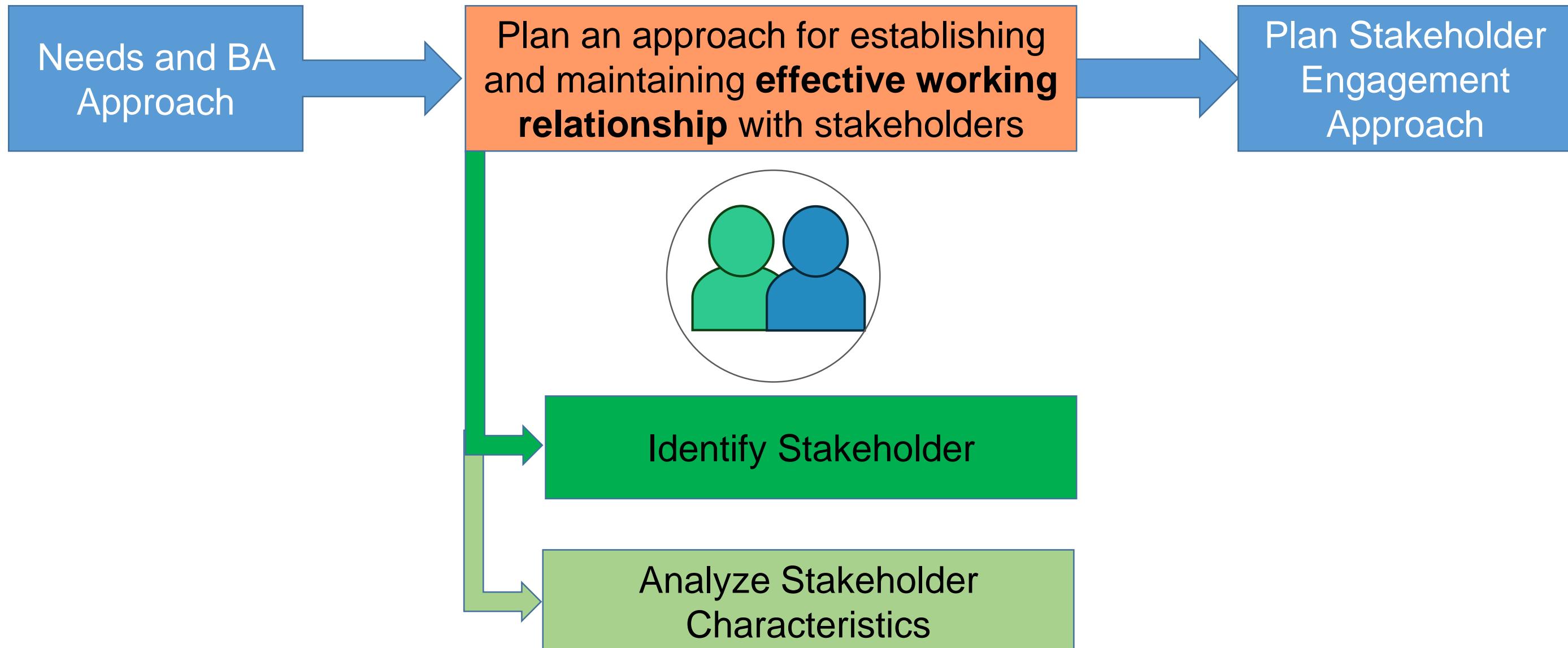
Lesson 3: Business Analysis Planning and Monitoring

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

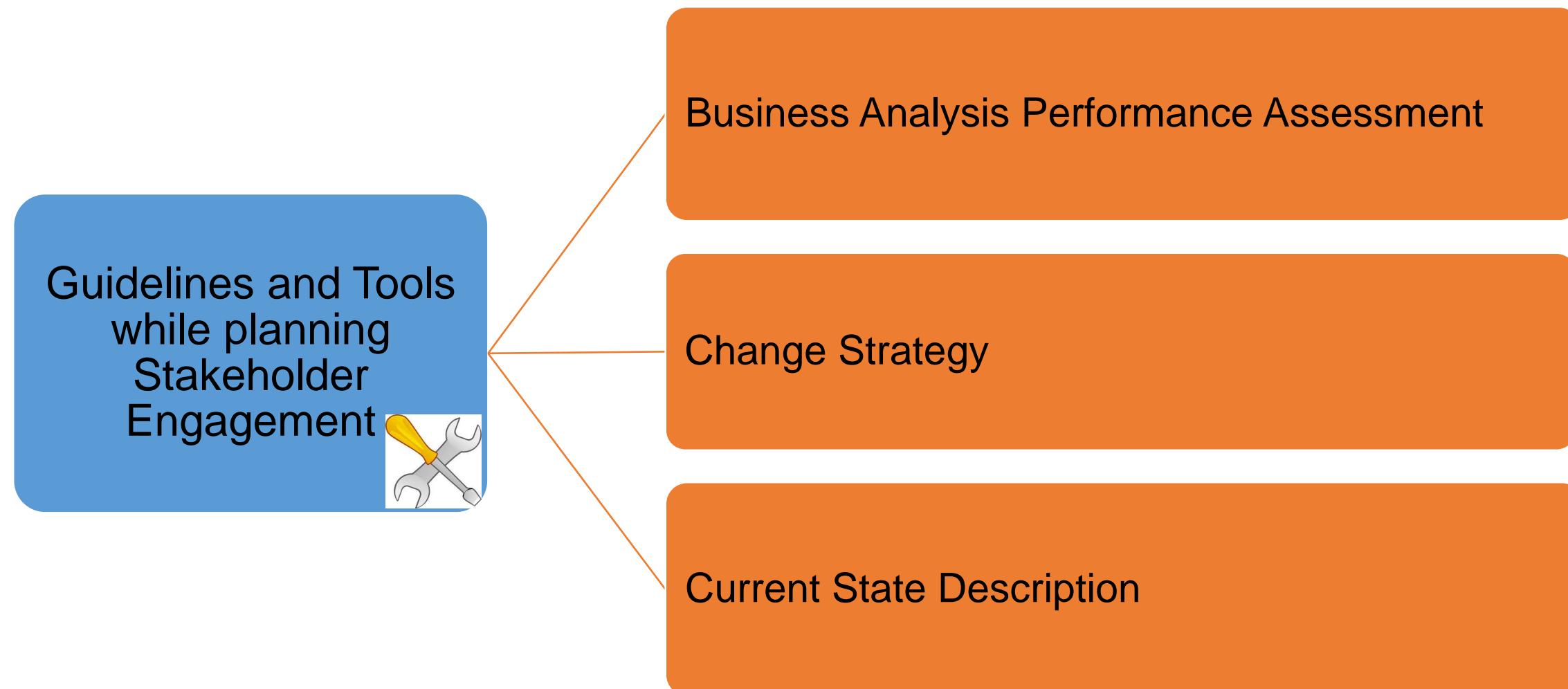


Roles
Attitude
Decision Making Authority
Level of Power or Influence



PLAN STAKEHOLDER ENGAGEMENT

GUIDELINES AND TOOLS



PLAN STAKEHOLDER ENGAGEMENT

TECHNIQUES



ORGANIZATIONAL MODEL

PURPOSE

Organizational Modeling

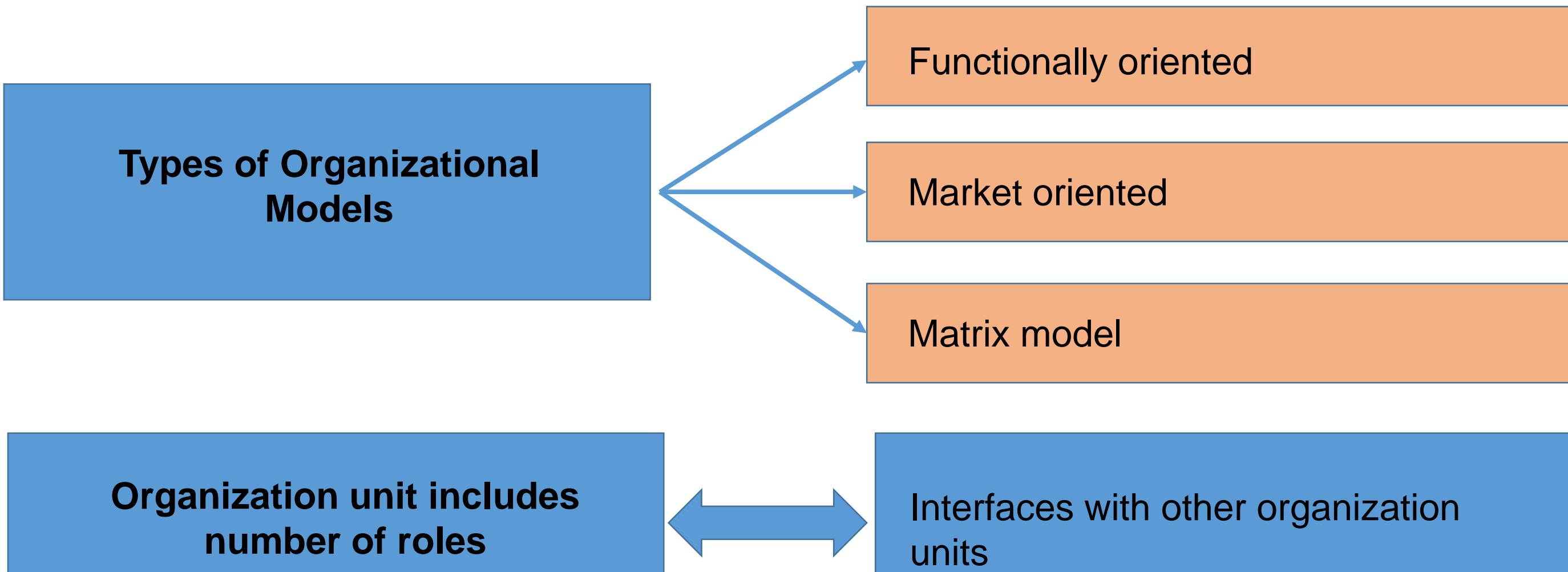
- Describe the roles, responsibilities, and reporting structure
- Align these structures with the organizational goals

Organizational Model

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

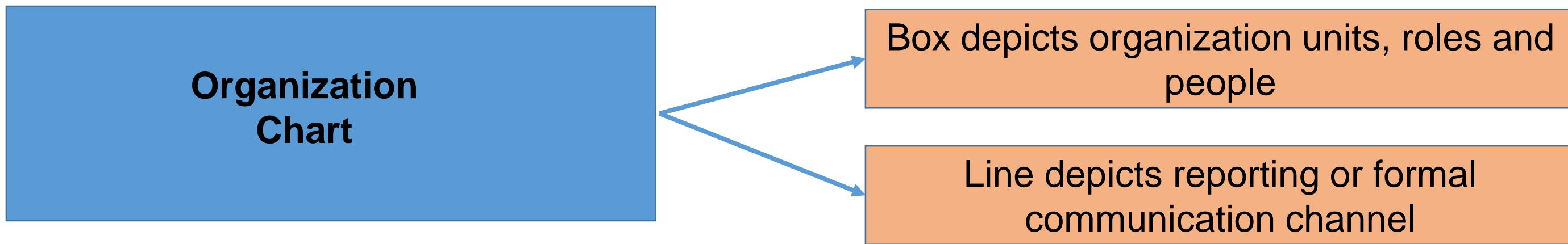
ORGANIZATIONAL MODEL

ELEMENTS



ORGANIZATIONAL MODEL

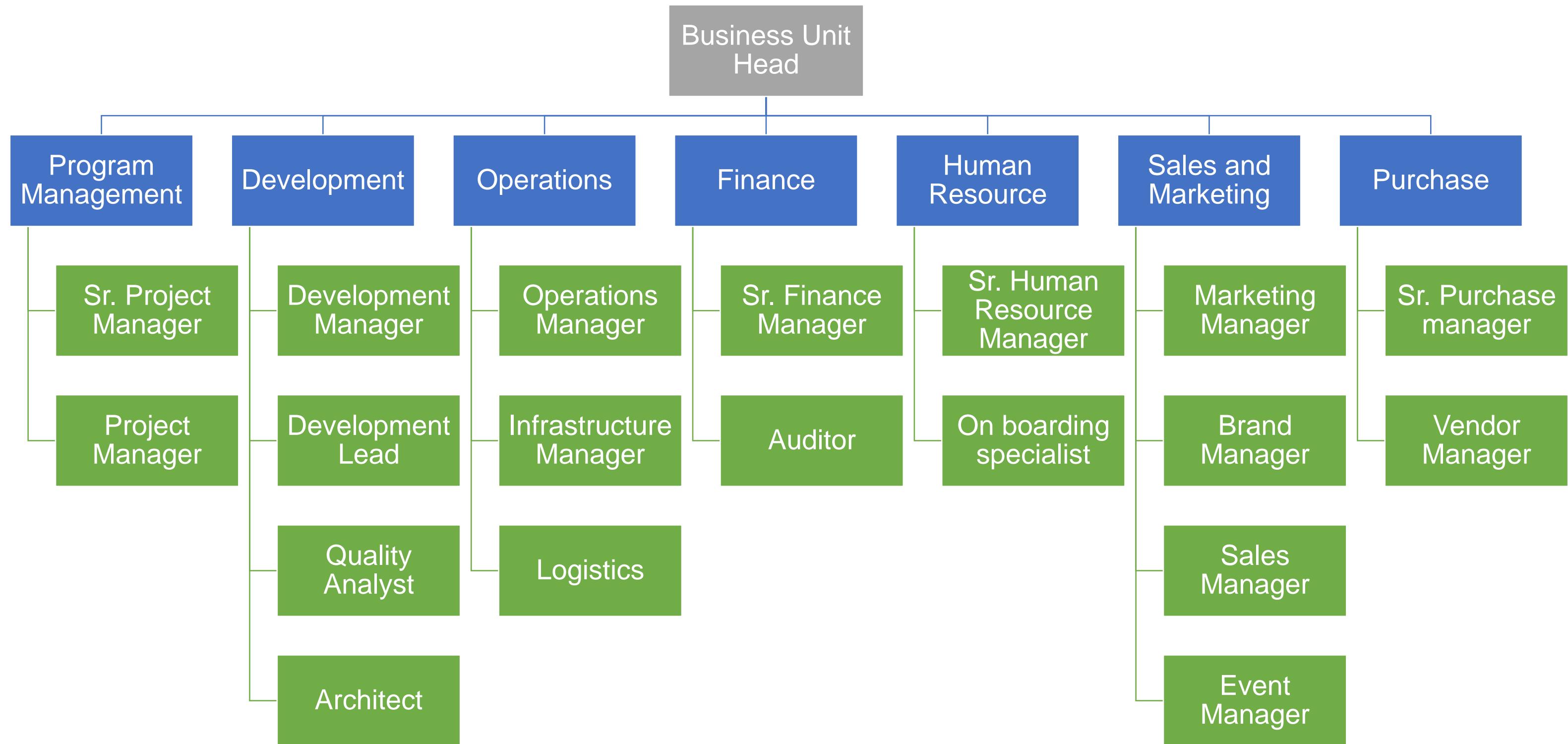
ELEMENTS (contd.)



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

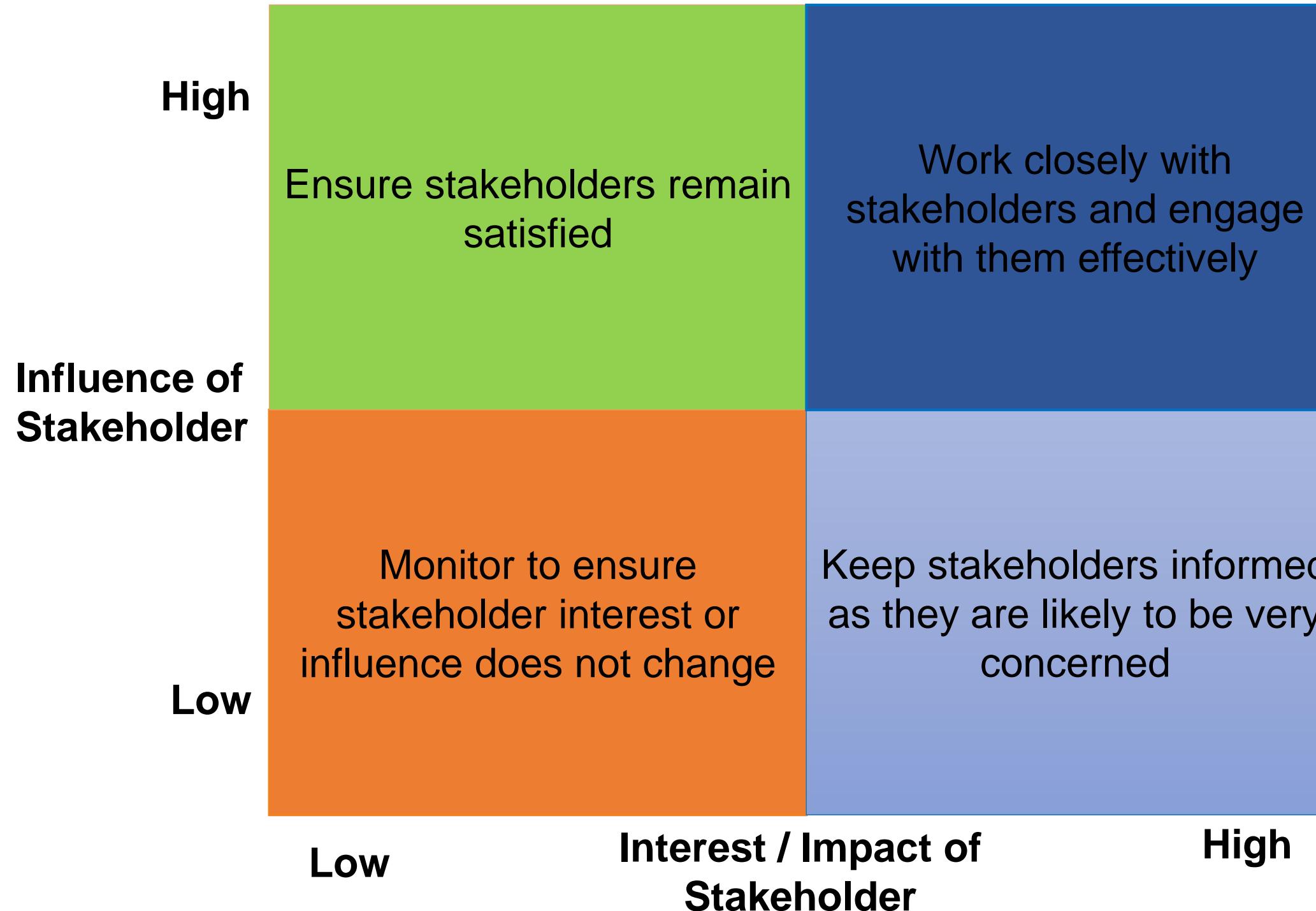
- Stakeholder Matrix
- Stakeholder Onion Diagram

RACI Matrix (Responsible, Accountable, Consulted and Informed)

Personas

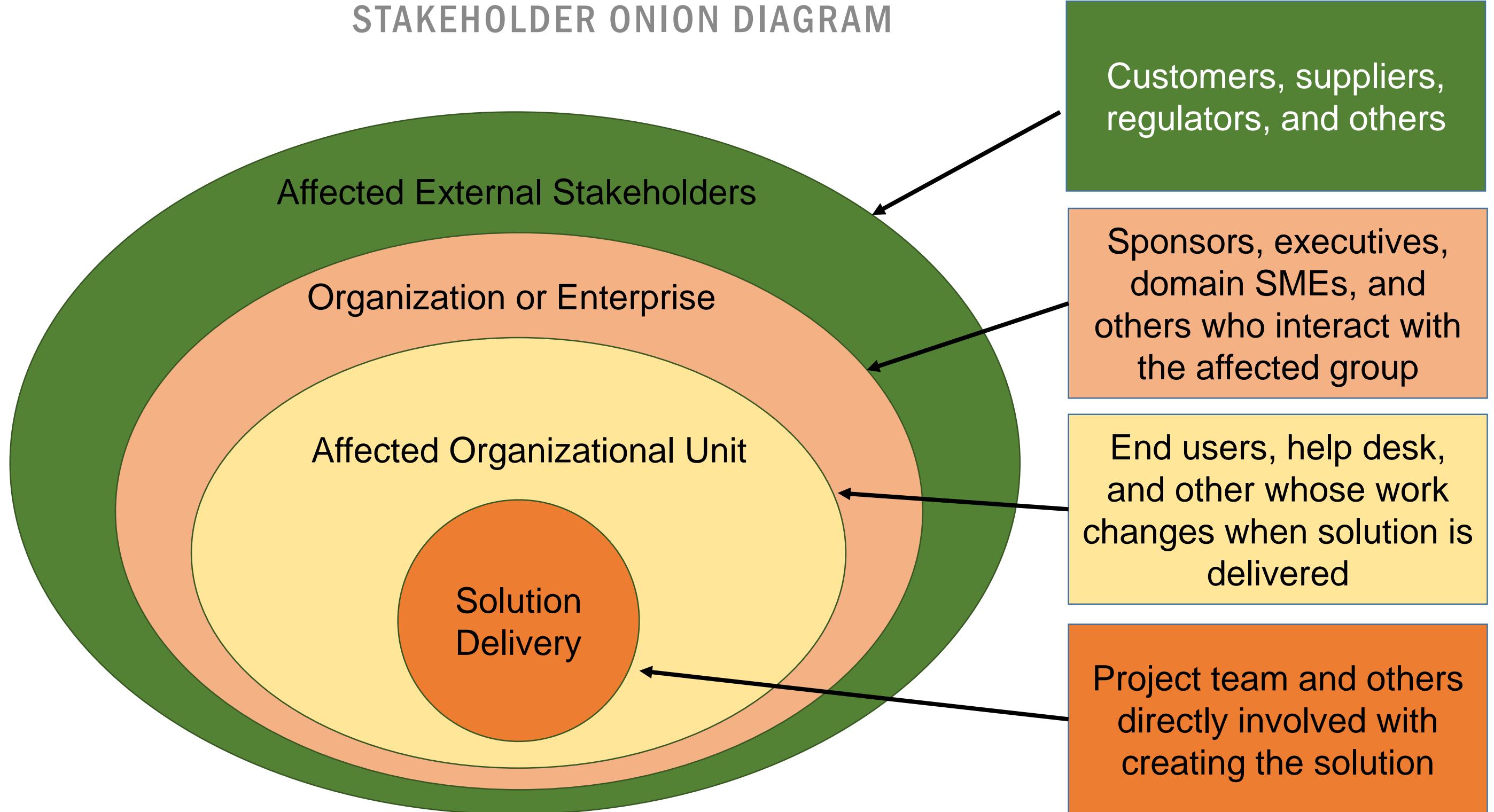
STAKEHOLDER LIST, MAP, OR PERSONAS

EXAMPLE



STAKEHOLDER LIST, MAP OR PERSONAS

STAKEHOLDER ONION DIAGRAM



STAKEHOLDER LIST, MAP OR PERSONAS

RACI – RESPONSIBLE, ACCOUNTABLE, CONSULTED, INFORMED

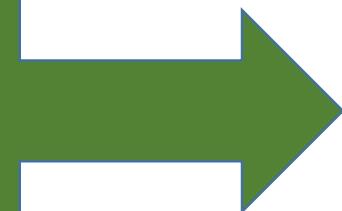
Task	Sponsor	Project Manager	Implementation Team	Operations	Business Analyst	Regulators
Identify problem or opportunity	R	R	C	R	A	I
Identify risk associated with business analysis work	R	R	R	R	A	I
Conduct feasibility study	C	R	R	C	A	
Recommend solution	R	C	R	R	A	I
Approve Business Analysis Deliverables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

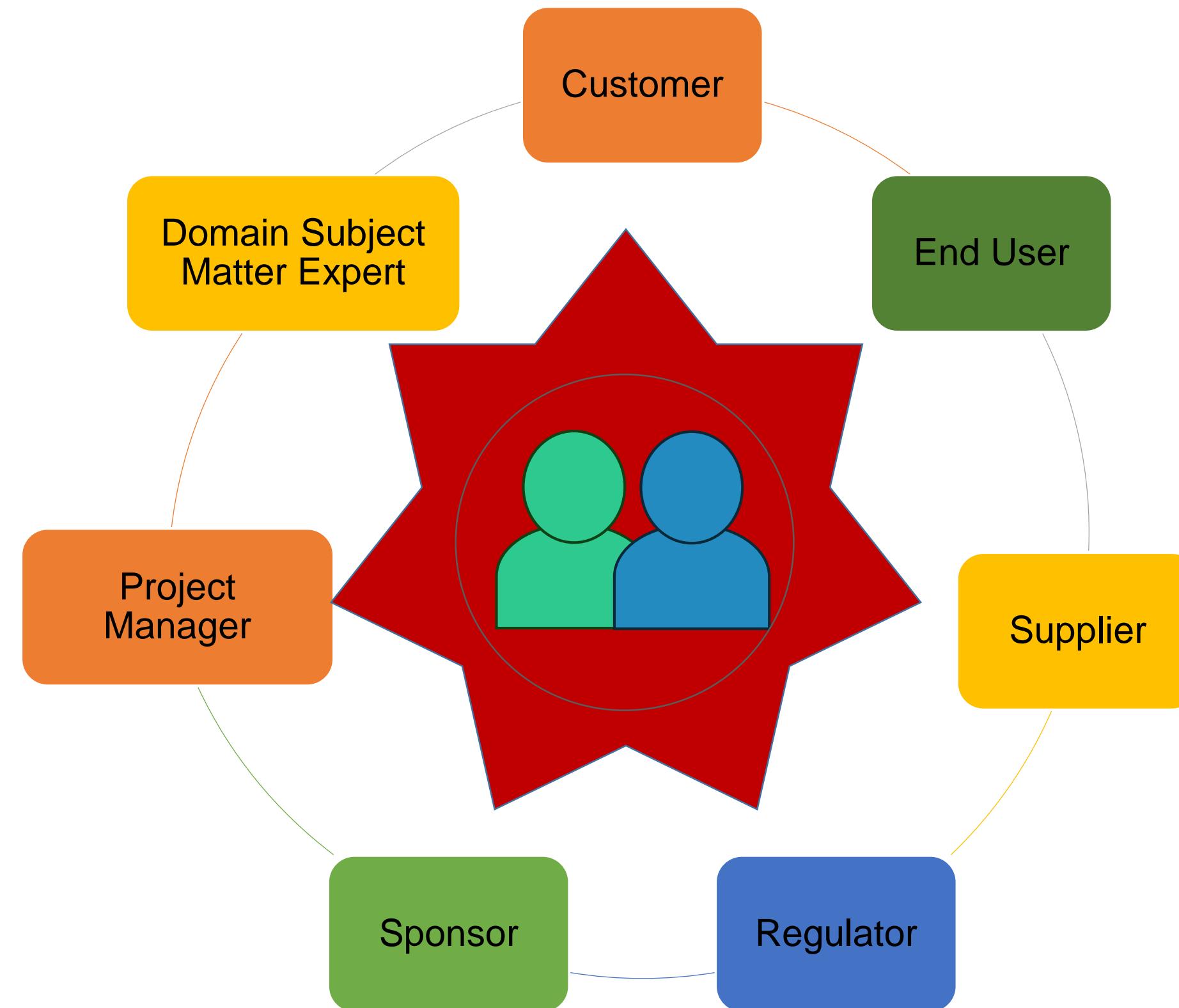
Personal Background: Age, Family (single, married, children), Education

Preferences

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

PLAN STAKEHOLDER ENGAGEMENT

STAKEHOLDERS



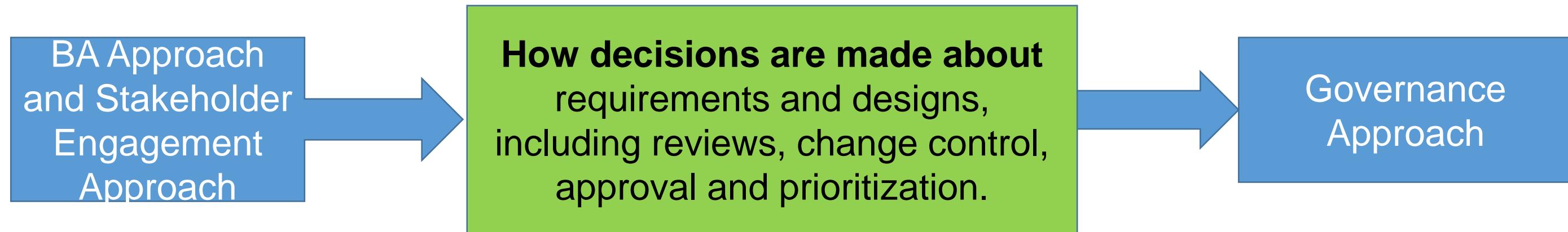
Lesson 3: Business Analysis Planning and Monitoring

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



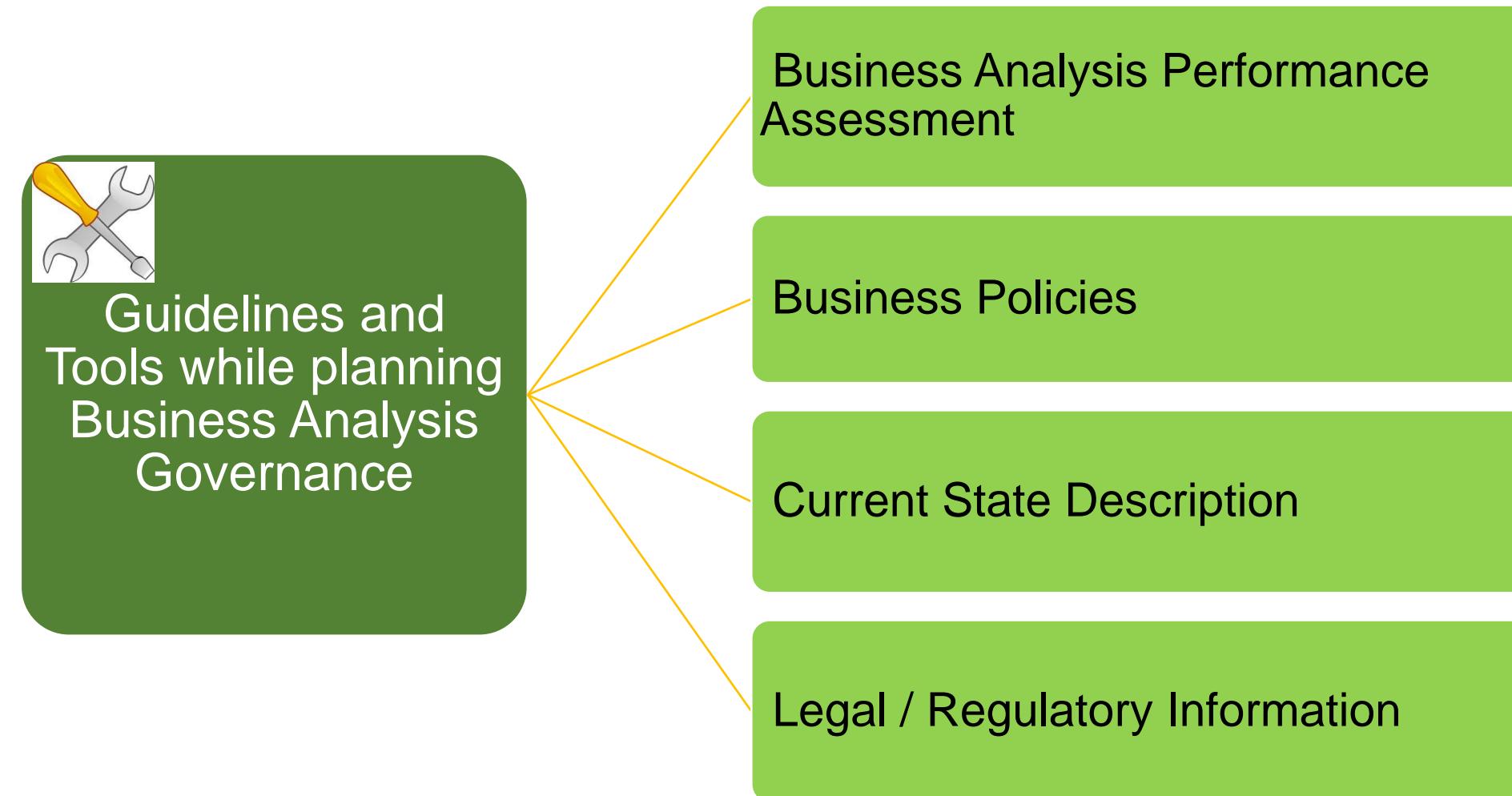
PLAN BUSINESS ANALYSIS GOVERNANCE

ELEMENTS



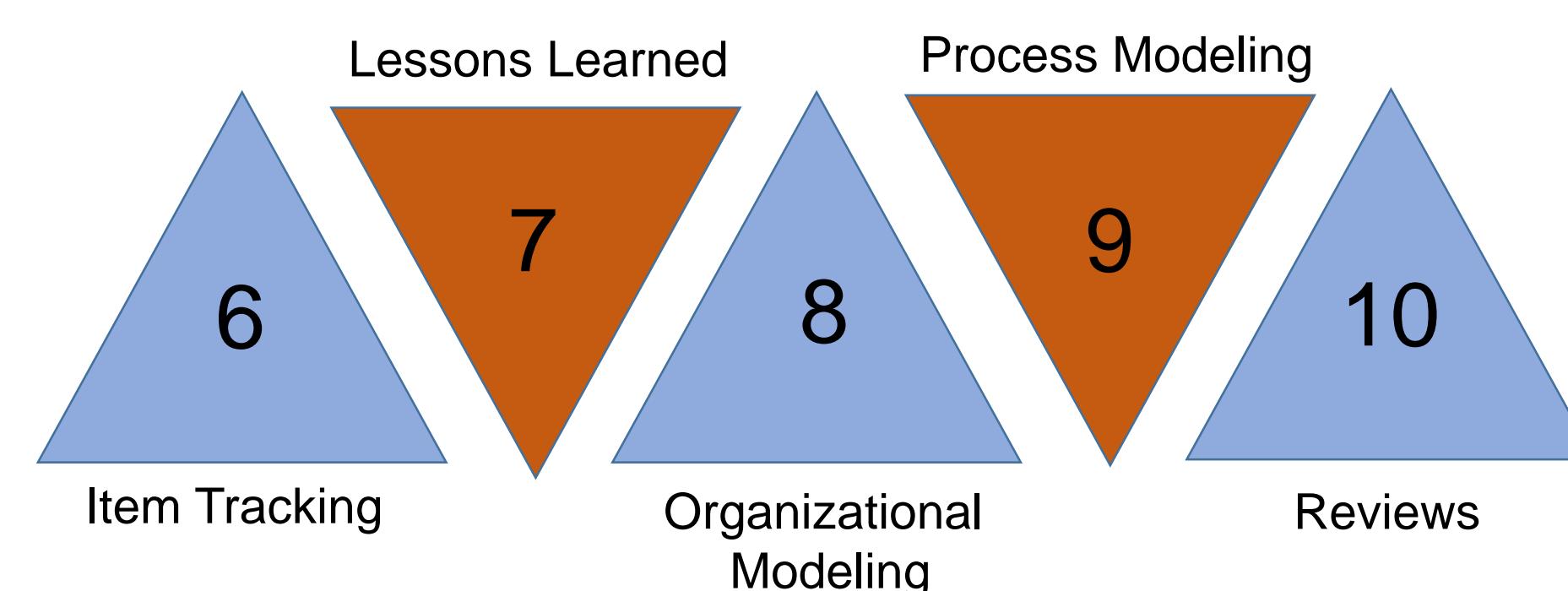
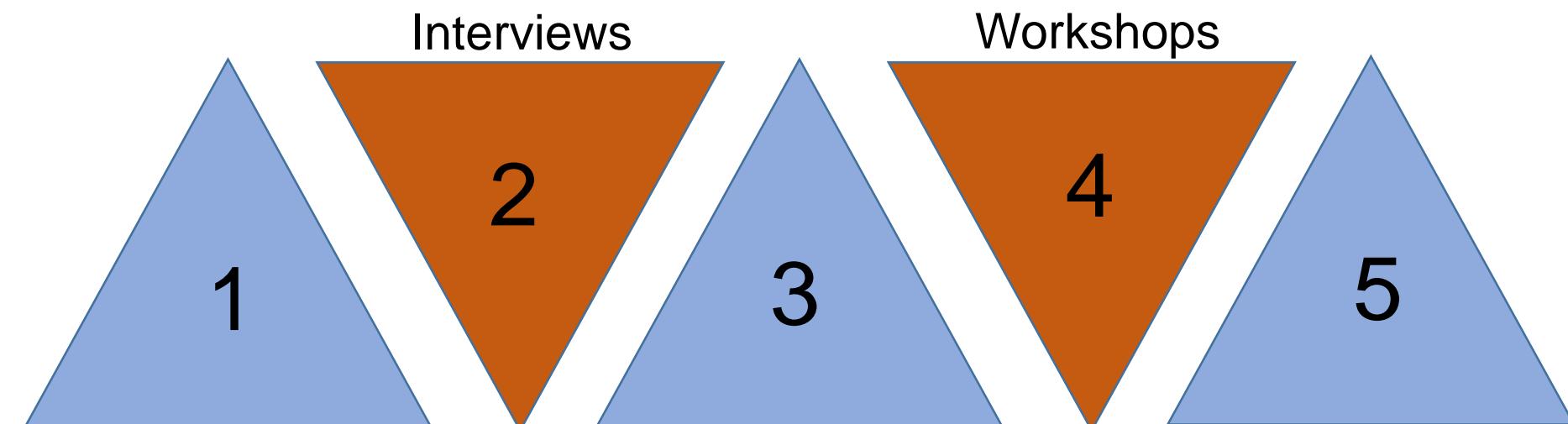
PLAN BUSINESS ANALYSIS GOVERNANCE

GUIDELINES AND TOOLS



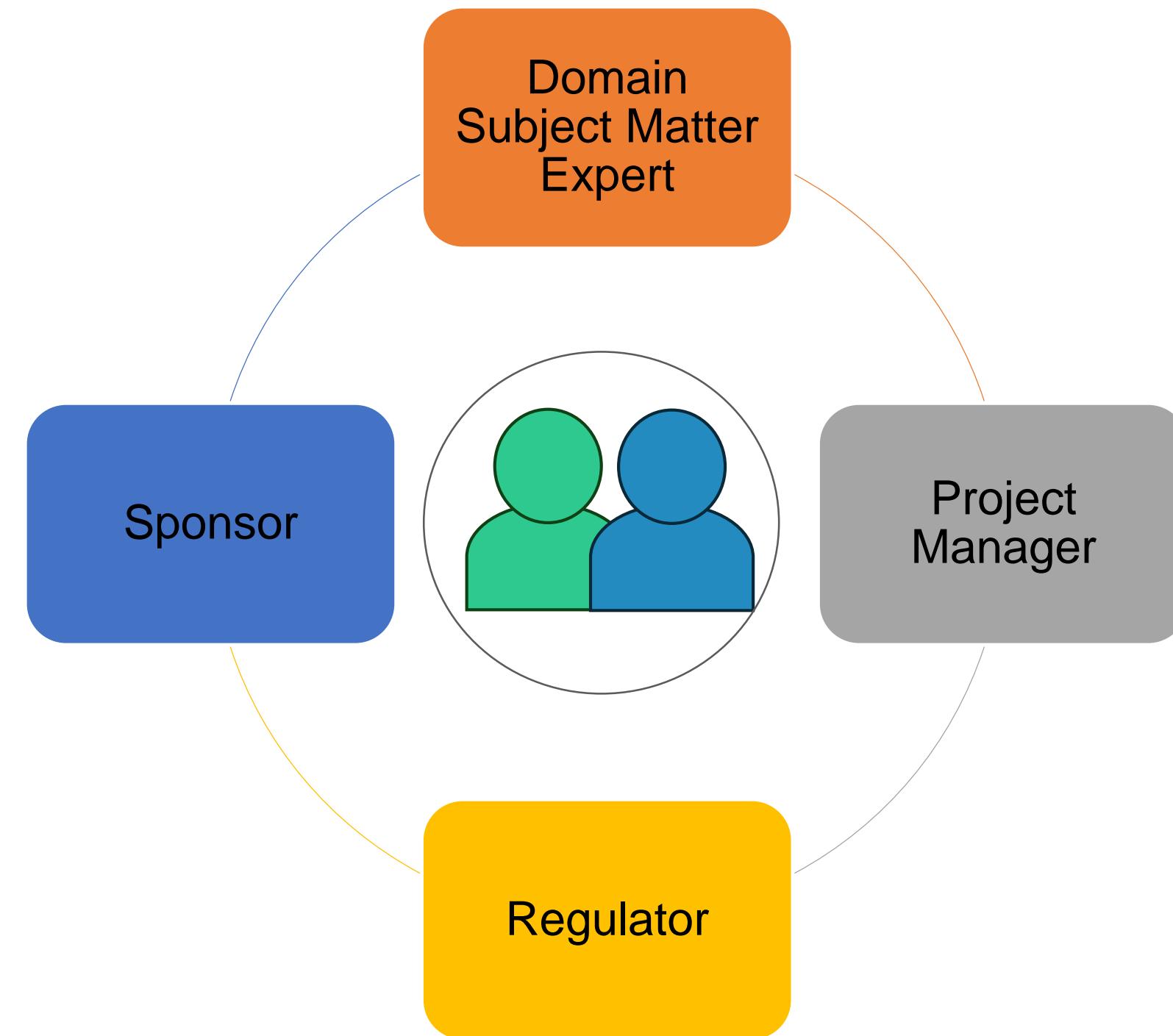
PLAN BUSINESS ANALYSIS GOVERNANCE

TECHNIQUES



PLAN BUSINESS ANALYSIS GOVERNANCE

STAKEHOLDERS



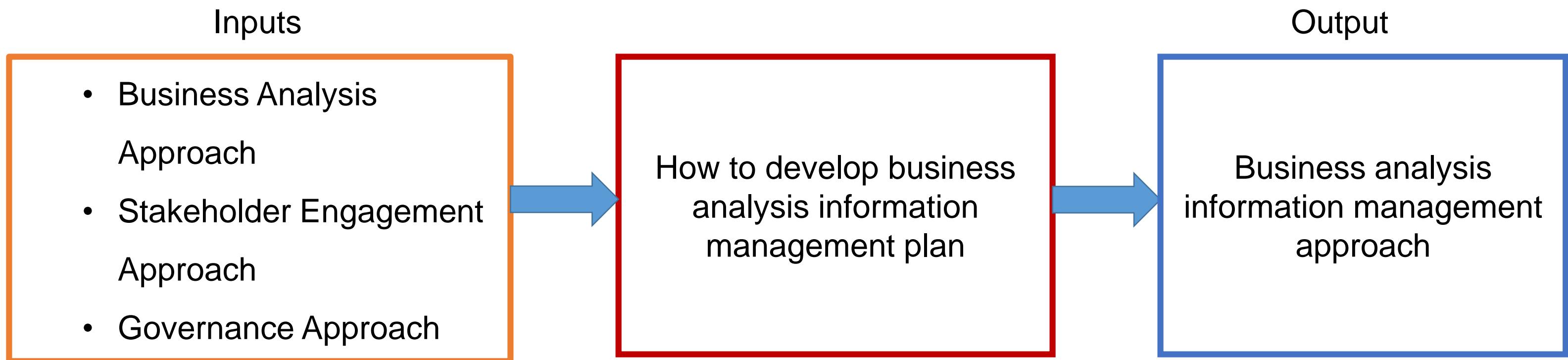
Lesson 3: Business Analysis Planning and Monitoring

Topic 3.4: Plan Business Analysis Information Management

✓ *Storing and accessing business analysis information*

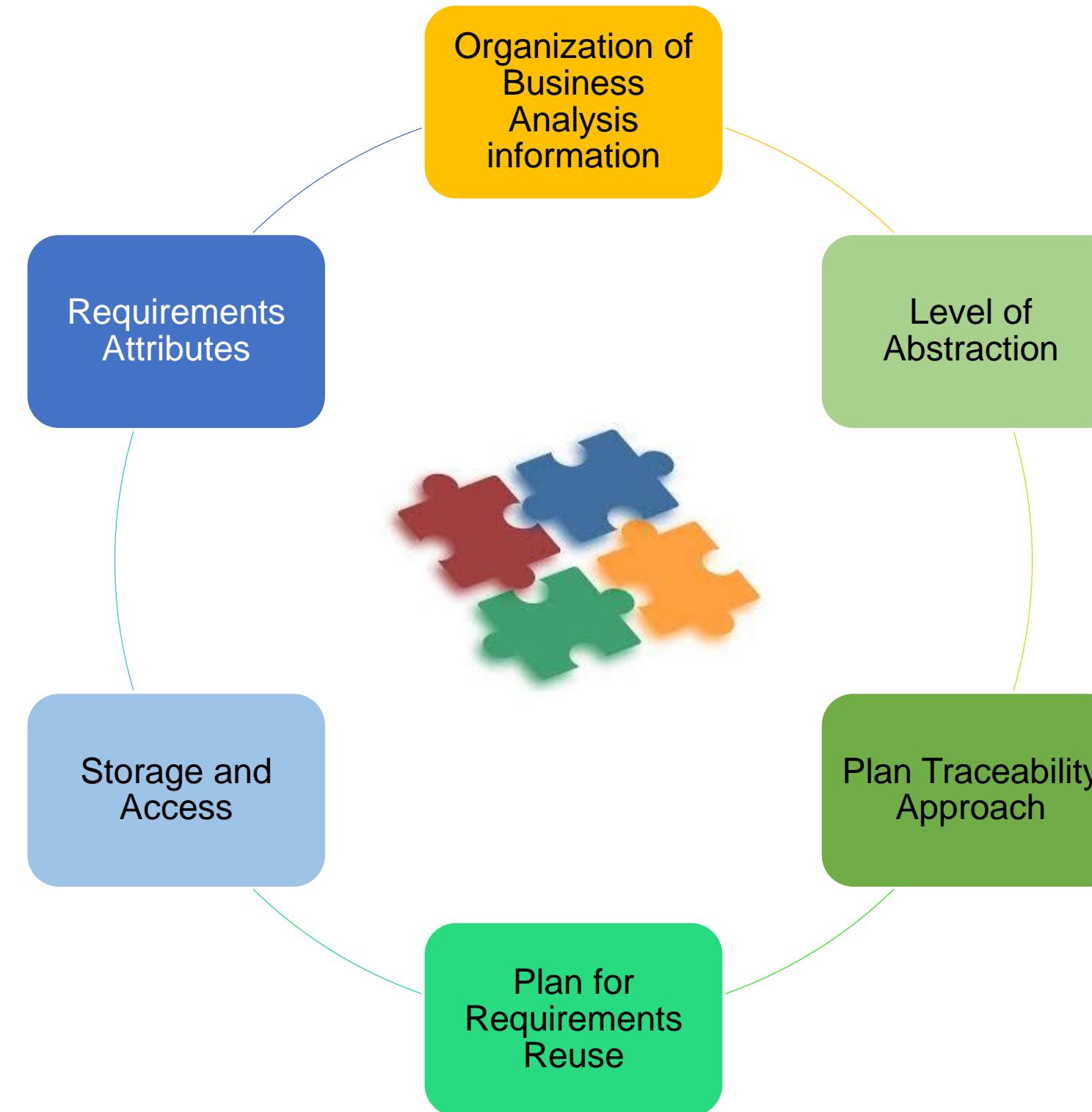
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

PURPOSE



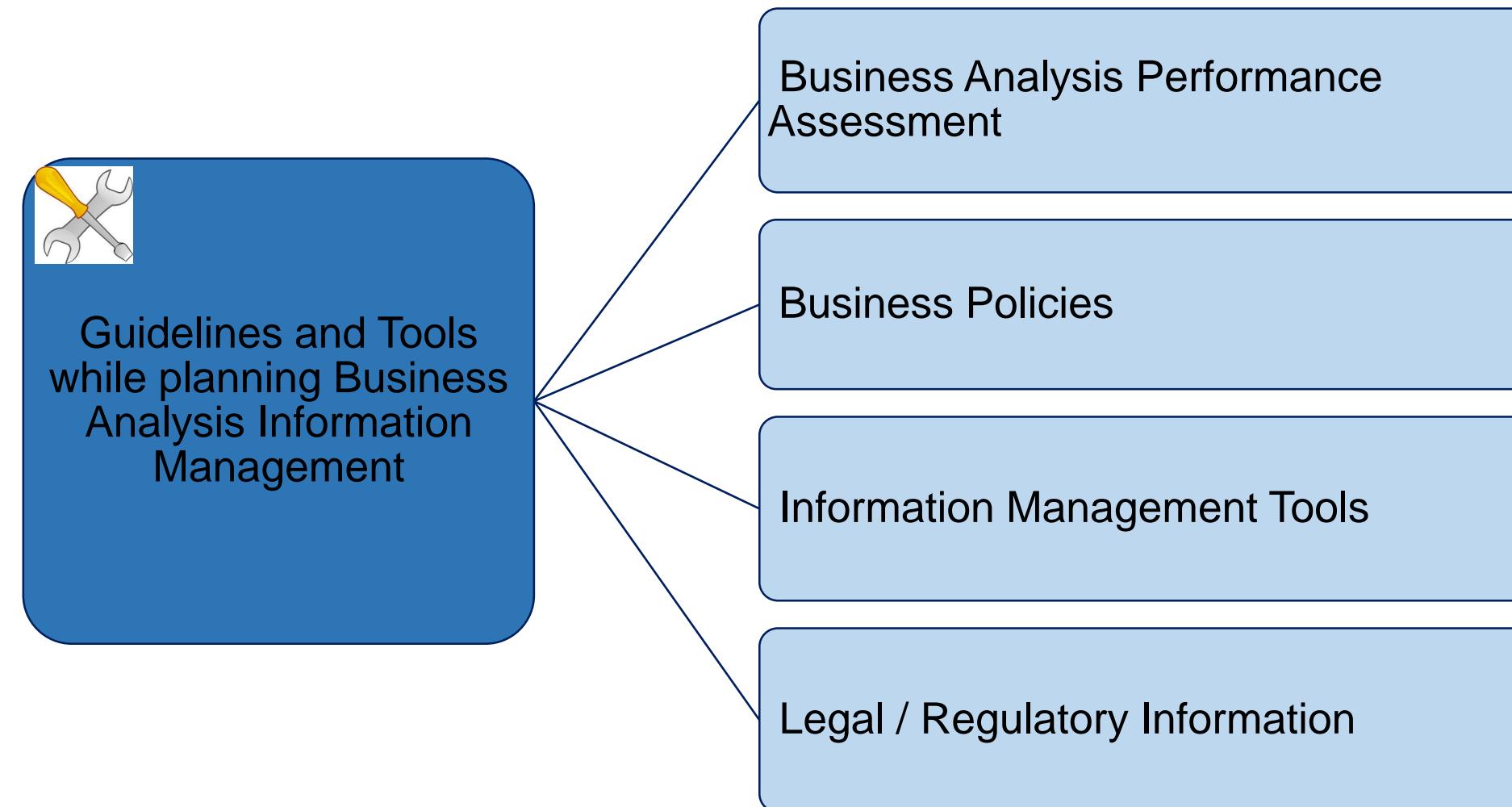
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

ELEMENTS



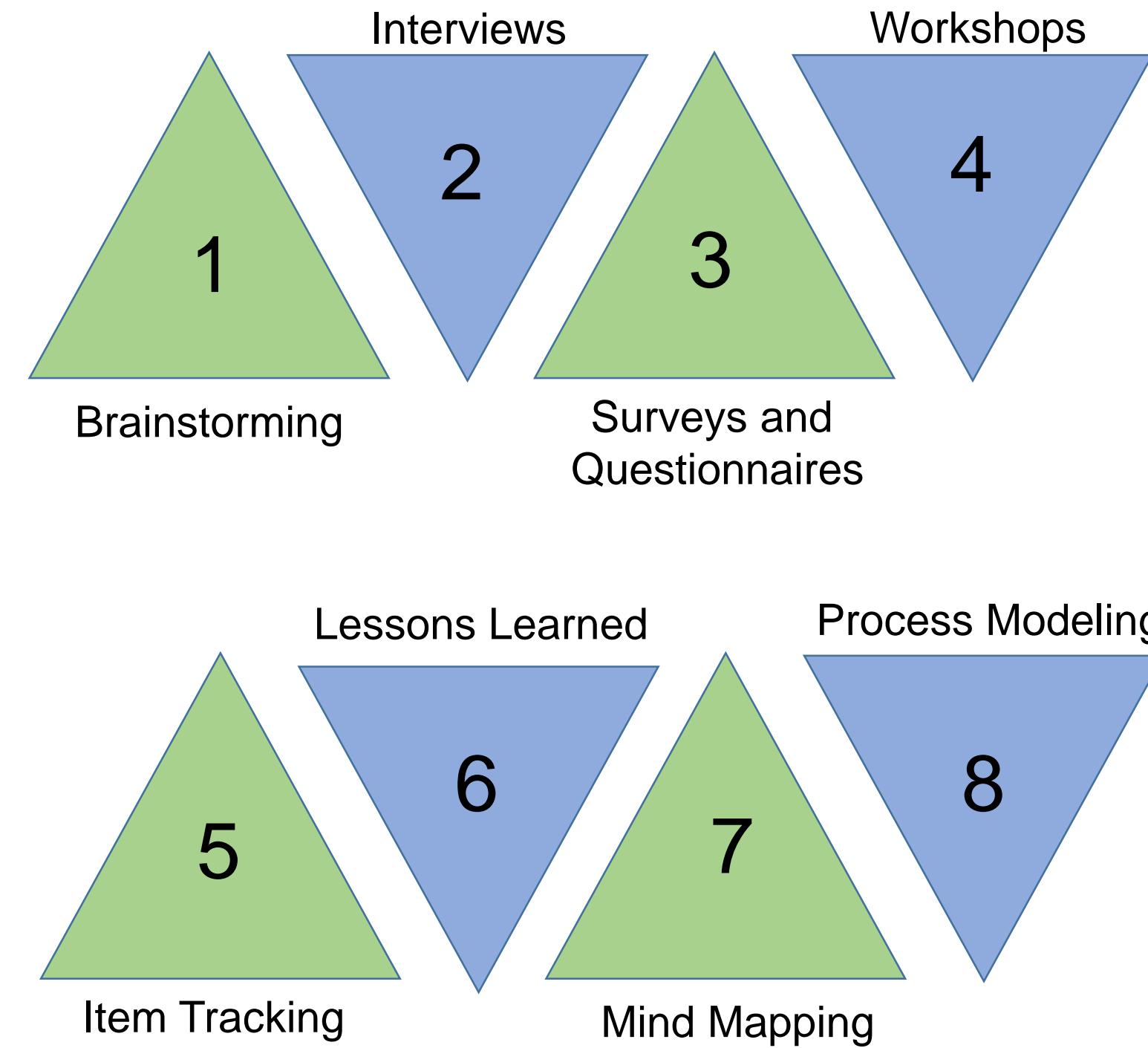
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

GUIDELINES AND TOOLS



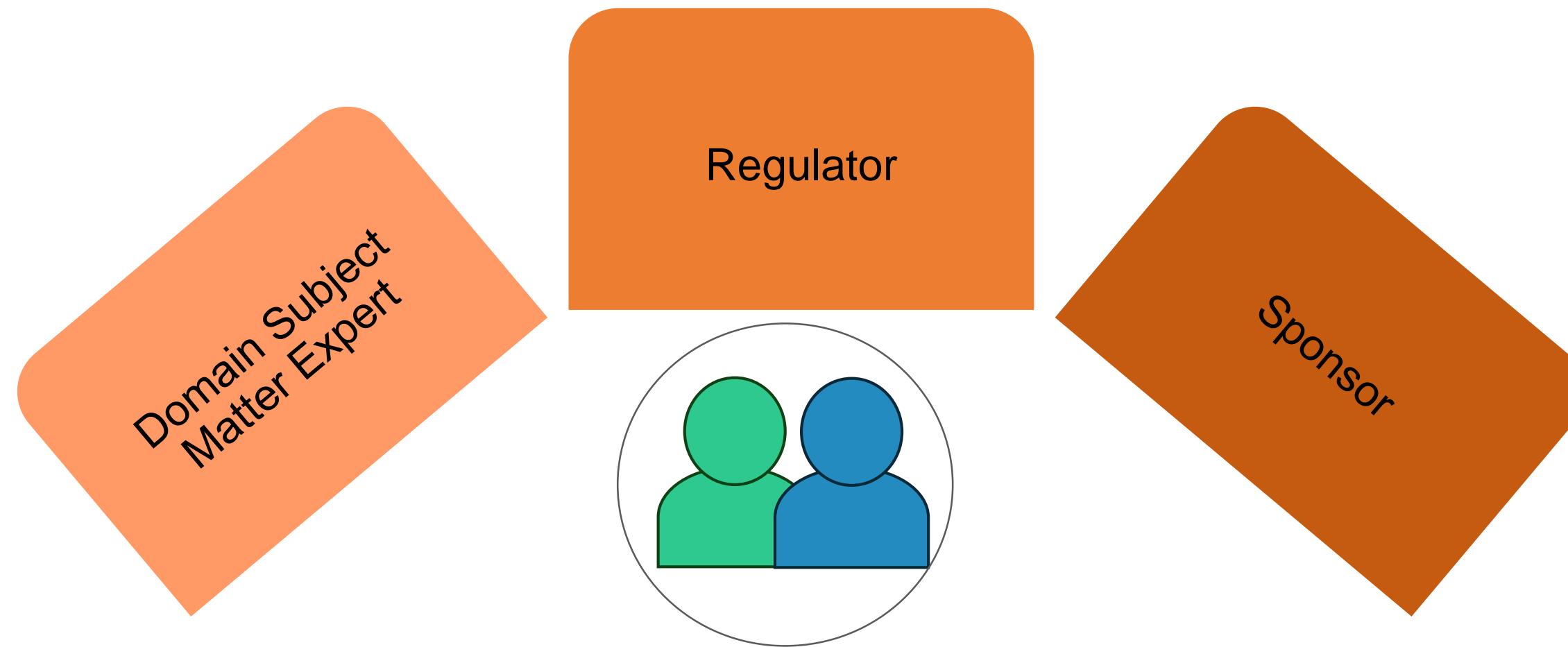
PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

TECHNIQUES



PLAN BUSINESS ANALYSIS INFORMATION MANAGEMENT

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**

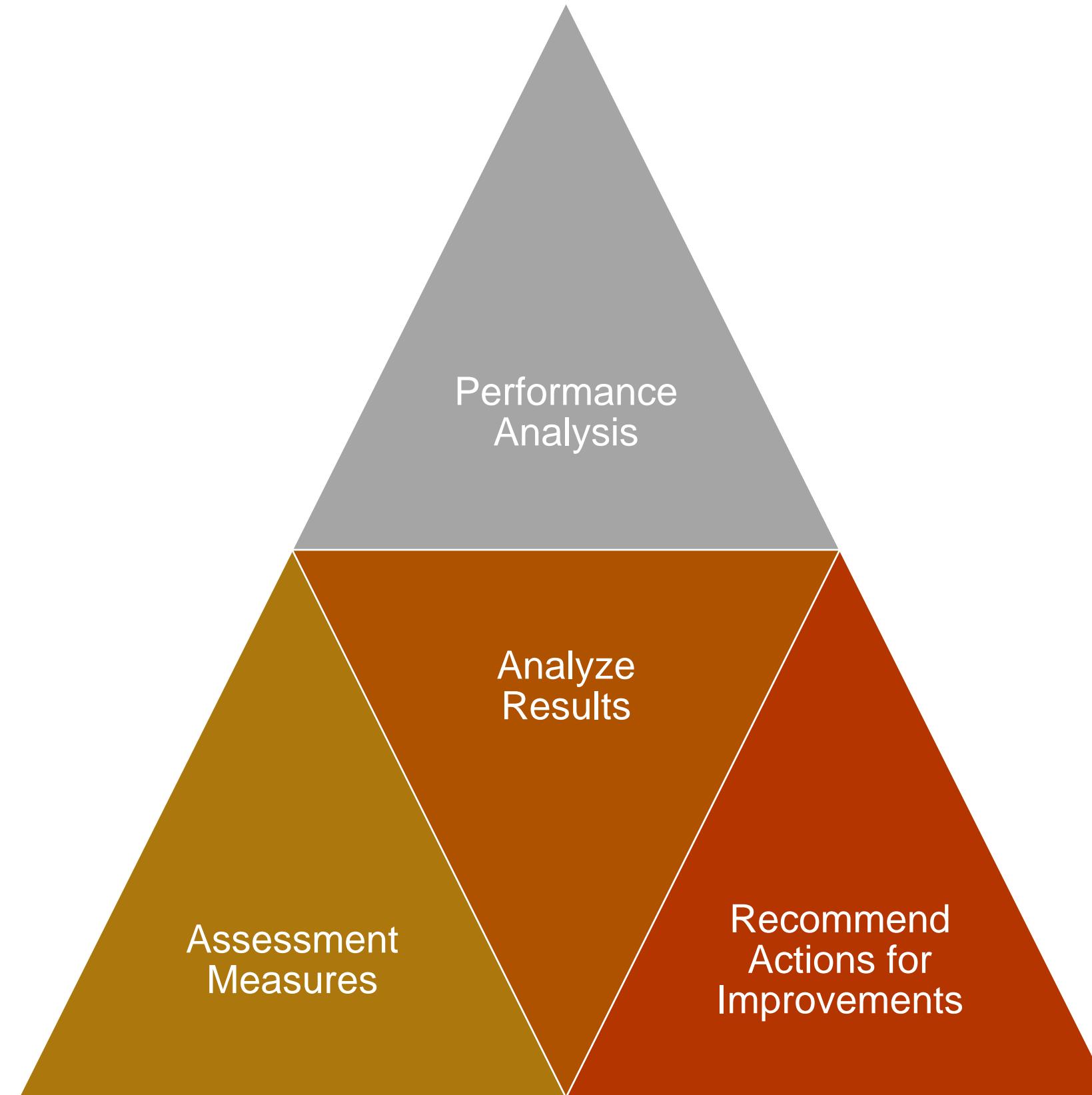
IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

PURPOSE



IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

ELEMENTS



IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

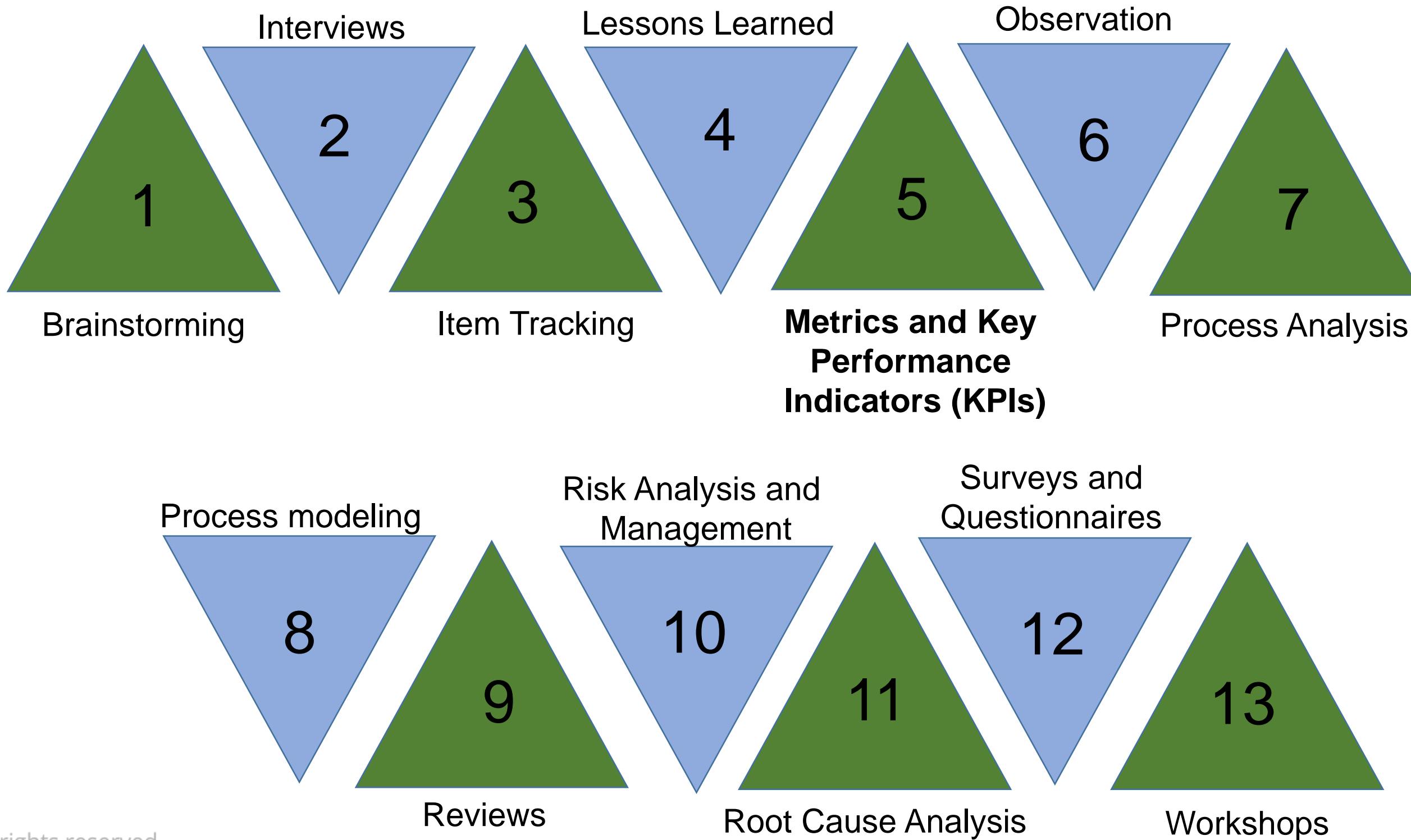
GUIDELINES AND TOOLS



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.

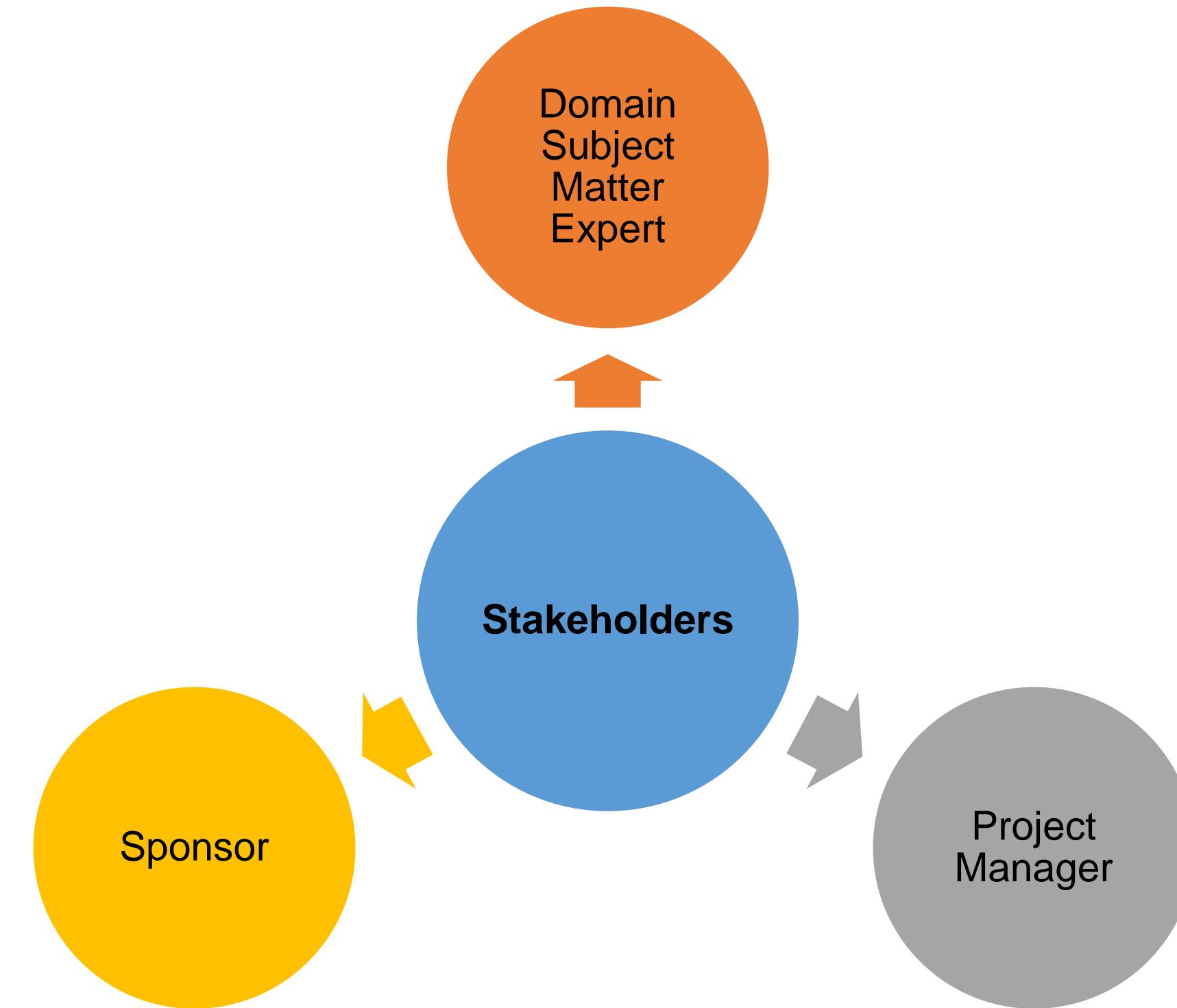
METRICS AND KEY PERFORMANCE INDICATORS (KPIs)

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

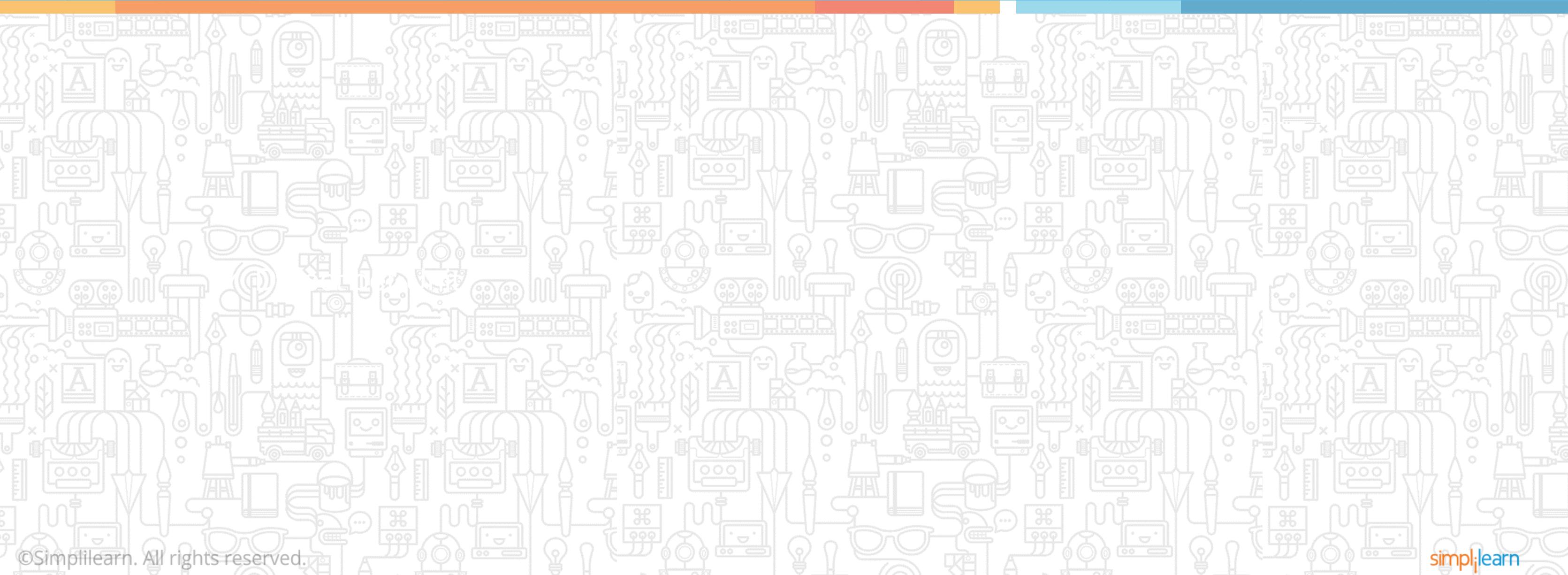
IDENTIFY BUSINESS ANALYSIS PERFORMANCE IMPROVEMENTS

STAKEHOLDERS



Lesson 3: Business Analysis Planning and Monitoring

CASE STUDY EXERCISE



CASE STUDY

OVERVIEW



BATONICS
Pharma Company

Unable to
deliver products
on time

Customers switching
to competitor
products

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

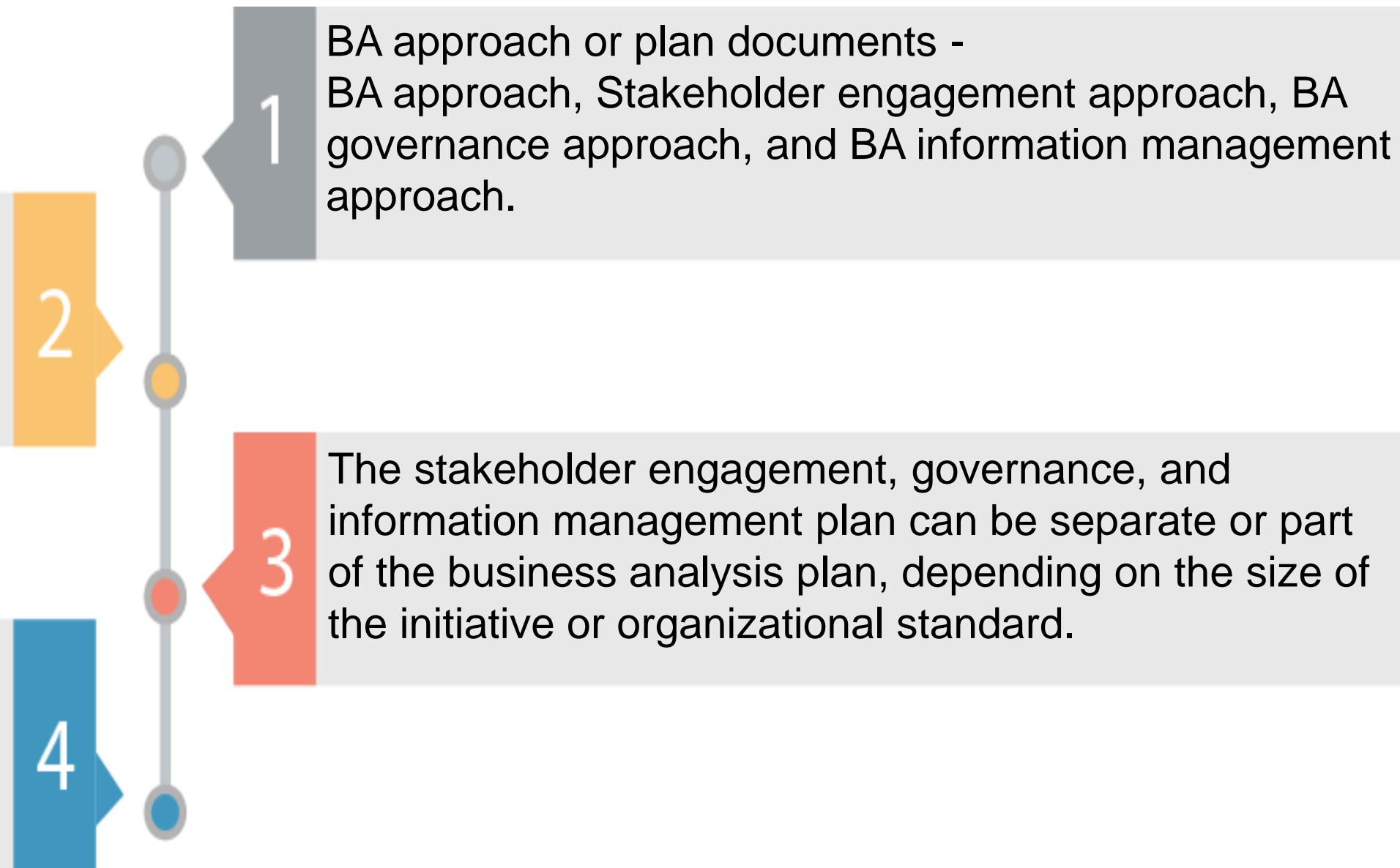


The correct answer is **d**

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)

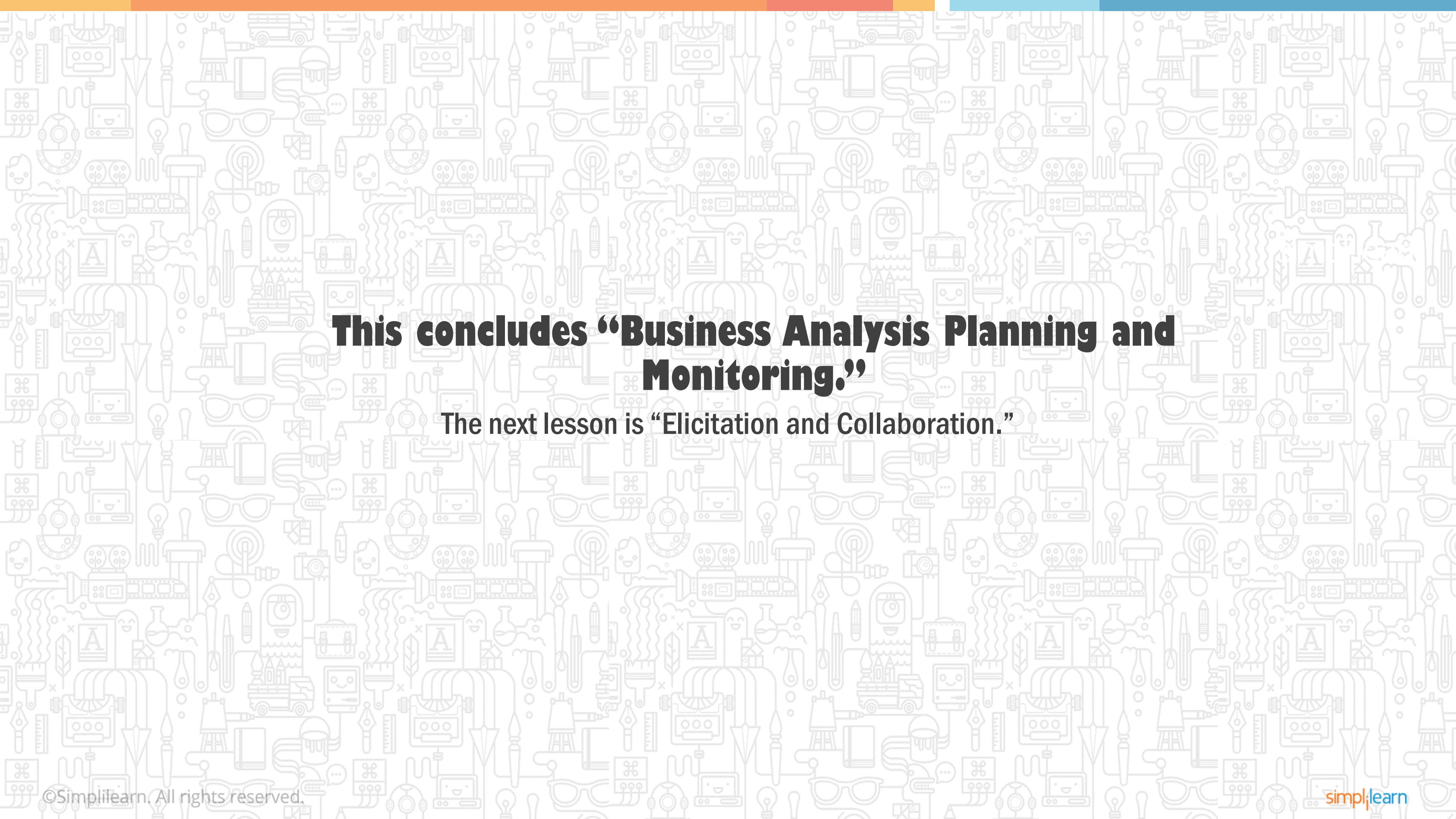
Business Analysis approach or plan is developed based on need, methodology, complexity, size and risk.



KEY TAKEAWAYS (contd.)

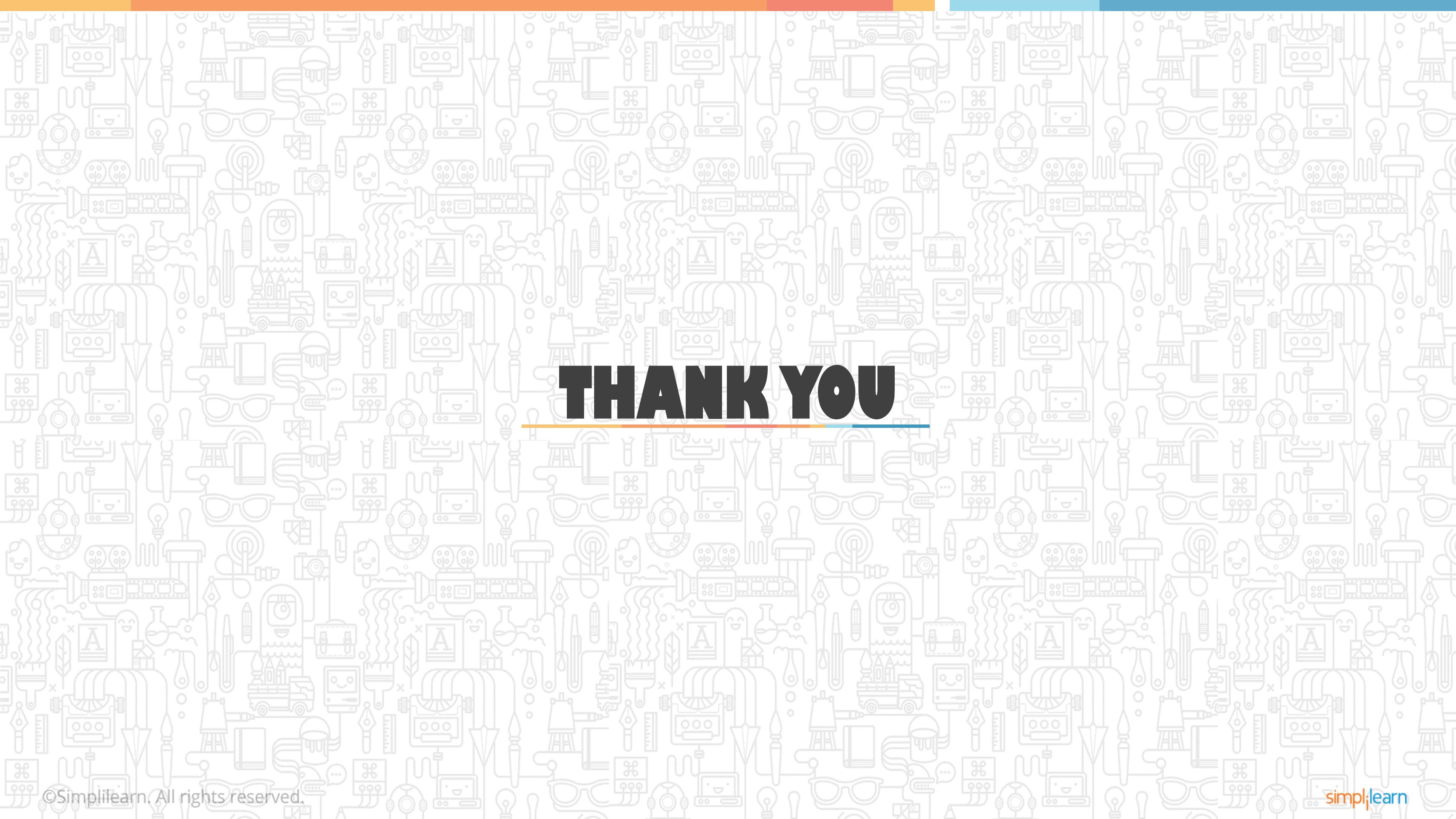
Performance baseline, metrics and KPIs, and the process of monitoring and evaluation are defined to improve performance of business analysis work.





This concludes “Business Analysis Planning and Monitoring.”

The next lesson is “Elicitation and Collaboration.”



THANK YOU

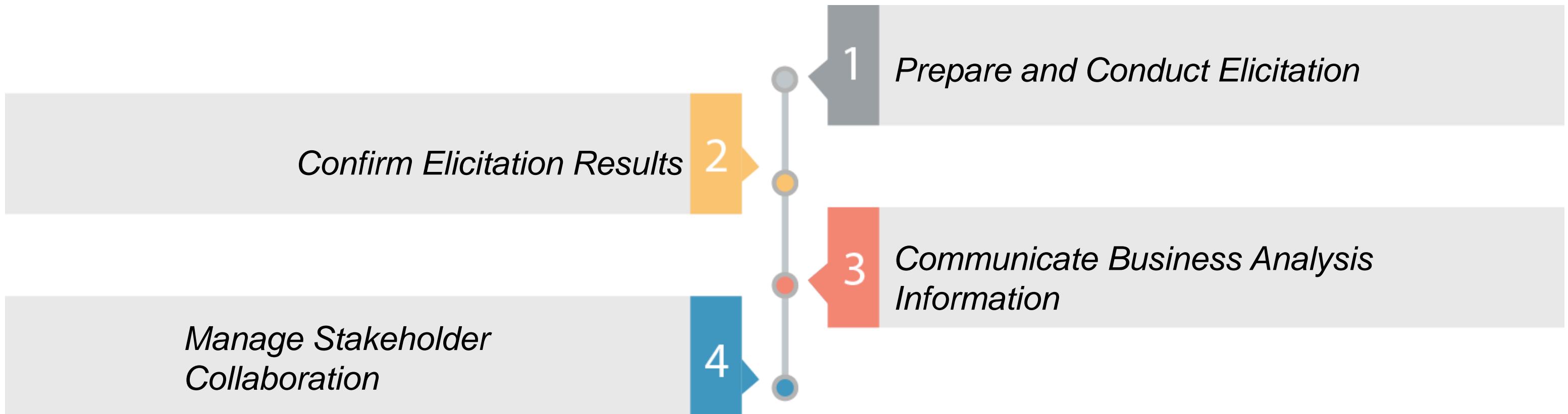
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Lesson 4 - Elicitation and Collaboration



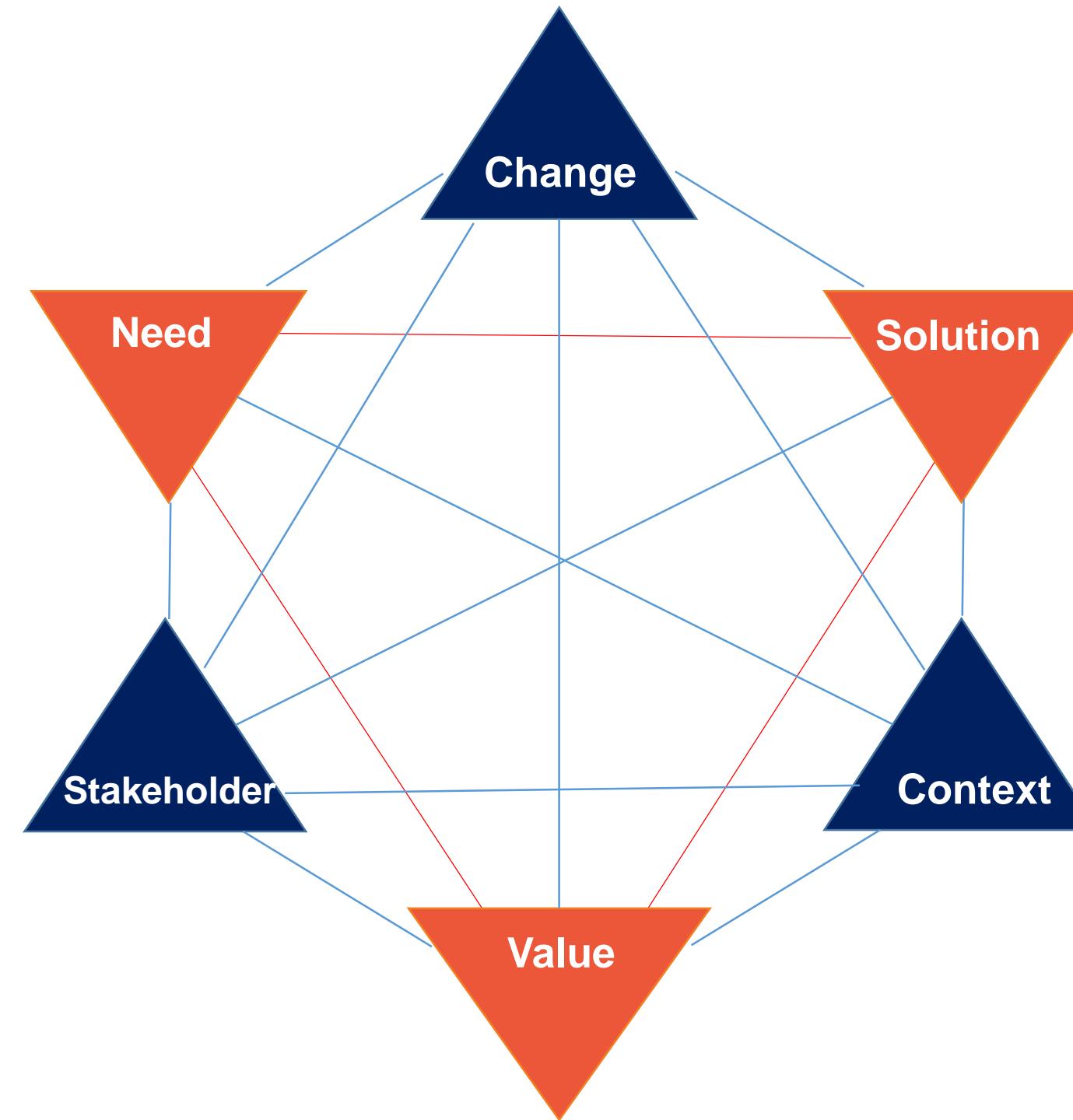
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WHAT'S IN IT FOR ME



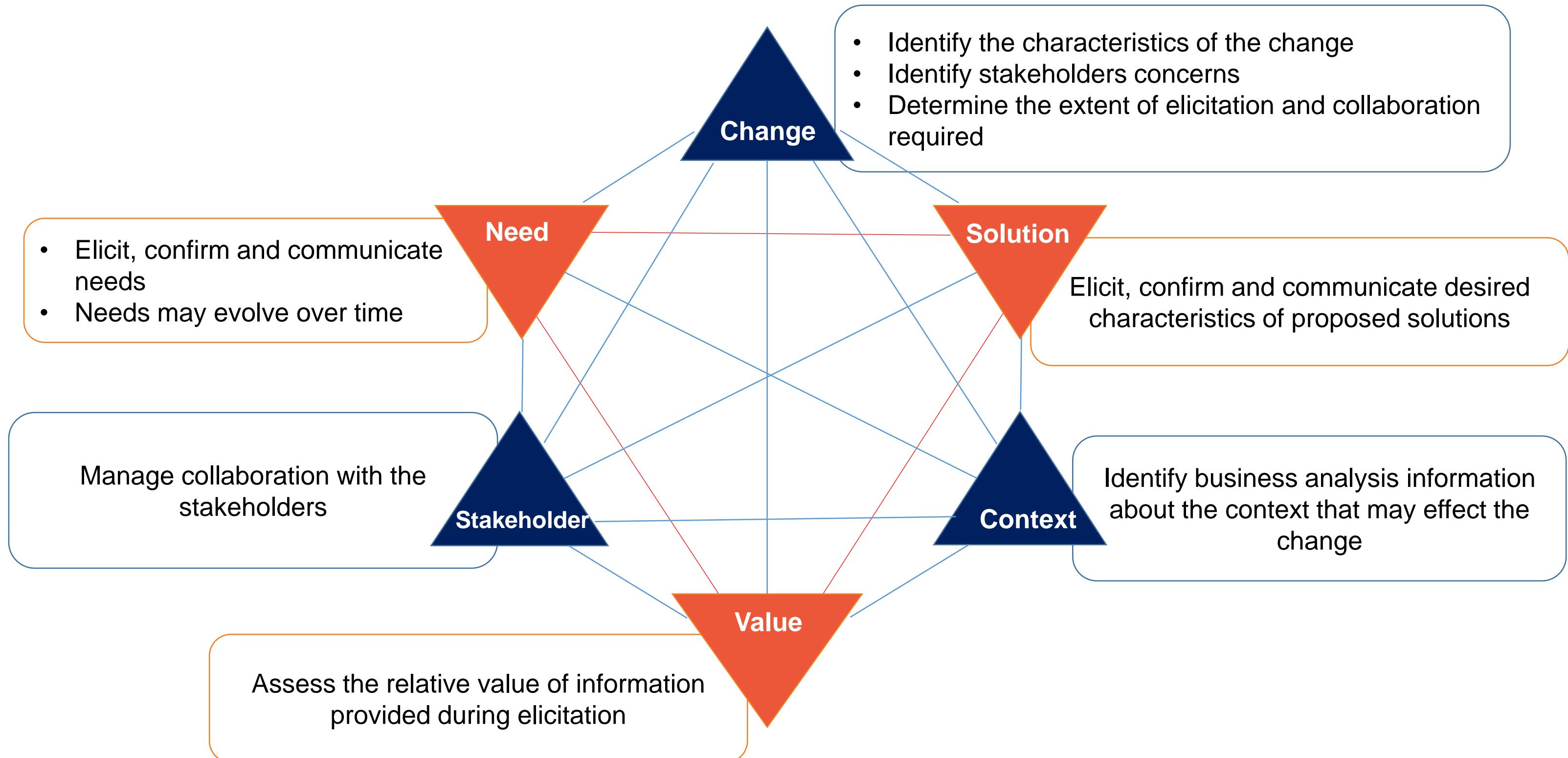
ELICITATION AND COLLABORATION KNOWLEDGE AREA

OVERVIEW



ELICITATION AND COLLABORATION KNOWLEDGE AREA (contd.)

OVERVIEW



ELICITATION AND COLLABORATION KNOWLEDGE AREA

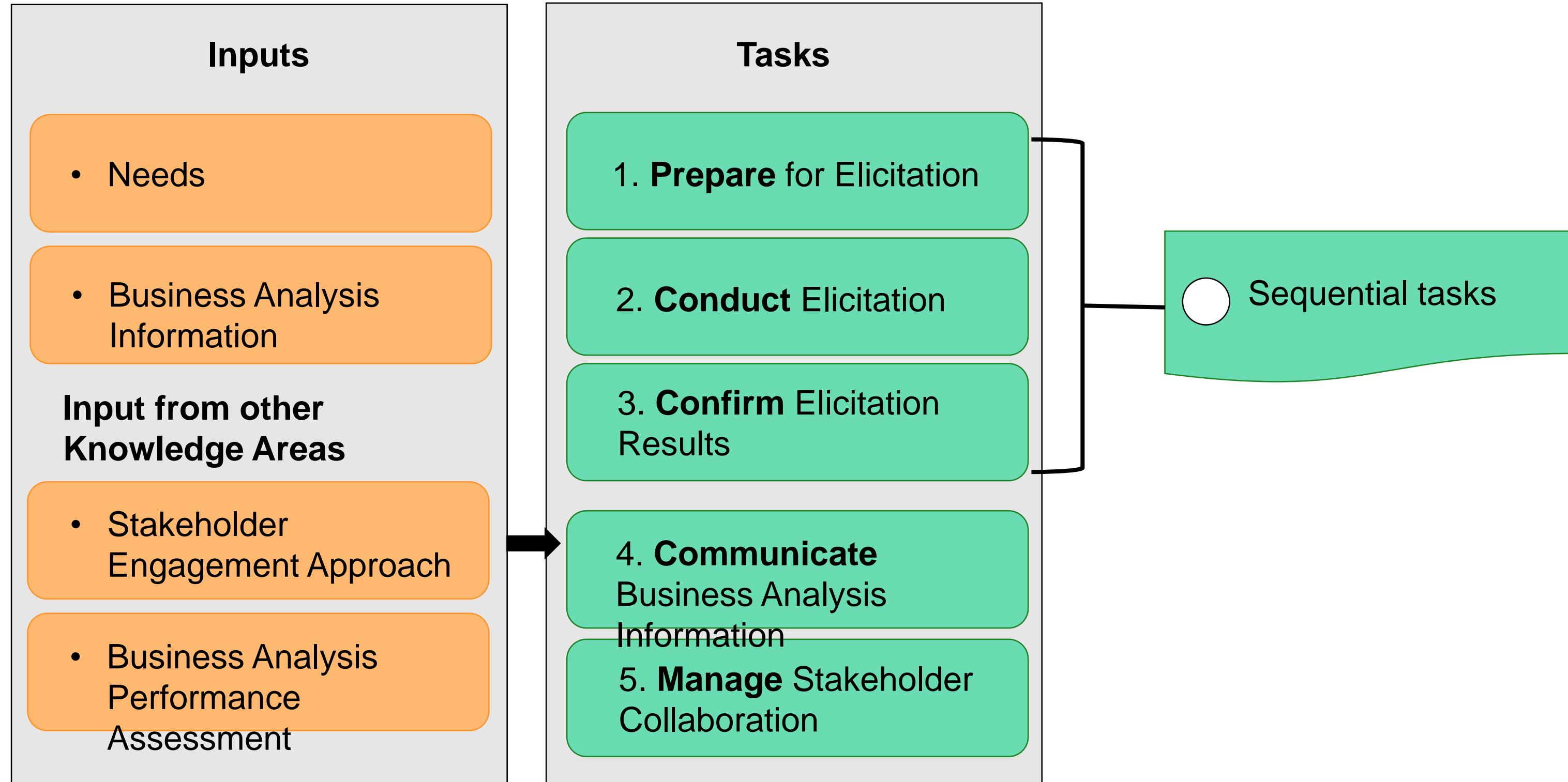
TASKS AND OUTPUT

Tasks

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

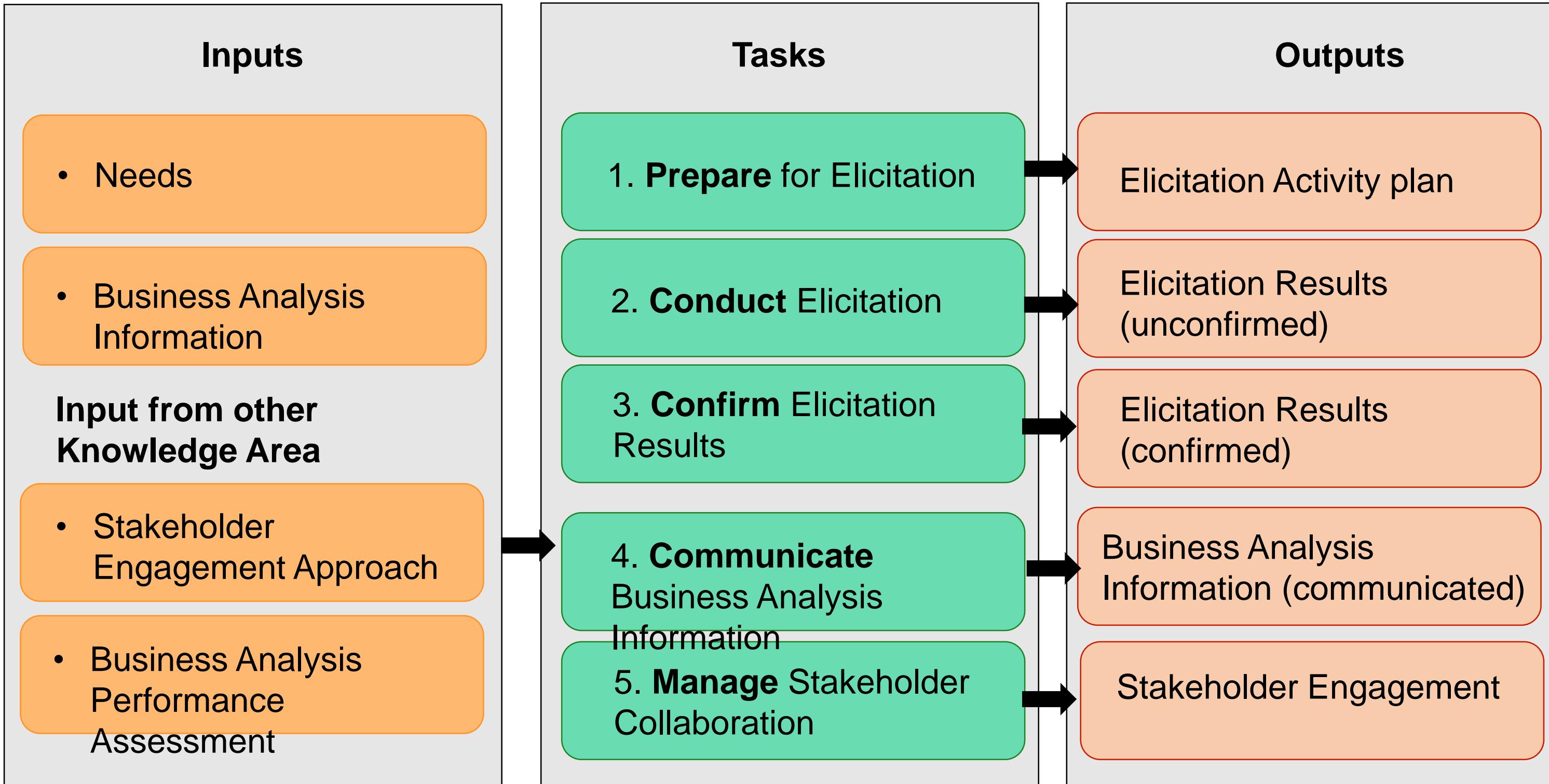
ELICITATION AND COLLABORATION KNOWLEDGE AREA (contd.)

TASKS AND OUTPUT



ELICITATION AND COLLABORATION KNOWLEDGE AREA (contd.)

TASKS AND OUTPUT



Lesson 4: Elicitation and Collaboration

Topic 4.1: Prepare for Elicitation

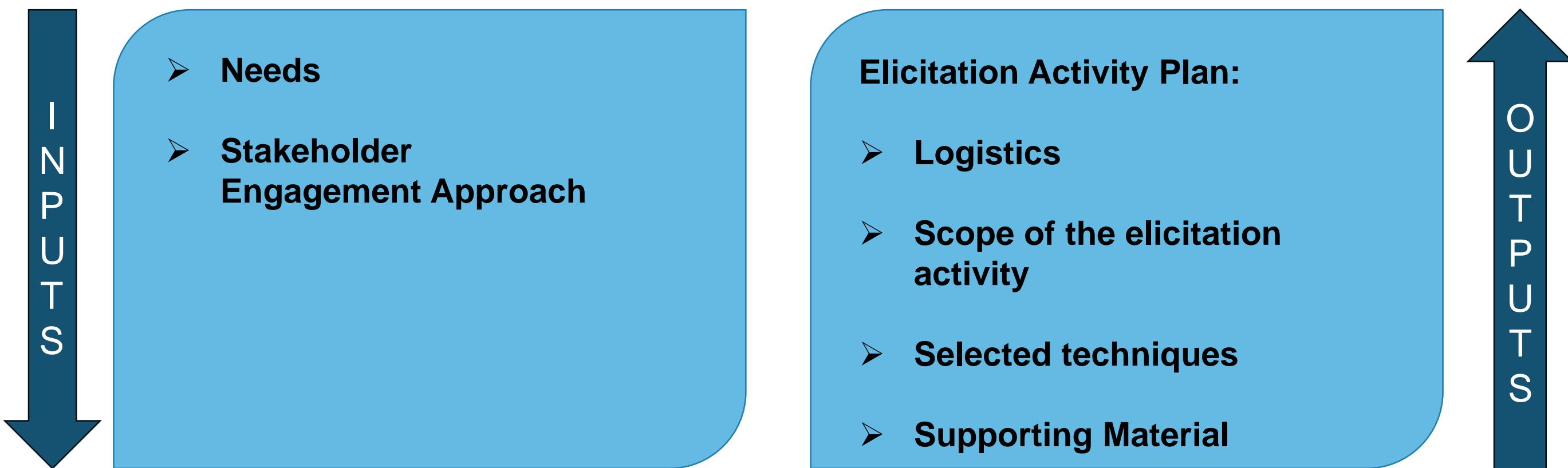
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

PREPARE FOR ELICITATION

OVERVIEW

Purpose

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



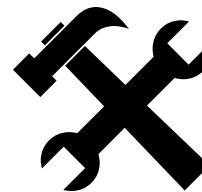
PREPARE FOR ELICITATION

ELEMENTS

Understand Scope



Select Technique



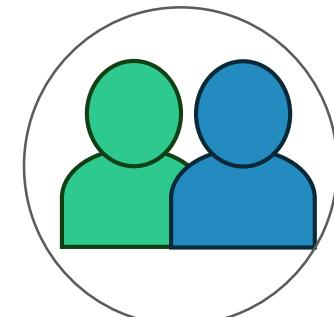
Set up Logistics



Secure Supporting Material

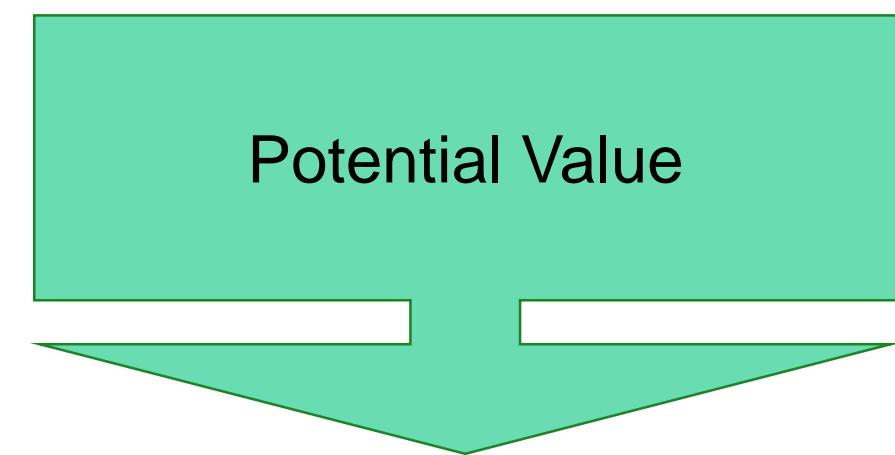
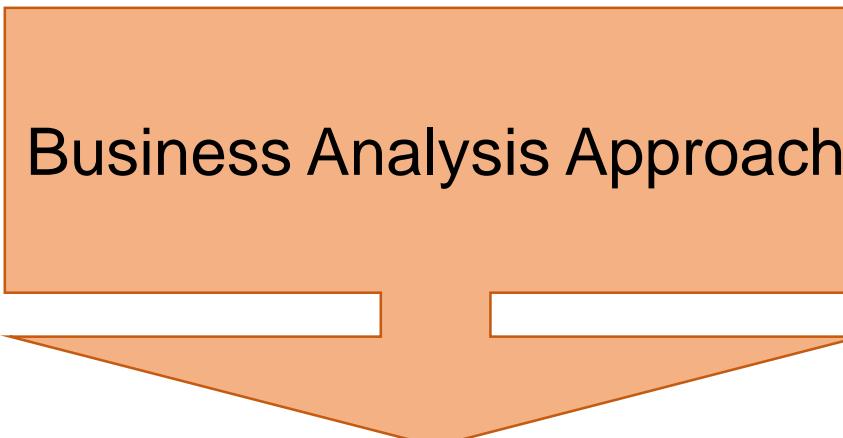


Prepare Stakeholders



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

Data Mining

Brainstorming

Estimation

Mind Mapping

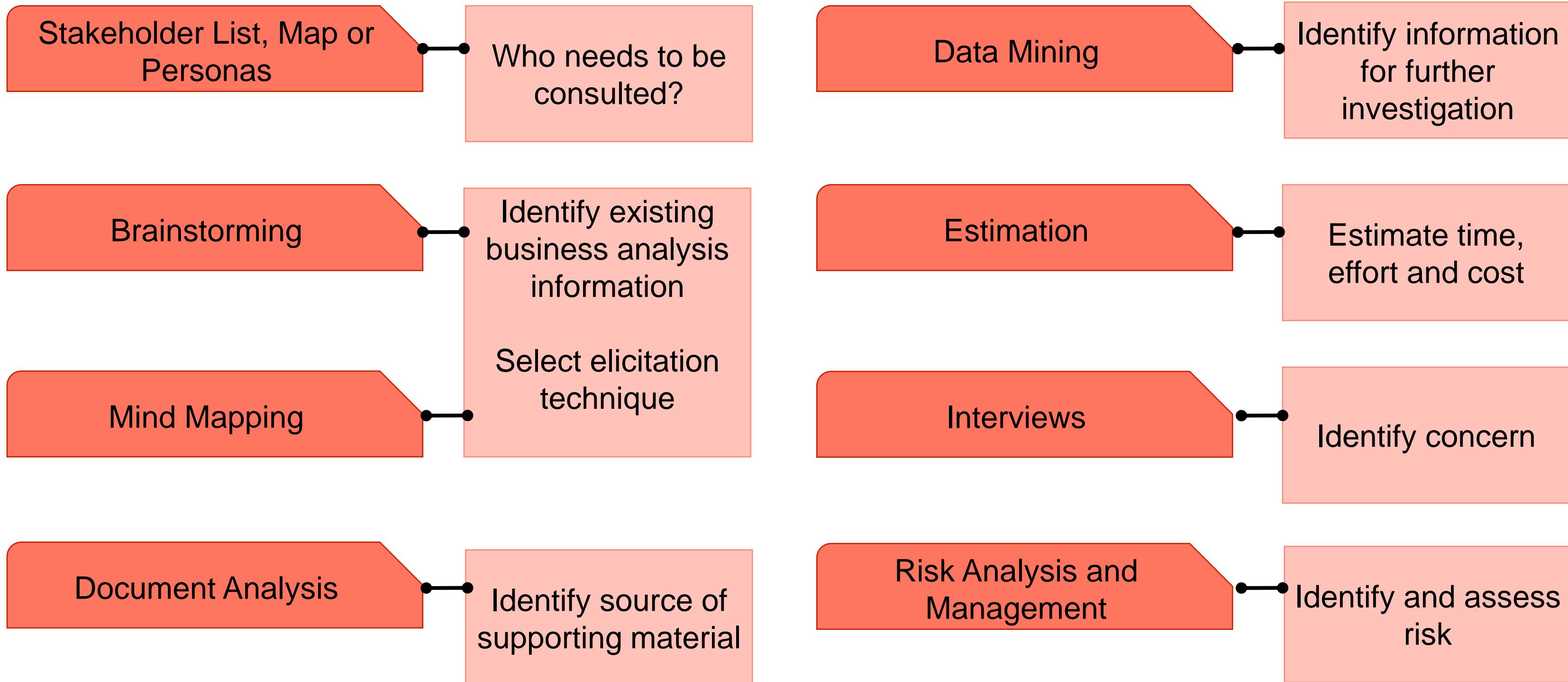
Interviews

Document Analysis

Risk Analysis and Management

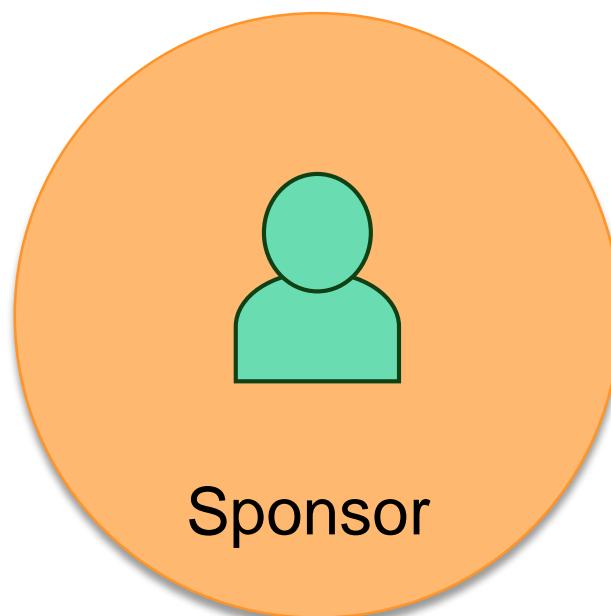
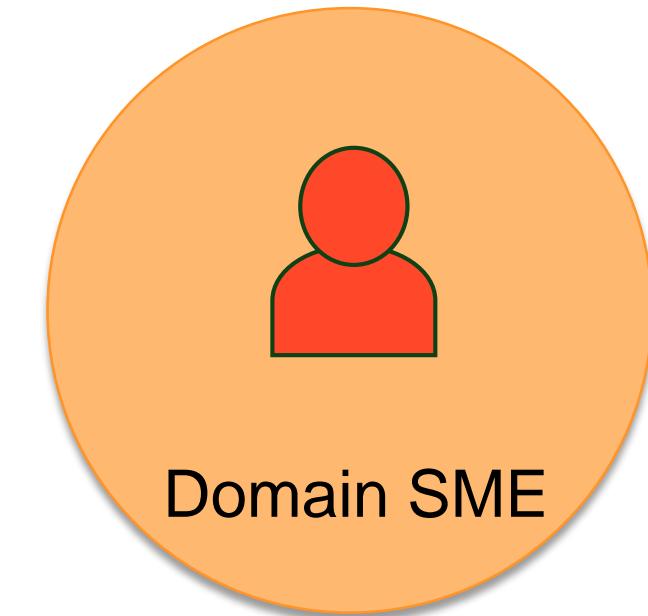
PREPARE FOR ELICITATION (contd.)

TECHNIQUES



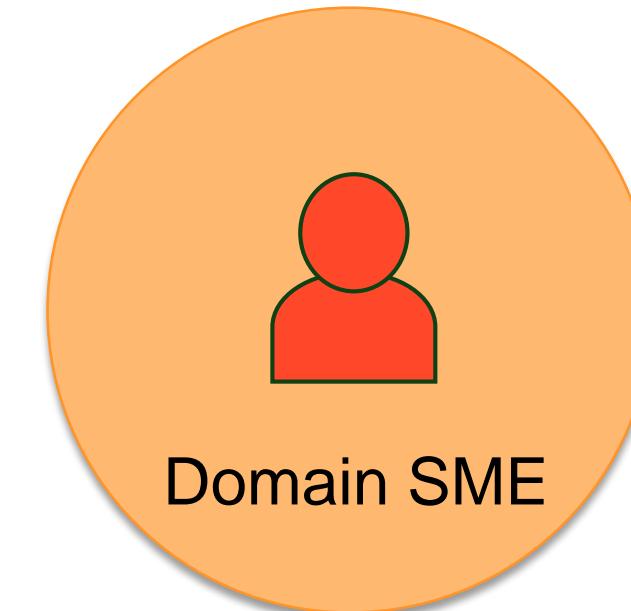
PREPARE FOR ELICITATION

STAKEHOLDERS



PREPARE FOR ELICITATION (contd.)

STAKEHOLDERS



Domain SME

Provides supporting material and guidance.

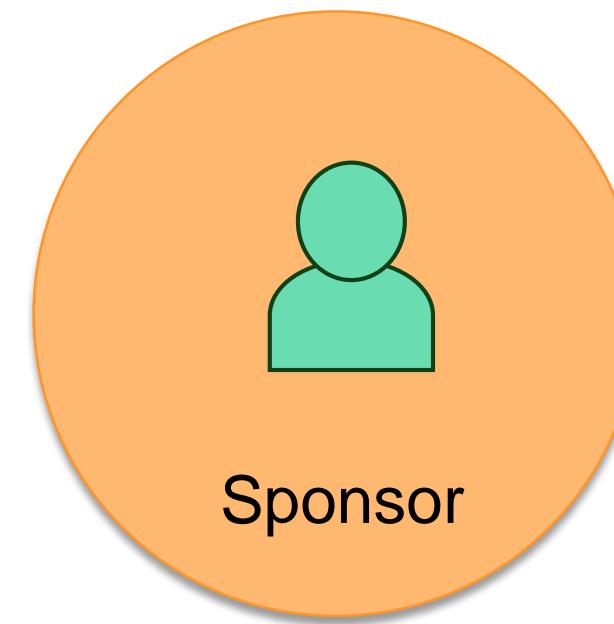


Project Manager

Ensures the appropriate people and resources are available



Business Analyst



Sponsor

Approves or denies a planned elicitation event

Lesson 4: Elicitation and Collaboration

Topic 4.2: Conduct Elicitation

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

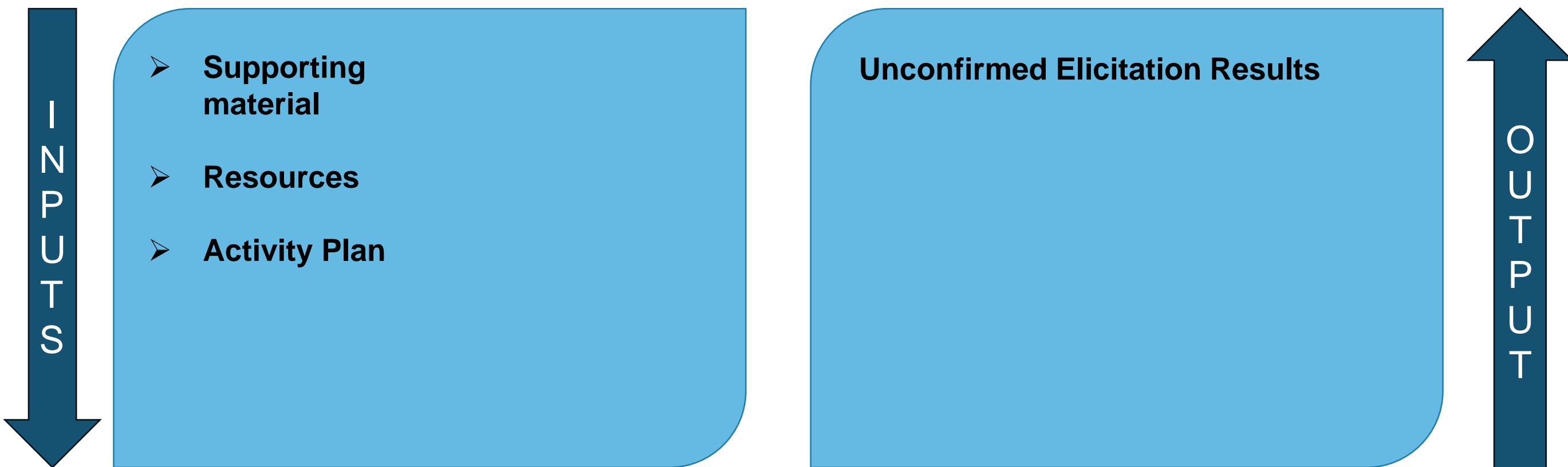
CONDUCT ELICITATION

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



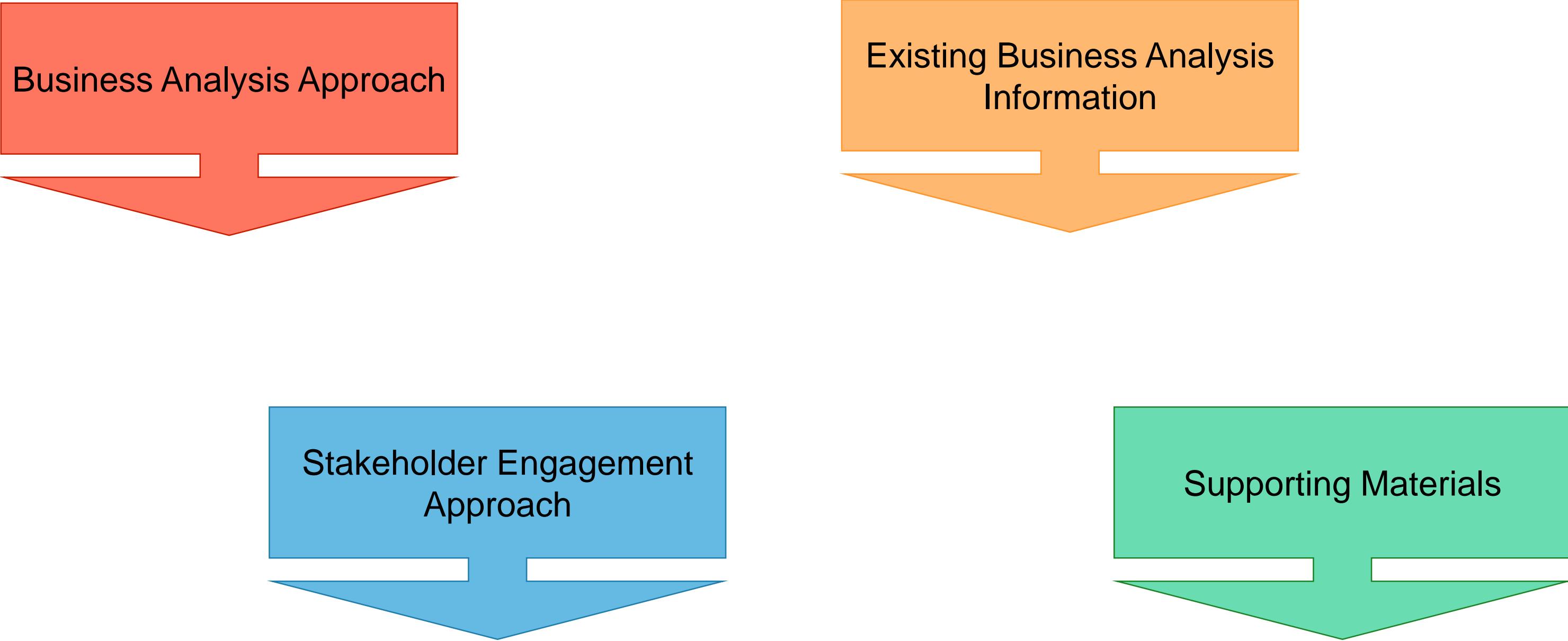
Capture elicitation results



Engage someone else to scribe

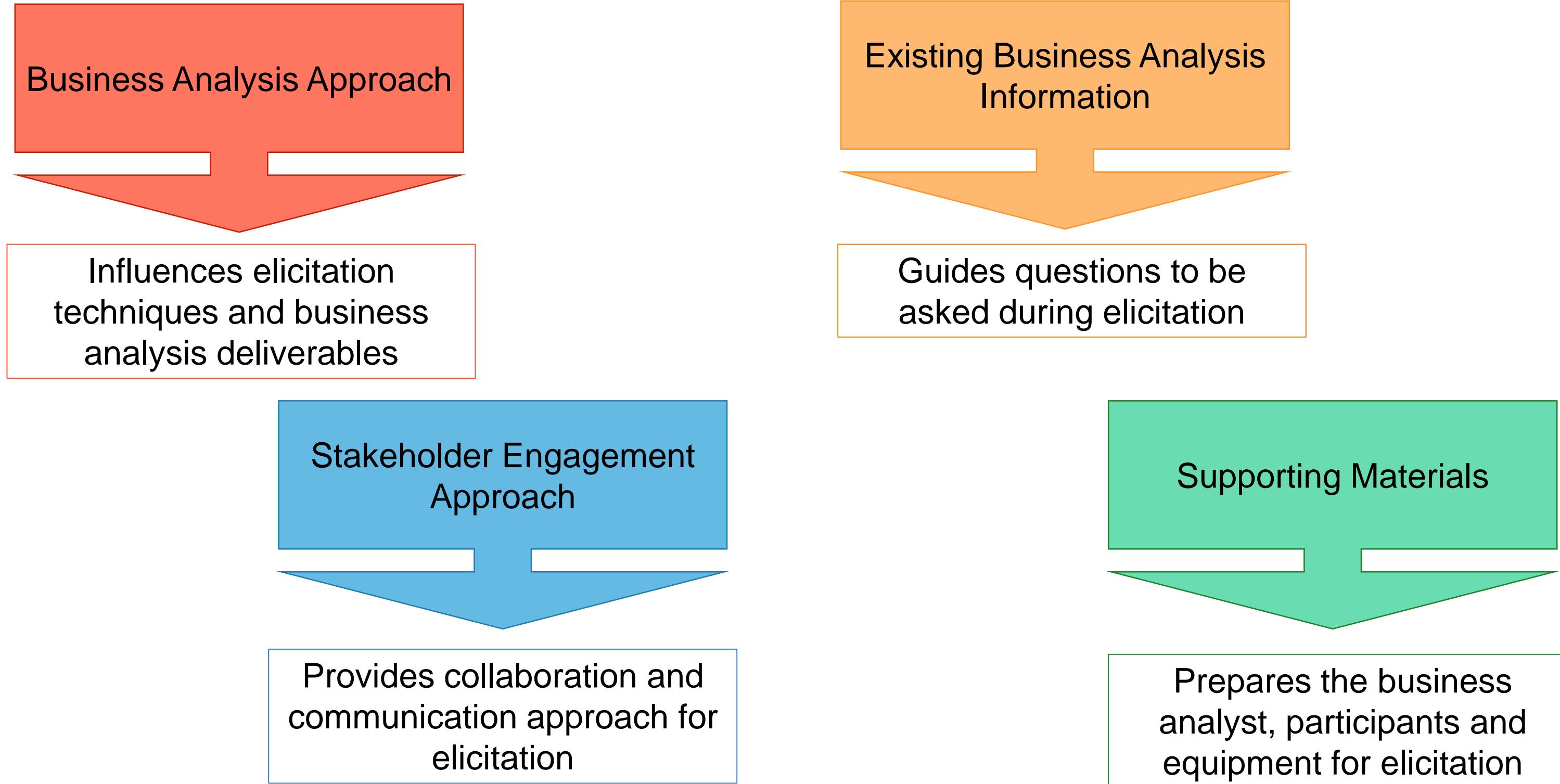
CONDUCT ELICITATION

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

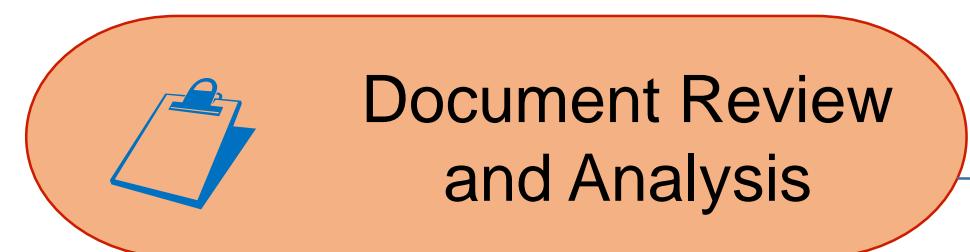
CONDUCT ELICITATION

DOCUMENT ANALYSIS - ELEMENTS



Source document:

- Relevant, current and has data or information required



Source document:

- Detailed review and recording notes
- Identify conflicting or duplicated notes



- Appropriate level of detail
- Present information to improve understanding

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

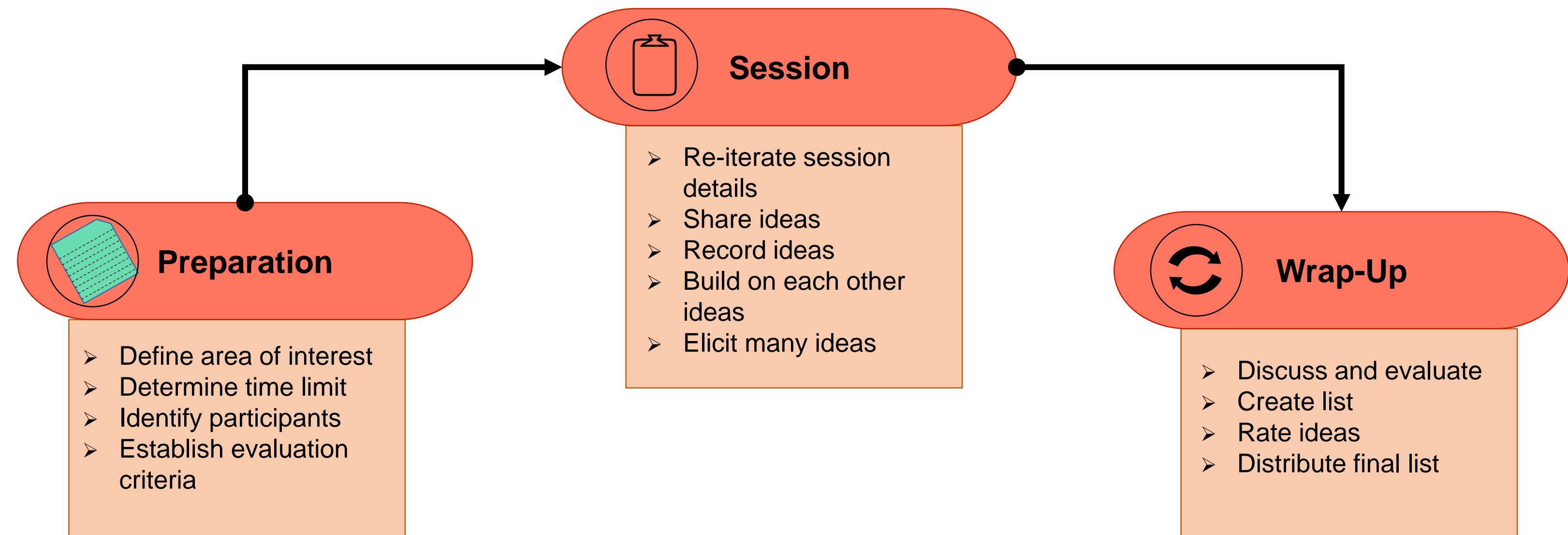
Limitations



- 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

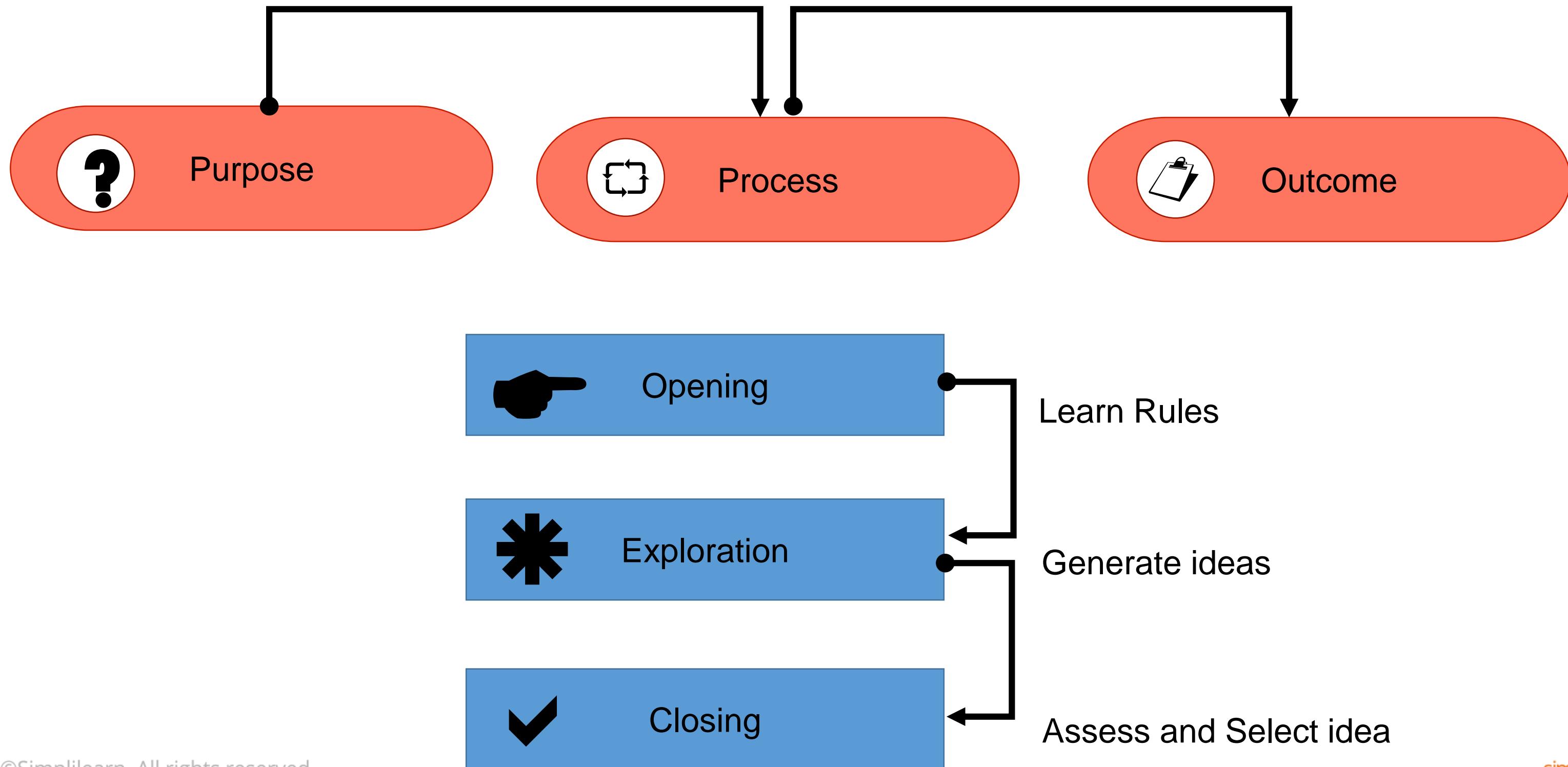
Limitations



- 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

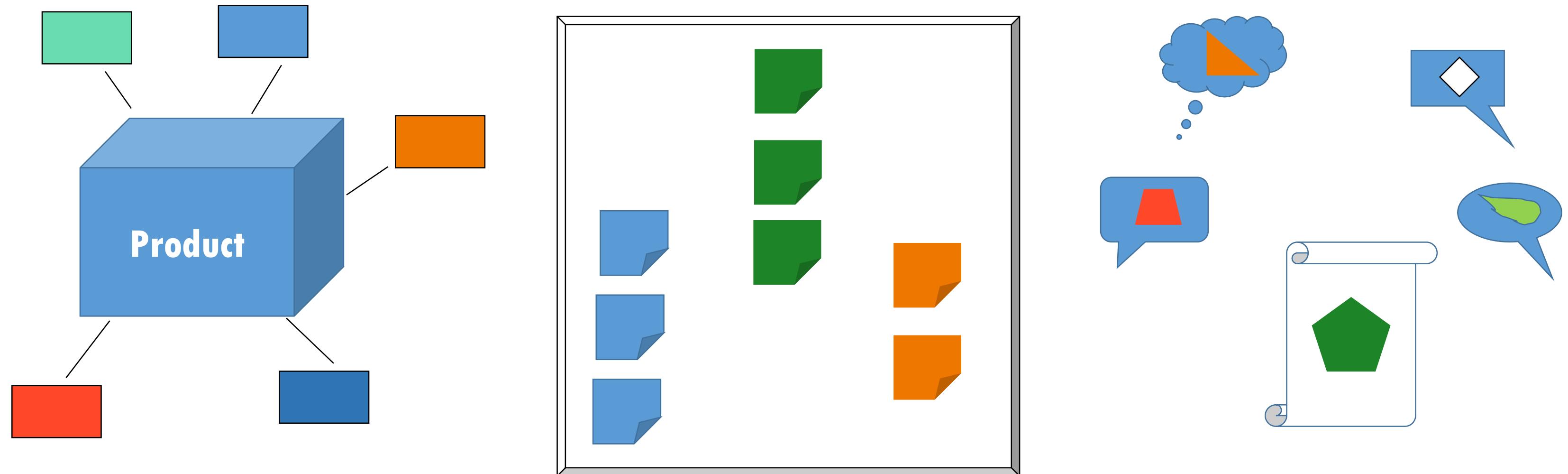
Identify features of a product

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

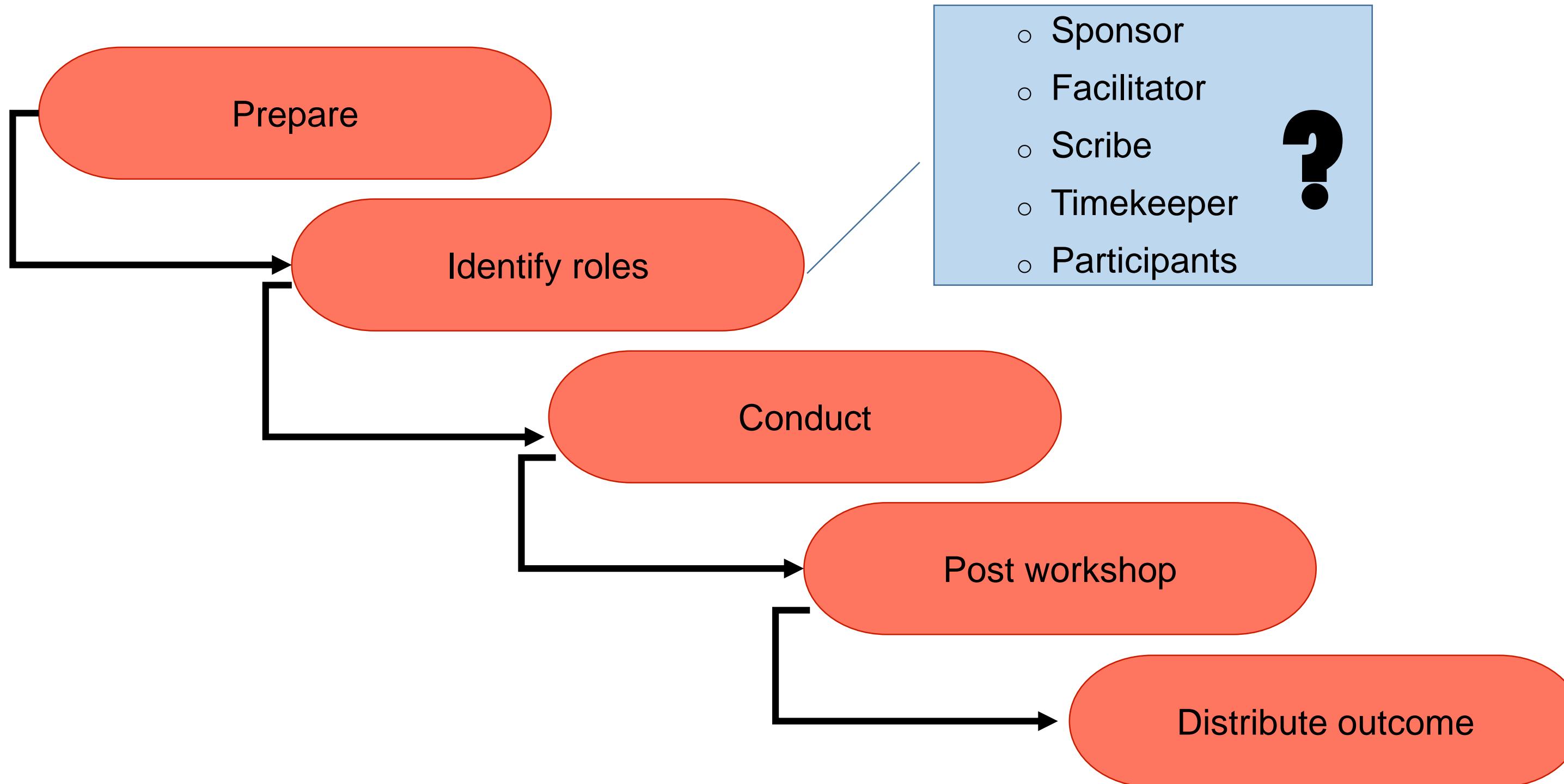
Limitations



- 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

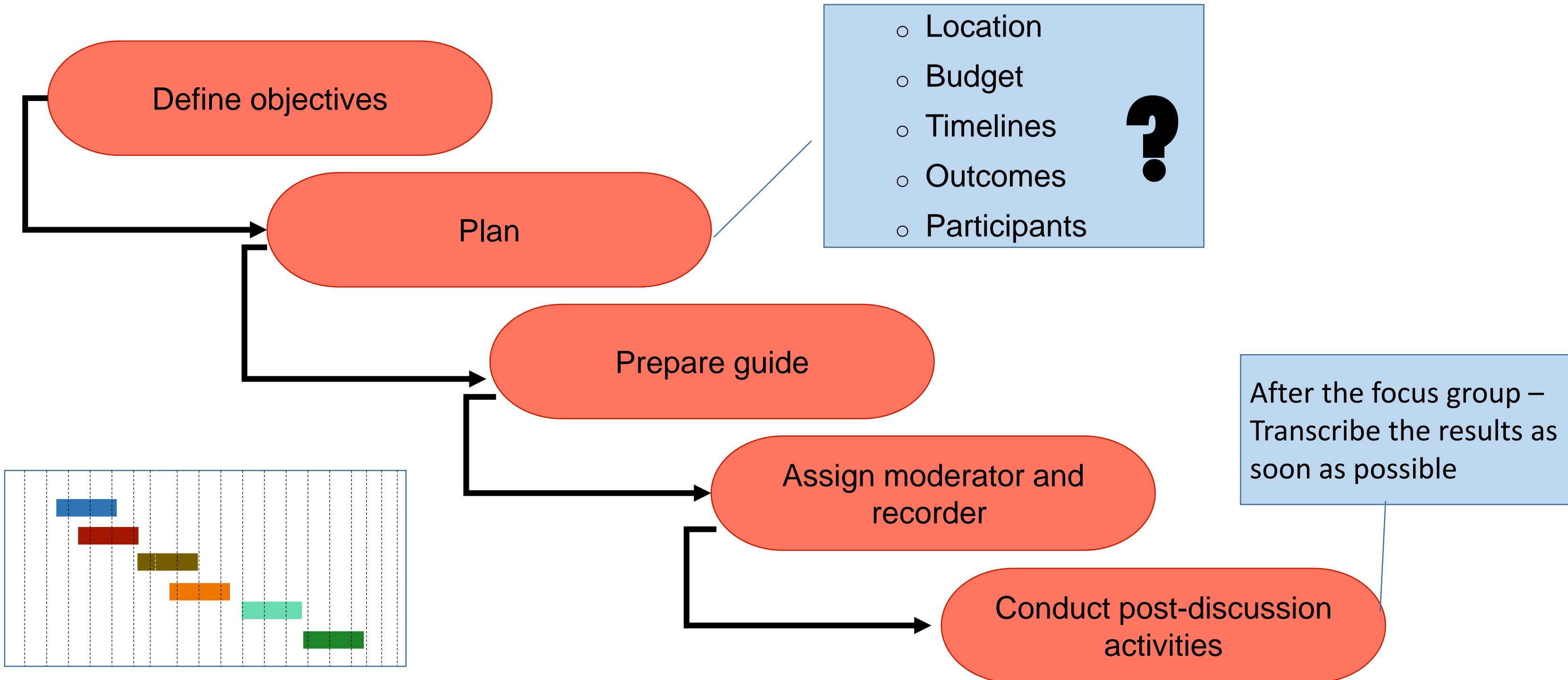
Limitations



- 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

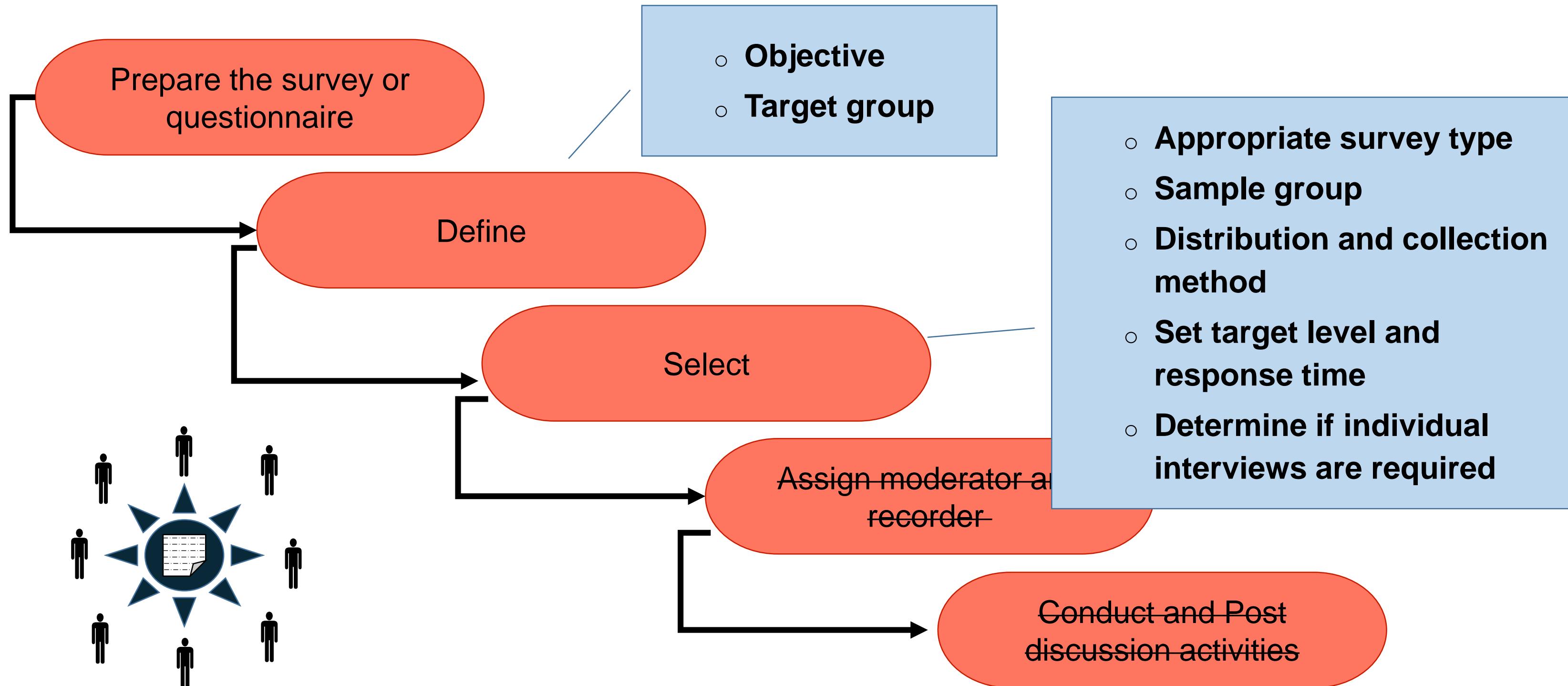
Limitations



- 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

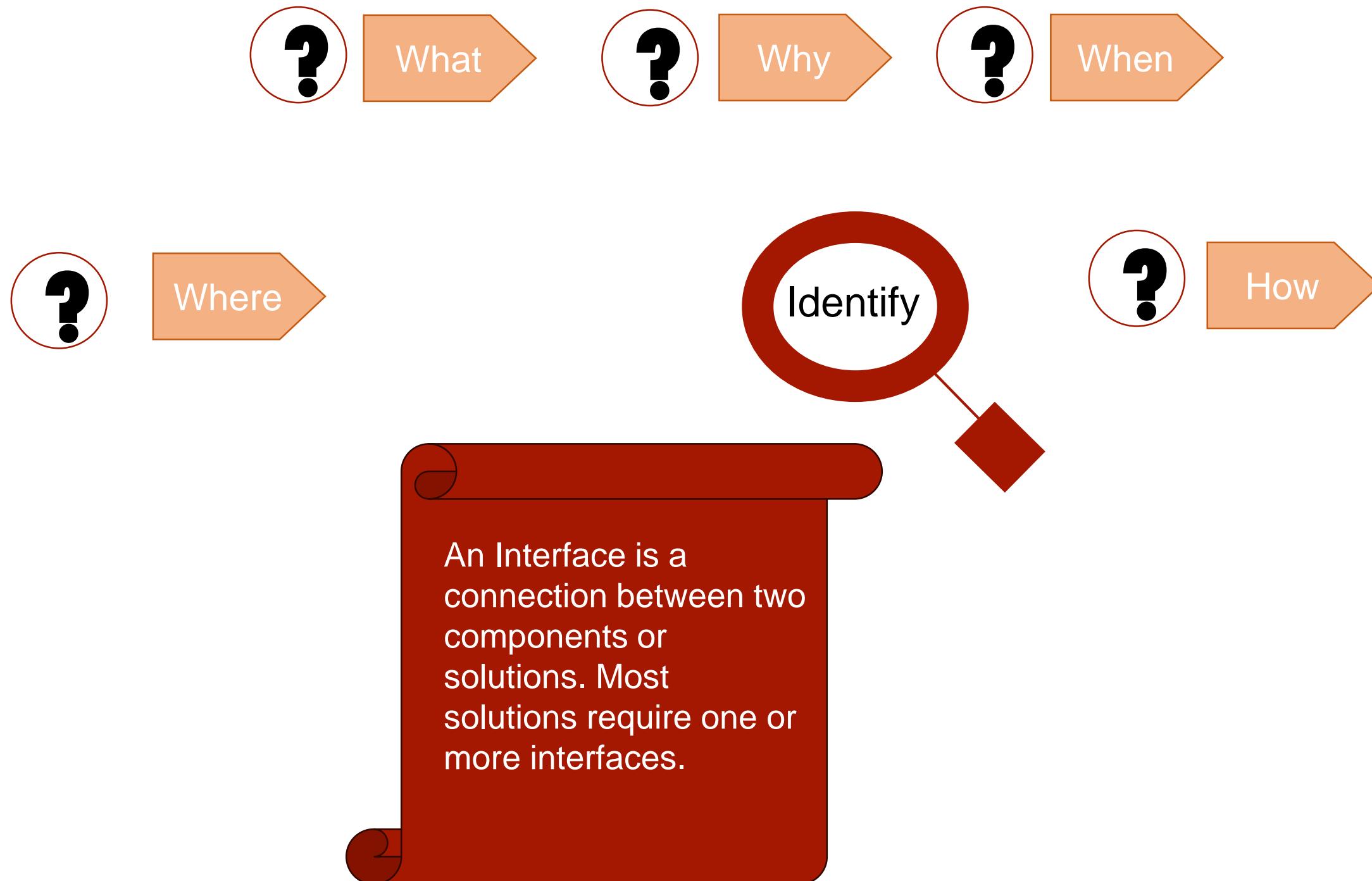
Paper prototyping

Workflow modeling

Simulation

CONDUCT ELICITATION

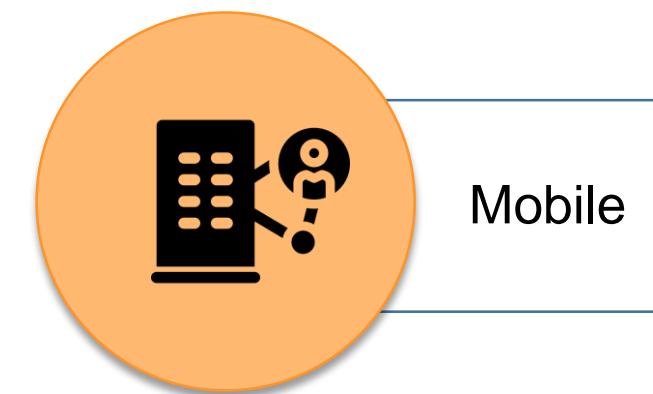
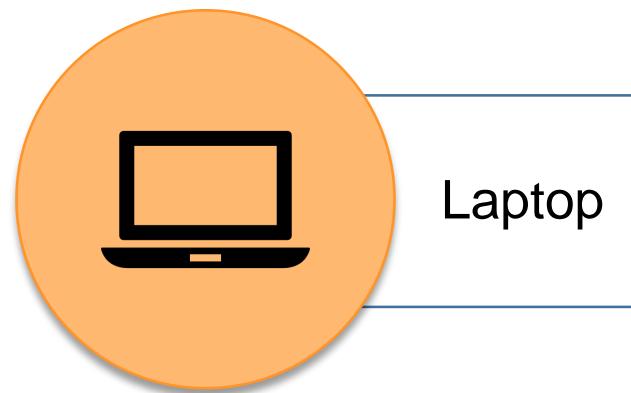
INTERFACE ANALYSIS - OVERVIEW



CONDUCT ELICITATION (contd.)

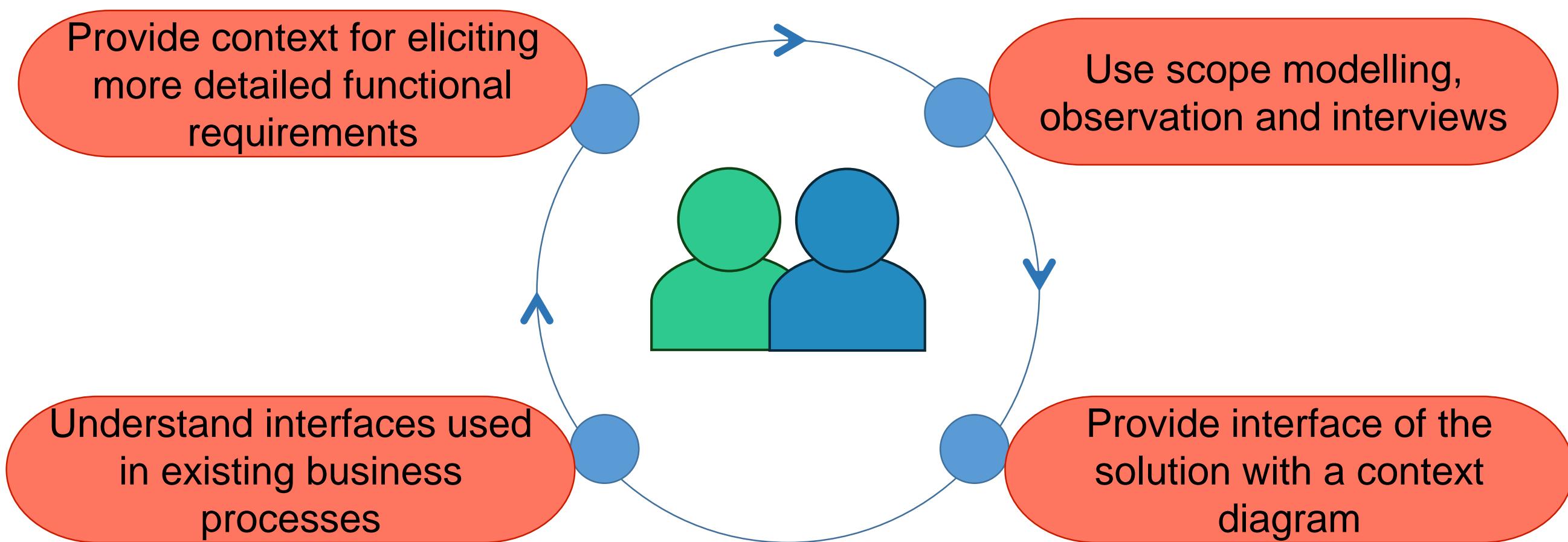
INTERFACE ANALYSIS - OVERVIEW

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



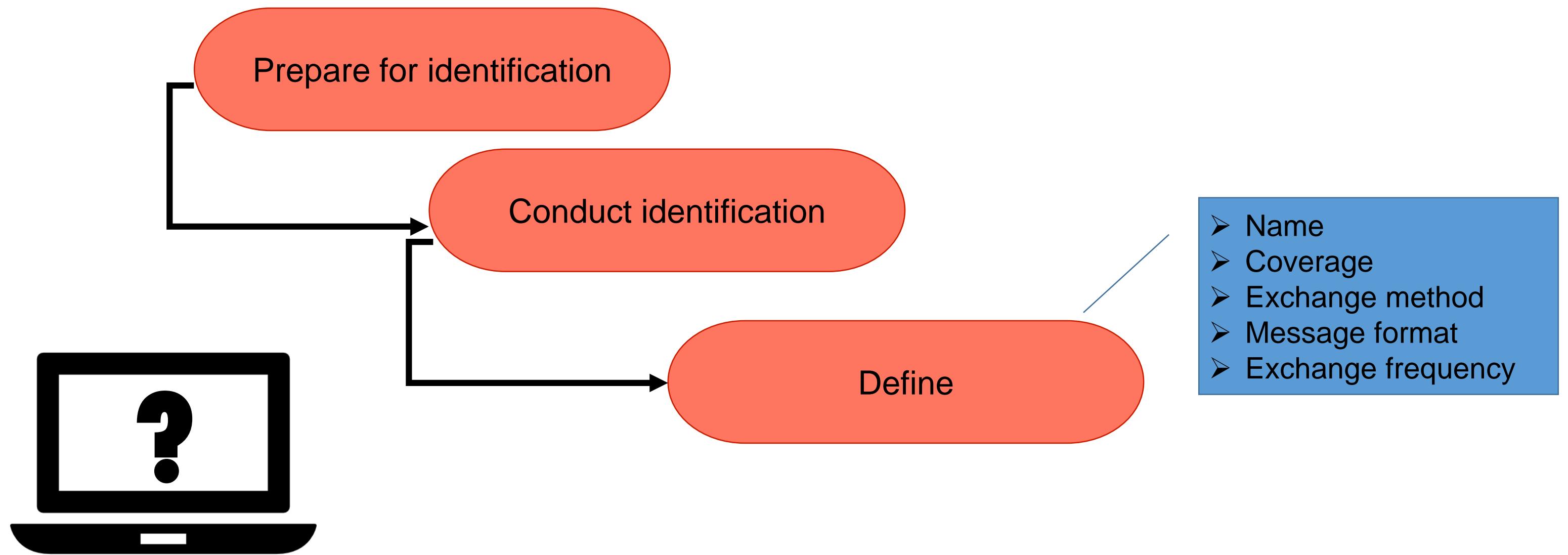
CONDUCT ELICITATION (contd.)

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

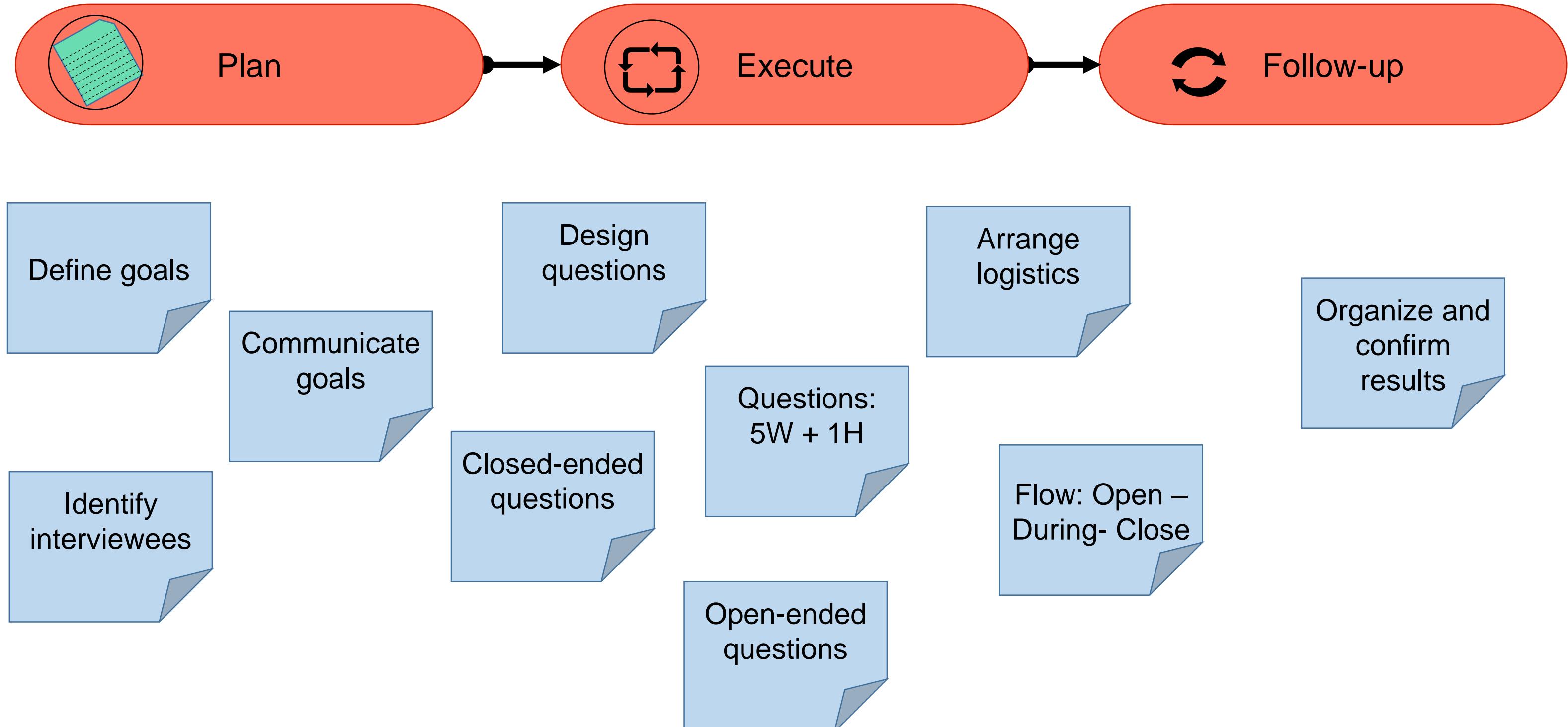
- Interviewers - Domain knowledge, experience and skills for documenting the discussion
- Interviewees - Readiness, degree of clarity about the goal of the interview
- Rapport of the interviewer with the interviewee

Constraint

Significant time is required to plan and conduct interviews.

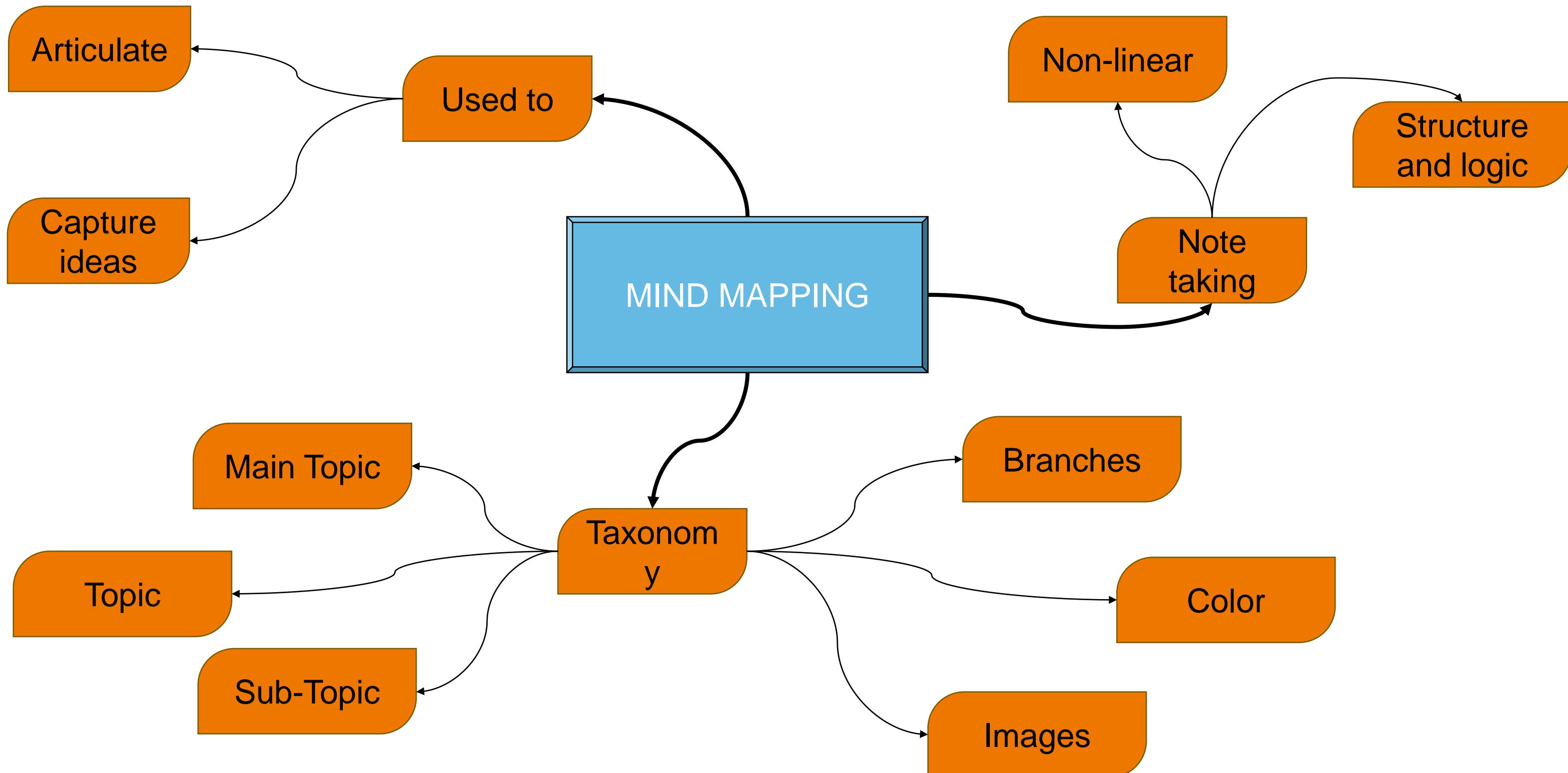
CONDUCT ELICITATION

INTERVIEWS - ELEMENTS



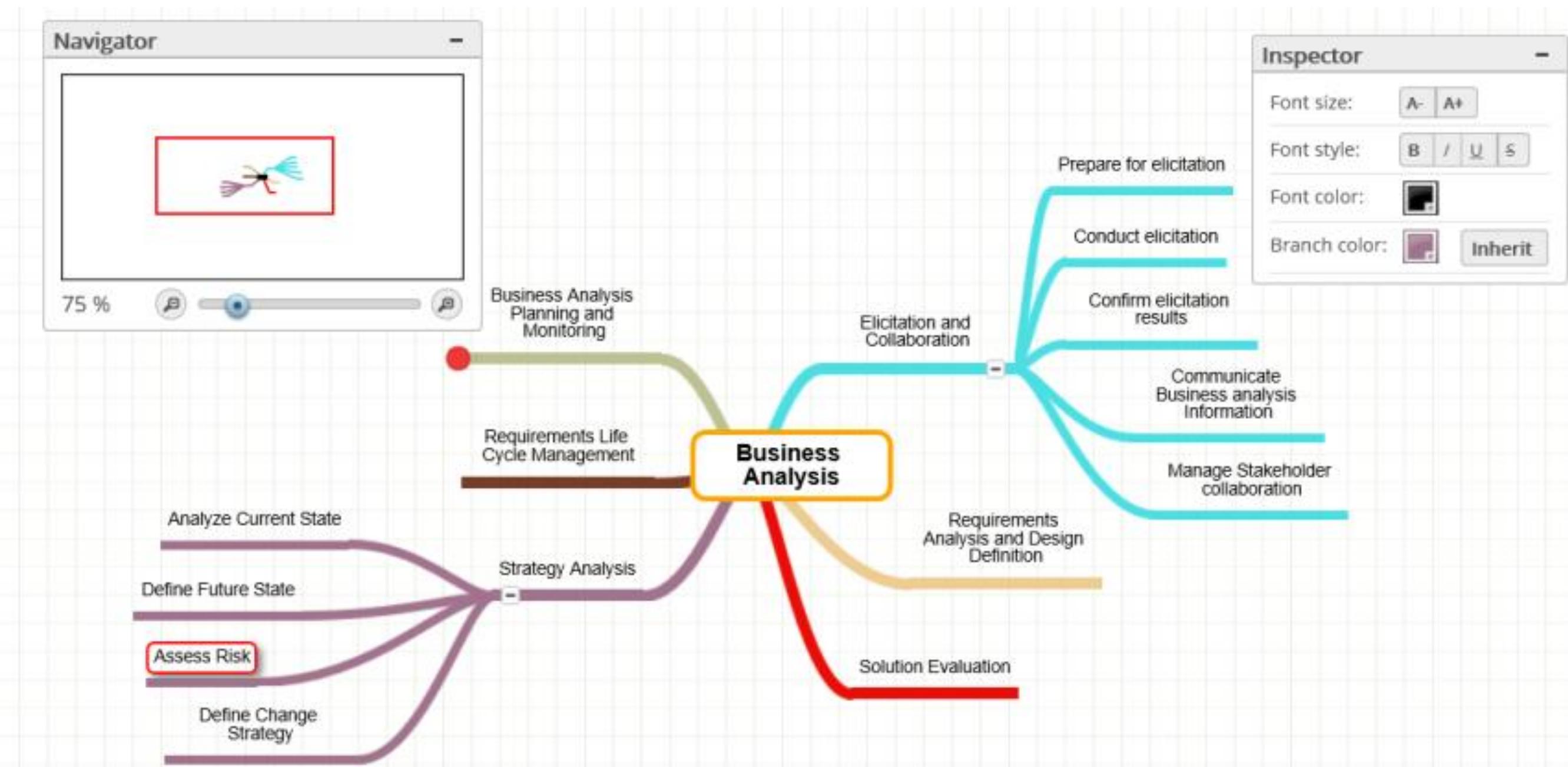
CONDUCT ELICITATION

MIND MAPPING - OVERVIEW



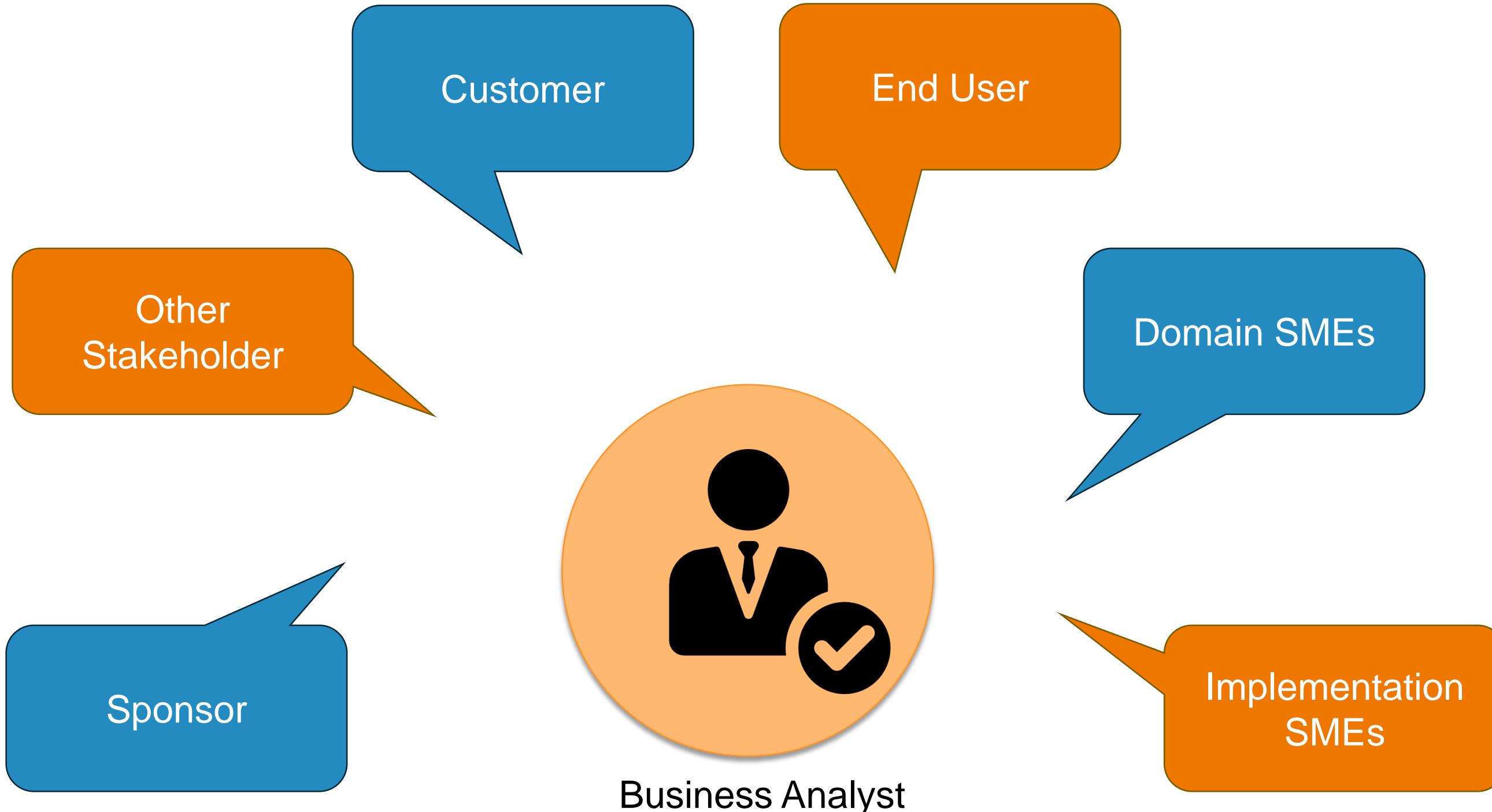
CONDUCT ELICITATION

MIND MAPPING - ELEMENTS



CONDUCT ELICITATION

STAKEHOLDERS



Lesson 4: Elicitation and Collaboration

Topic 4.3: Confirm Elicitation Results

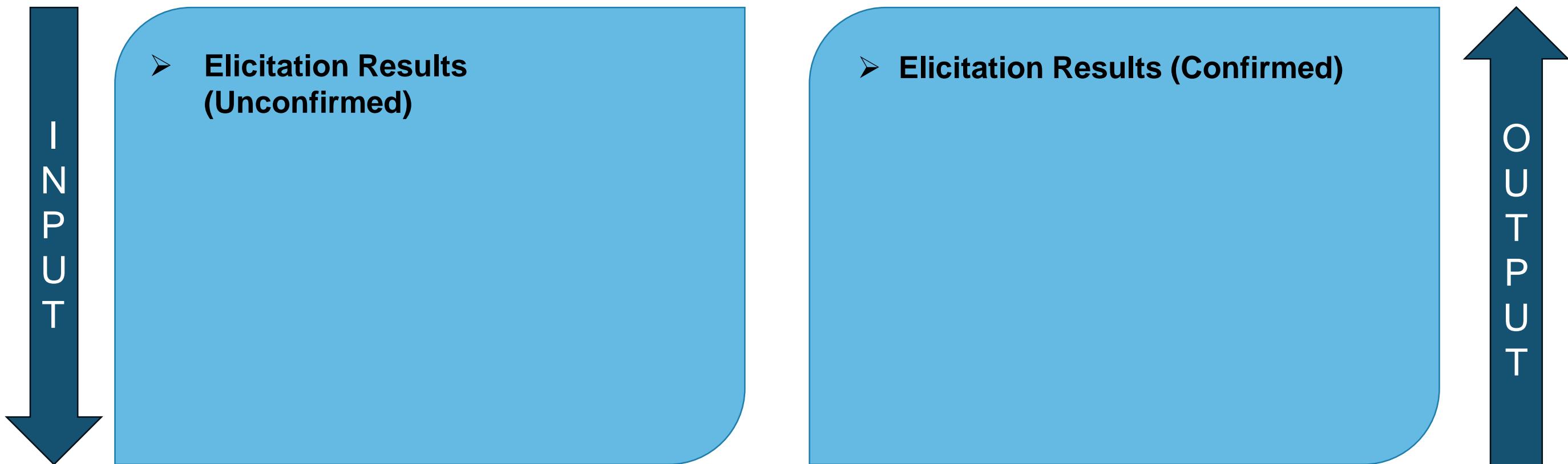
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

CONFIRM ELICITATION RESULTS

OVERVIEW

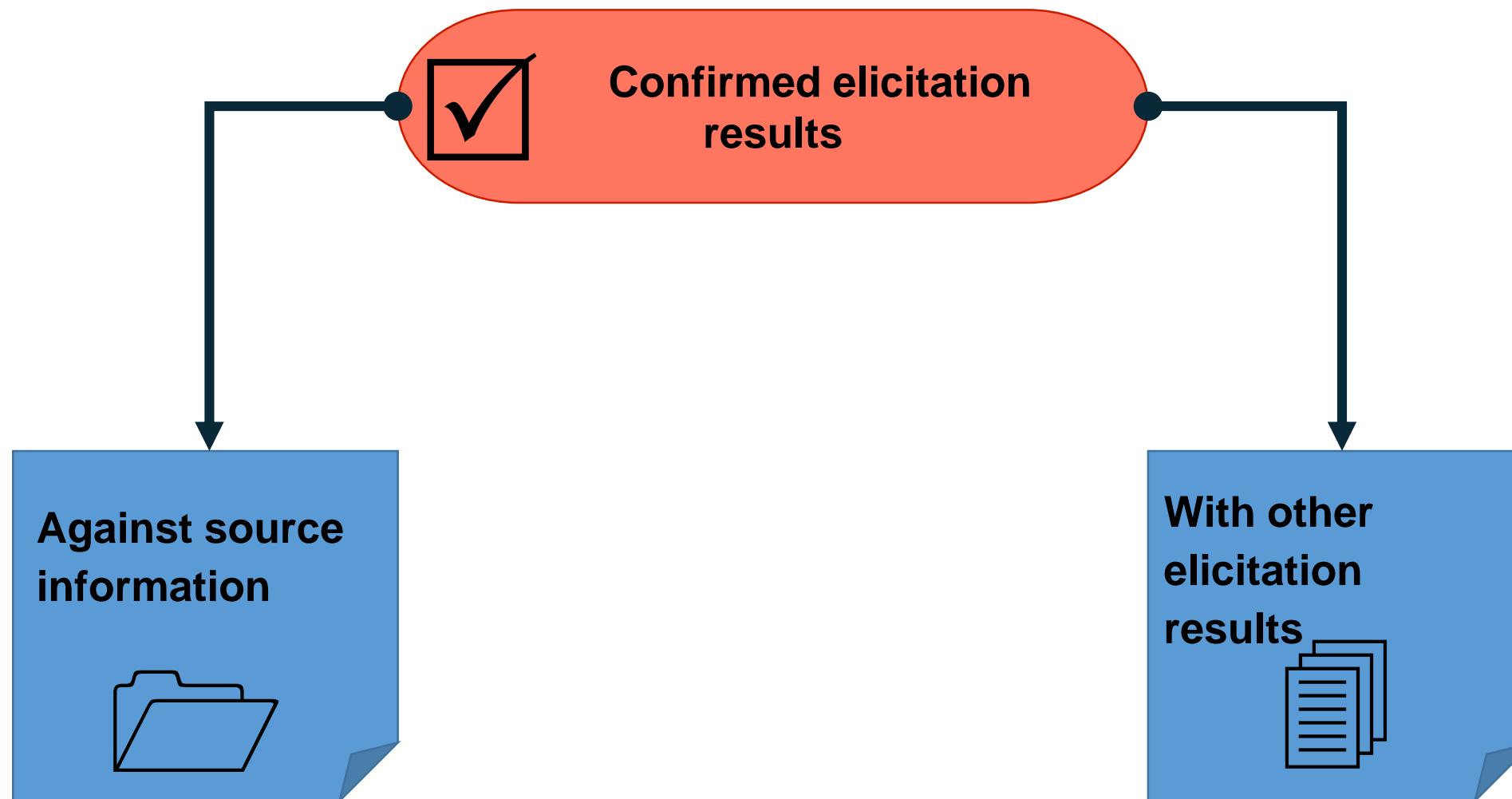
Purpose

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



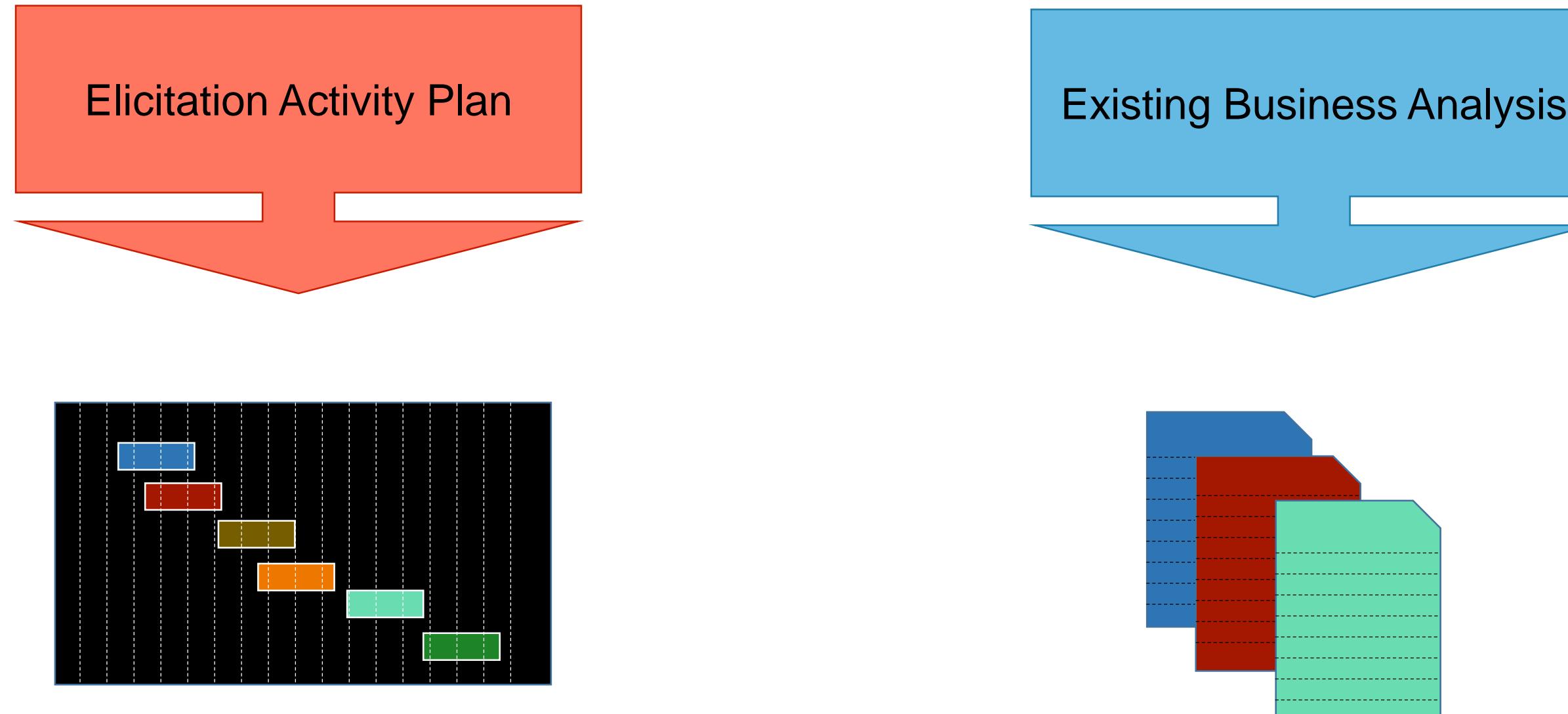
CONFIRM ELICITATION RESULTS

ELEMENTS



CONFIRM ELICITATION RESULTS

GUIDELINES AND TOOLS



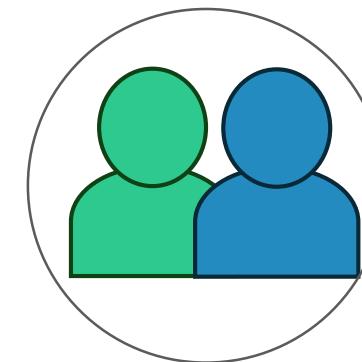
CONFIRM ELICITATION RESULTS

TECHNIQUES

Document Analysis



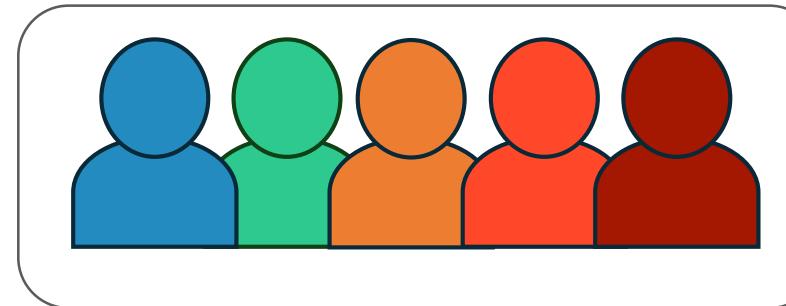
Interviews



Reviews



Workshops



CONFIRM ELICITATION RESULTS (contd.)

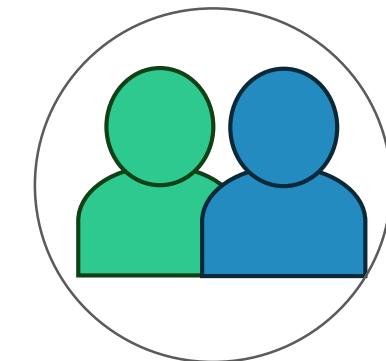
TECHNIQUES

Document Analysis



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

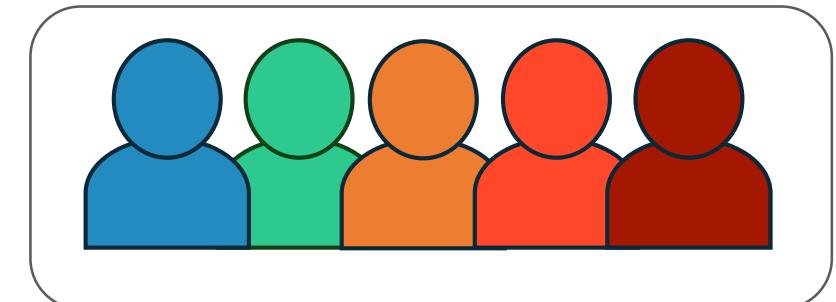
Interviews



Reviews

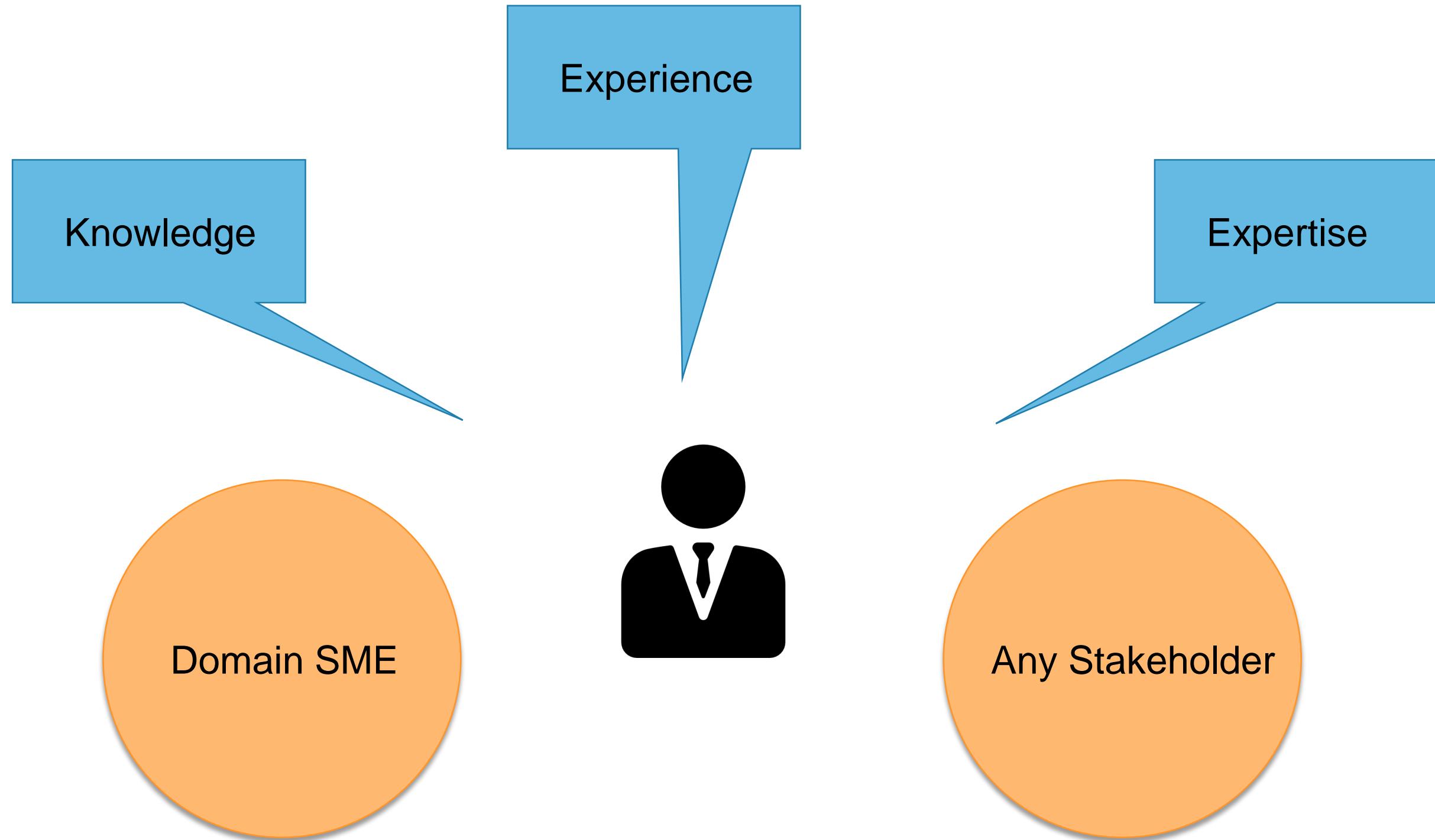


Workshops



CONFIRM ELICITATION RESULTS

STAKEHOLDERS



Lesson 4: Elicitation and Collaboration

Topic 4.4: Communicate Business Analysis Information

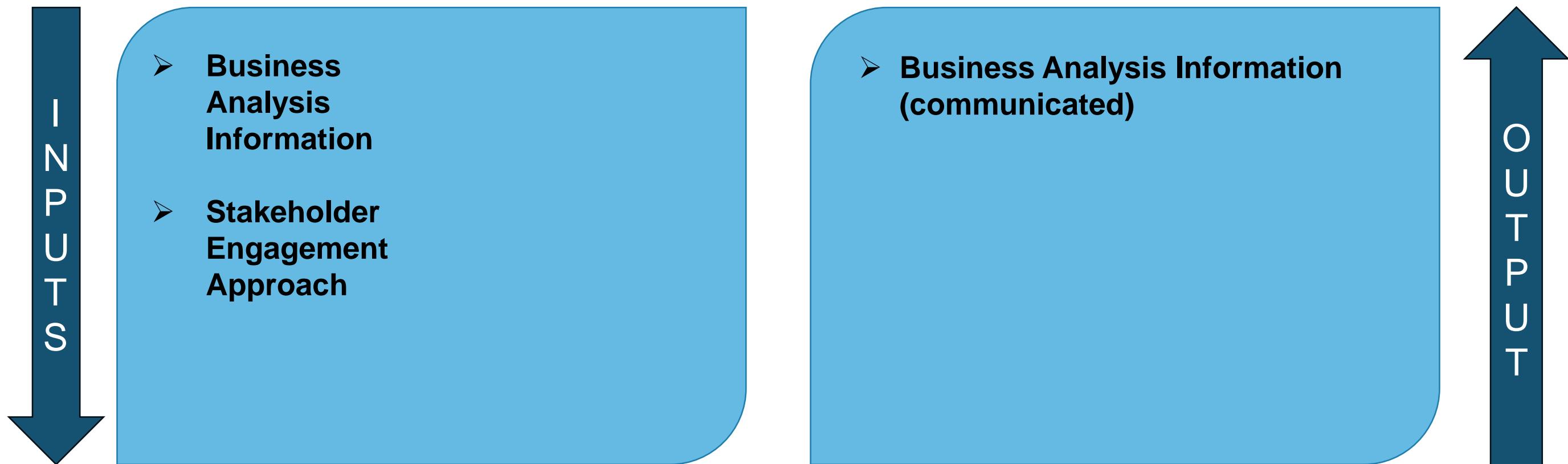
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

COMMUNICATE BUSINESS ANALYSIS INFORMATION

OVERVIEW

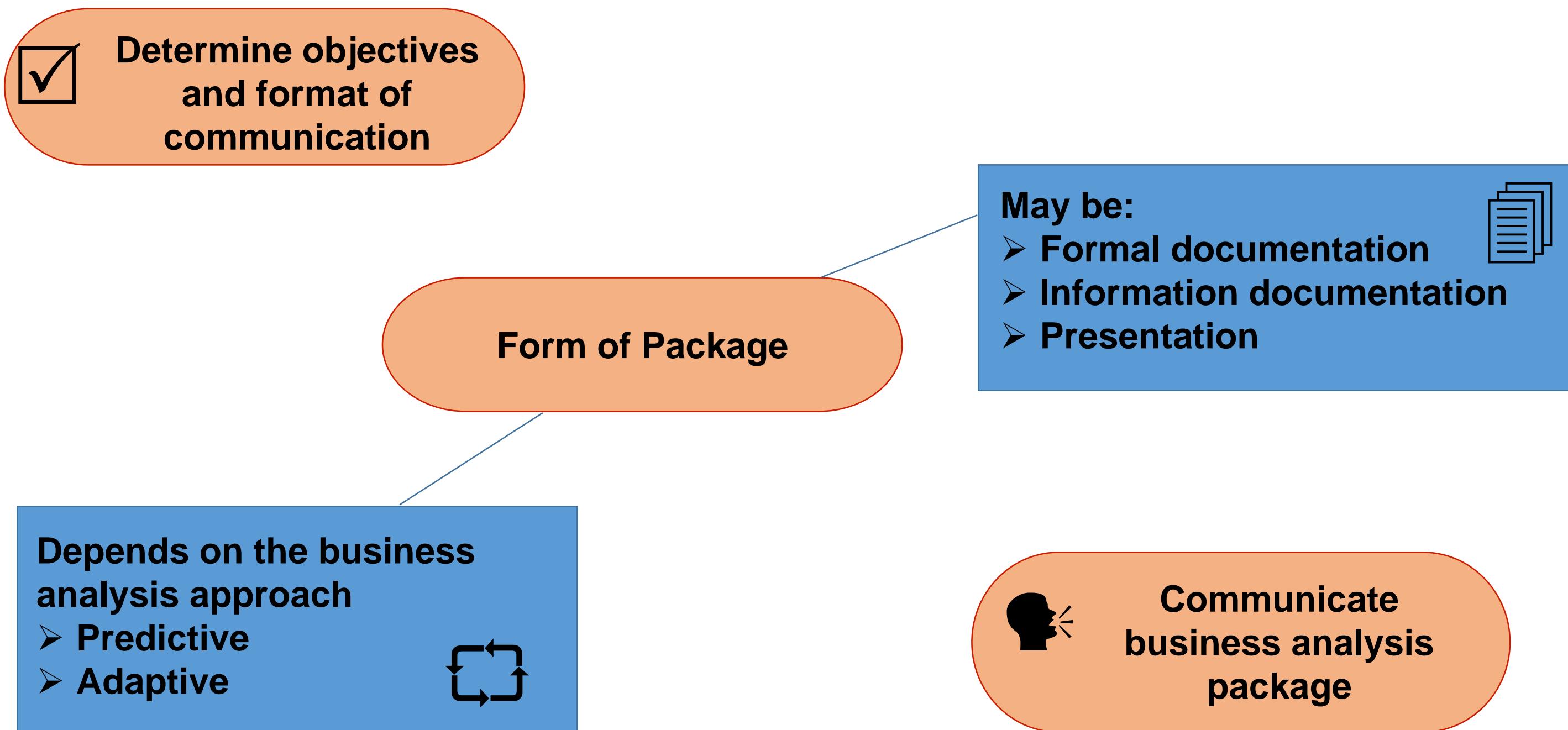
Purpose

- Stakeholders have a shared understanding of business analysis information



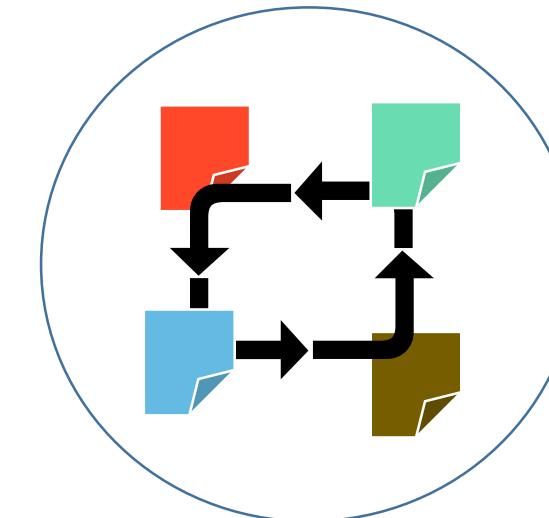
COMMUNICATE BUSINESS ANALYSIS INFORMATION

ELEMENTS



COMMUNICATE BUSINESS ANALYSIS INFORMATION

GUIDELINES AND TOOLS



COMMUNICATE BUSINESS ANALYSIS INFORMATION

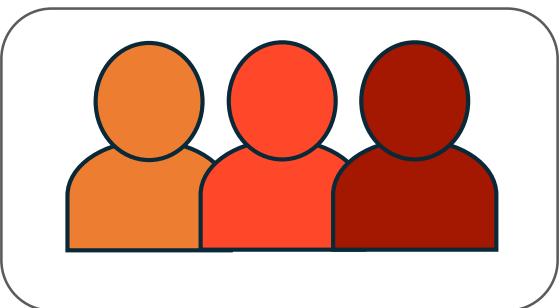
TECHNIQUES



Interviews



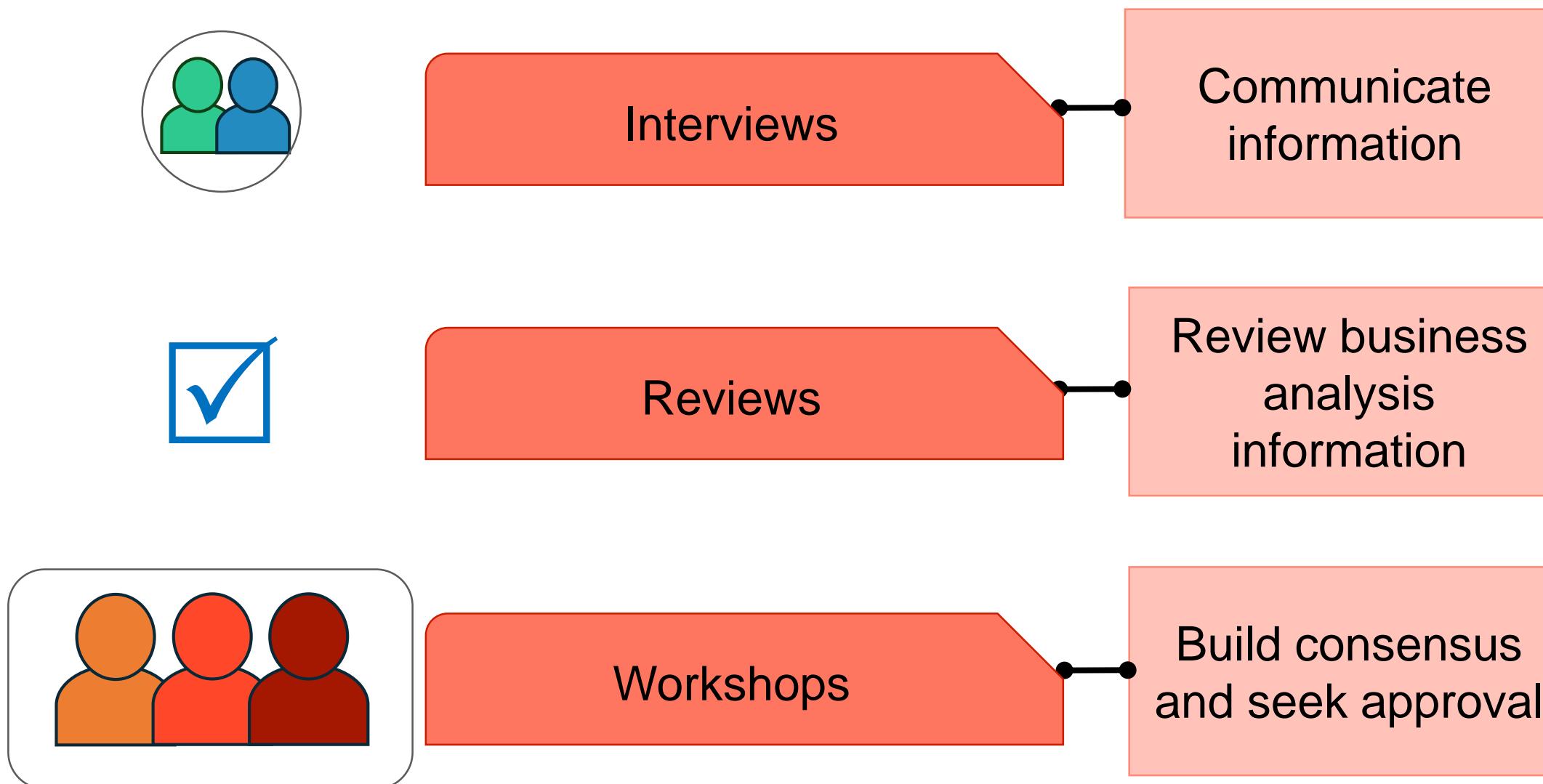
Reviews



Workshops

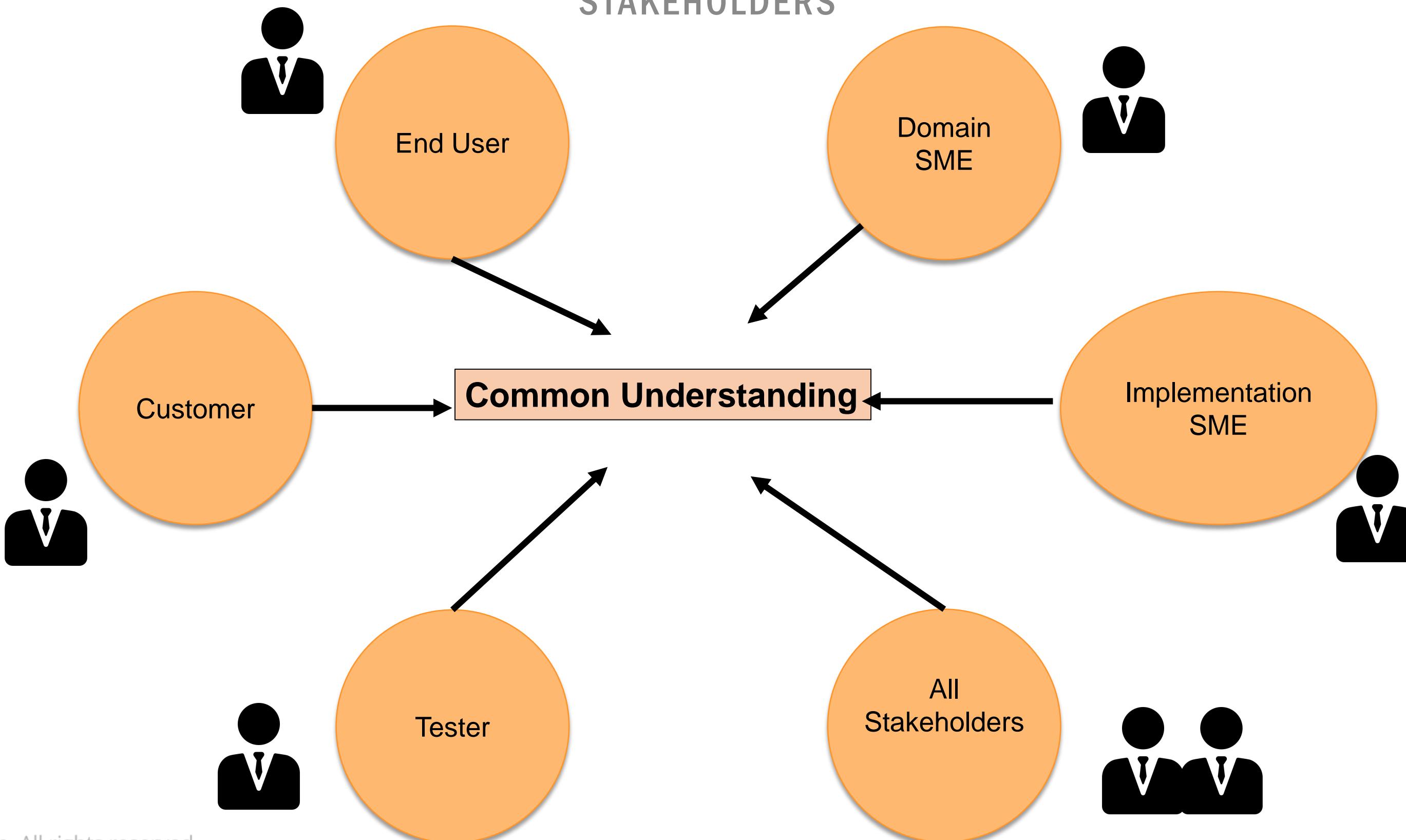
COMMUNICATE BUSINESS ANALYSIS INFORMATION (contd.)

TECHNIQUES



COMMUNICATE BUSINESS ANALYSIS INFORMATION

STAKEHOLDERS



Lesson 4: Elicitation and Collaboration

Topic 4.5: Manage Stakeholder Collaboration

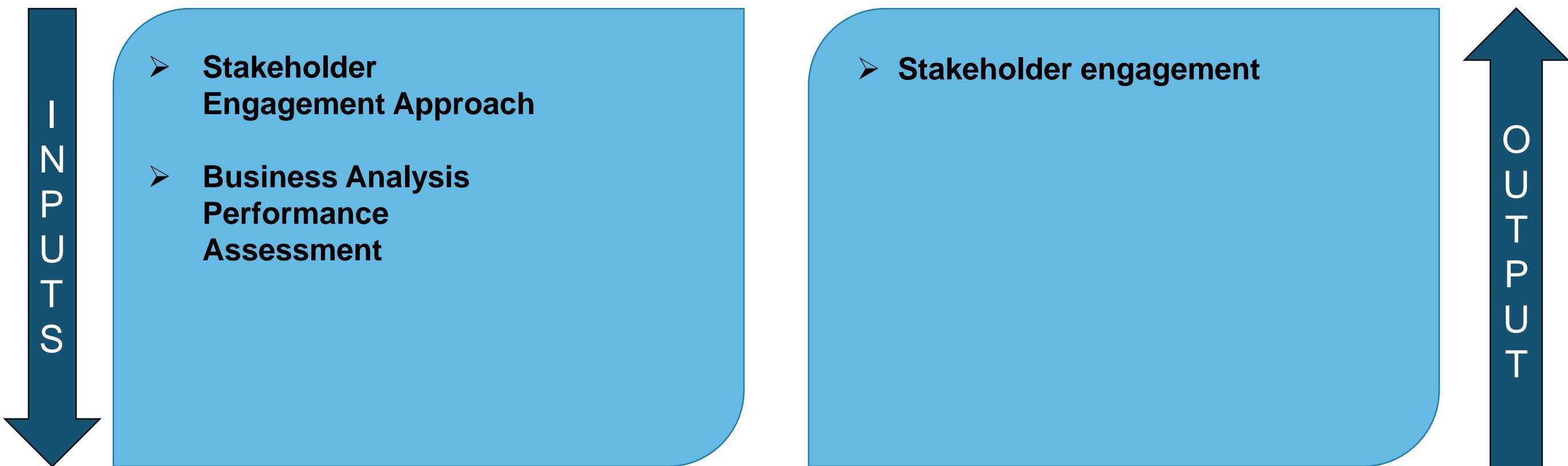
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

MANAGE STAKEHOLDER COLLABORATION

OVERVIEW

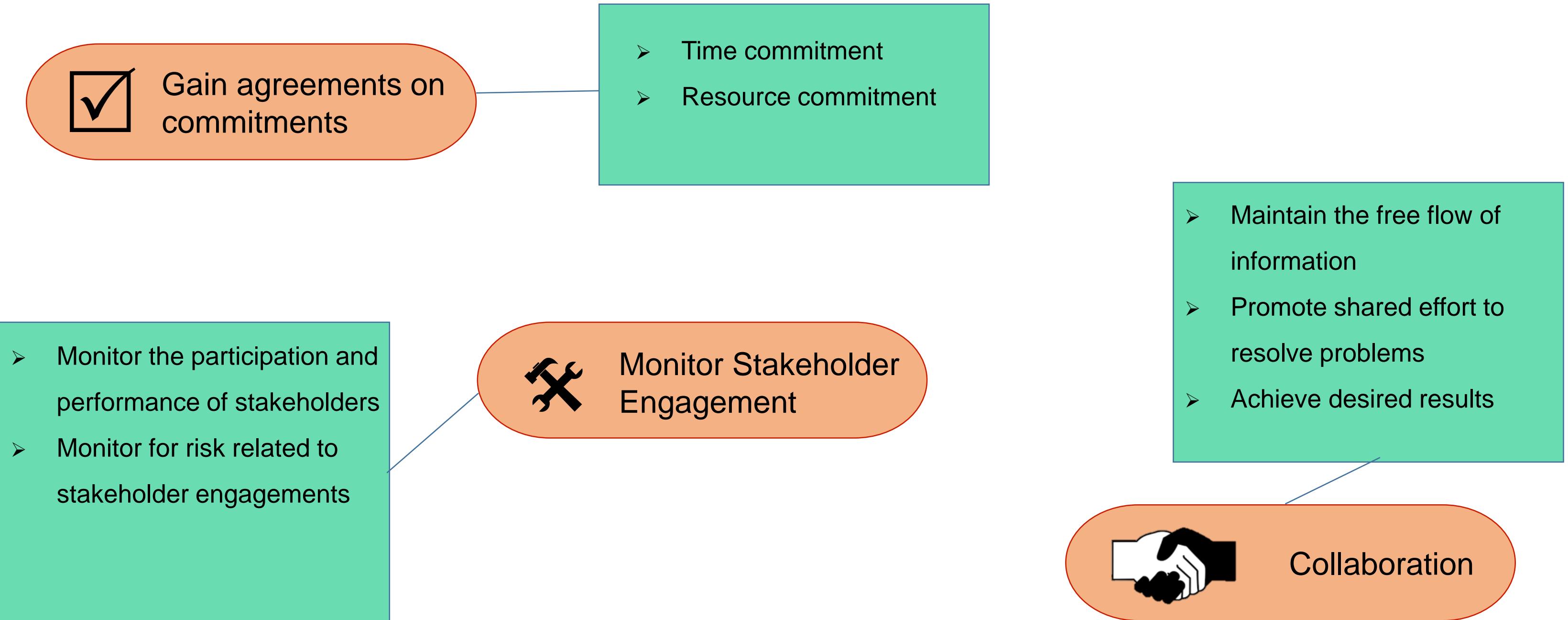
Purpose

- Encourage stakeholders to work towards a common goal



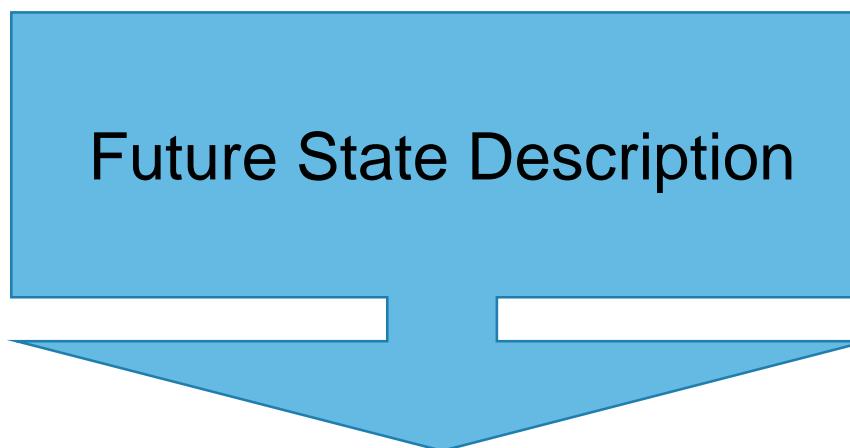
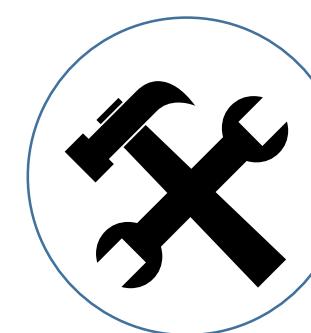
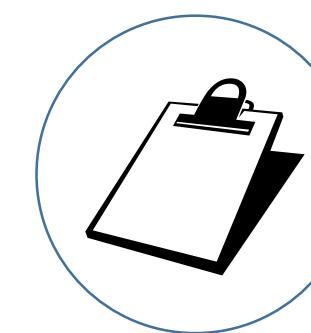
MANAGE STAKEHOLDER COLLABORATION

ELEMENTS



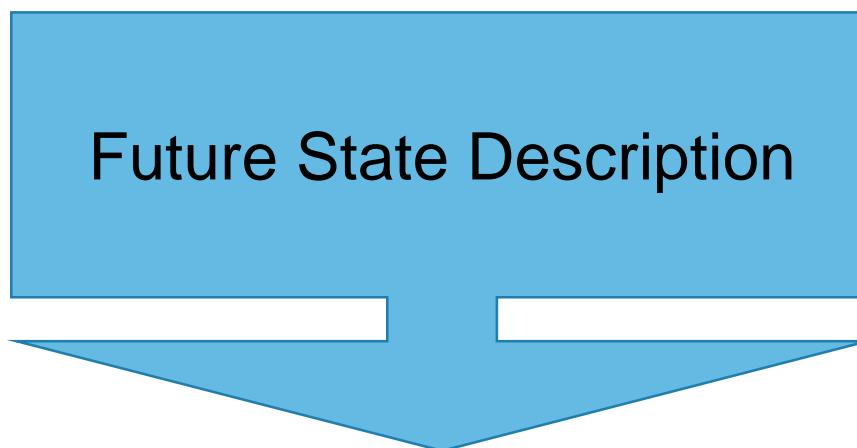
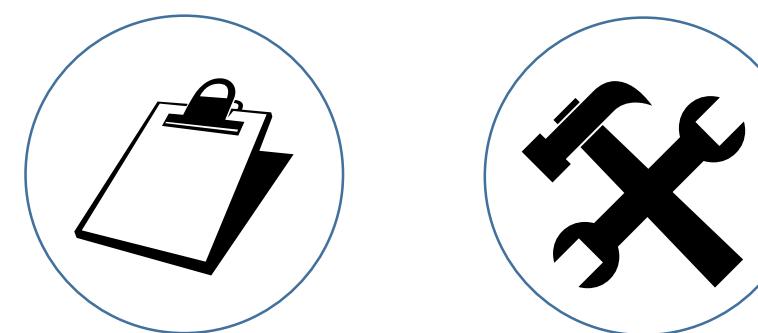
MANAGE STAKEHOLDER COLLABORATION

GUIDELINES AND TOOLS



MANAGE STAKEHOLDER COLLABORATION (contd.)

GUIDELINES AND TOOLS



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

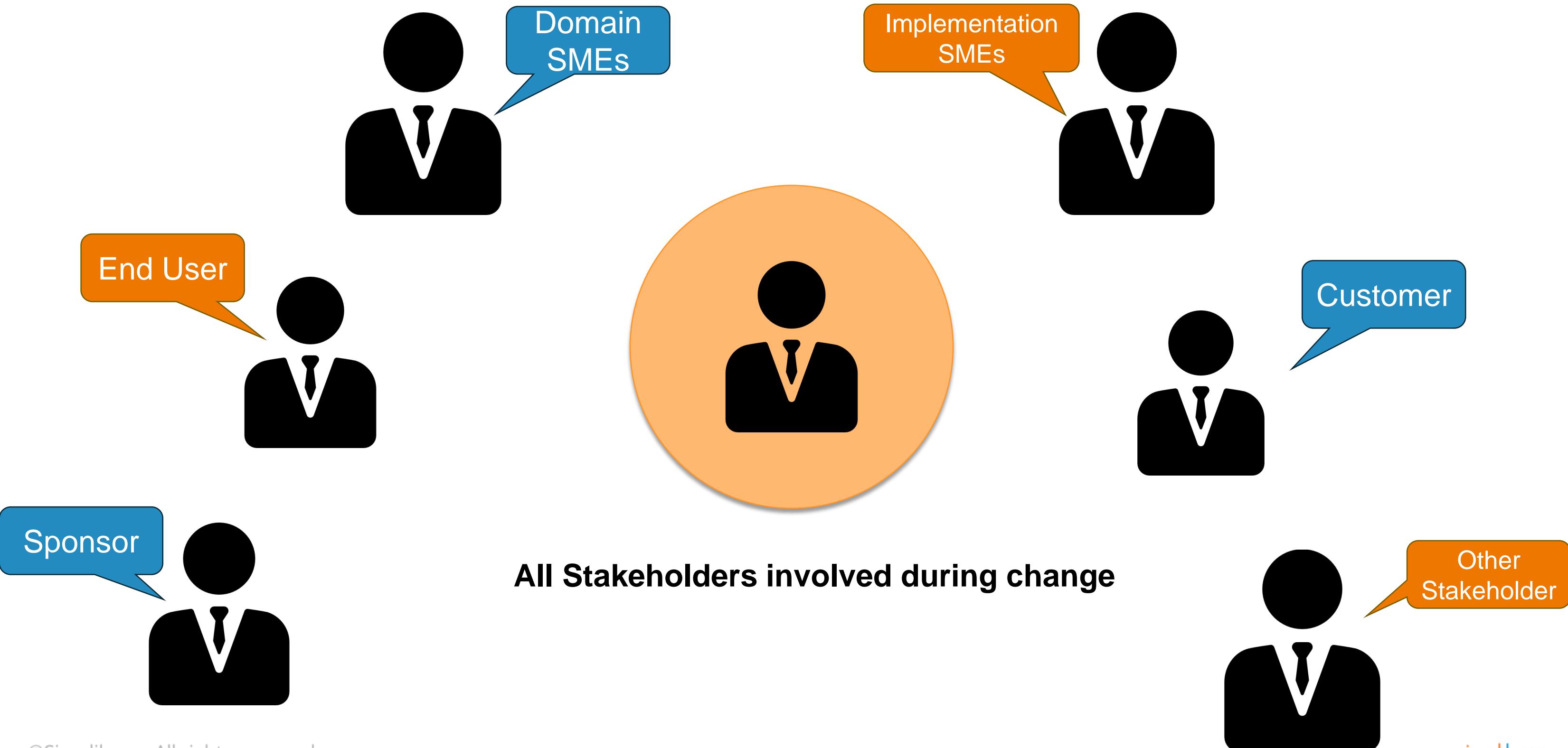


Stakeholder list, Map or Personas

Who needs to be involved?

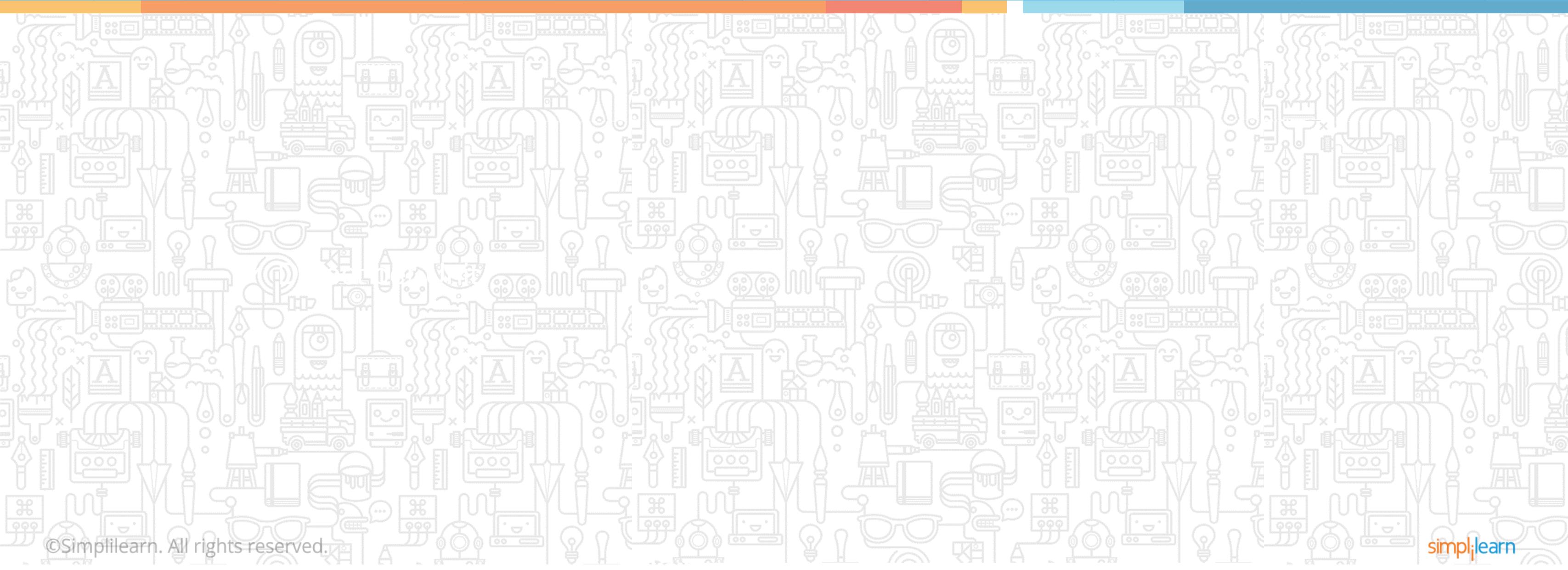
MANAGE STAKEHOLDER COLLABORATION

STAKEHOLDERS



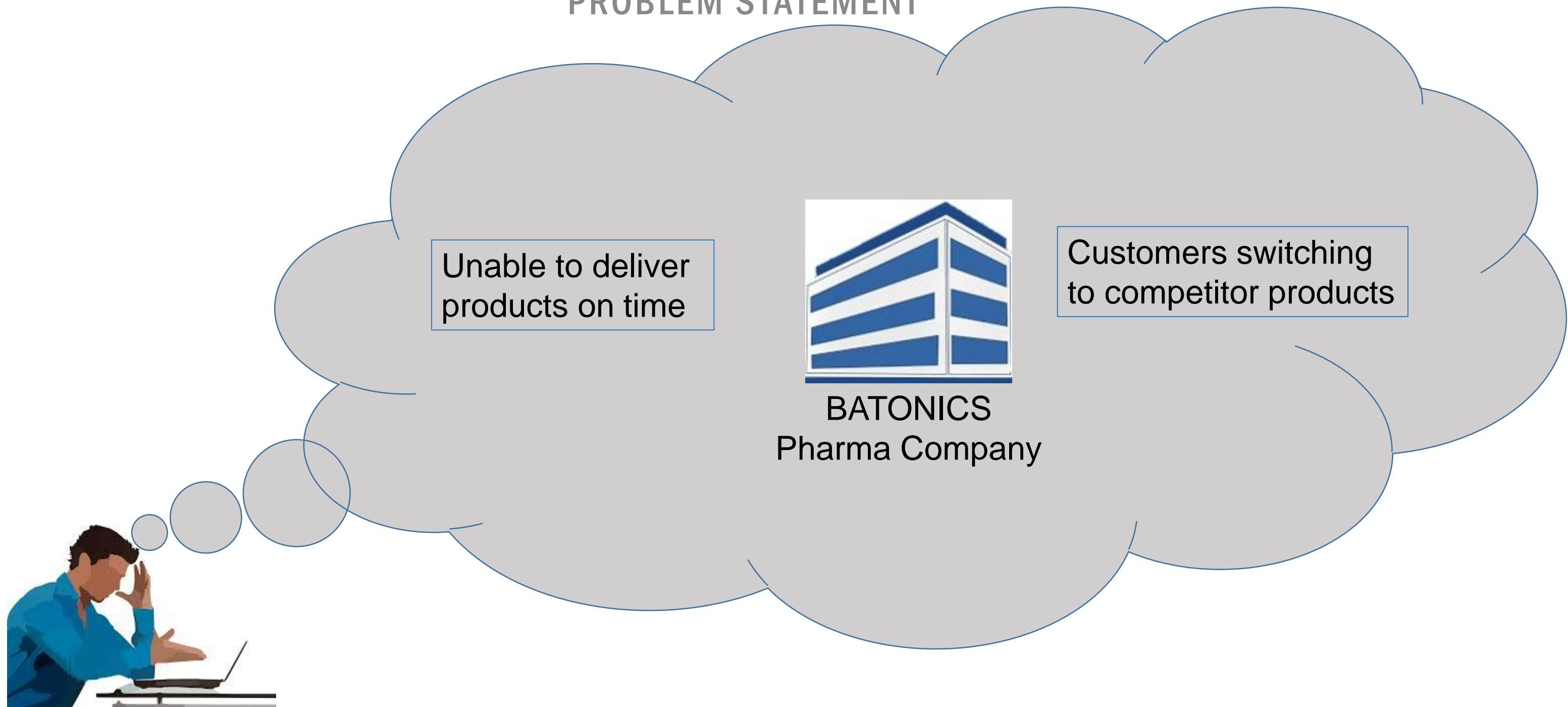
Lesson 4: ELICITATION AND COLLABORATION

CASE STUDY EXERCISE



CASE STUDY

PROBLEM STATEMENT



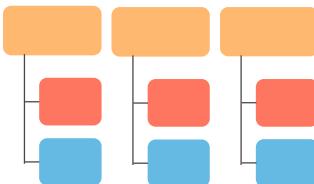
CASE STUDY

ACTIVITIES

The business analyst performed the following activities:



Spent some time going through existing documents



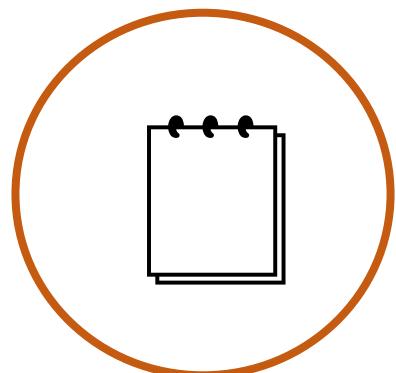
Created a high level context diagram



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



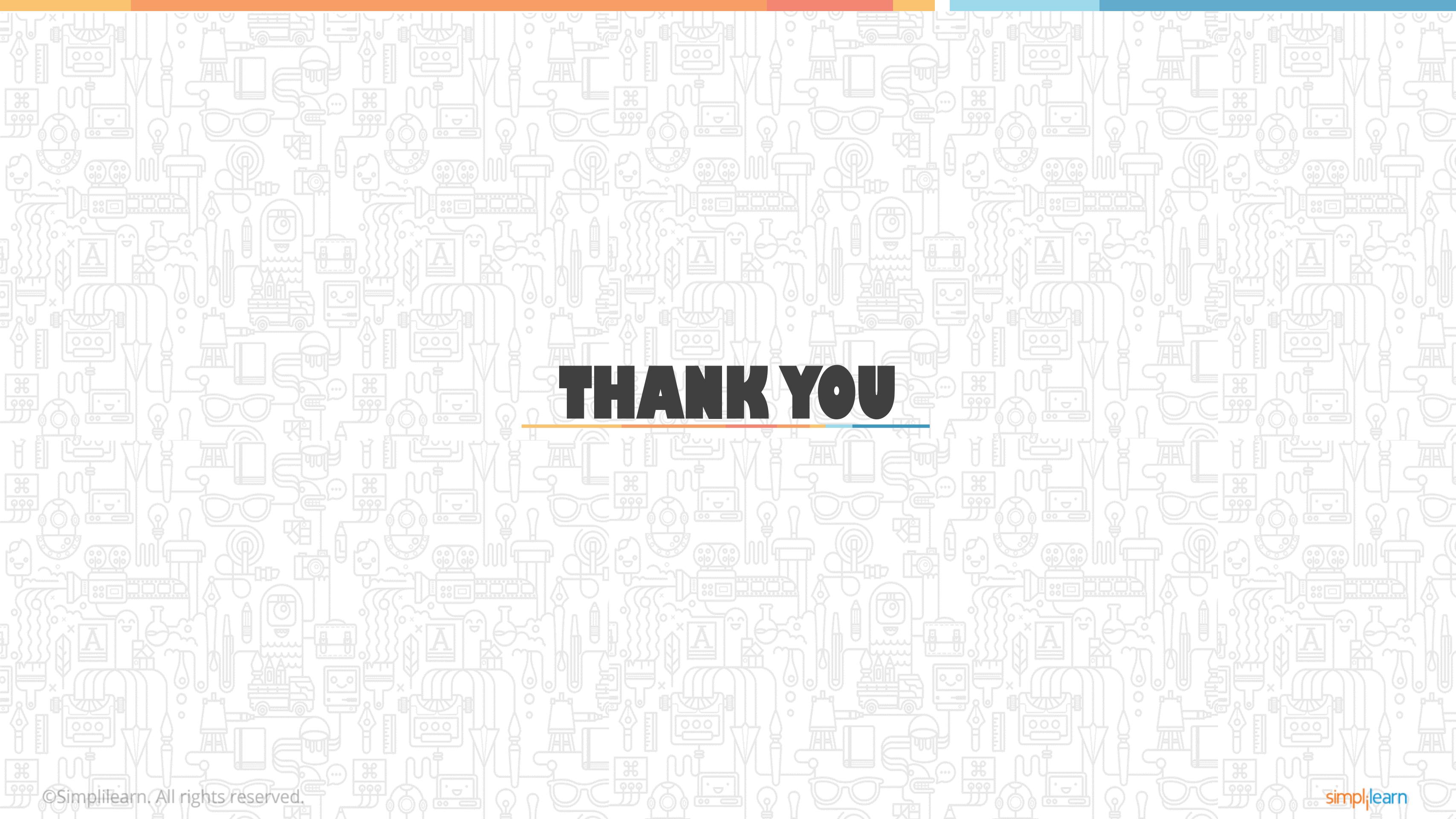
The correct answer is **d**.

**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

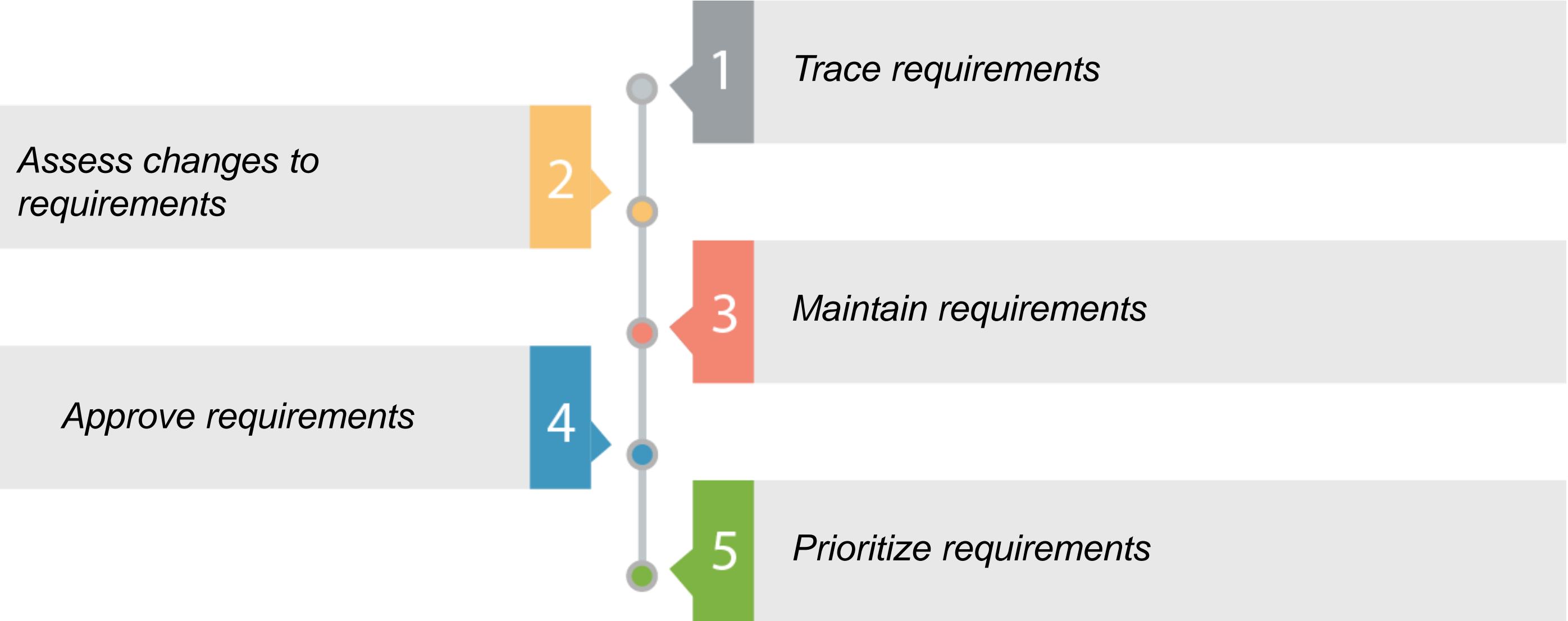
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# **CBAP® Exam Preparation Course**

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



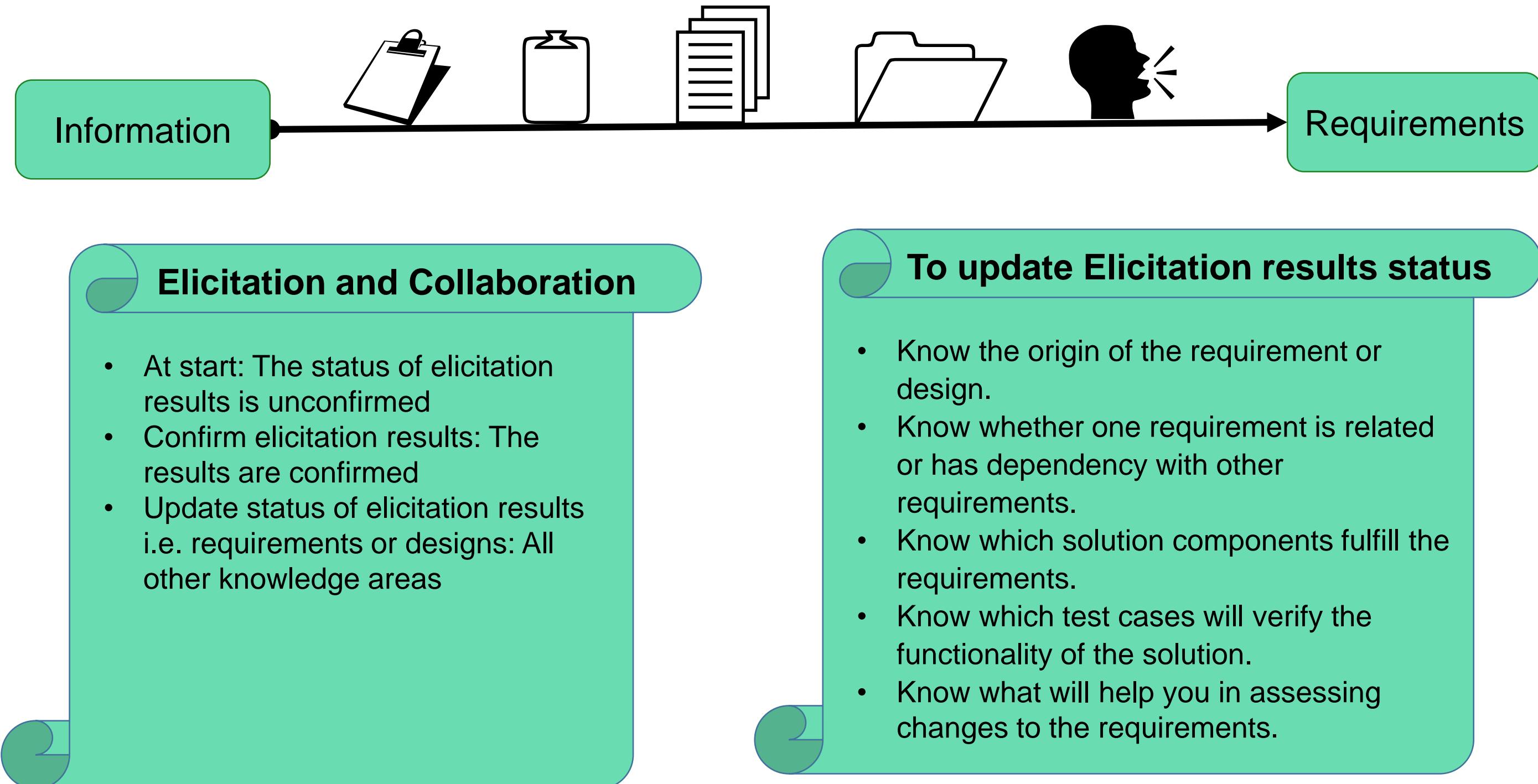
# WHAT'S IN IT FOR ME



# INTRODUCTION



Business Analyst



# INTRODUCTION



Business Analyst

Trace requirements

Prioritize requirements

Reuse requirements

Assess requirements

Approve requirements

Allocate requirements



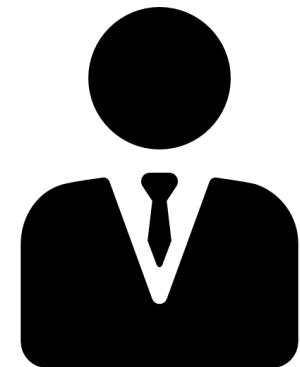
- The requirements need to be maintained throughout the project life cycles. Changes are inevitable, hence you need to assess changes to the requirements and design, and recommend appropriate actions
- Changes to the requirements and the approval process depend upon the project methodology

# INTRODUCTION

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.

Trace requirements

Prioritize requirements



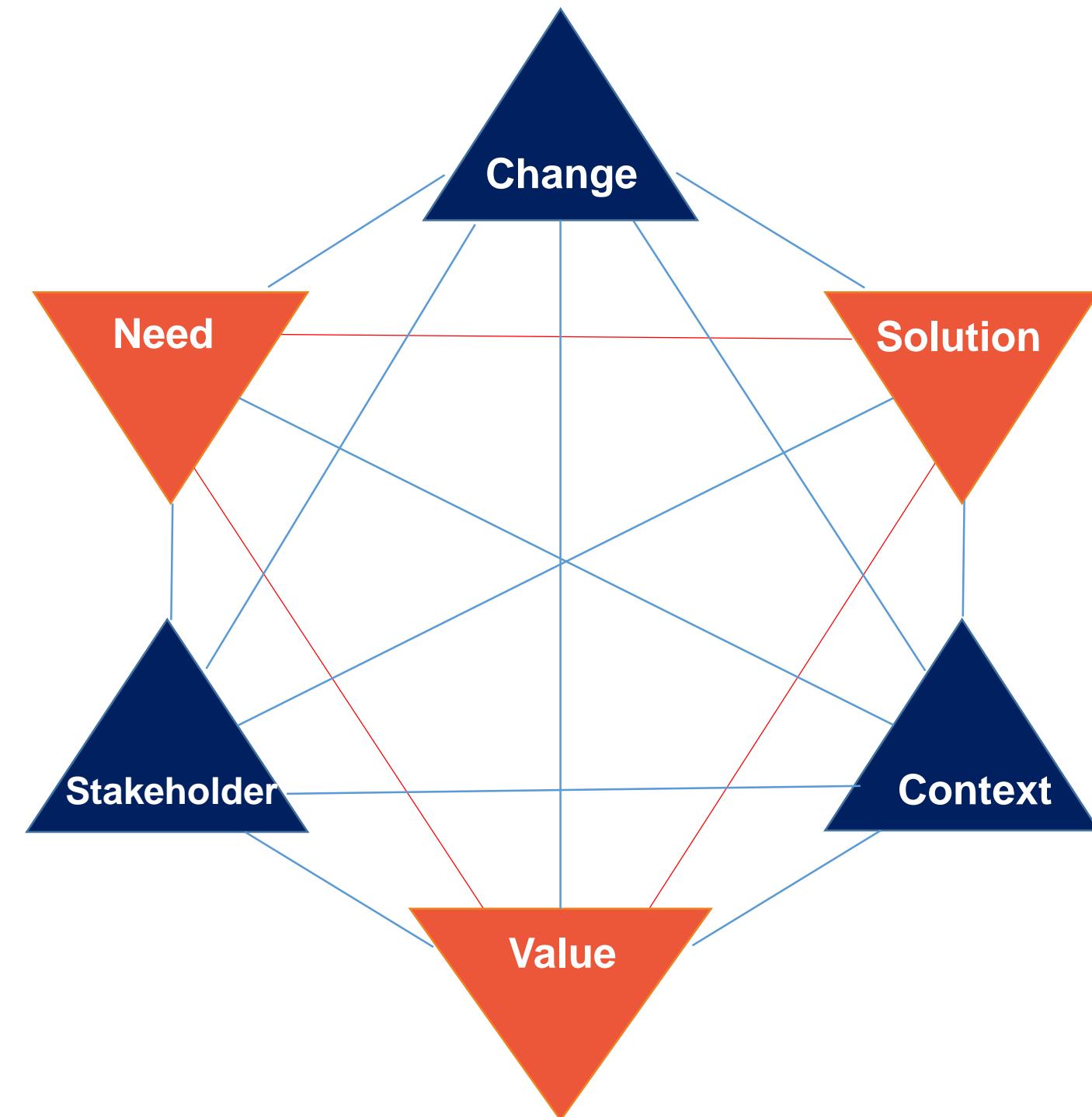
Business Analyst

Maintain requirements

Approve requirements

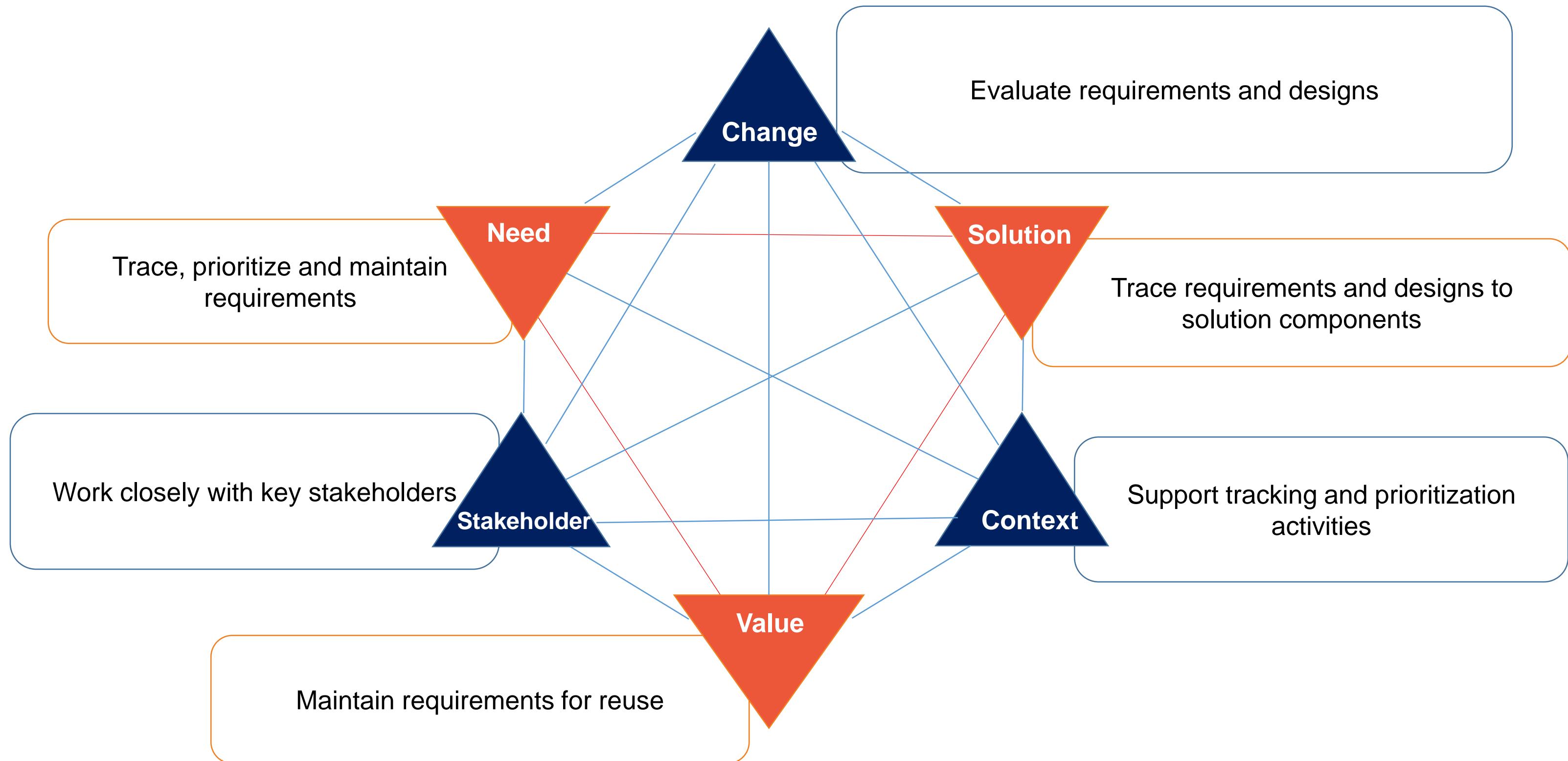
# REQUIREMENTS LIFE CYCLE MANAGEMENT

## OVERVIEW



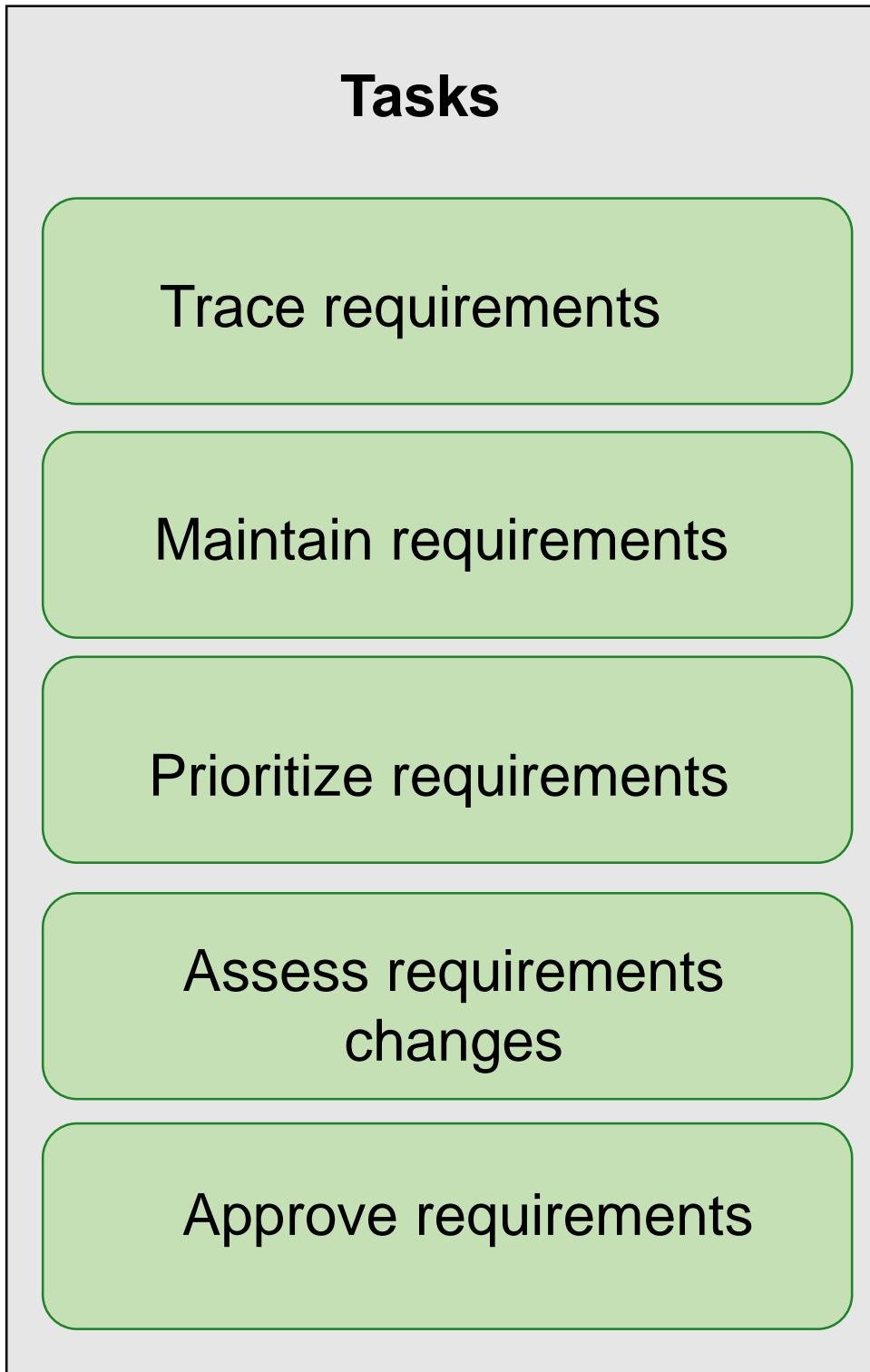
# REQUIREMENTS LIFE CYCLE MANAGEMENT

## 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?

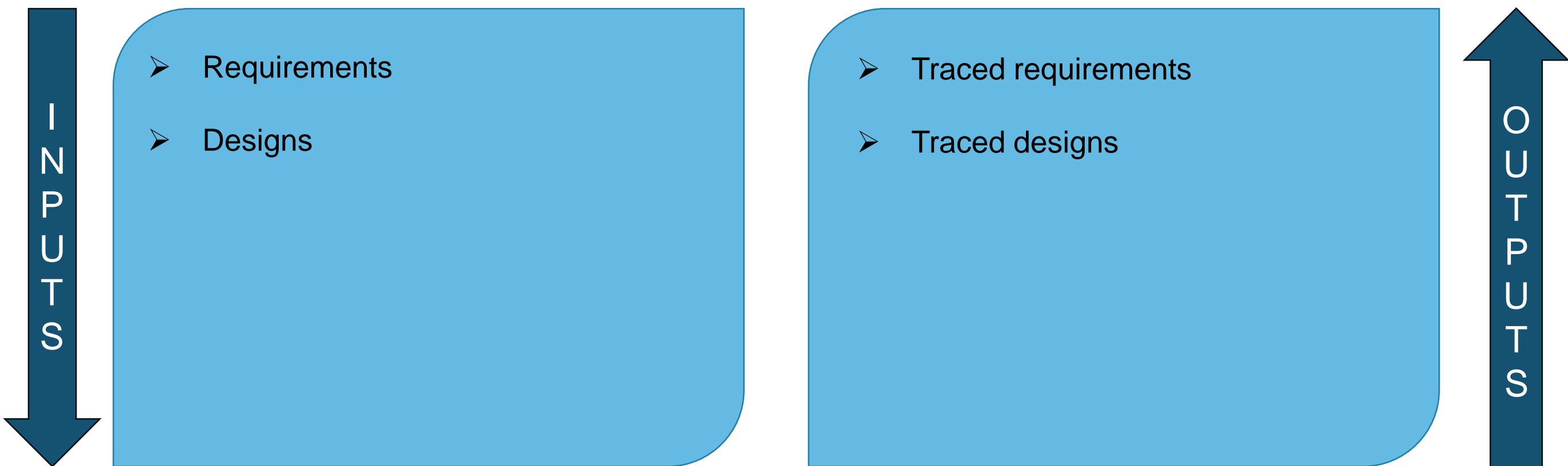
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# TRACE REQUIREMENTS

## OVERVIEW

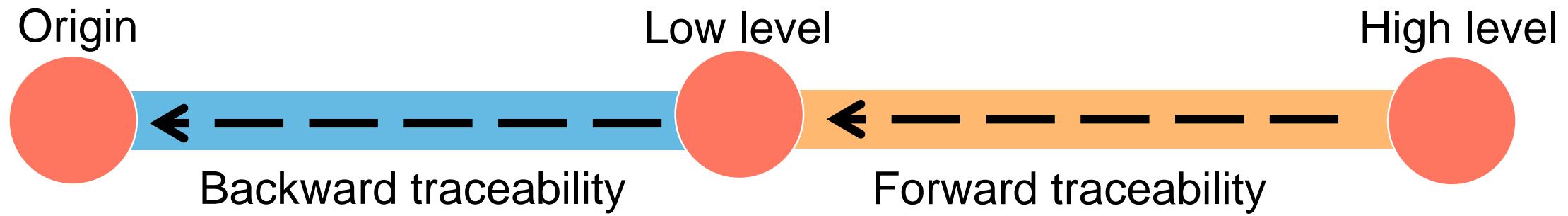
### Purpose

- 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

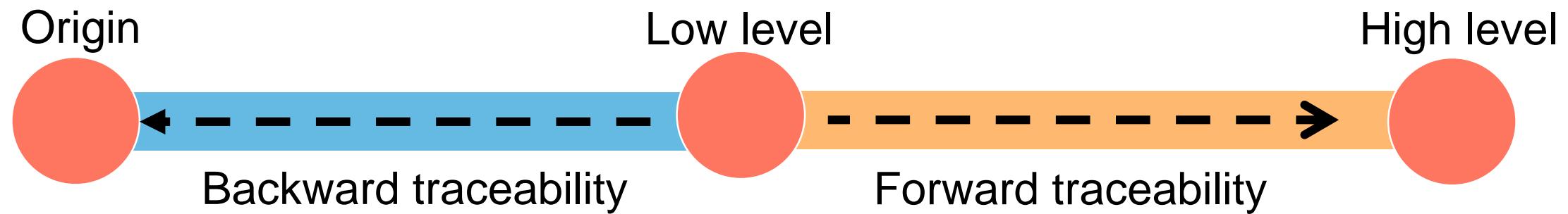


Effort increases with:

- Number of requirements and
- Level of formality

# TRACE REQUIREMENTS

## ELEMENTS

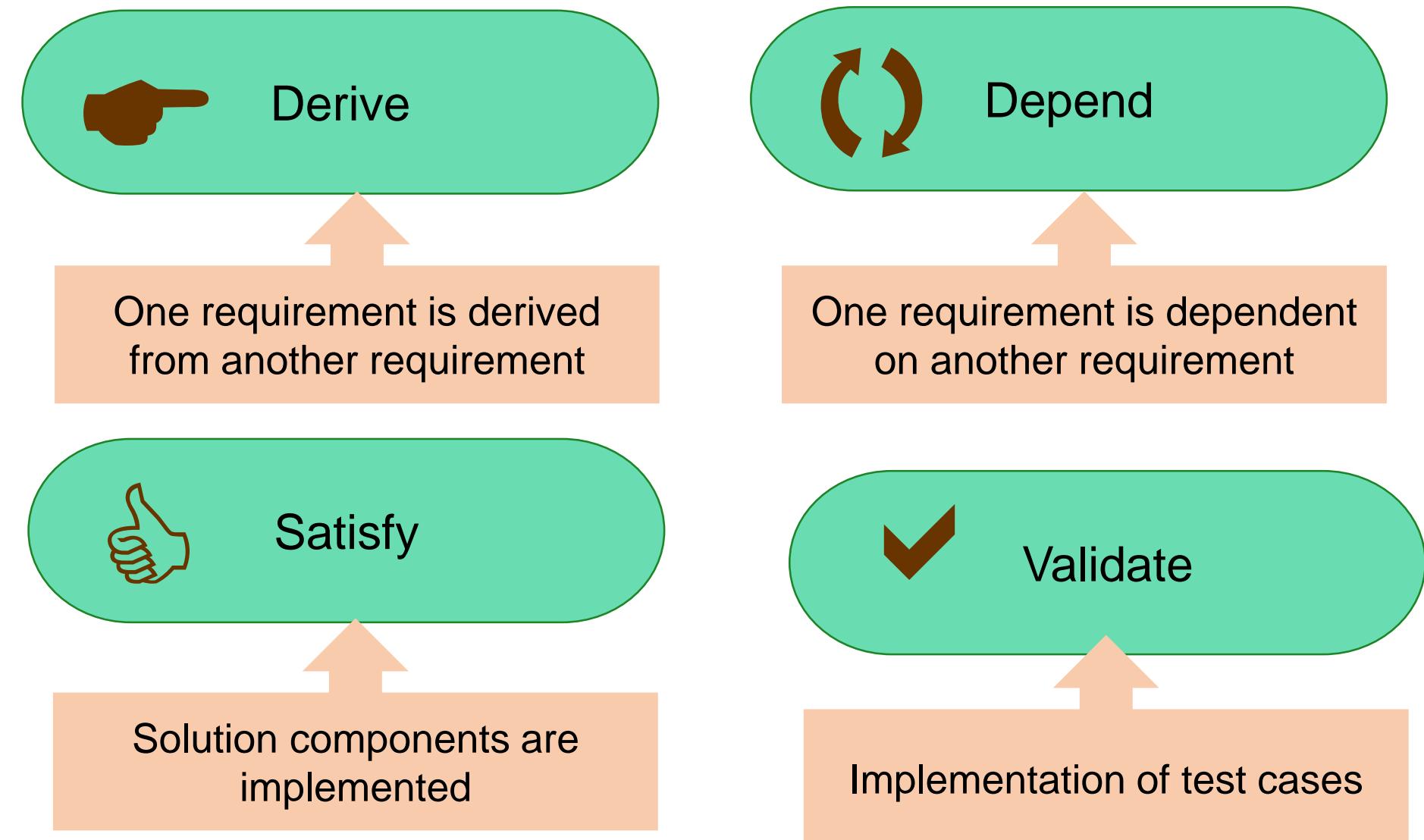


### Consider:

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

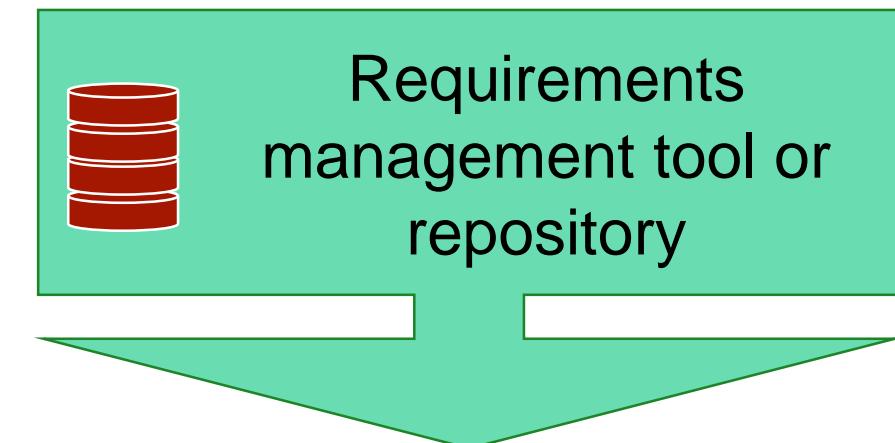
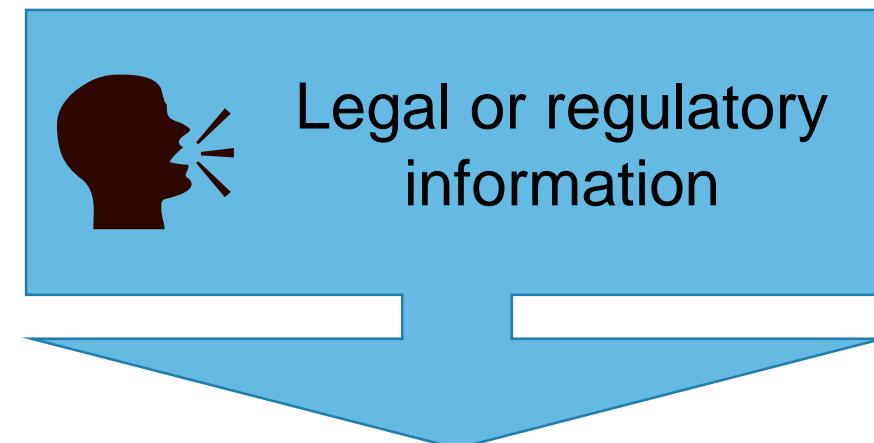
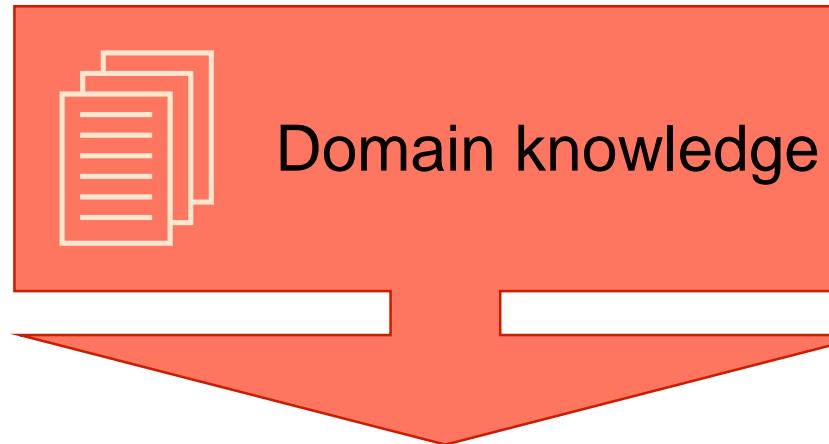
! Effort increases with:

- Number of requirements and
- Level of formality



# 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

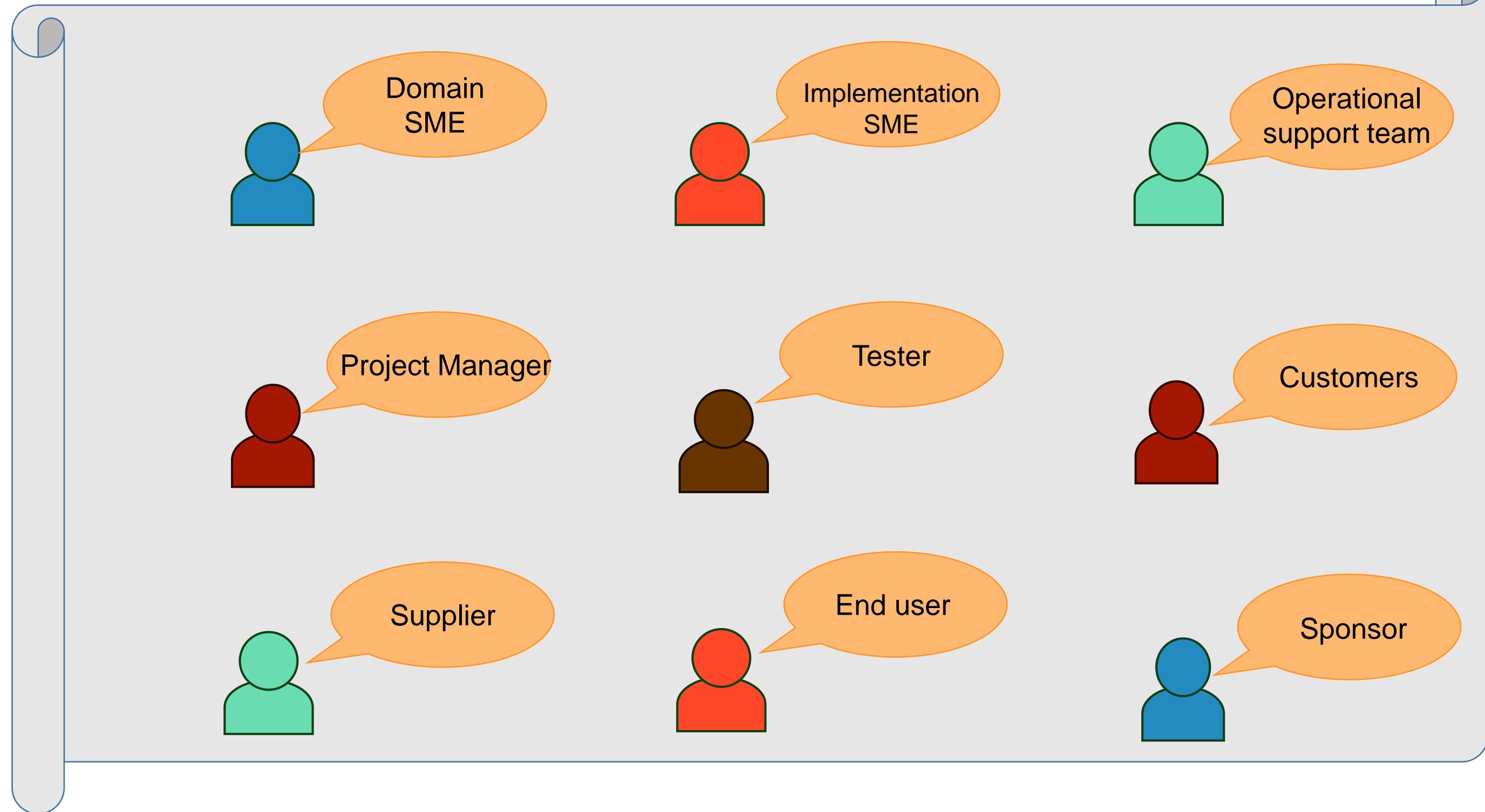
Show the scope of the  
business analysis work

# TRACE REQUIREMENTS

## STAKEHOLDERS



Business Analyst



# Lesson 5: Requirements Life Cycle Management

## Topic 5.2: Maintain Requirements

What is requirements maintenance?

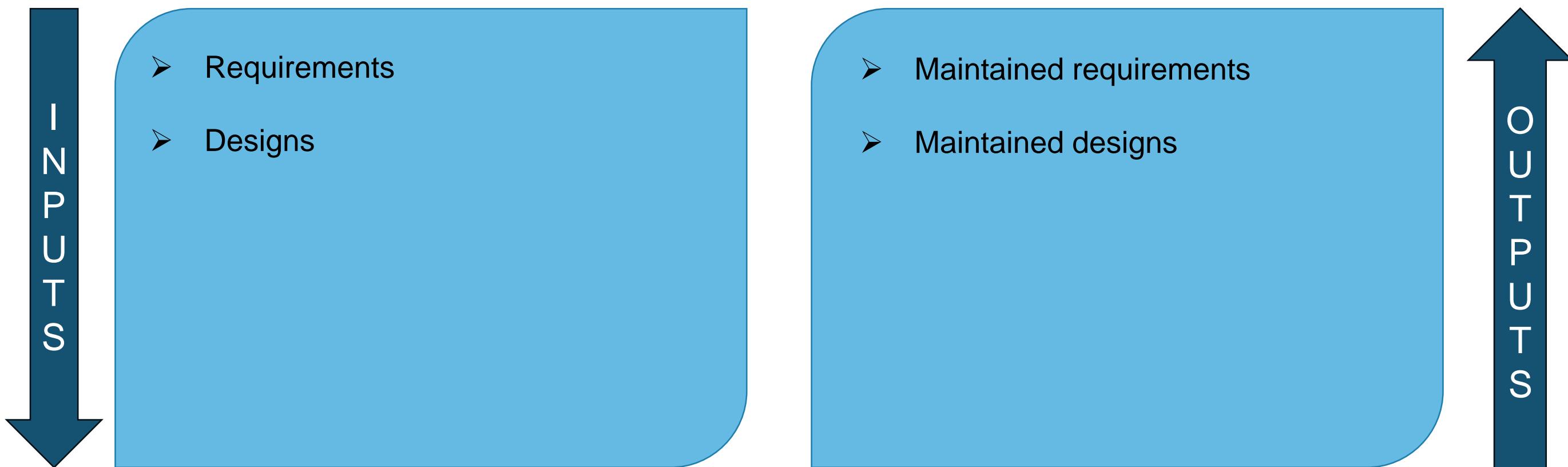
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# MAINTAIN REQUIREMENTS

## OVERVIEW

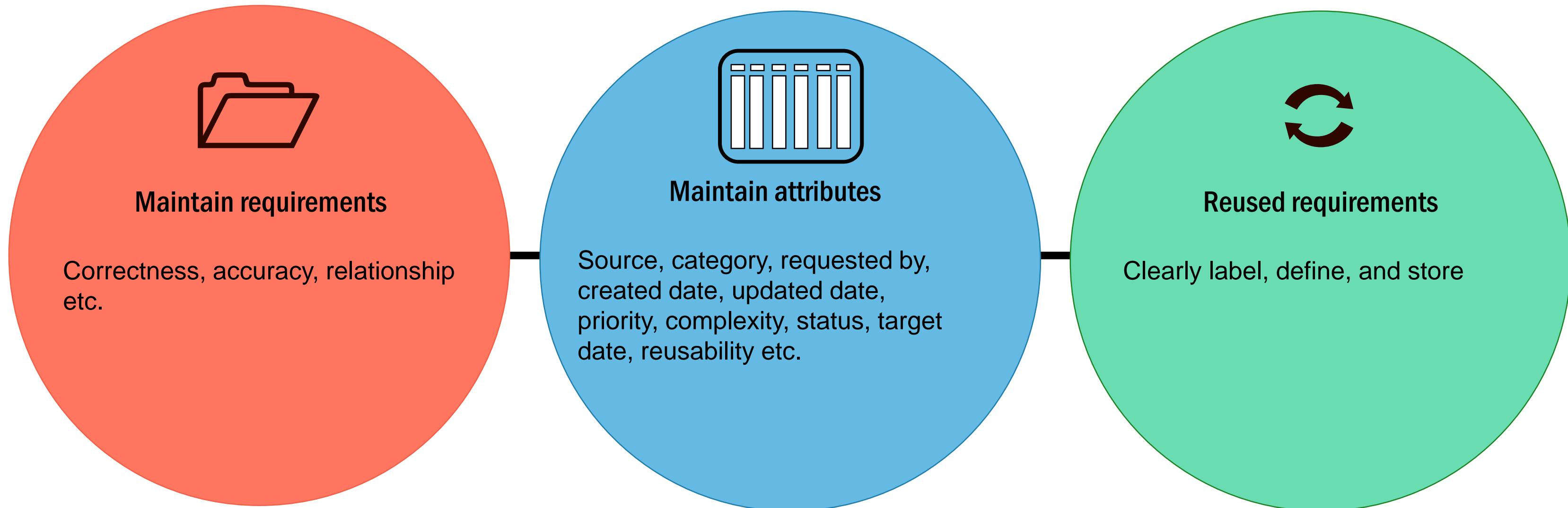
### Purpose

- 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

Data flow diagrams

Data modeling

Use cases and scenarios

User stories

Process modeling

Document analysis

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

Functional decomposition

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

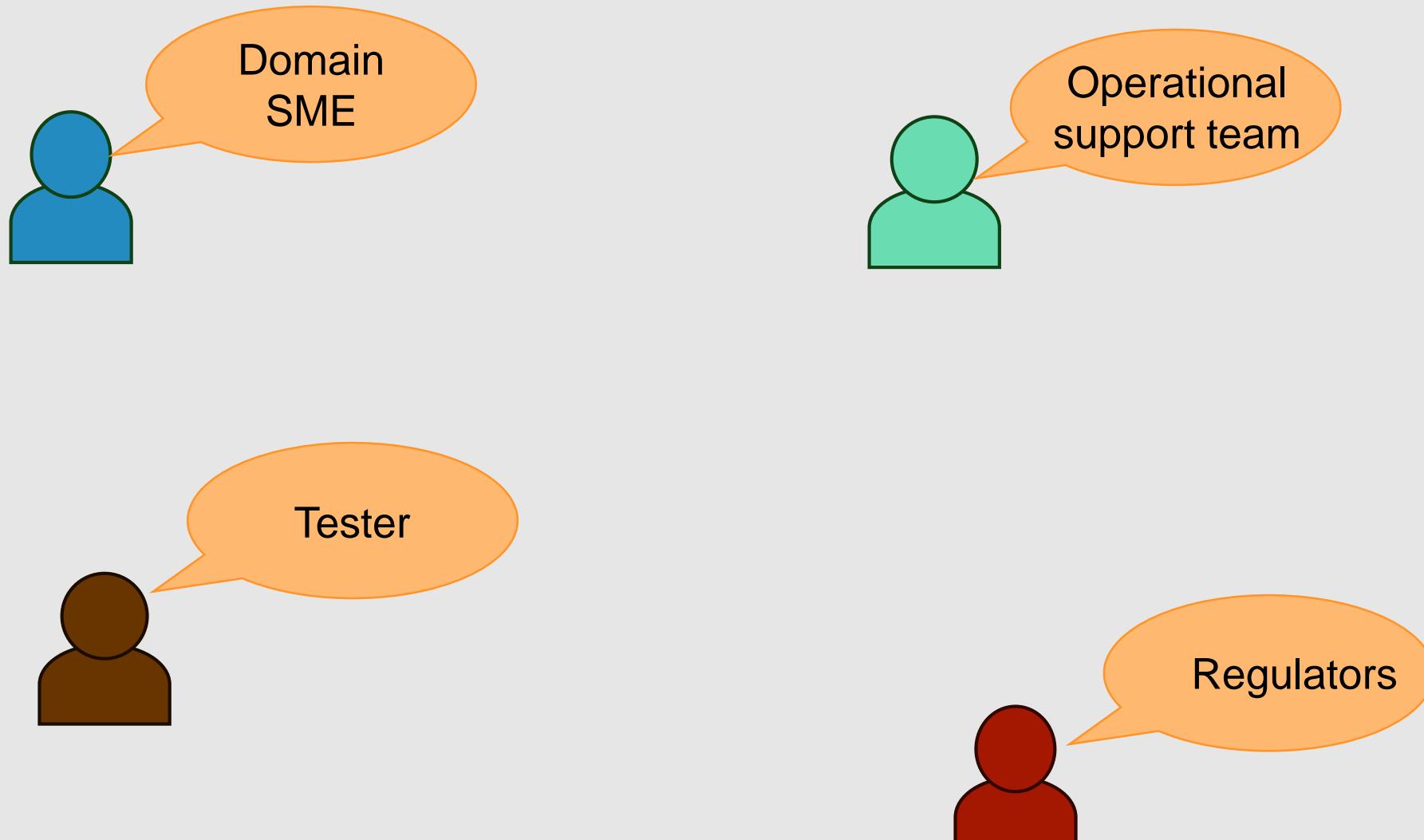
Identify requirements associated with components and available for reuse

# MAINTAIN REQUIREMENTS

## STAKEHOLDERS



Business Analyst



# Lesson 5: Requirements Life Cycle Management

## Topic 5.3: Prioritize Requirements

What is prioritizing requirements?

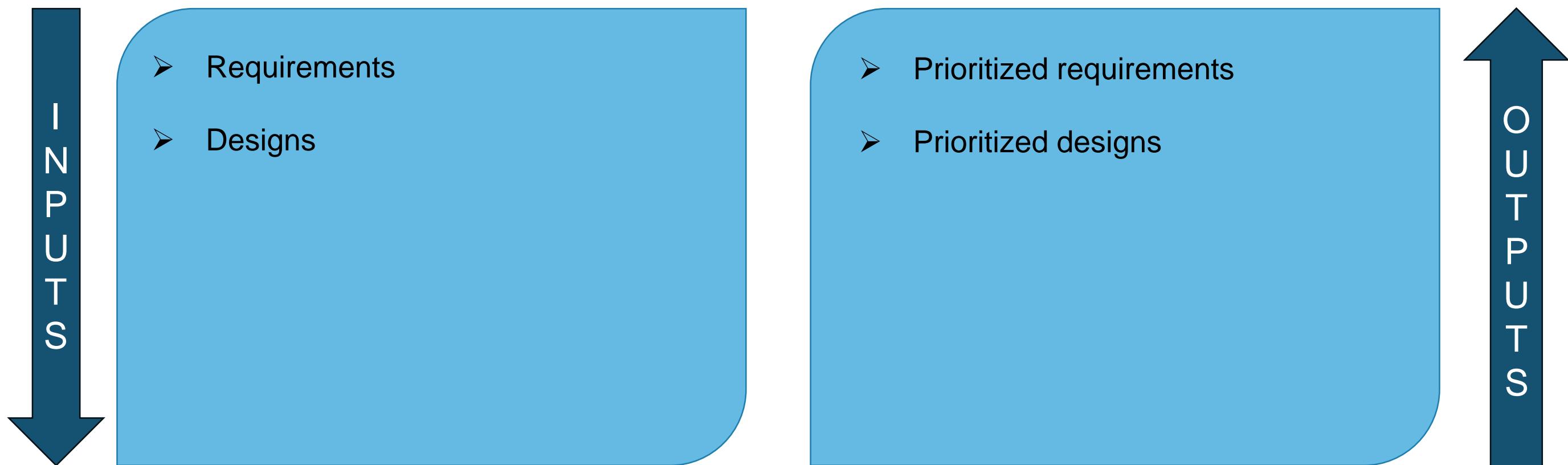
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# PRIORITIZE REQUIREMENTS

## OVERVIEW

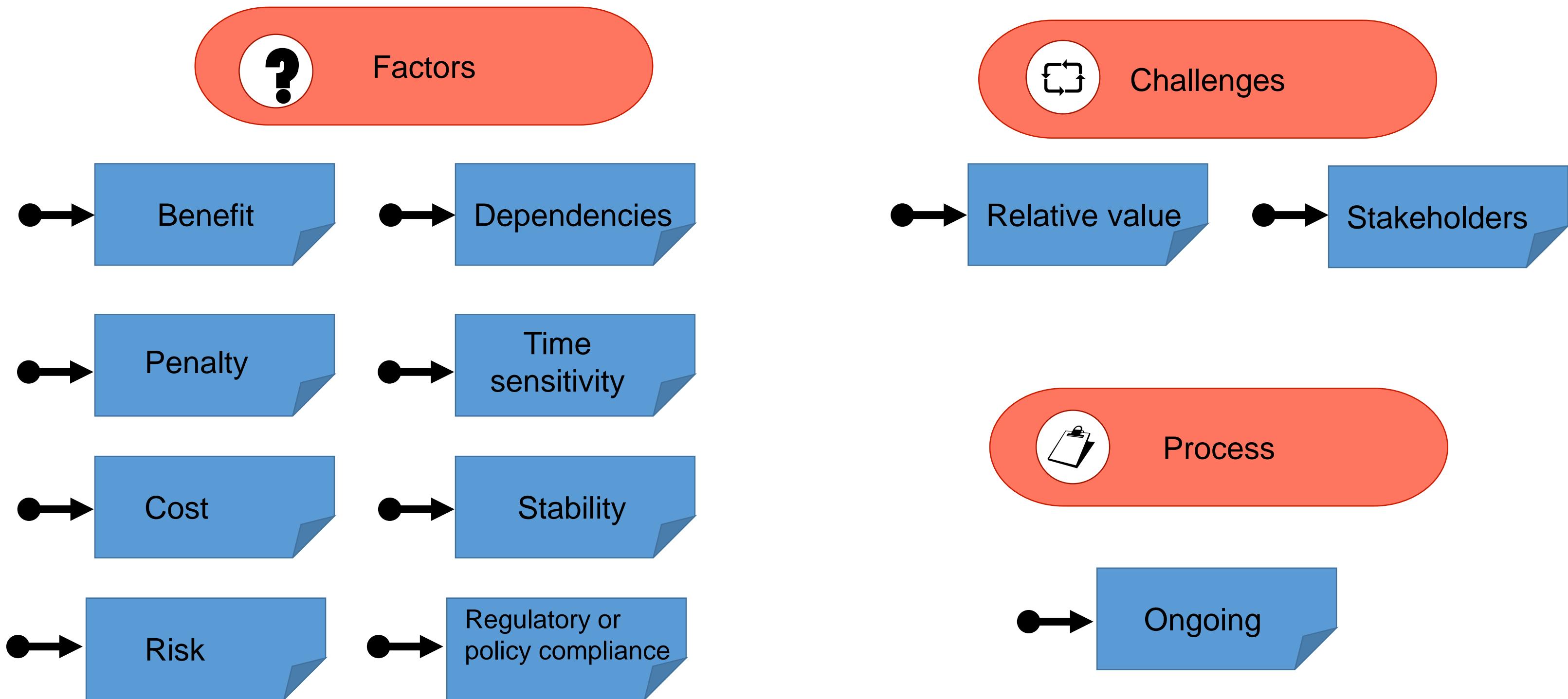
### Purpose

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



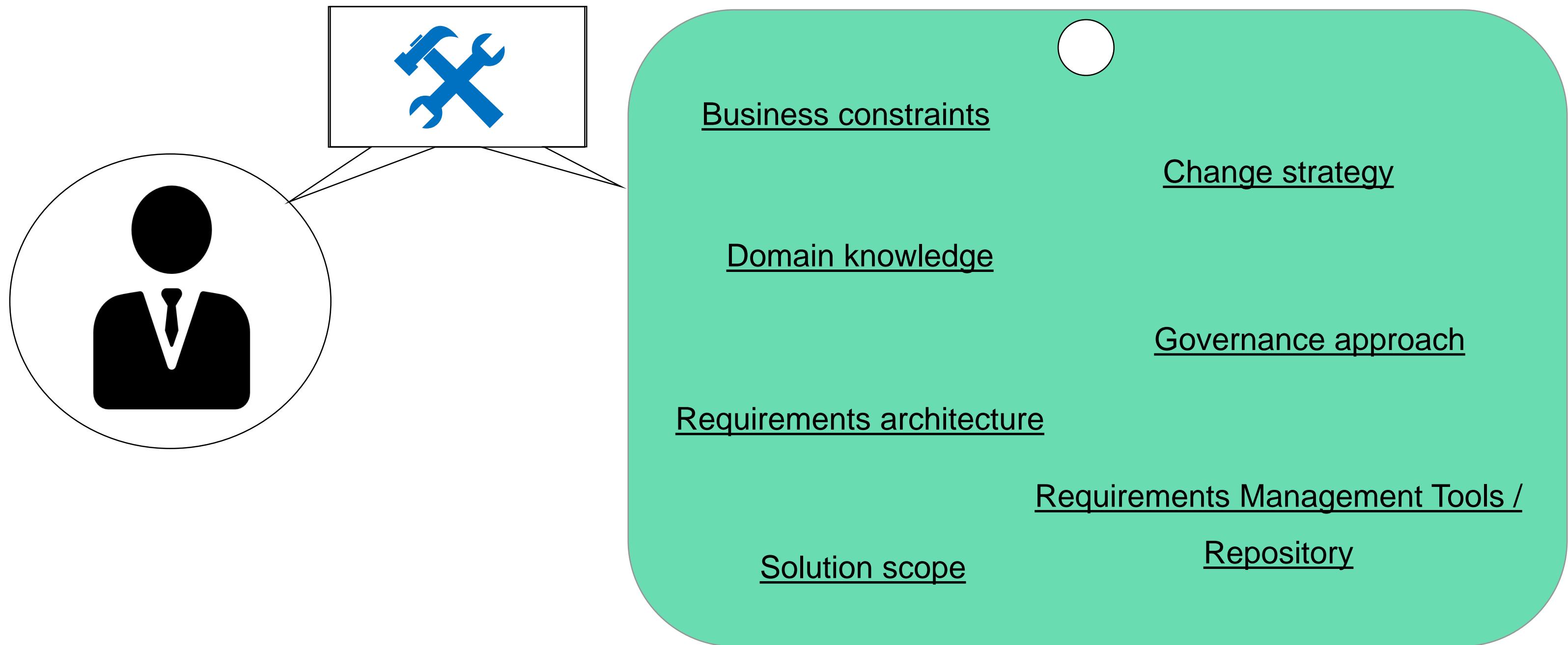
# PRIORITIZE REQUIREMENTS

## ELEMENTS



# PRIORITIZE REQUIREMENTS

## GUIDELINES AND TOOLS



# PRIORITIZE REQUIREMENTS

## TECHNIQUES

Backlog management



Interviews



Business cases

Workshops

Decision analysis



Risk analysis and  
management



Estimation

Item tracking

Financial analysis



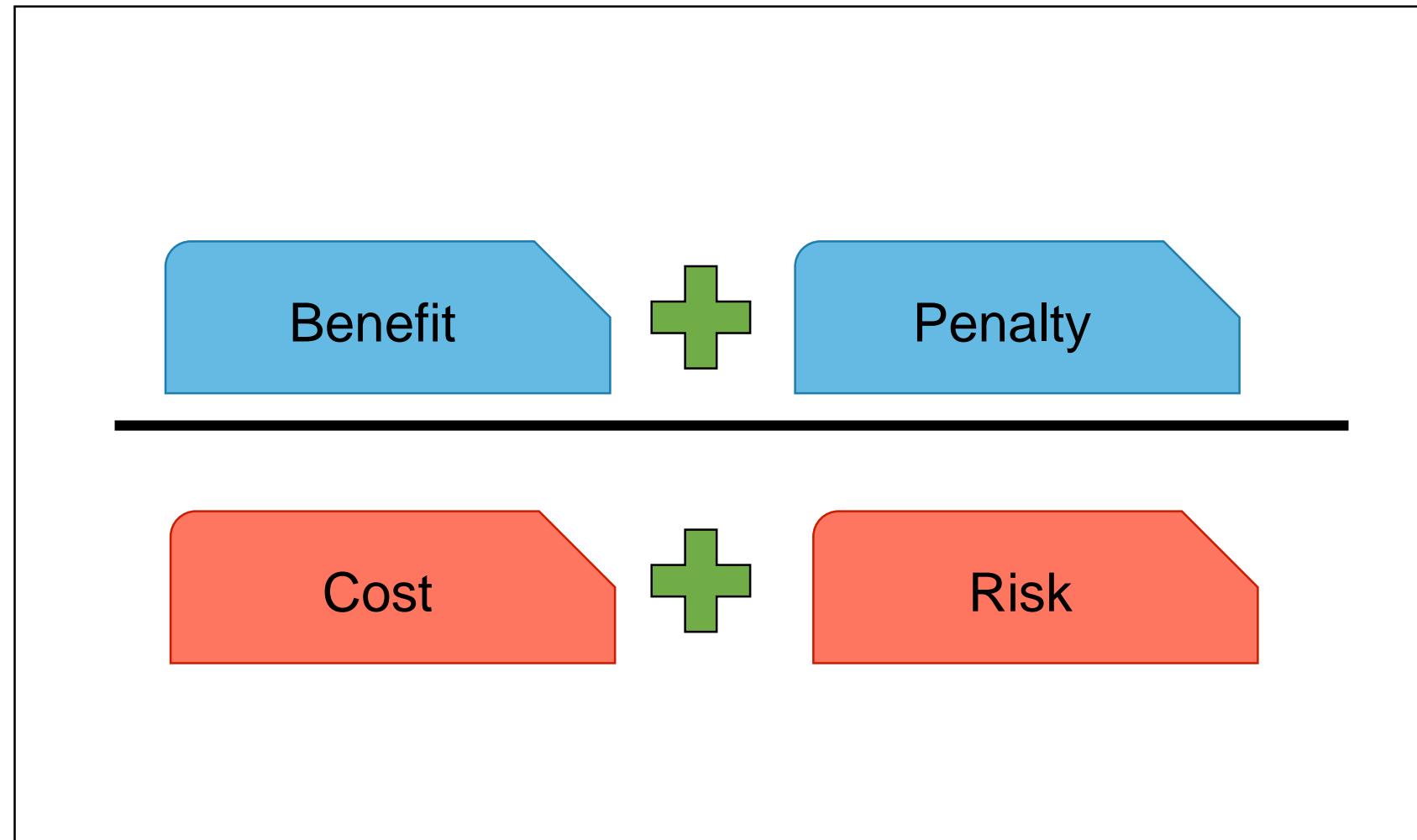
Prioritization



# 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

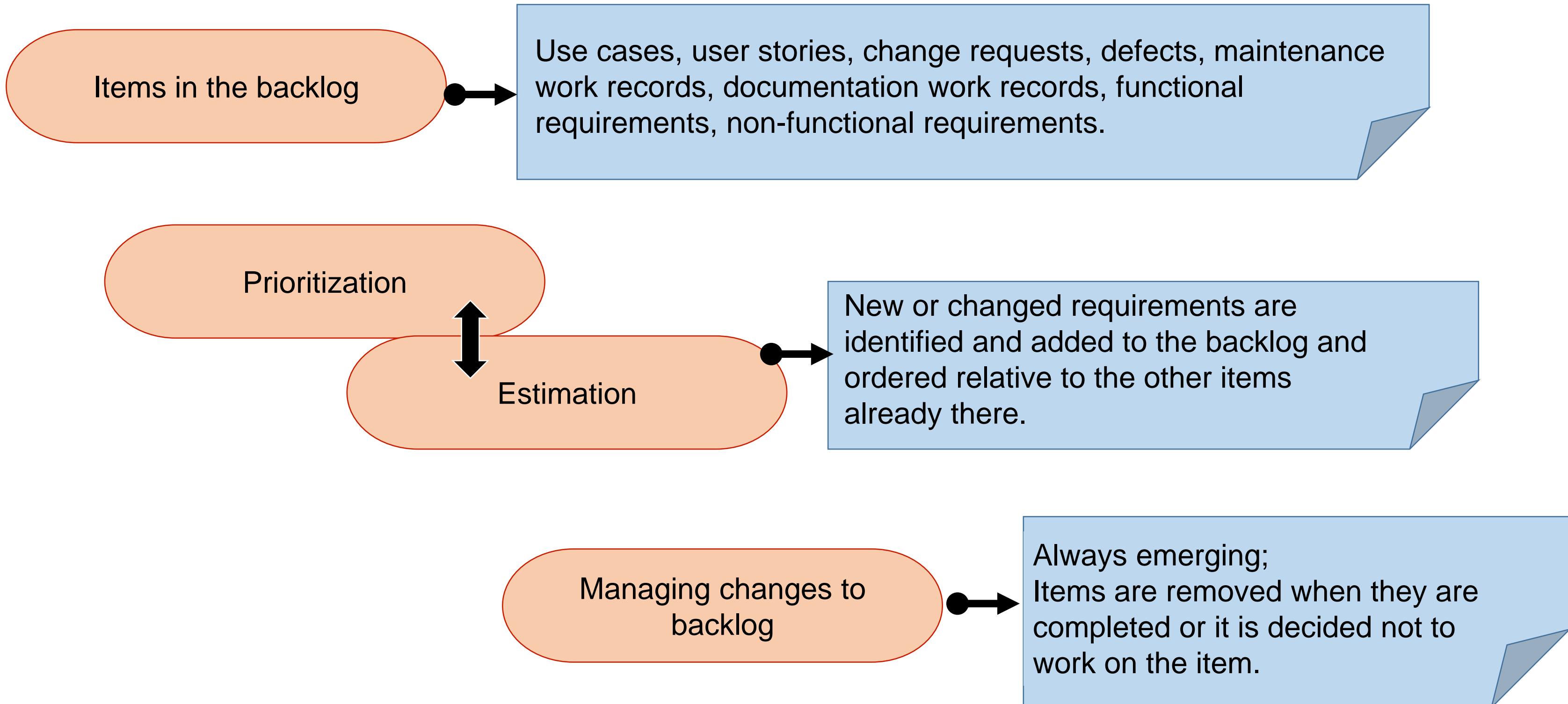
Items at the top have the highest business value and priority

### 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

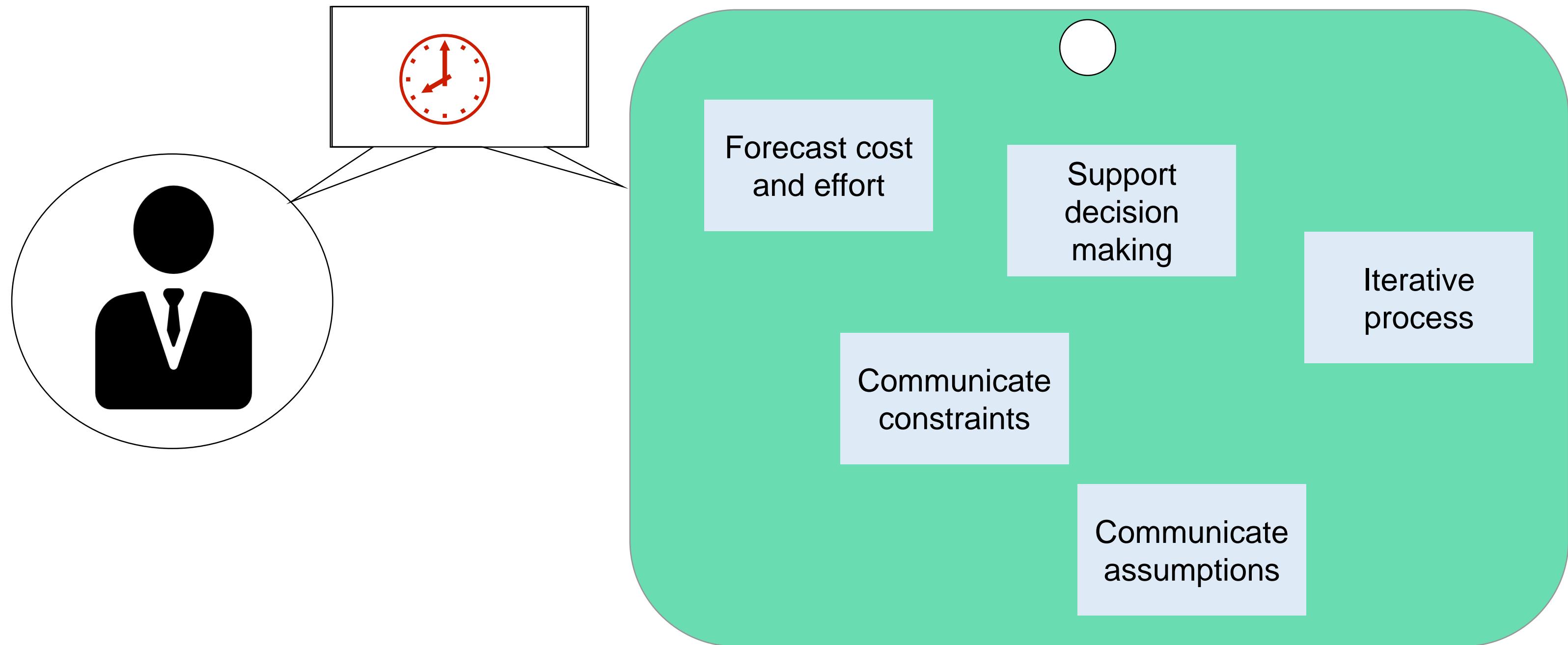
# PRIORITIZE REQUIREMENTS

## BACKLOG MANAGEMENT - ELEMENTS



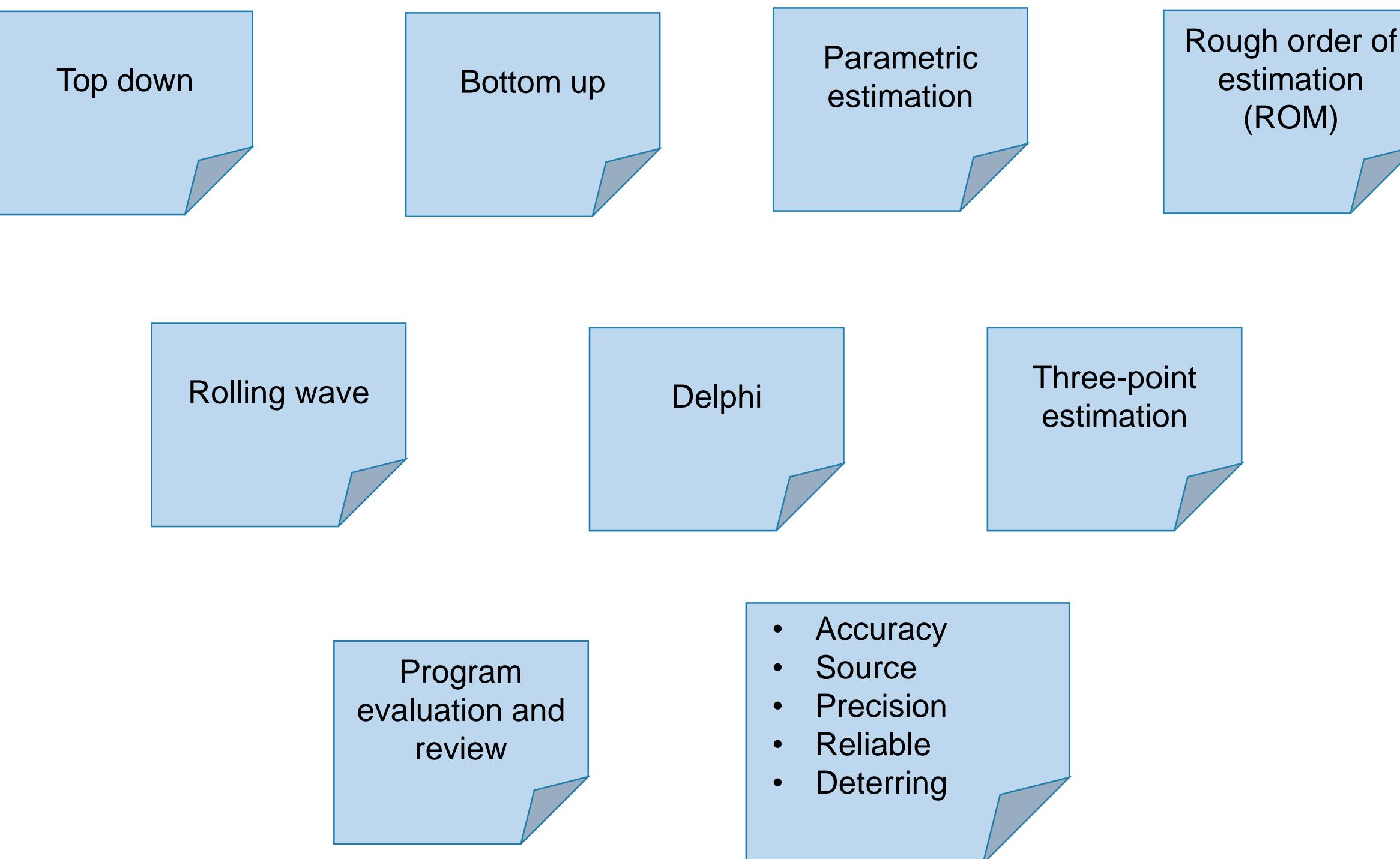
# PRIORITIZE REQUIREMENTS

## ESTIMATION - OVERVIEW



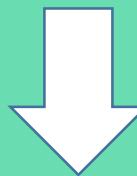
# PRIORITIZE REQUIREMENTS

## 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

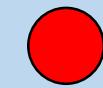


Higher level of accuracy

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

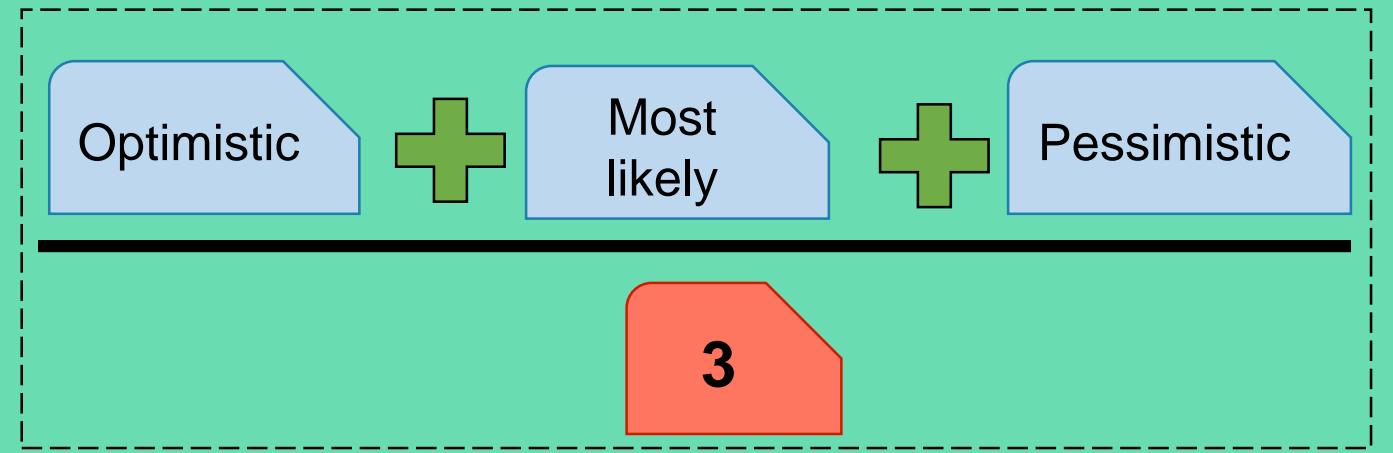
It's more accurate than 3-point average

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

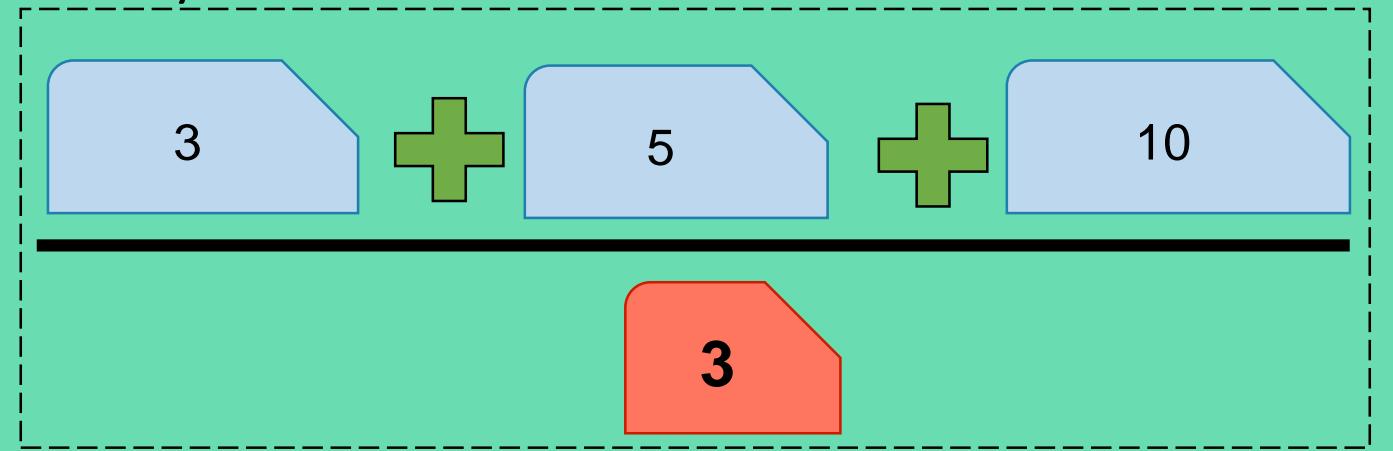
# PRIORITIZE REQUIREMENTS

## THREE POINT AVERAGE AND PERT ESTIMATION

### THREE POINT AVERAGE

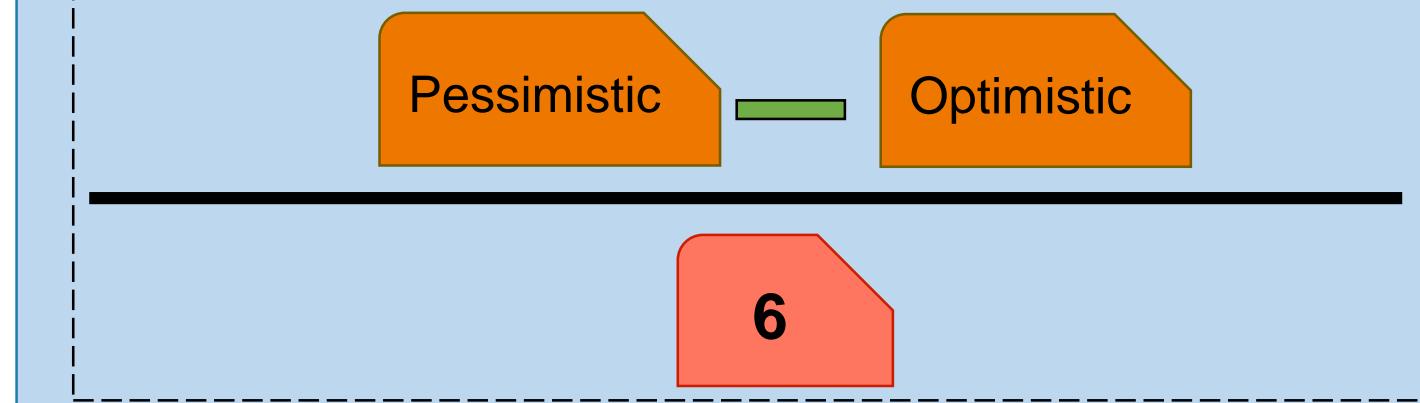
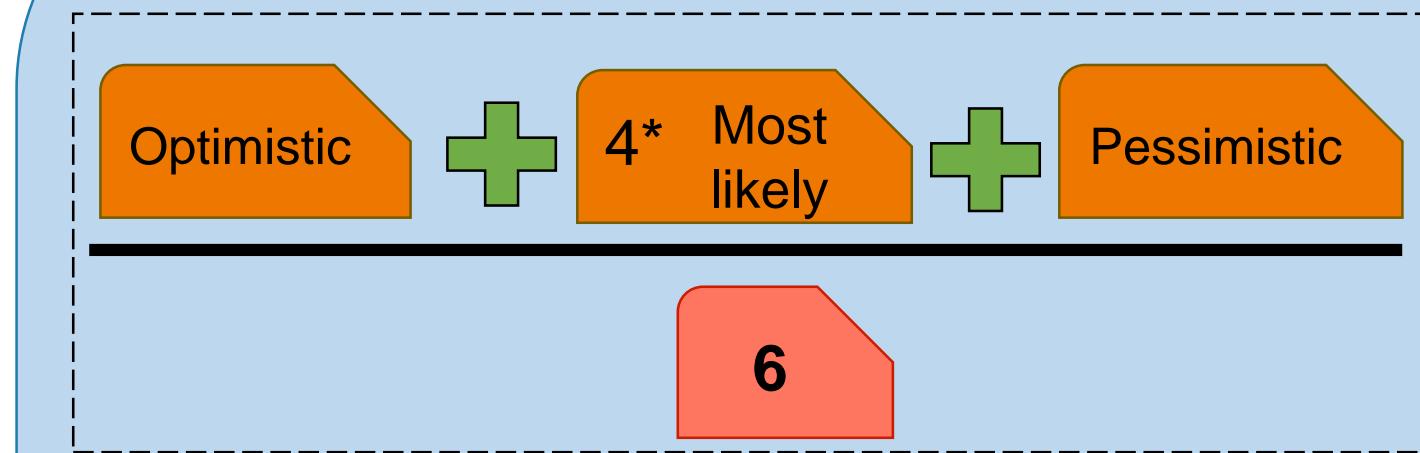


Optimistic: 3 days, Most Likely: 5 days and Pessimistic:  
10 days



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        | ● Identified by   | ● Resolver or assigned to |
| ● Summary or Description | ● Impact          | ● Agreed strategy         |
| ● Category               | ● Priority        | ● Status                  |
| ● Type                   | ● Resolution date | ● Resolution updates      |
| ● Date identified        | ● Owner           | ● Escalation matrix       |

# PRIORITIZE REQUIREMENTS

## STAKEHOLDERS



# Lesson 5: Requirements Life Cycle Management

## Topic 5.4: Assess Requirements Changes

How changes to the requirements are assessed?

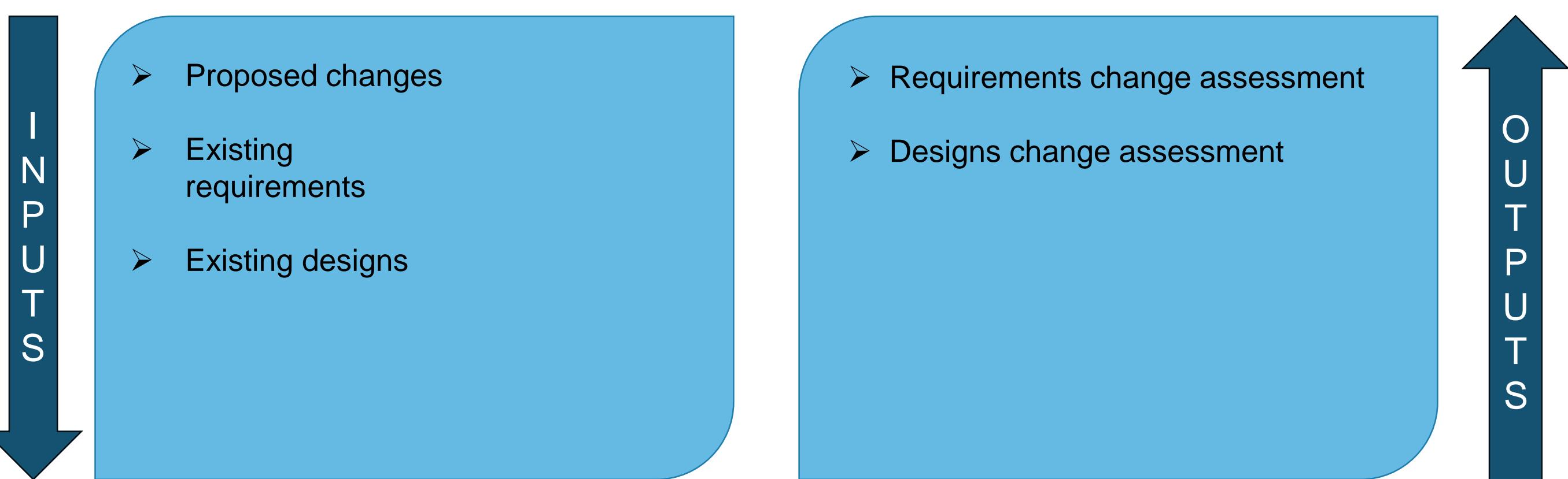
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# ASSESS REQUIREMENTS CHANGES

## OVERVIEW

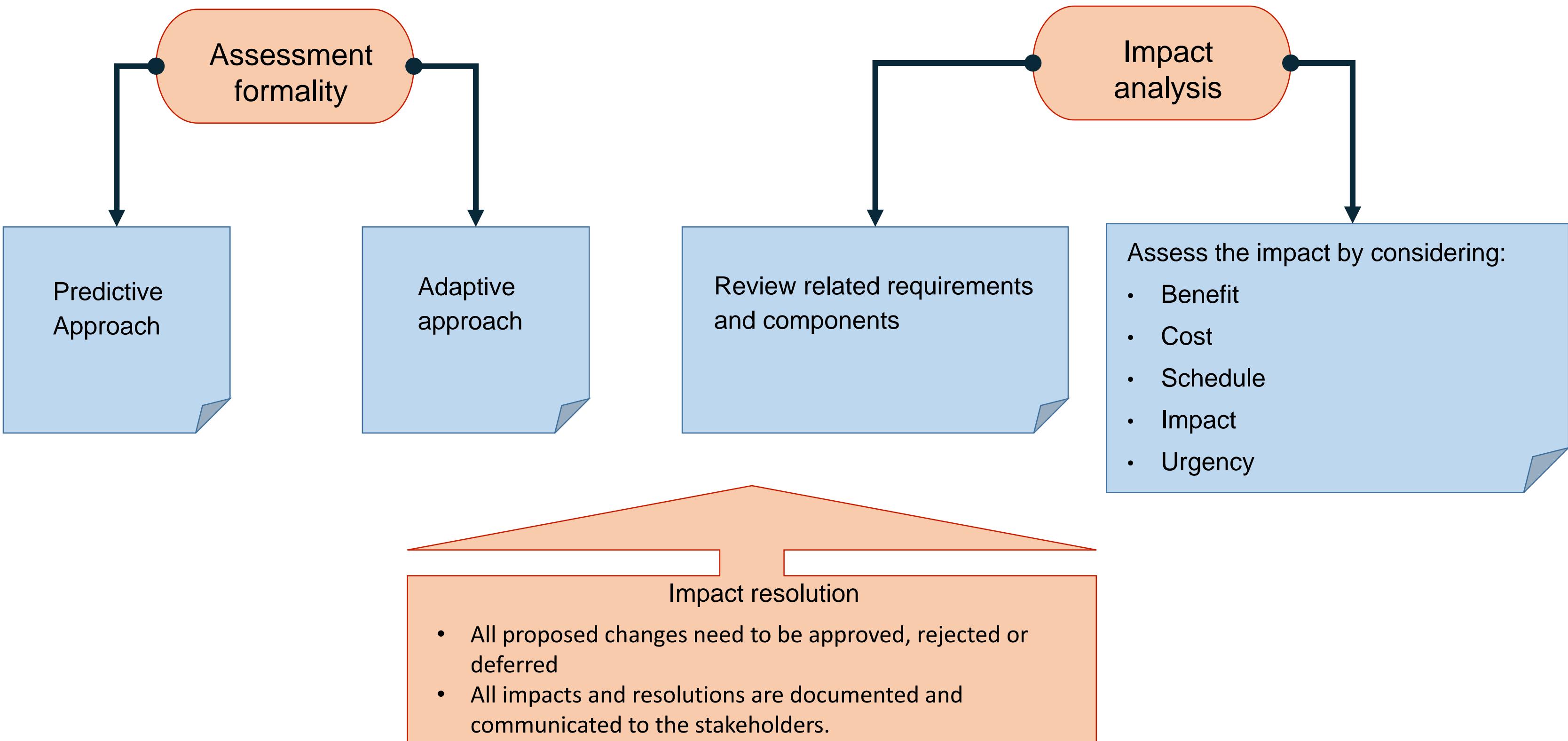
### Purpose

- Evaluate the implications of proposed changes to requirements and designs



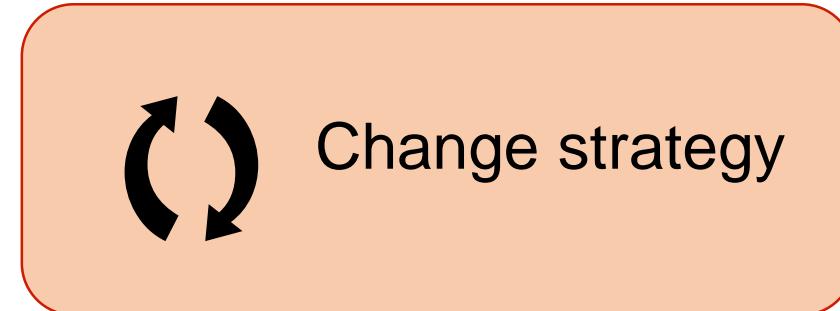
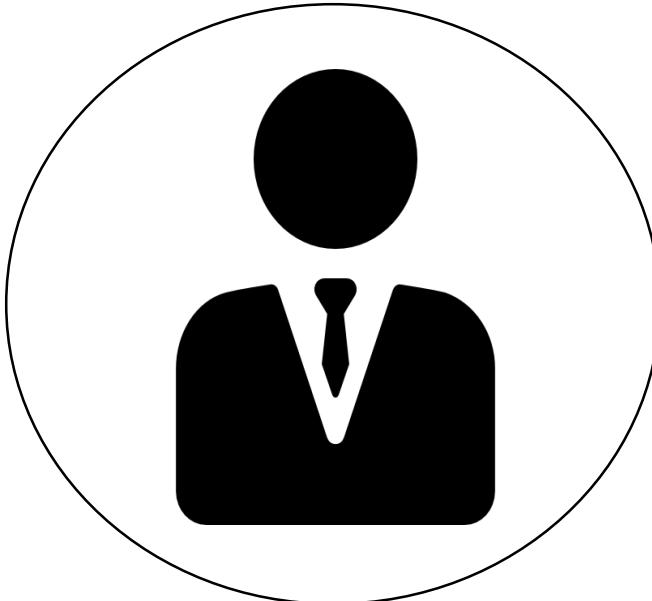
# ASSESS REQUIREMENTS CHANGES

## ELEMENTS



# ASSESS REQUIREMENTS CHANGES

## GUIDELINES AND TOOLS



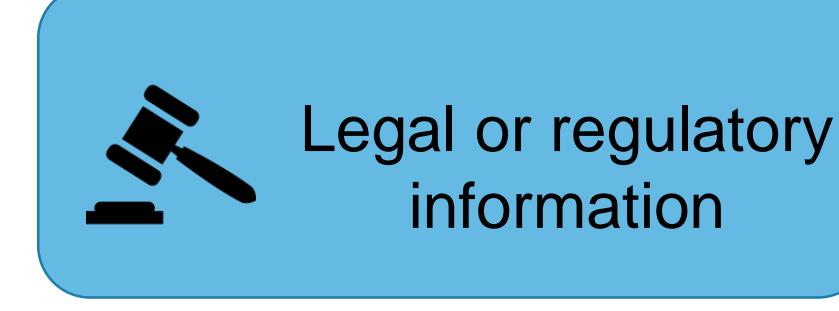
Change strategy



Domain knowledge



Governance  
approach



Legal or regulatory  
information



Requirements  
architecture



Solution scope

# ASSESS REQUIREMENTS CHANGES

## TECHNIQUES

Business case



Estimation

Document analysis



Financial analysis



Risk analysis and management

Business rules analysis



Workshops and interviews



Item tracking

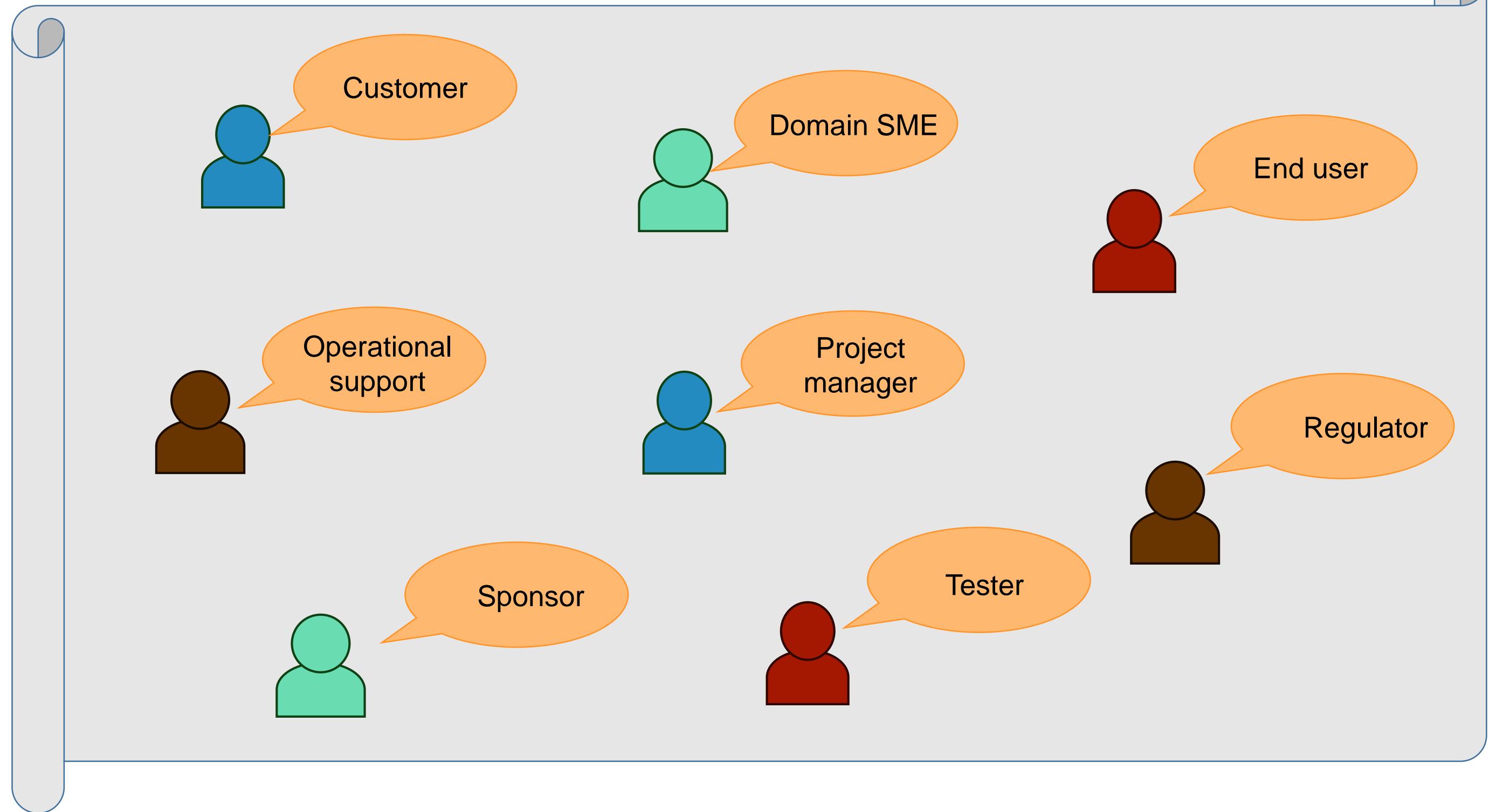
Decision analysis

# ASSESS REQUIREMENTS CHANGES

## STAKEHOLDERS



Business Analyst



# Lesson 5: Requirements Life Cycle Management

## Topic 5.5: Approve Requirements

How are requirements approved?

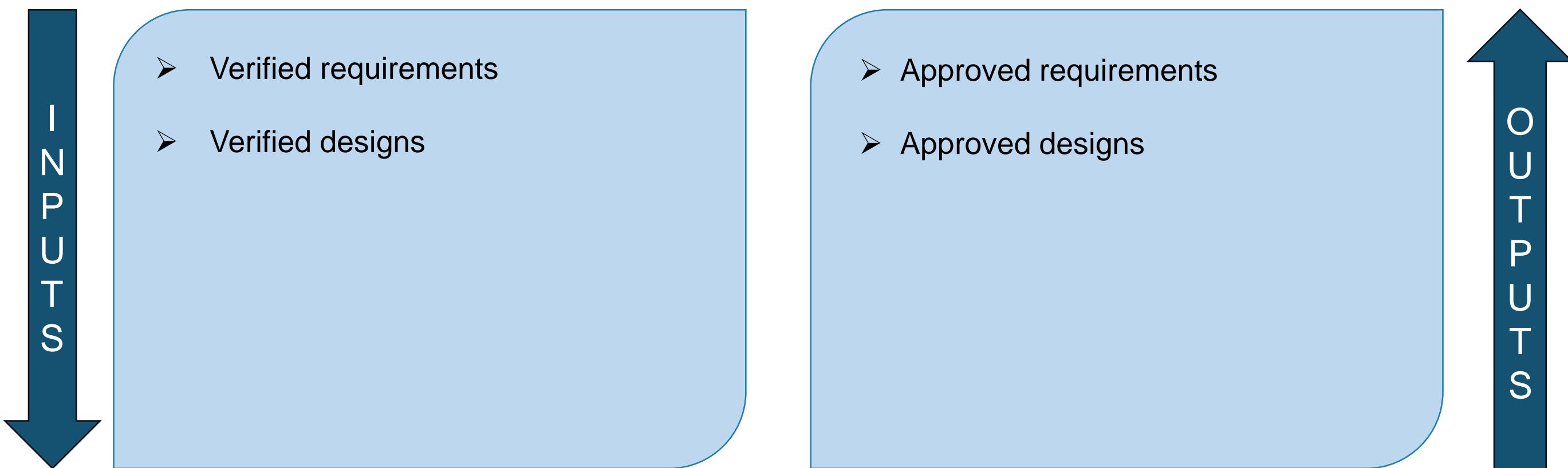
- ✓ Overview
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders

# APPROVE REQUIREMENTS

## OVERVIEW

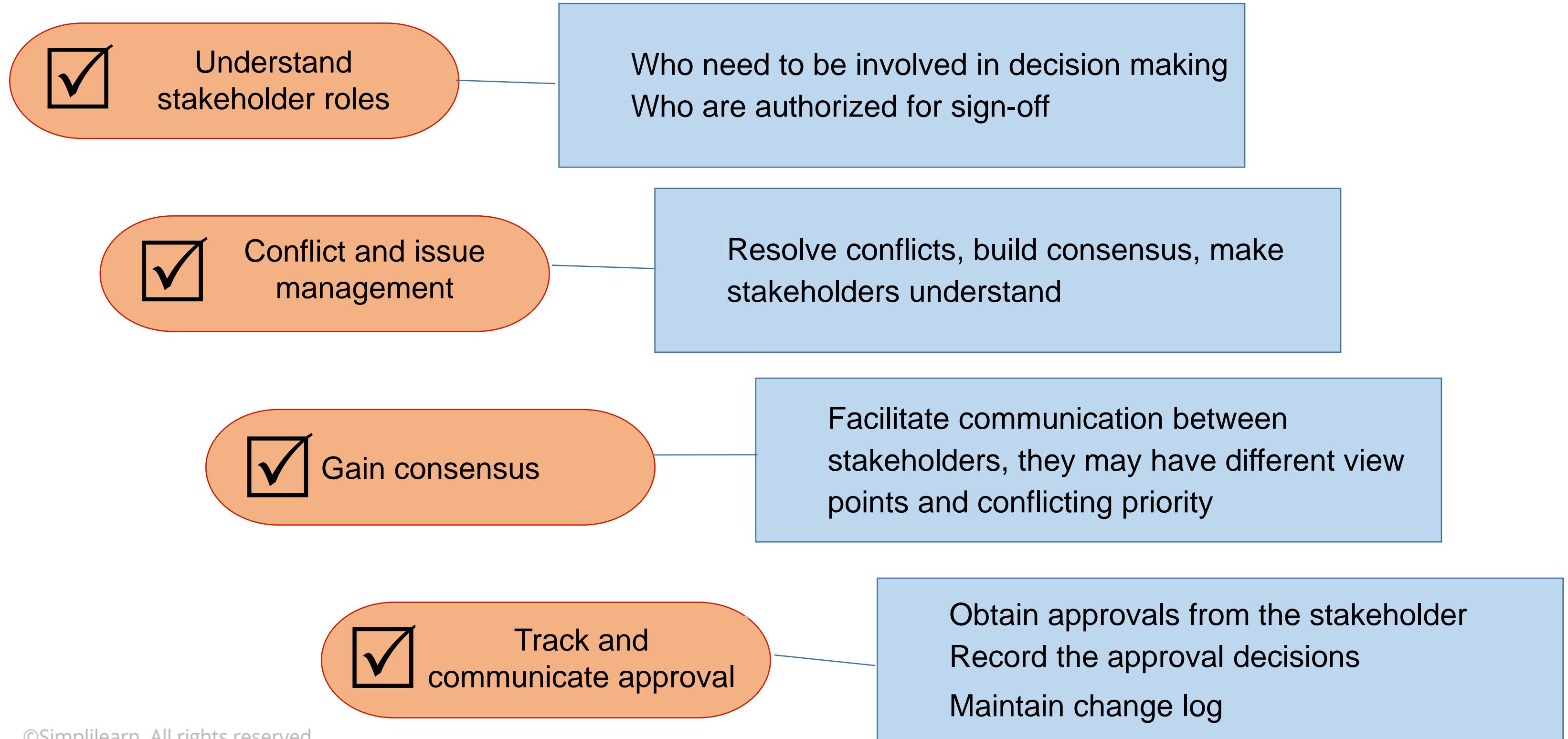
### Purpose

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



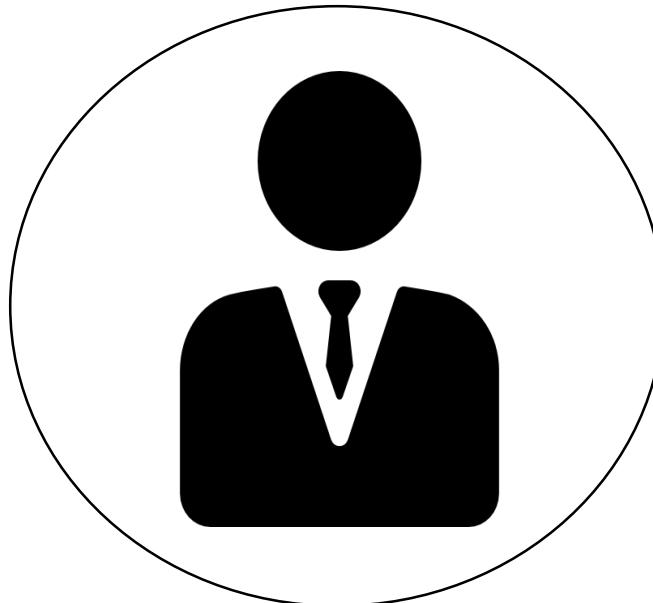
# APPROVE REQUIREMENTS

## ELEMENTS

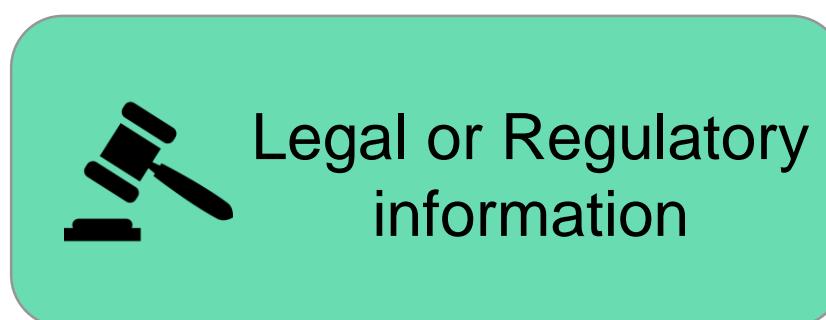


# APPROVE REQUIREMENTS

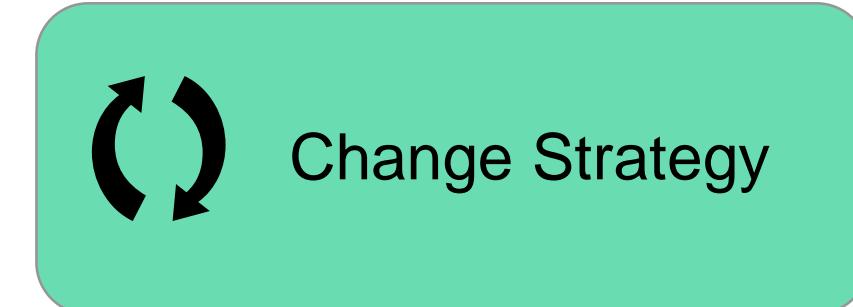
## GUIDELINES AND TOOLS



Governance  
approach



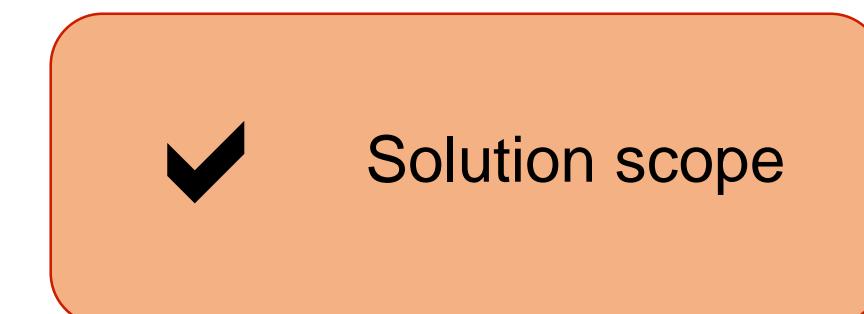
Legal or Regulatory  
information



Change Strategy



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



- 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

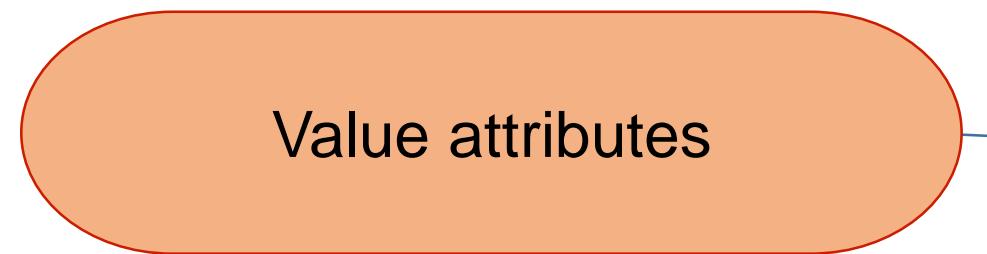
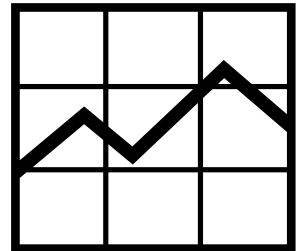
Limitations



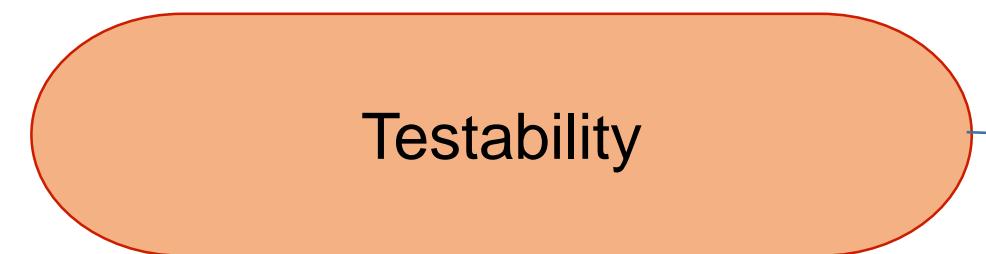
- Acceptance criteria may express contractual obligation
- Achieving agreement on evaluation criteria for different needs can be challenging

# APPROVE REQUIREMENTS

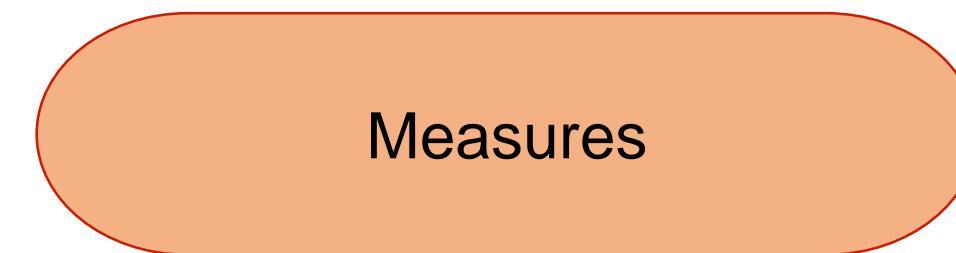
## ACCEPTANCE AND EVALUATION CRITERIA - ELEMENTS



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



User acceptance testing



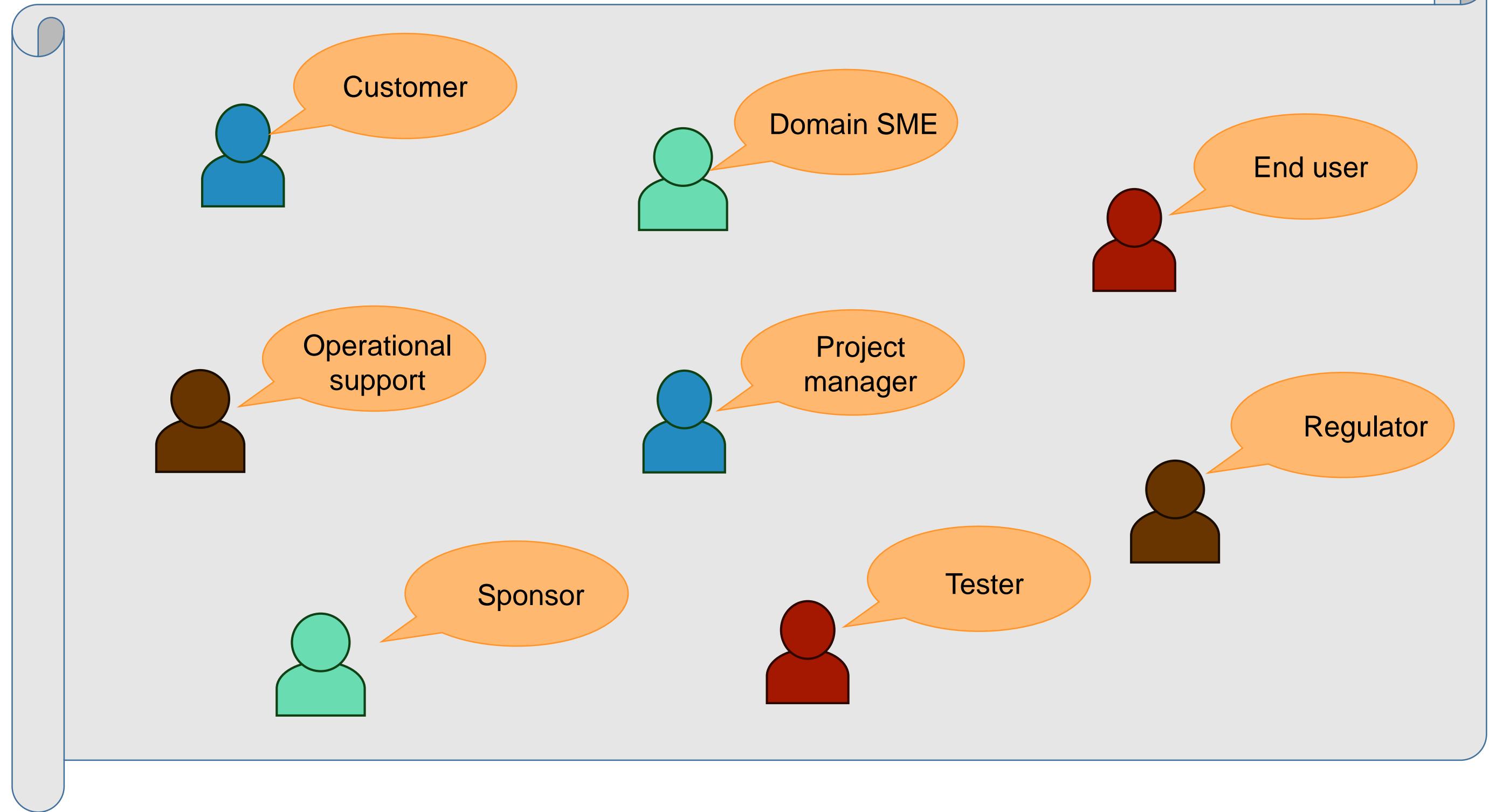
Continuous or discrete scale

# APPROVE REQUIREMENTS

## STAKEHOLDERS



Business Analyst



## KEY TAKEAWAYS

```
graph TD; 1[1] --> 2[2]; 2 --> 3[3]; 3 --> 4[4]; 4 --> 5[5]; 5 --> 6[6]; 6 --> 7[7];
```

5 Tasks in the Requirements Life Cycle Management Knowledge Area.

Trace requirements and designs at different levels, to ensure alignment to one another. Maintain backward traceability and forward traceability.

Prioritize requirements and design in the order of relative importance to maximize value delivery.

Obtain agreement on and approval of requirements and designs for business analysis work to continue solution construction.

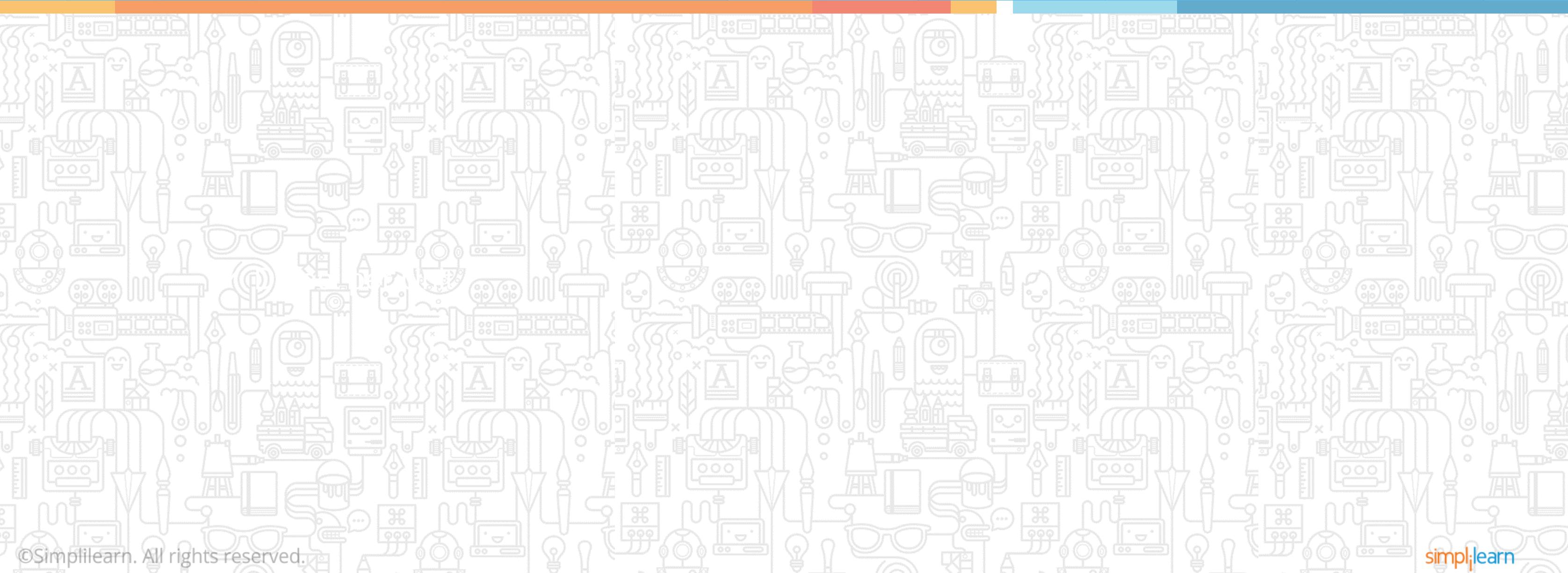
Maintain requirements for reusability. Retain requirements accuracy and consistency throughout the entire requirements life cycle.

Assess implications of proposed changes to requirements and designs.

Analysis, specification, modelling, verification, validation, and communication of requirements are performed in other knowledge areas.

# **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



# 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 the reason for the requirements not in scope getting 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 the reason for the requirements not in scope getting approved and allocated to a 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

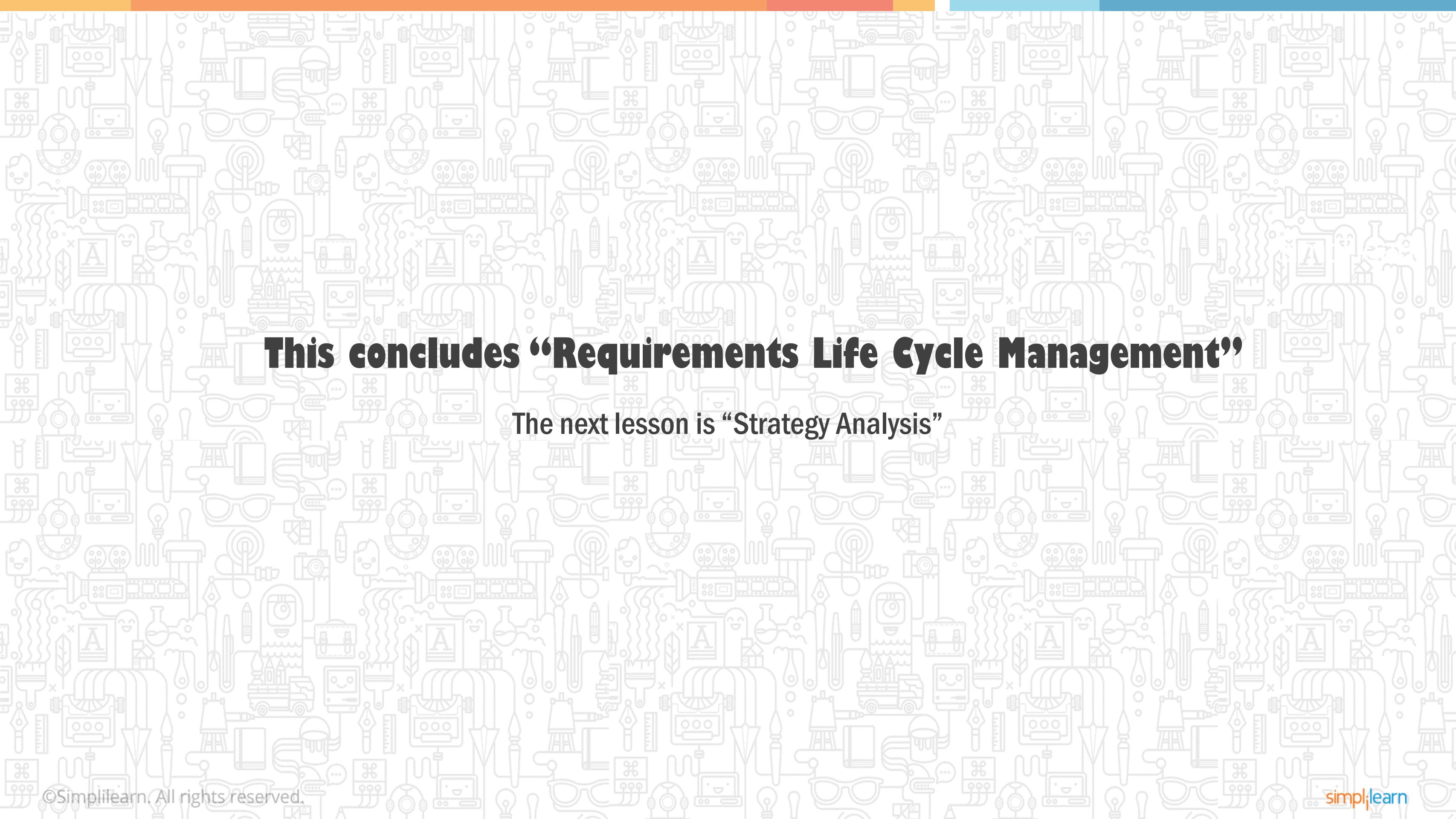
Which one of the following is an input to the approve requirements task?

- 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

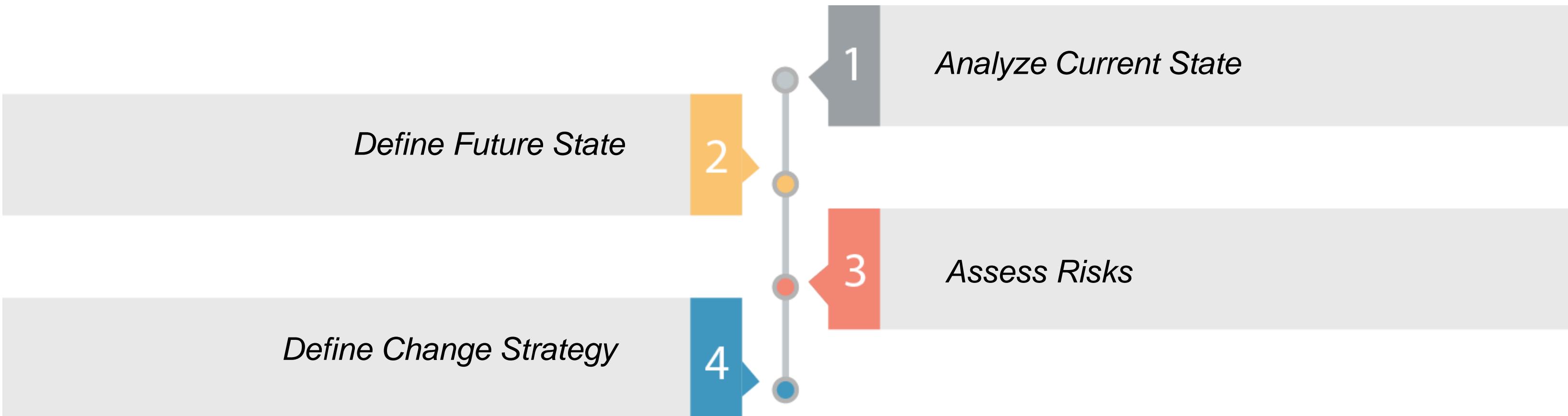
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# **CBAP® Exam Preparation Course**

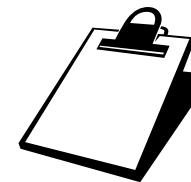
## Lesson 6 – Strategy Analysis



# WHAT'S IN IT FOR ME



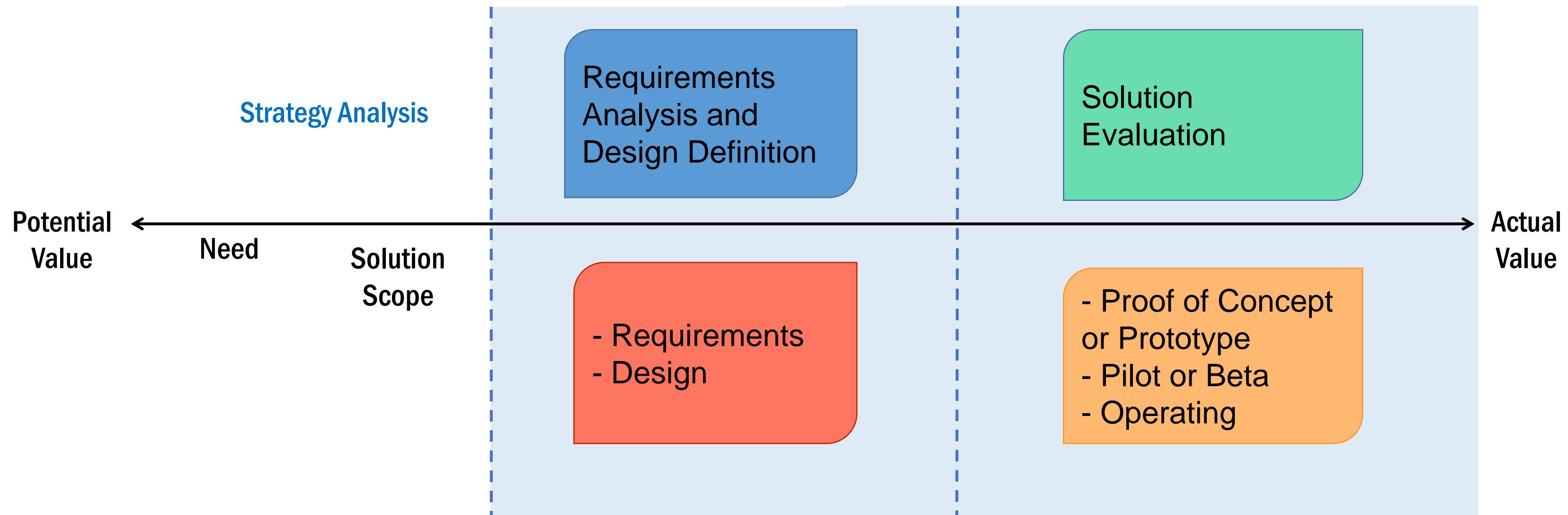
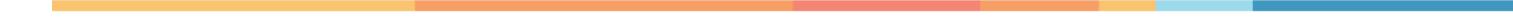
# INTRODUCTION



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

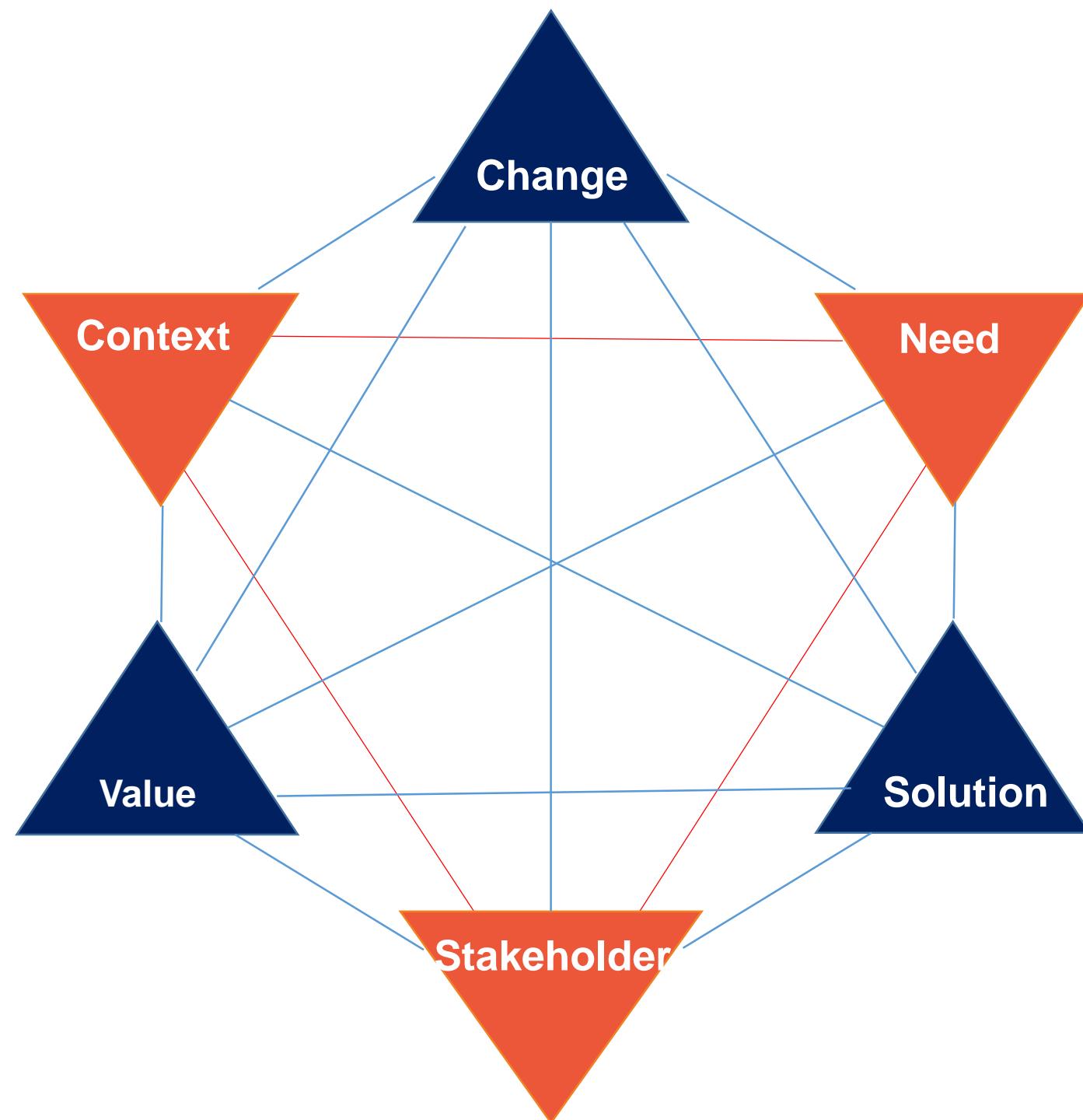
- ***identify*** a need of strategic or tactical importance (the business need)
- enable the enterprise to ***address*** that need, and
- ***align*** the resulting strategy for the change with higher and lower level strategies.

# BUSINESS ANALYSIS VALUE SPECTRUM



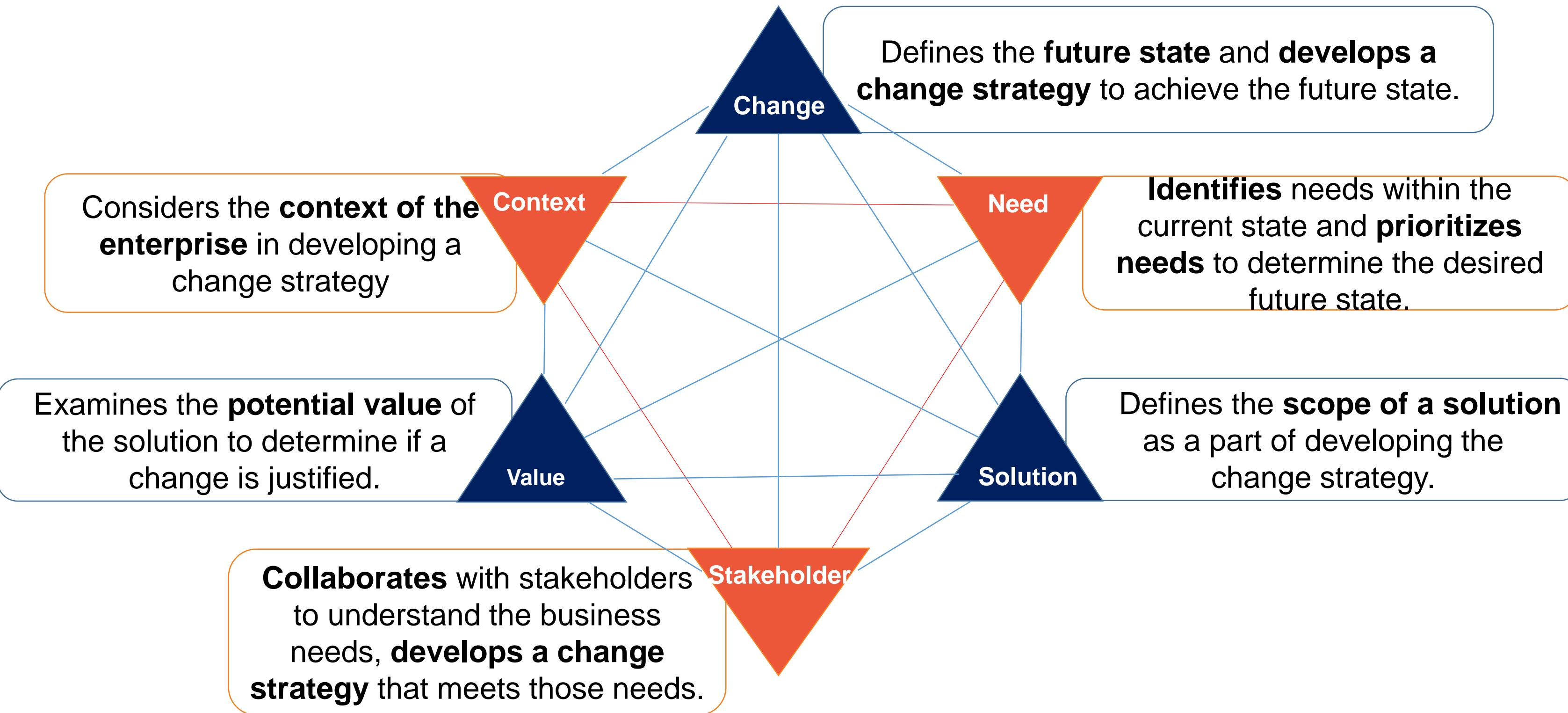
# STRATEGY ANALYSIS

## OVERVIEW



# STRATEGY ANALYSIS

## OVERVIEW



# STRATEGY ANALYSIS

## INPUT, TASKS, AND OUTPUT

### Tasks

**1. Analyze:** Current State

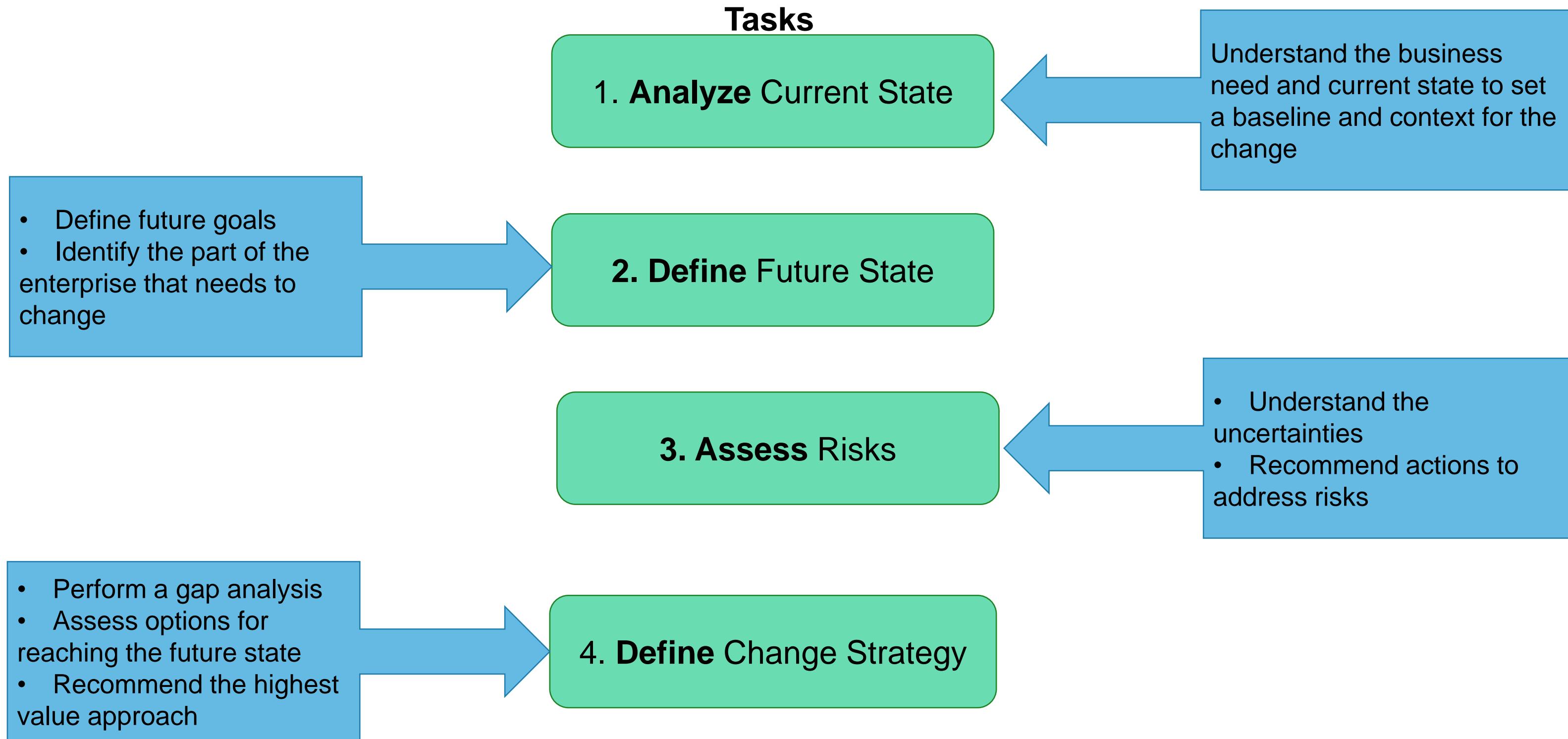
**2. Define:** Future State

**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)

### Output

- Current State Description
- Business Requirements

#### 1. Analyze Current State

- Business Requirements
- Business Objectives

#### 2. Define Future State

- Business Objectives
- Future State Description
- Potential Value

- 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

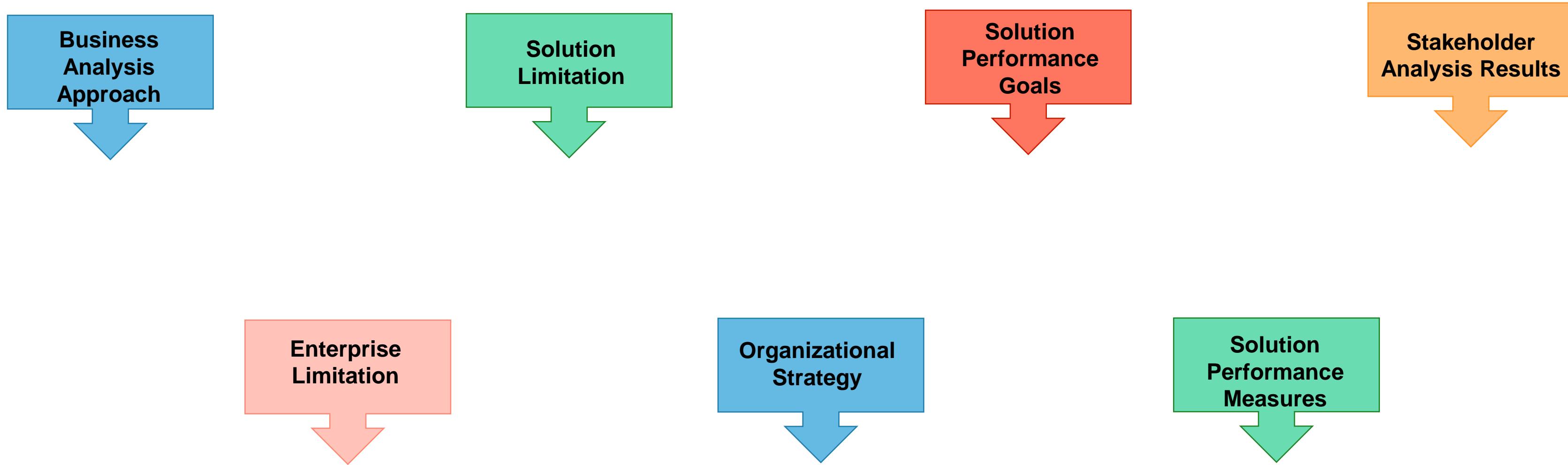
# ANALYZE CURRENT STATE (contd.)

## 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> |

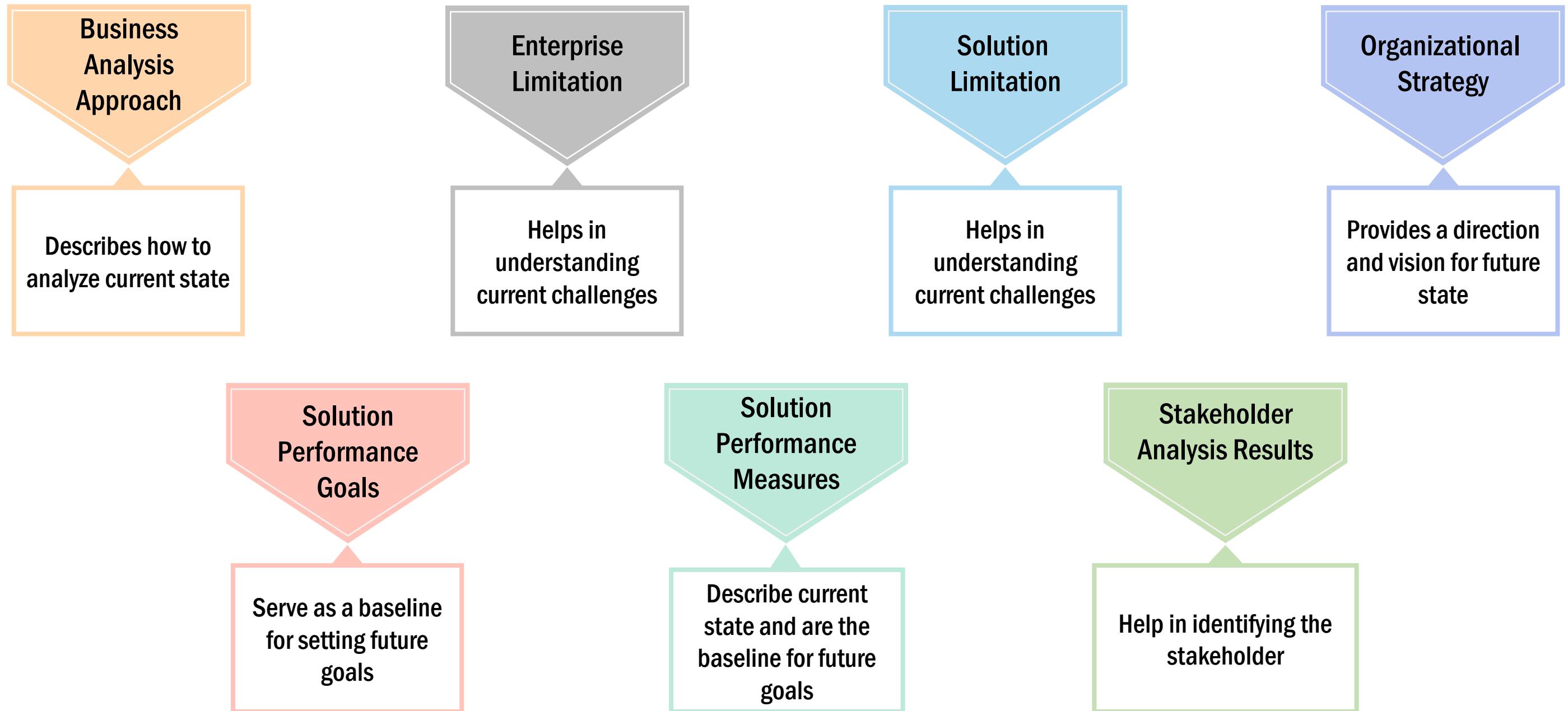
# ANALYZE CURRENT STATE

## GUIDELINES AND TOOLS



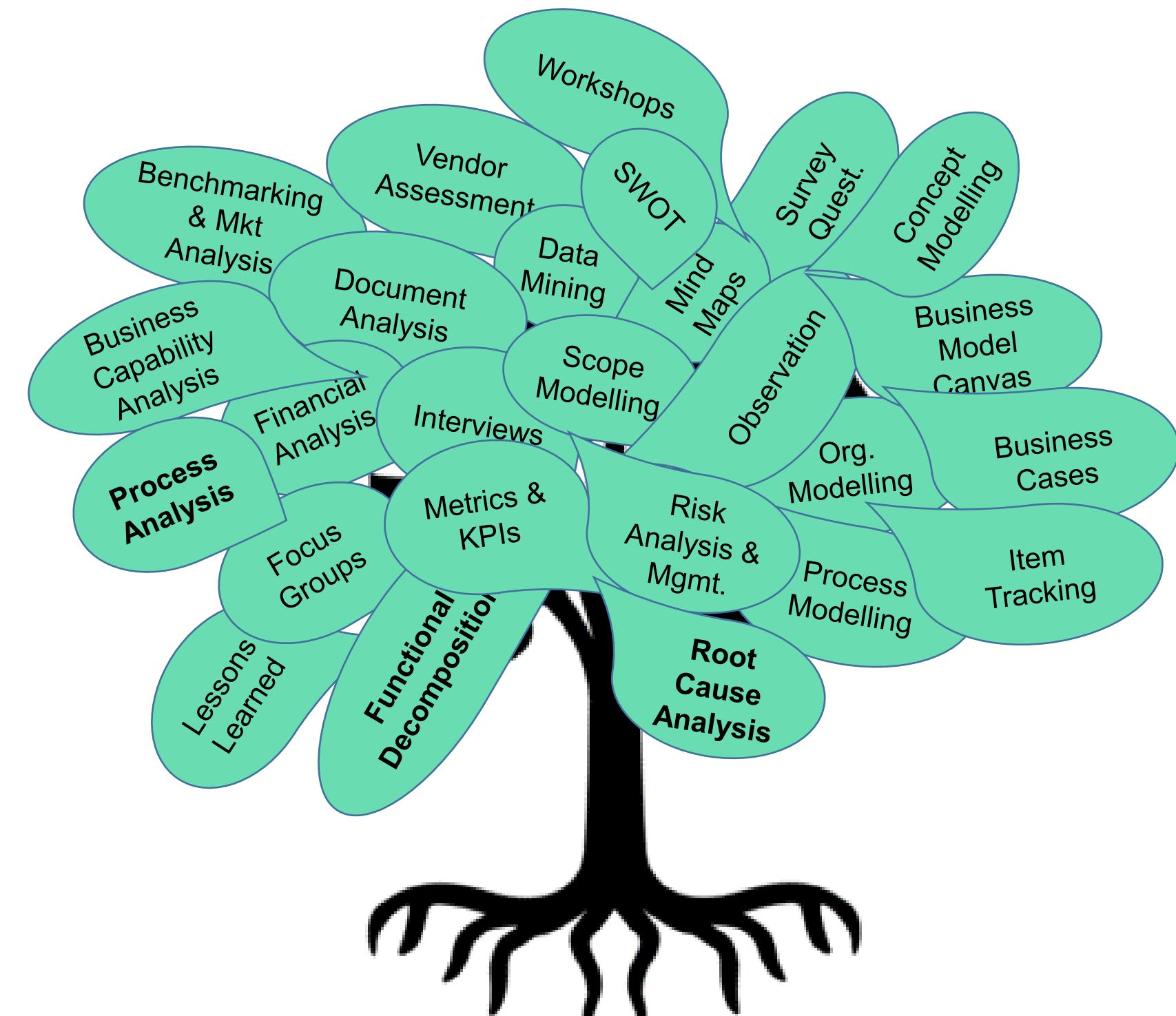
# ANALYZE CURRENT STATE

## 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**

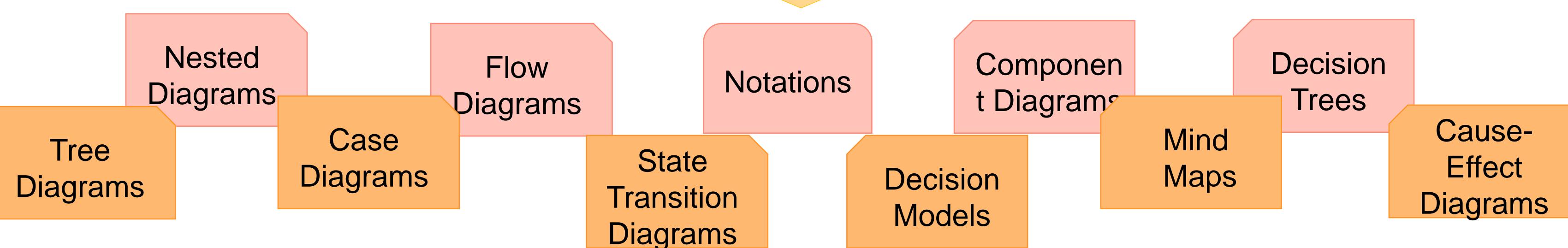
- It helps manage complexity and reduces uncertainty.
- It helps in analyzing each part independently.
- It allows scaling, tracking, measuring work effort and evaluation of the success of each sub-component.

# ANALYZE CURRENT STATE (contd.)

## FUNCTIONAL DECOMPOSITION - OVERVIEW



Representing  
Decomposition results



# ANALYZE CURRENT STATE

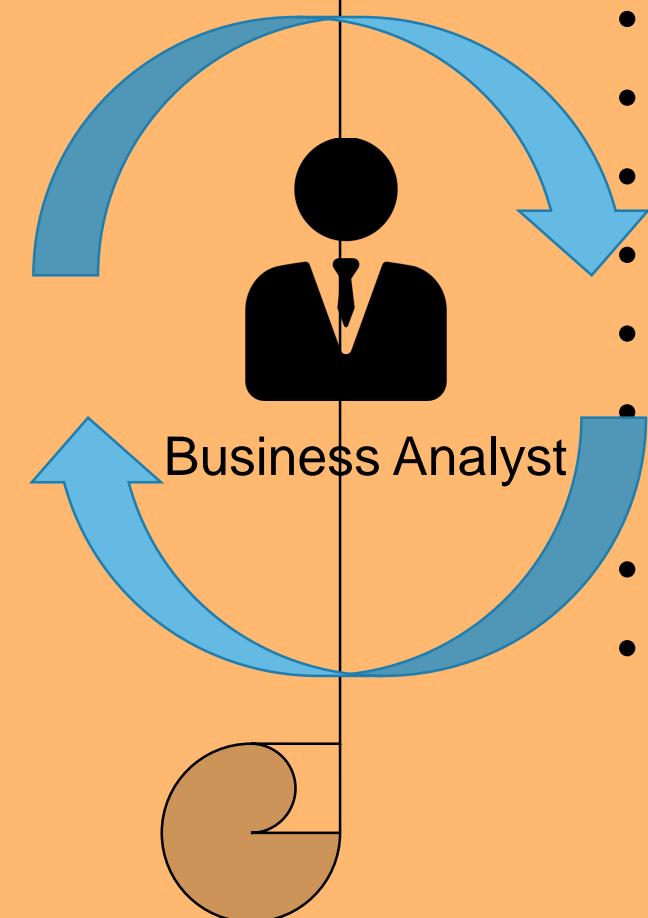
## FUNCTIONAL DECOMPOSITION - ELEMENTS

### Decomposition Objectives

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

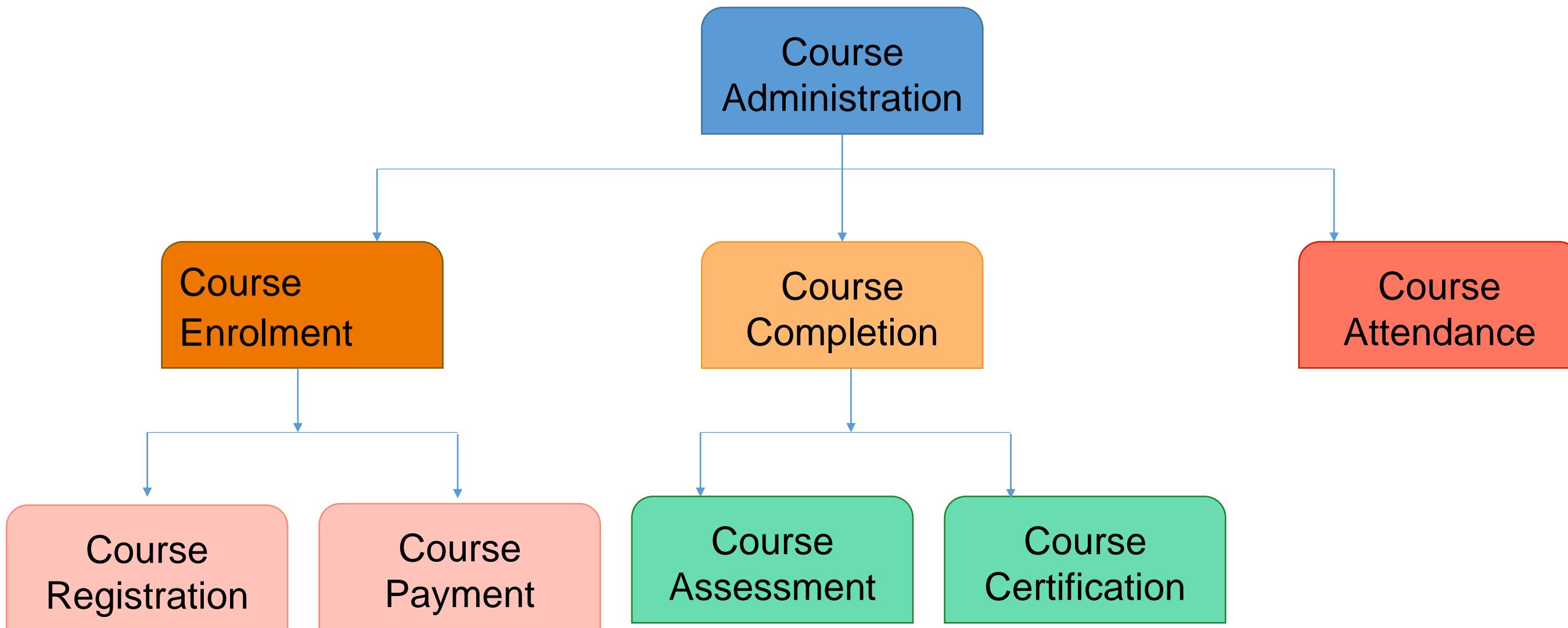
### Subject of Decomposition

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



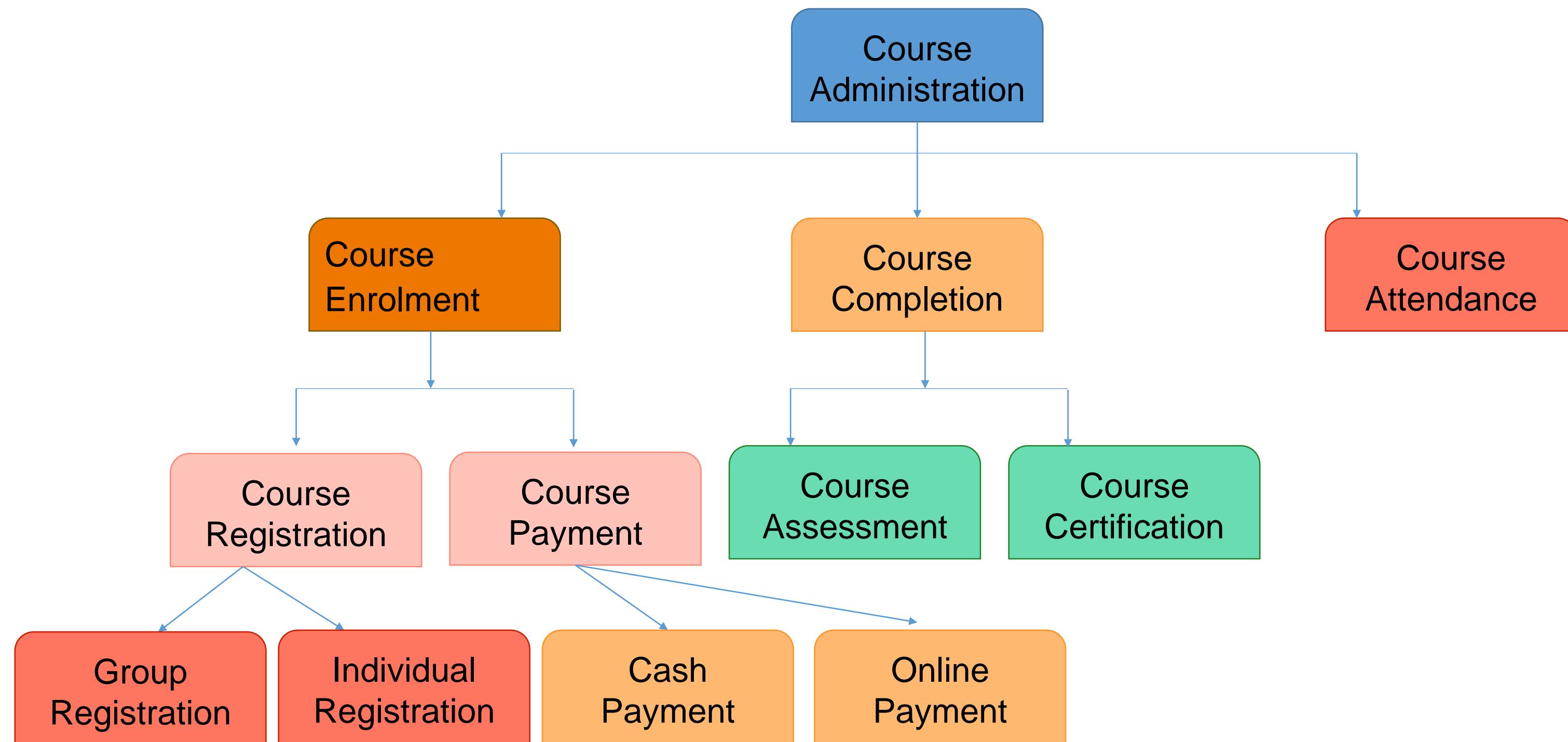
# ANALYZE CURRENT STATE

## 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

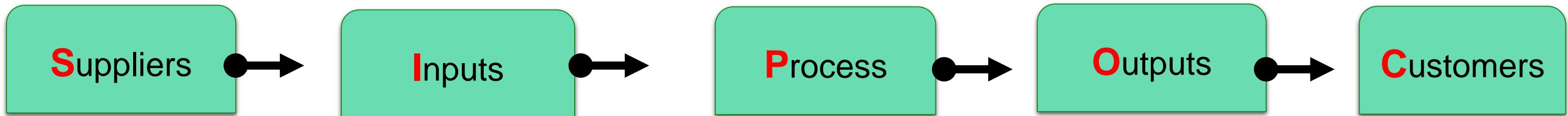
## PROCESS ANALYSIS- SIPOC



PROCESS

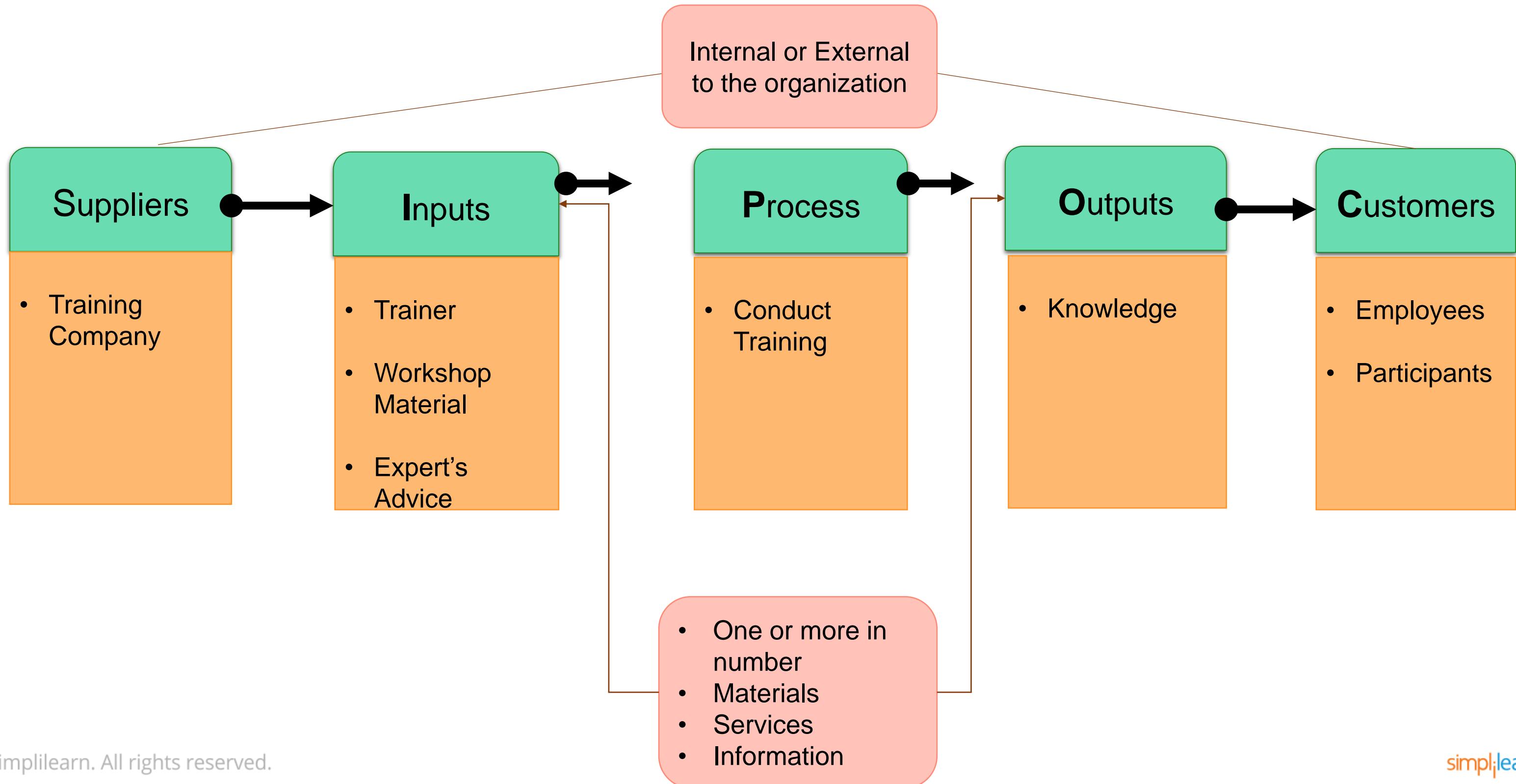


Is a systematic series of actions or steps taken to achieve a particular end



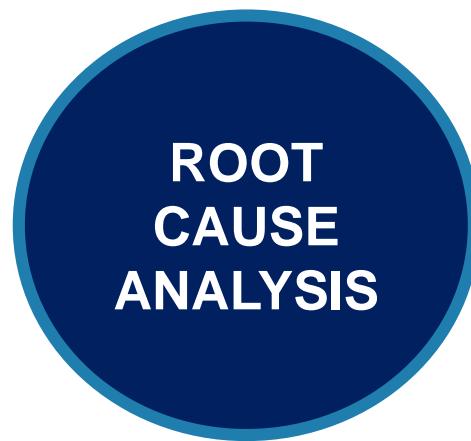
# ANALYZE CURRENT STATE (contd.)

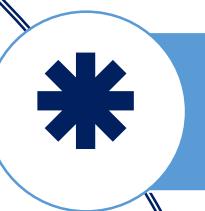
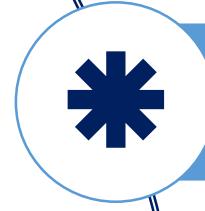
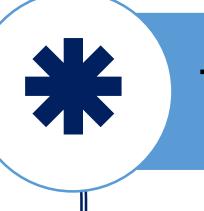
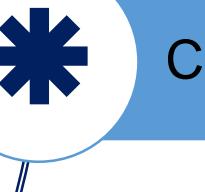
## PROCESS ANALYSIS- SIPOC



# ANALYZE CURRENT STATE

## ROOT CAUSE ANALYSIS - OVERVIEW



-  Used to identify and evaluate the underlying causes of a problem
-  Focuses on the origin of the problem
-  The causes of problems could be People, Physical, or Organizational
-  Can be used for reactive or proactive analysis
-  Helps maintain an objective perspective
-  May be difficult to use for solving complex problems

# 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

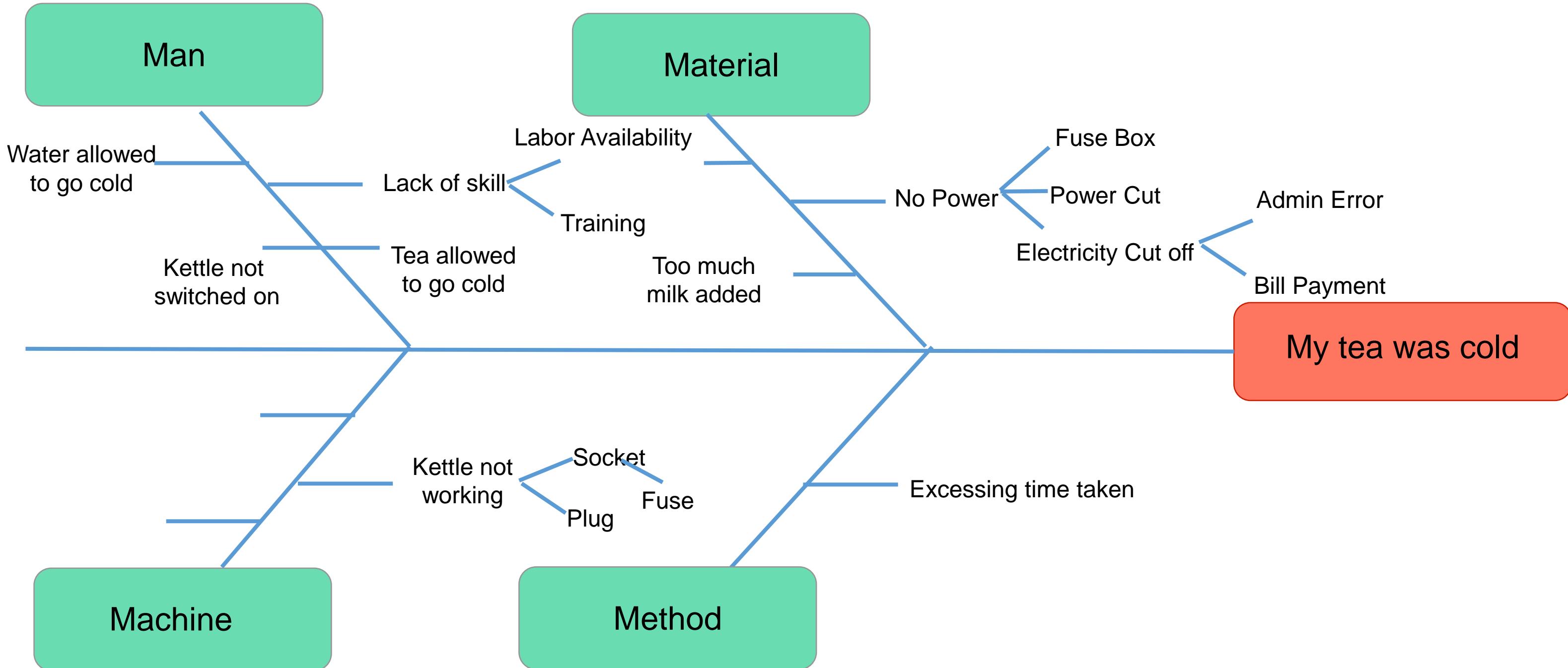
Data Collection

Cause Identification

Action Identification

# ANALYZE CURRENT STATE

## ROOT CAUSE ANALYSIS - ELEMENTS

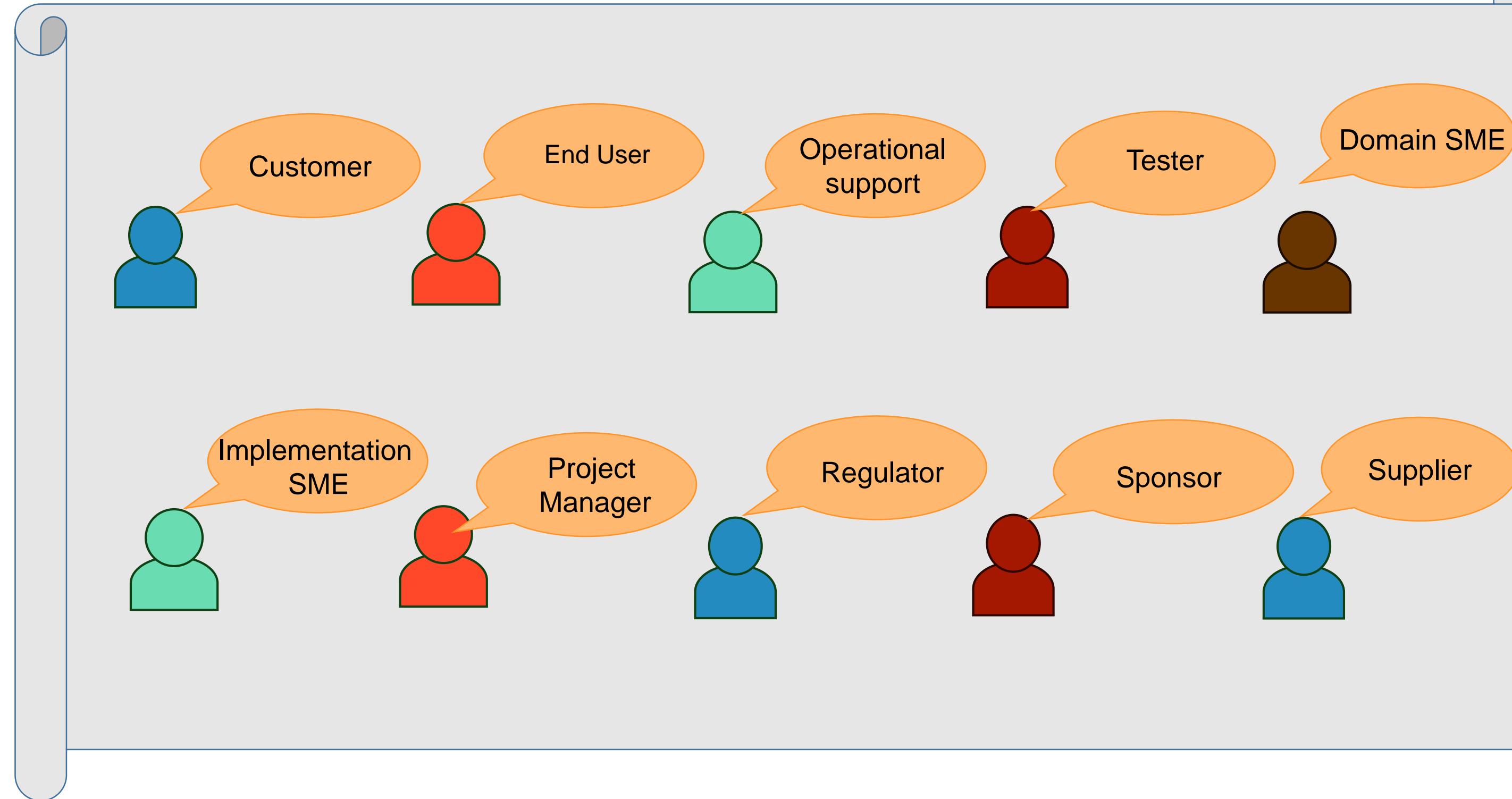


# ANALYZE CURRENT STATE

## 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

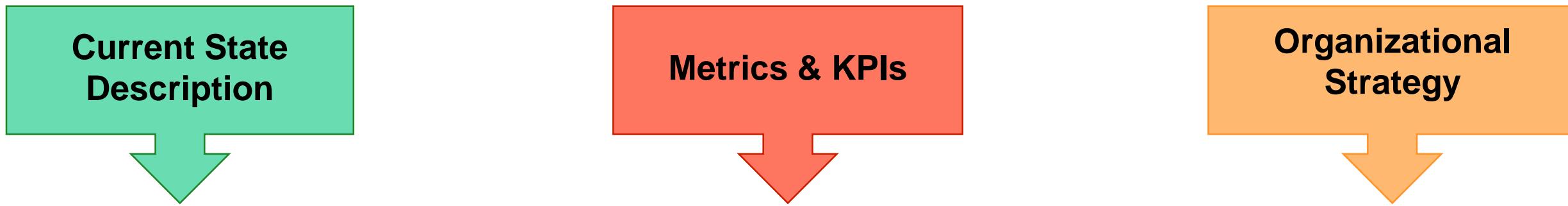


Potential Value

# DEFINE FUTURE STATE

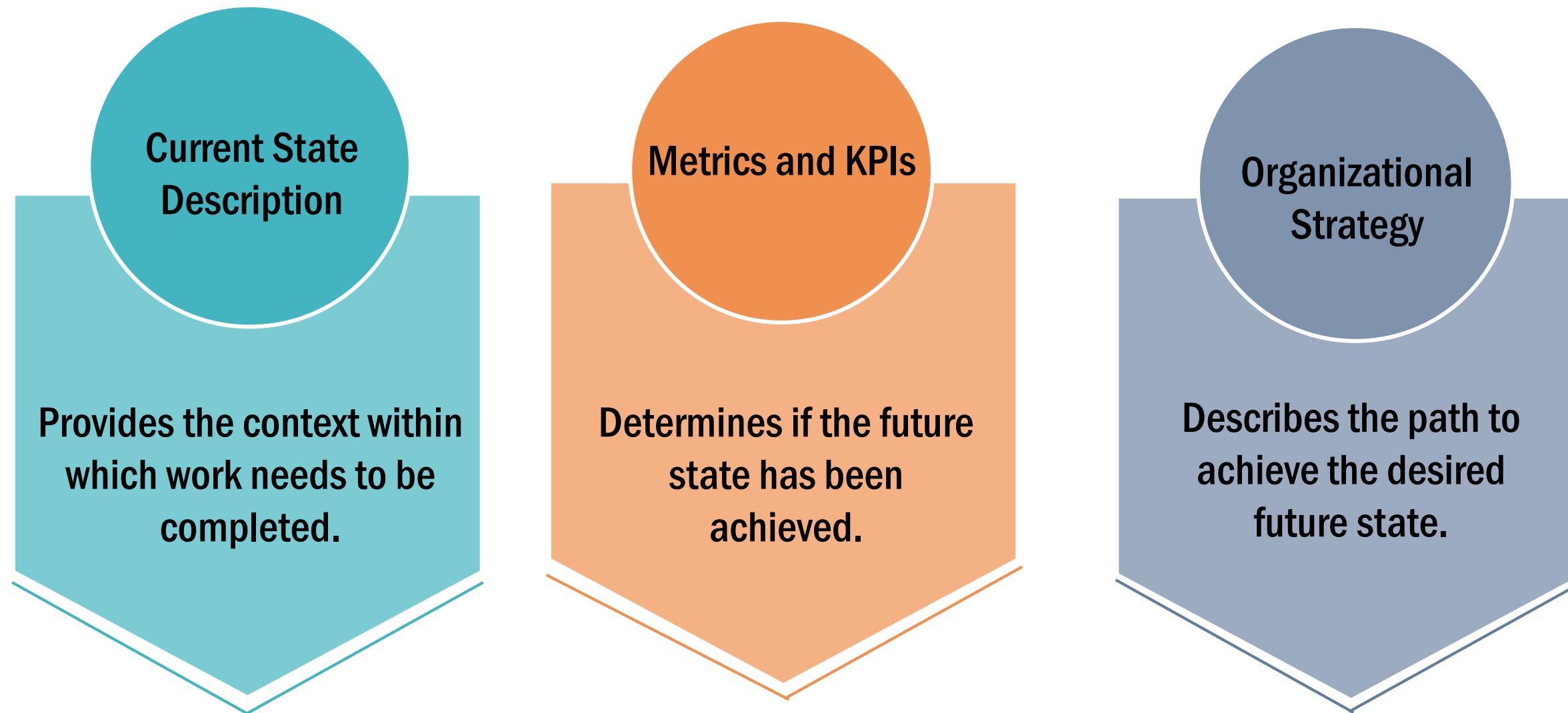
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## GUIDELINES AND TOOLS



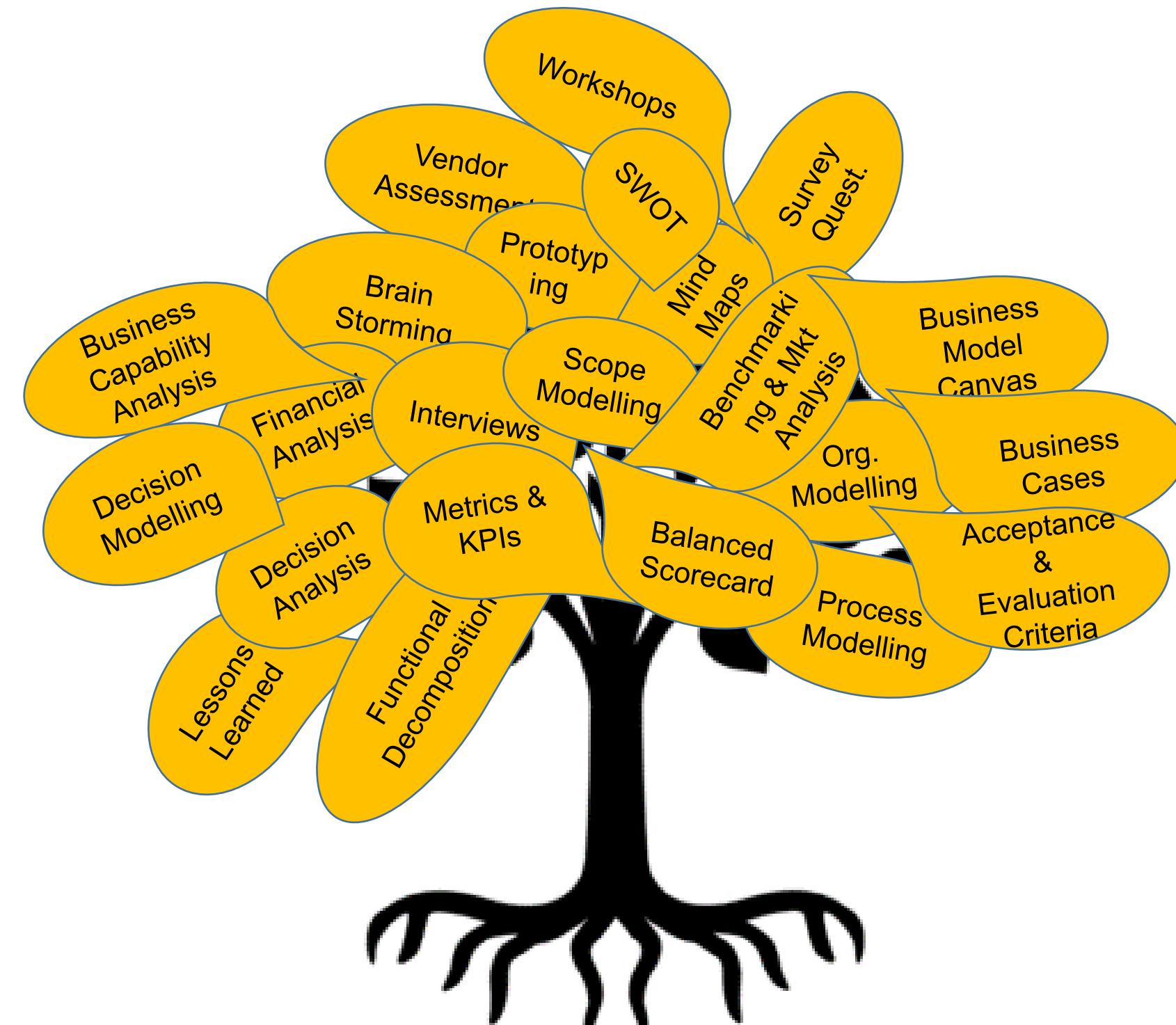
# DEFINE FUTURE STATE

## GUIDELINES AND TOOLS



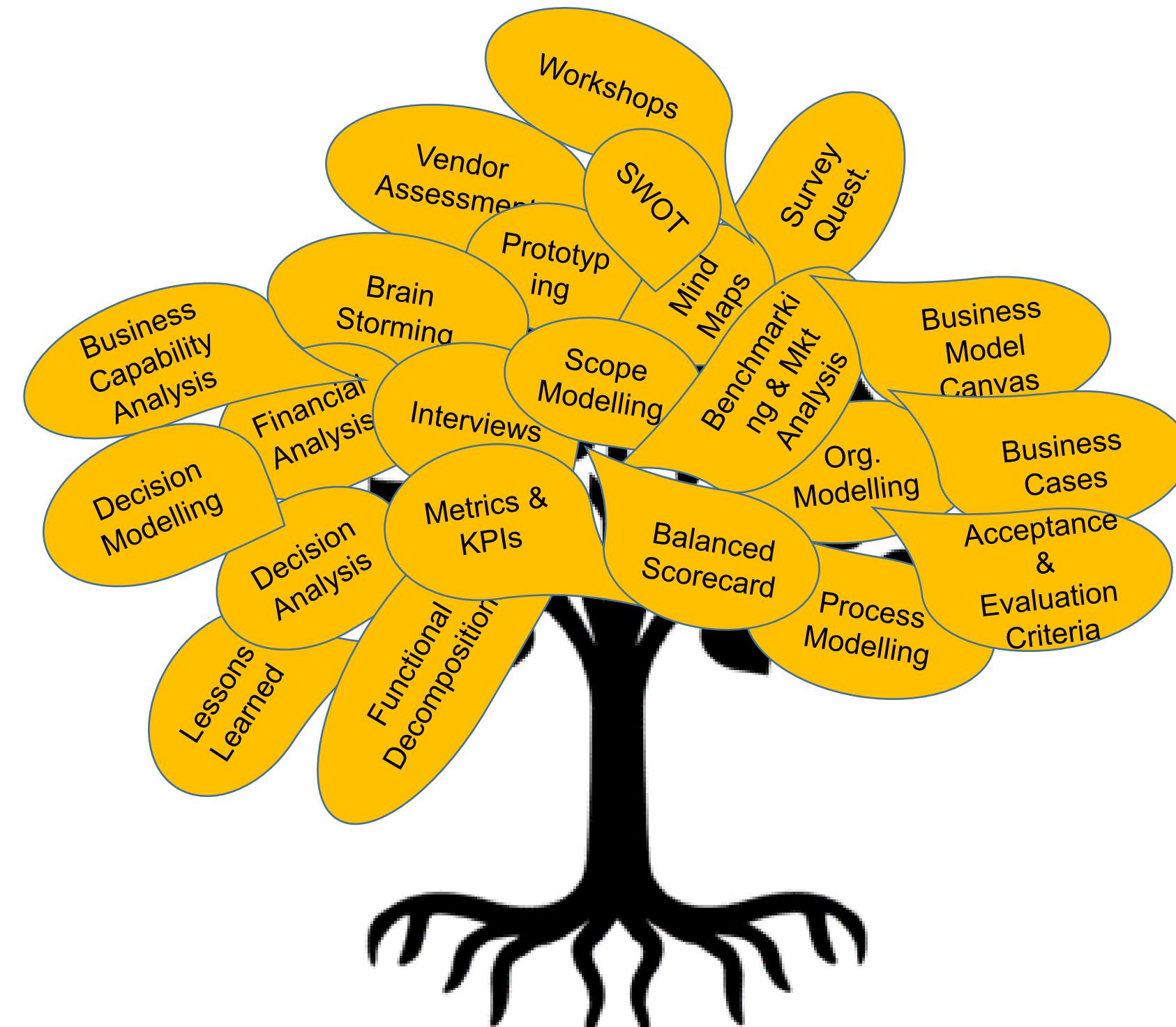
# DEFINE FUTURE STATE

## TECHNIQUES



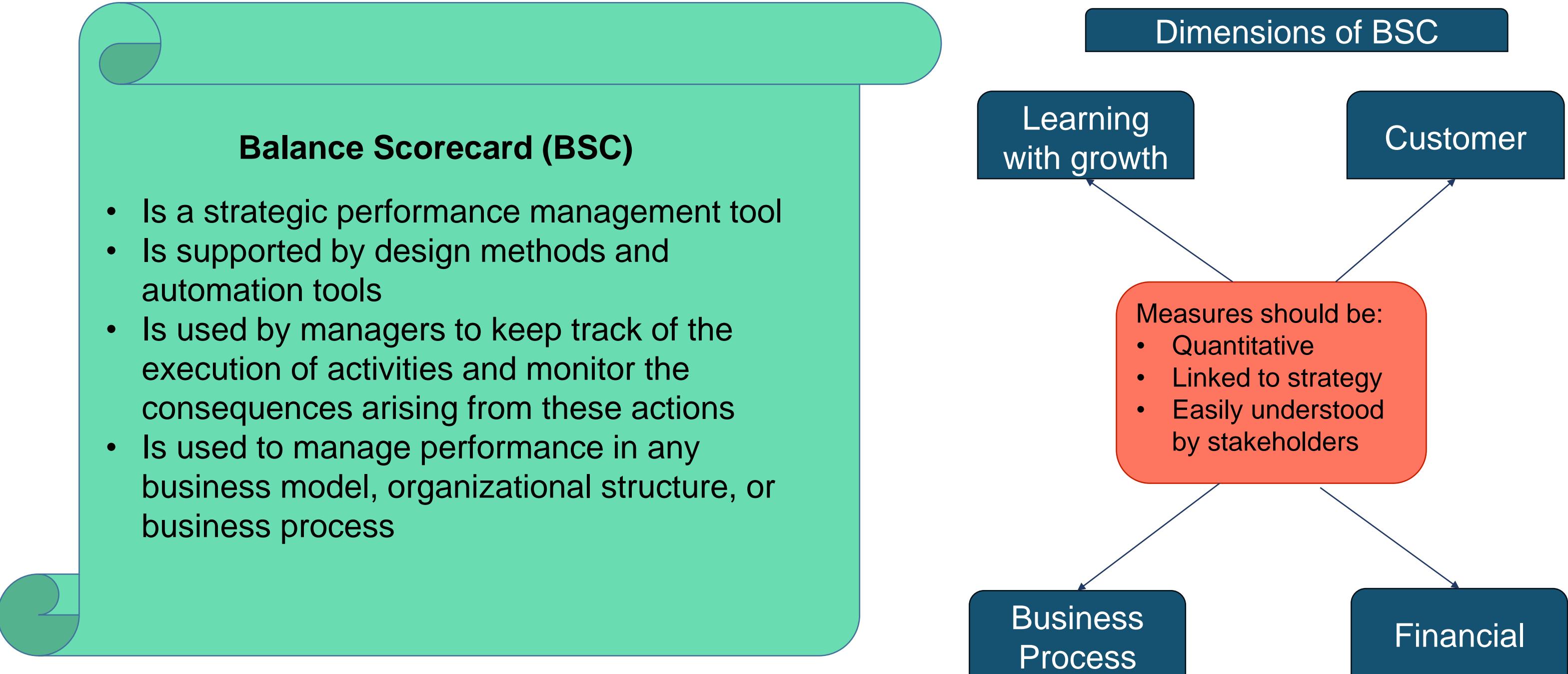
# DEFINE FUTURE STATE

## TECHNIQUES



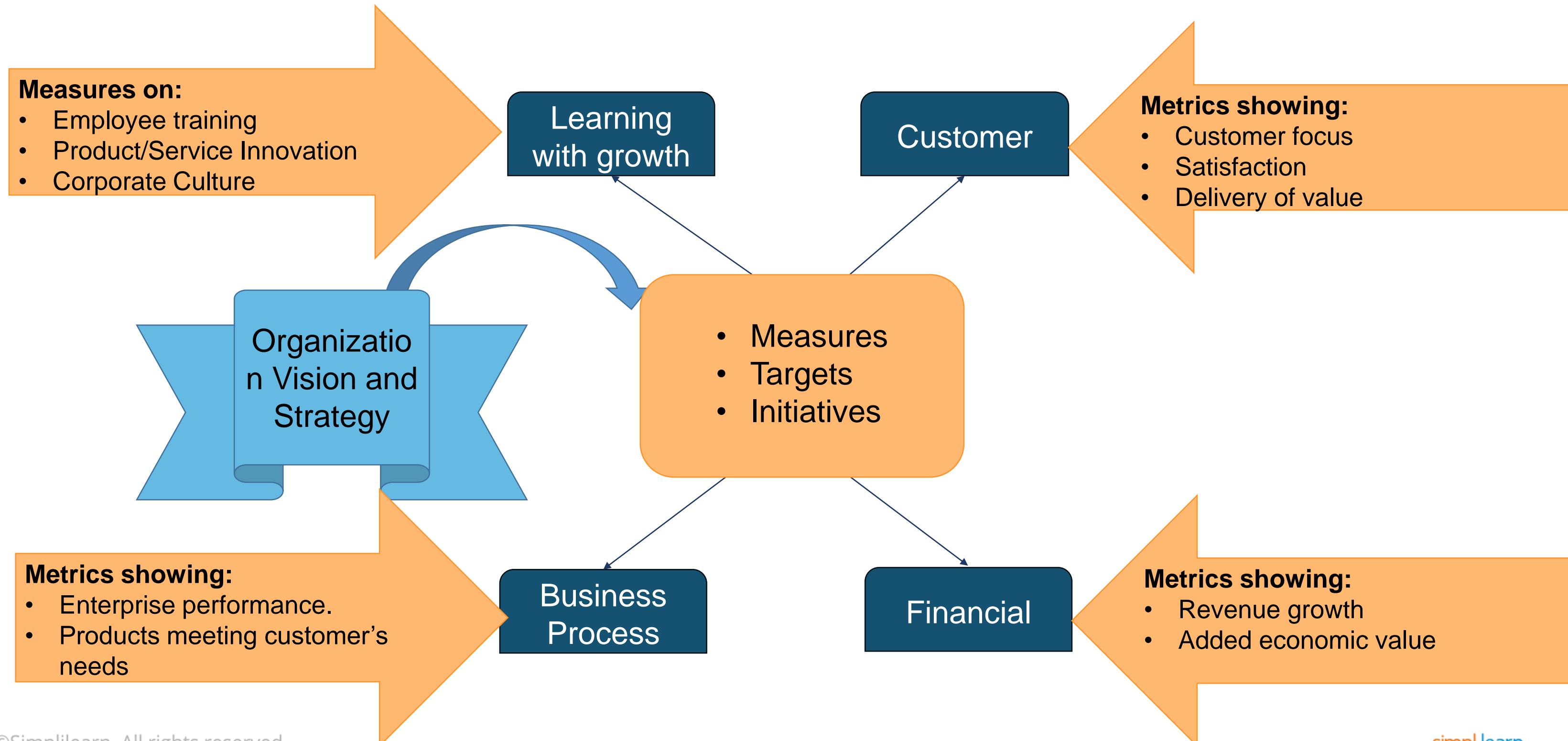
# DEFINE FUTURE STATE

## BALANCED SCORECARD - OVERVIEW



# DEFINE FUTURE STATE

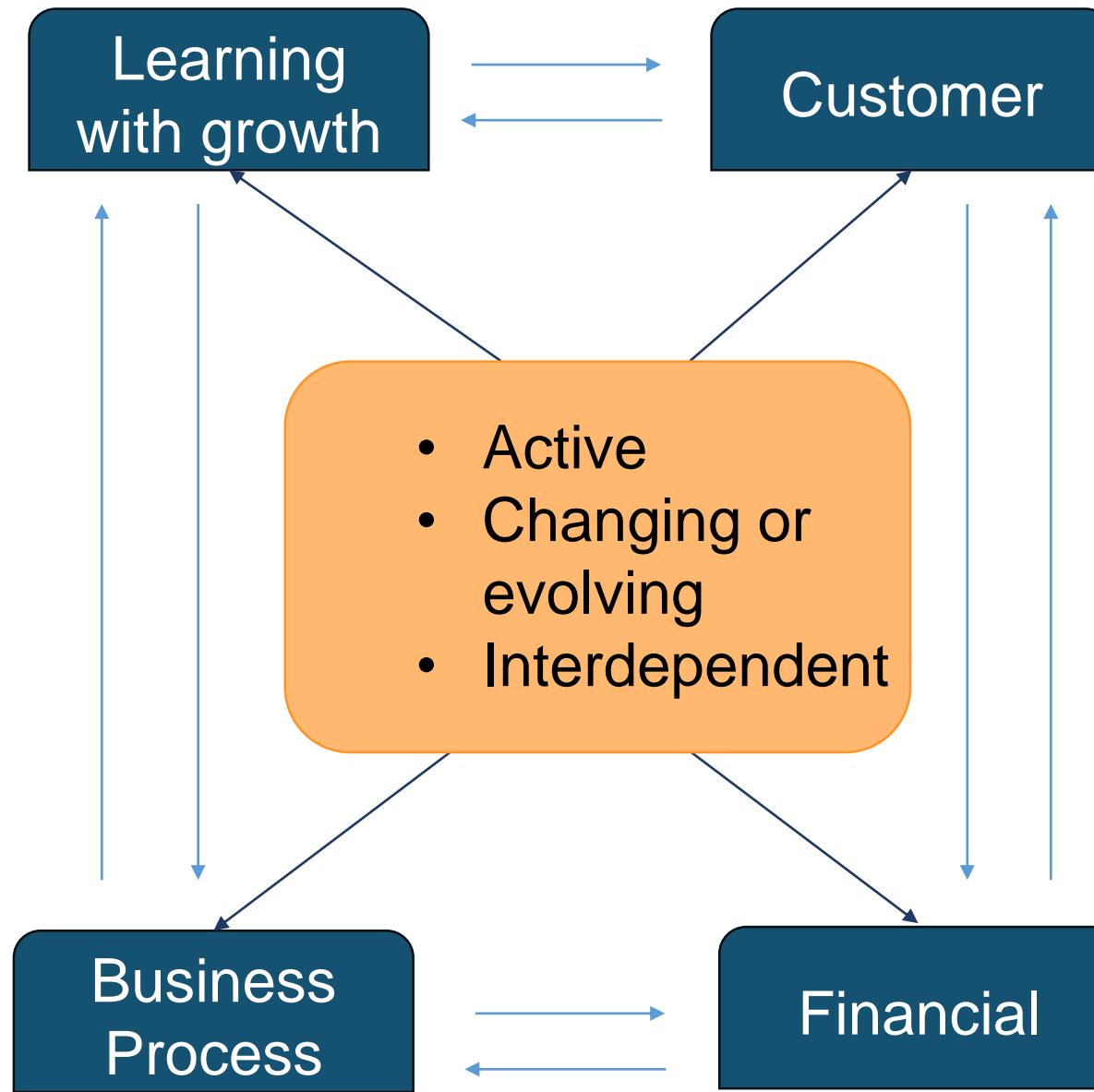
## BALANCED SCORECARD - ELEMENTS



## 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

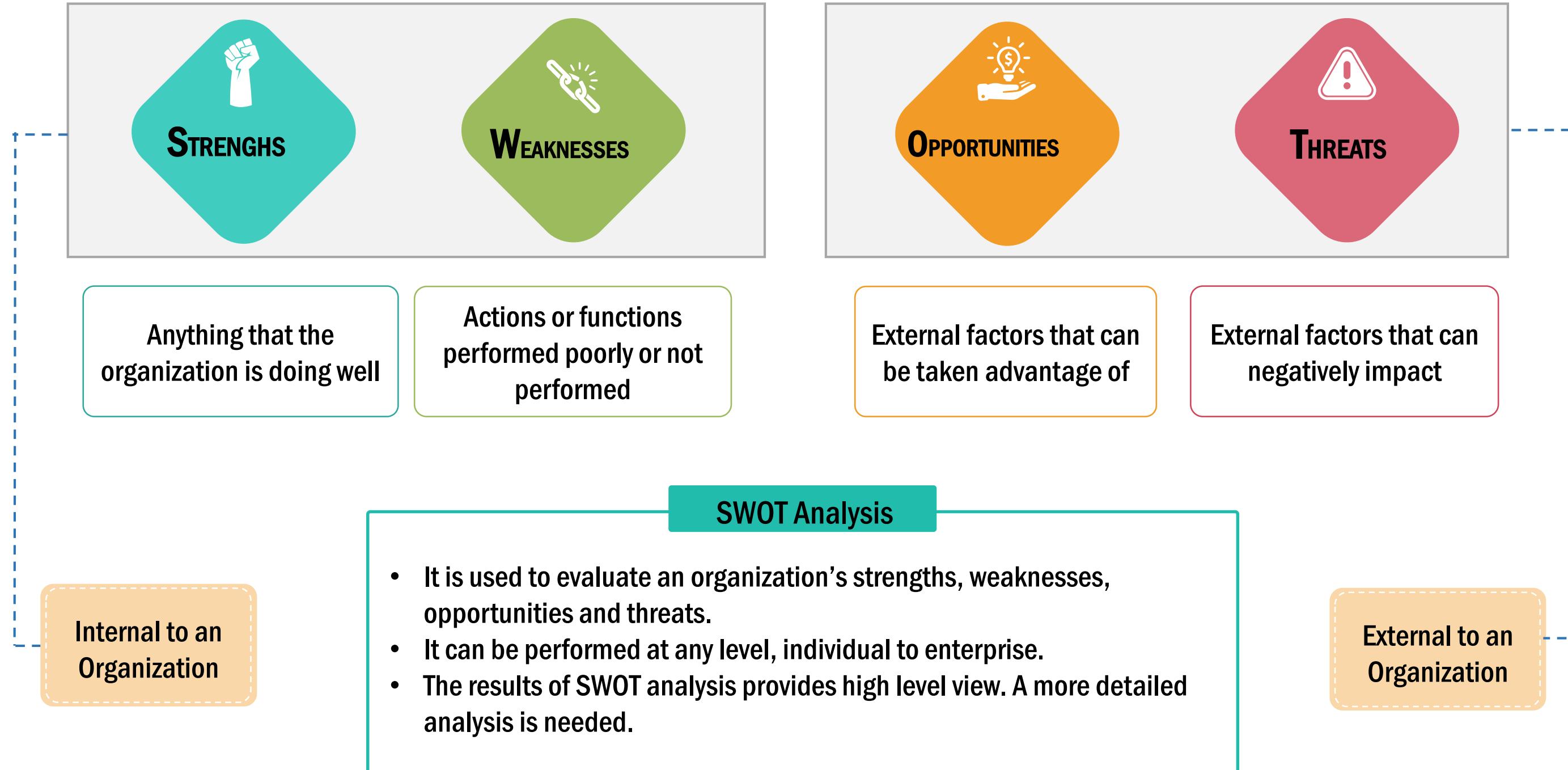
**5** Define appropriate business strategy

**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

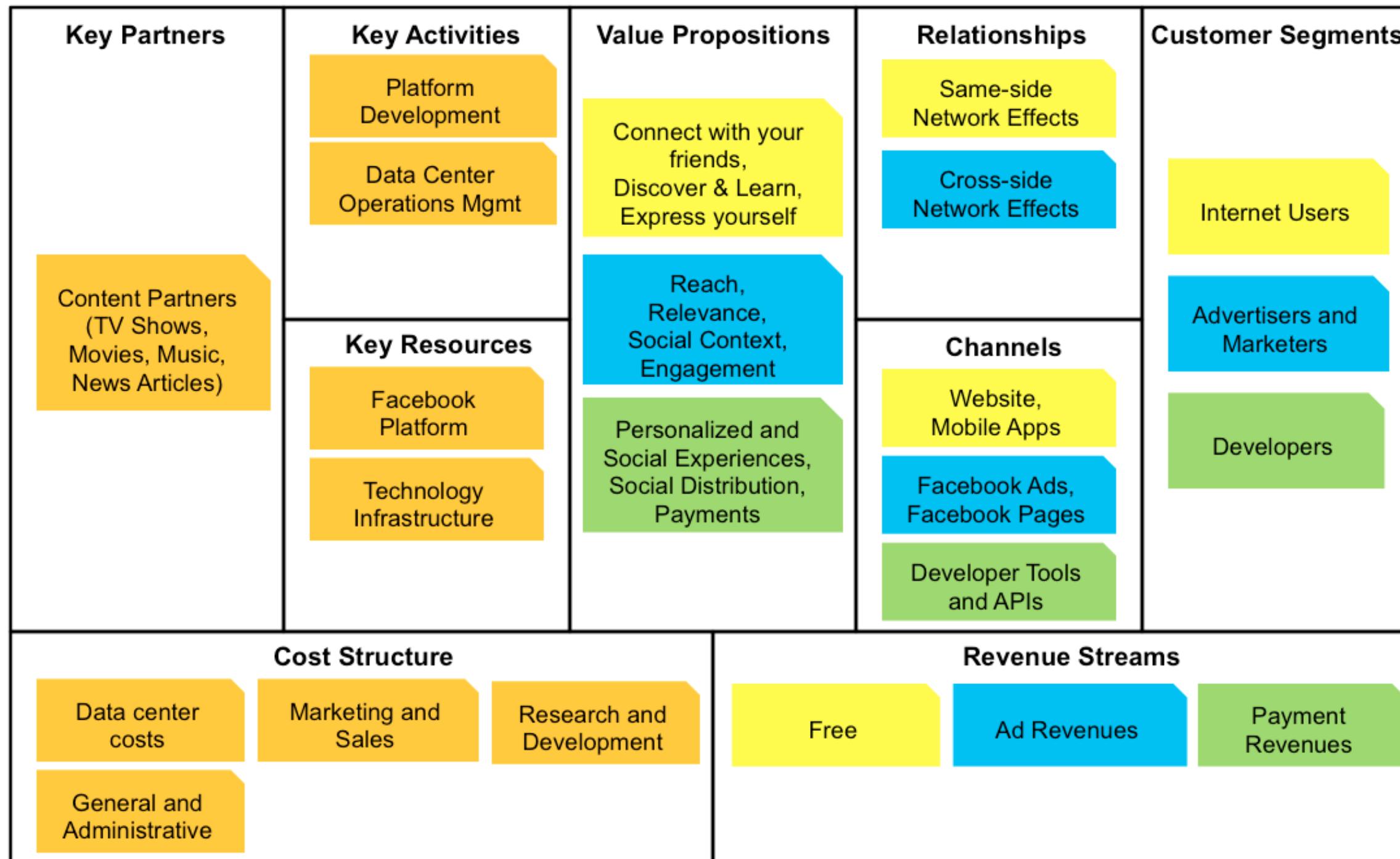
## BUSINESS MODEL CANVAS - ELEMENTS

| 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> <p><b>Key Resources</b></p> <ul style="list-style-type: none"> <li>- Assets needed to execute activities.</li> <li>- Physical/Financial/Intellectual /Human</li> </ul> | <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> <p><b>Channels</b></p> <ul style="list-style-type: none"> <li>- Communication oriented</li> <li>- Delivery Oriented</li> </ul> | <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>- Every entity within an enterprise has an associated cost</li> <li>- Reducing costs may increase profitability</li> </ul> | <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)

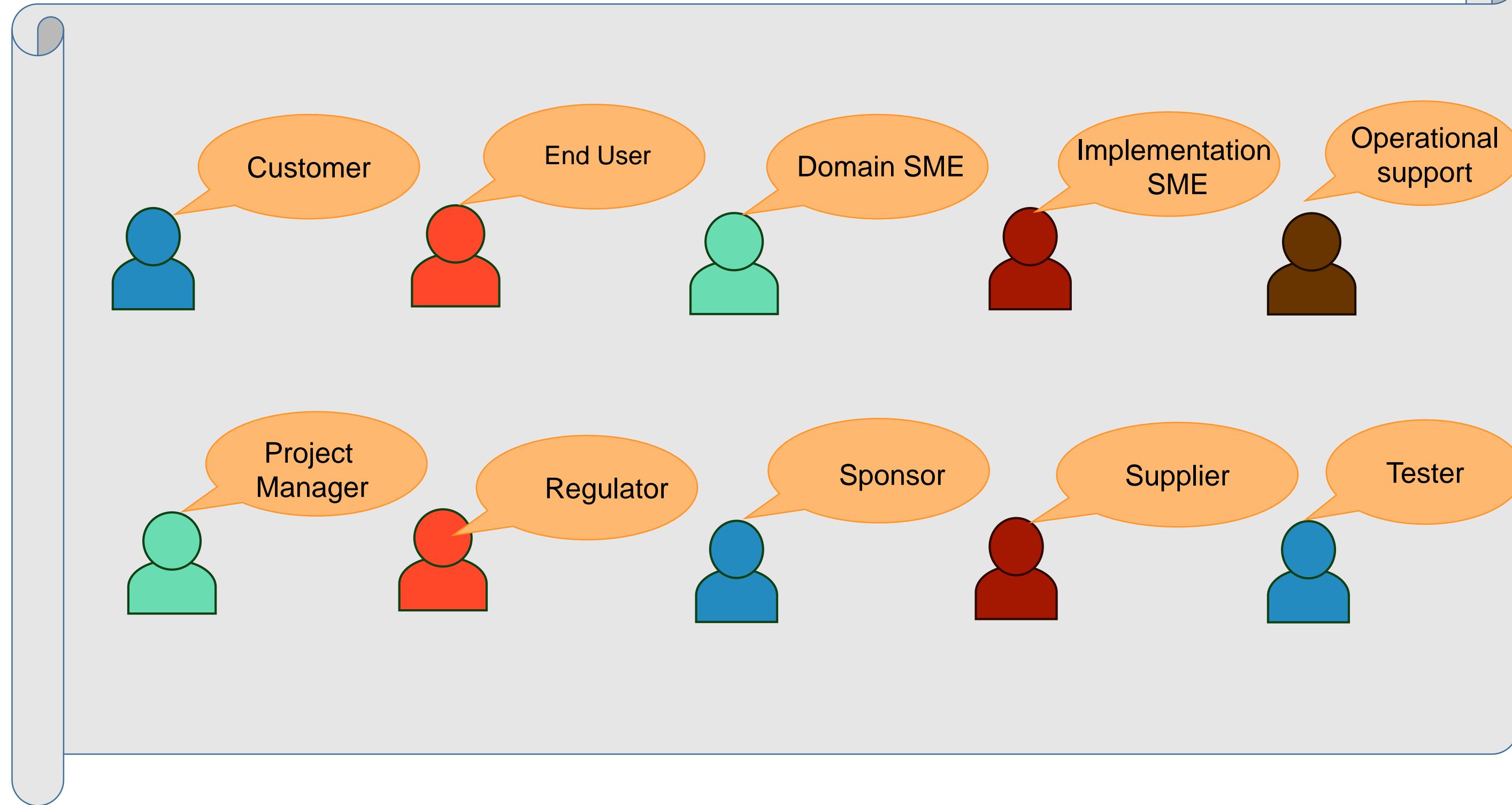


# DEFINE FUTURE STATE

## STAKEHOLDERS



Business Analyst



# Lesson 6: Strategy Analysis

## Topic 6.3: Assess Risks

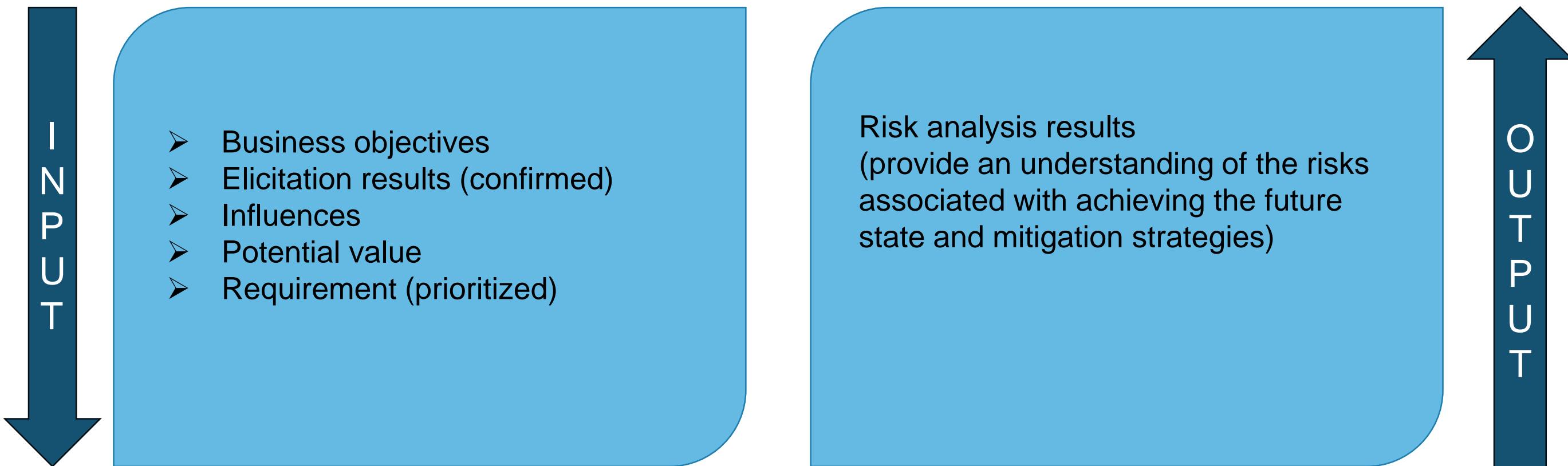
- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and tools
- ✓ Techniques
- ✓ Stakeholders

# ASSESS RISKS

## PURPOSE

### Purpose

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



# 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

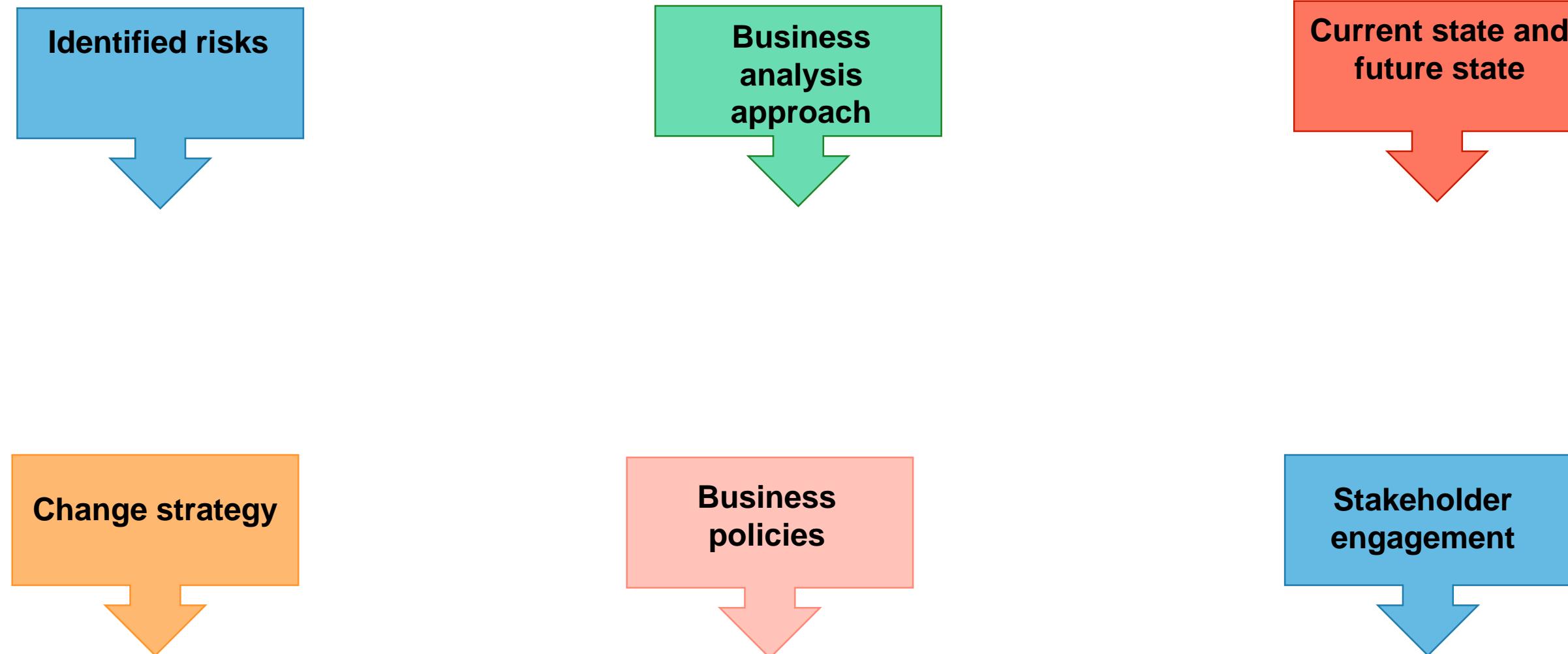
Pursue the benefit of a change and invest on reducing risks

Increase the benefit of a change to outweigh the risk

# ASSESS RISKS

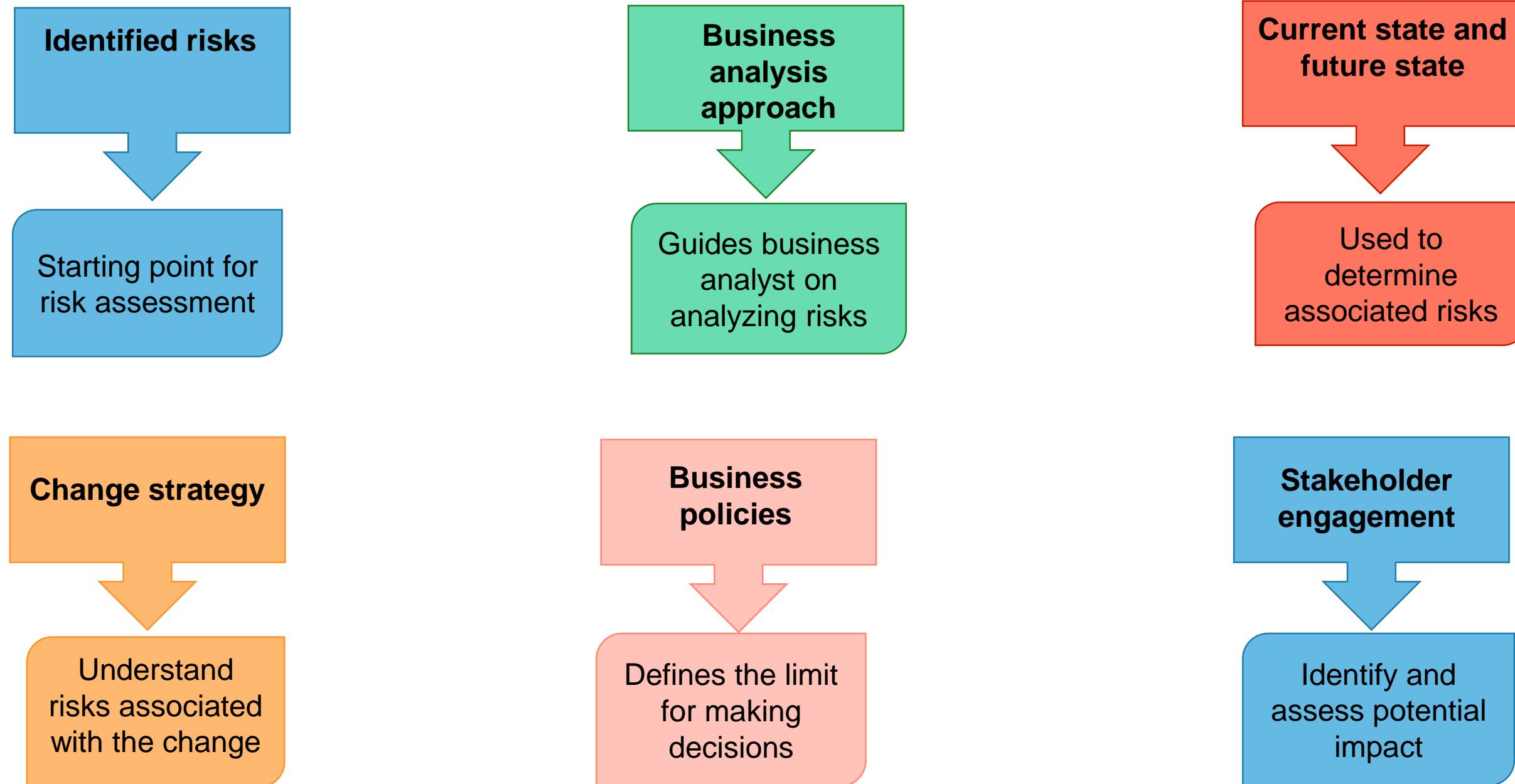
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## GUIDELINES AND TOOLS



# ASSESS RISKS (contd.)

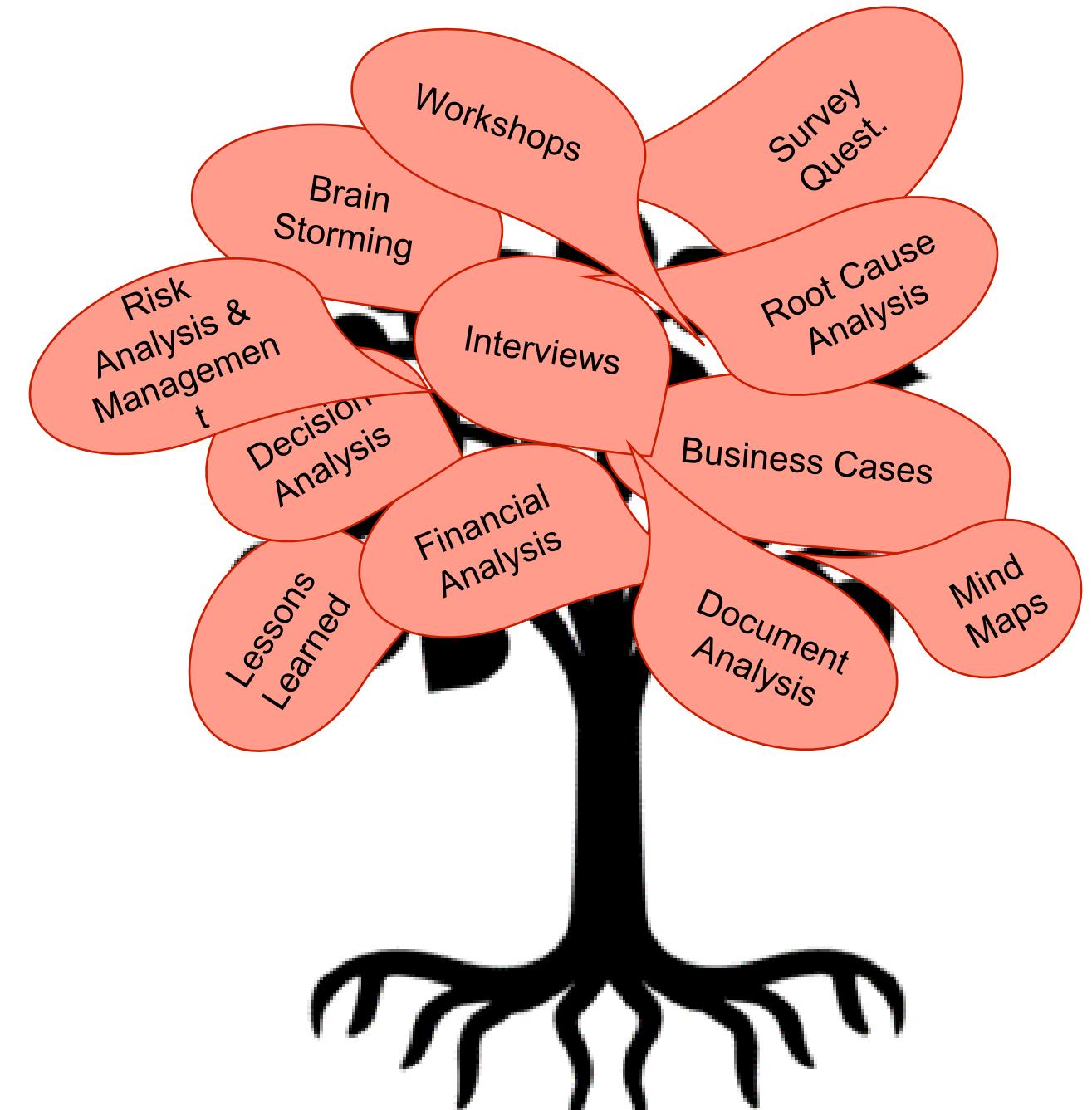
## GUIDELINES AND TOOLS



# ASSESS RISKS

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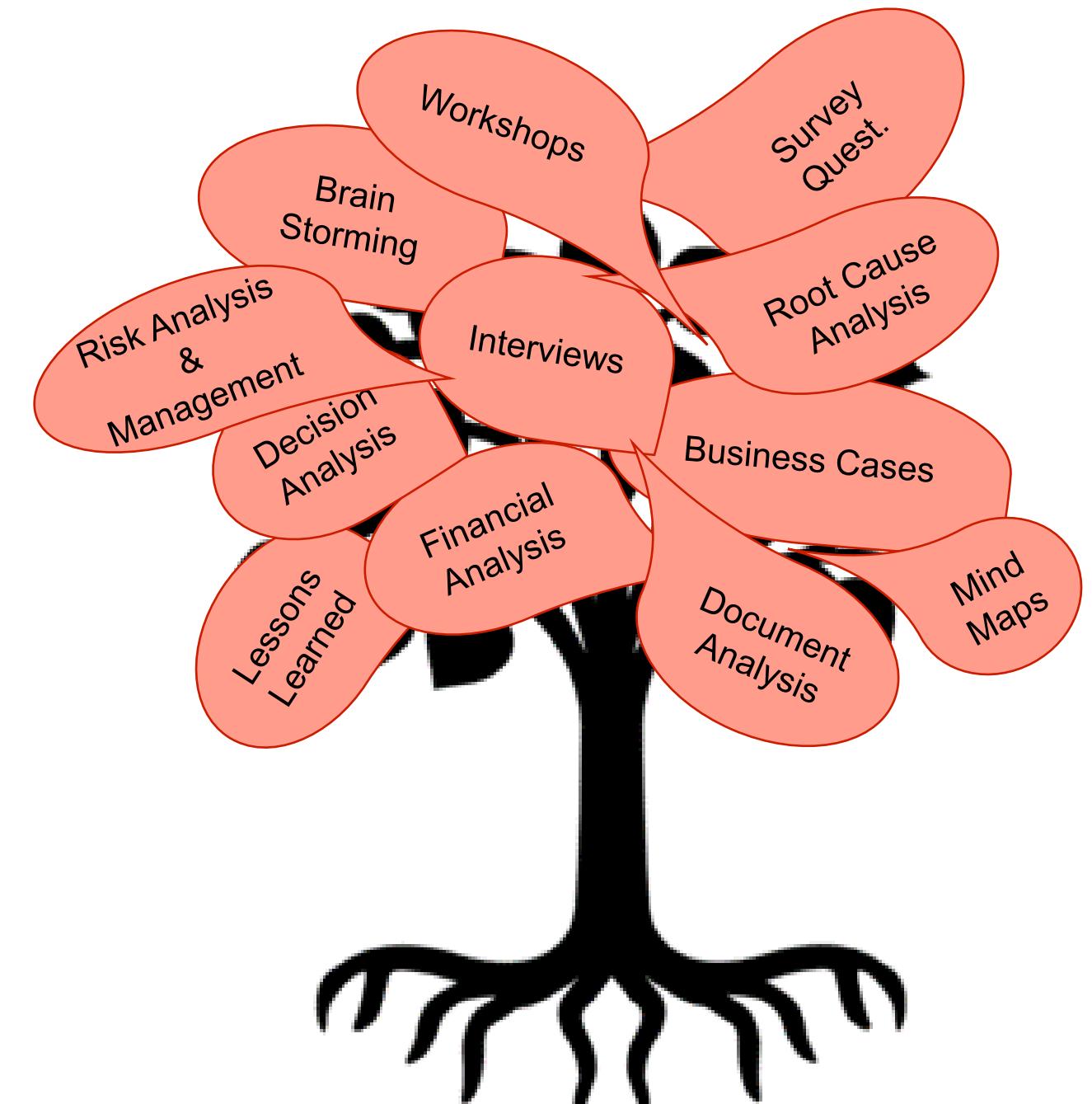
## TECHNIQUES



# 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

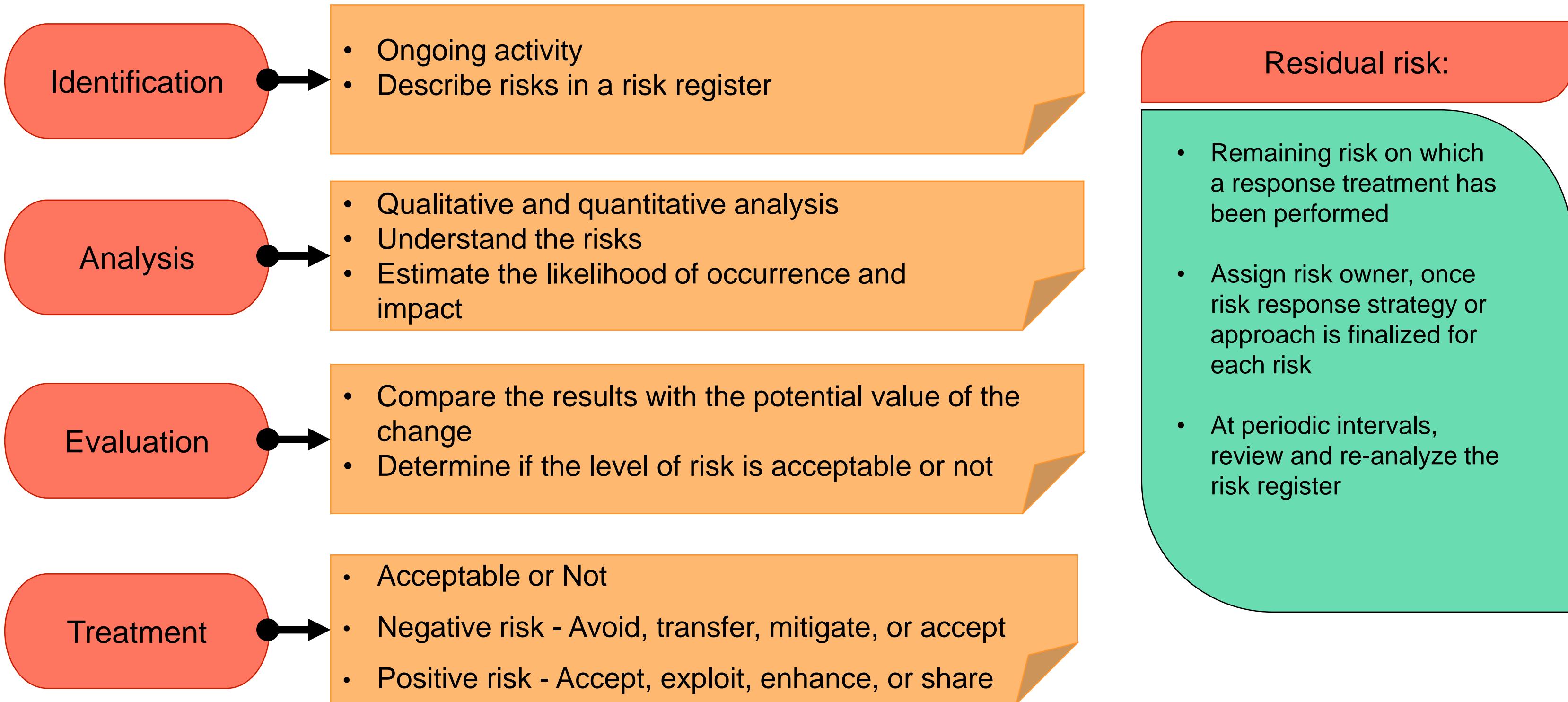
### Risk appetite

Risk tolerance level

- Risk averse
- Risk neutral
- Risk seeker

# ASSESS RISKS

## RISK ANALYSIS AND MANAGEMENT - ELEMENTS



# ASSESS RISKS

## RISK REGISTER

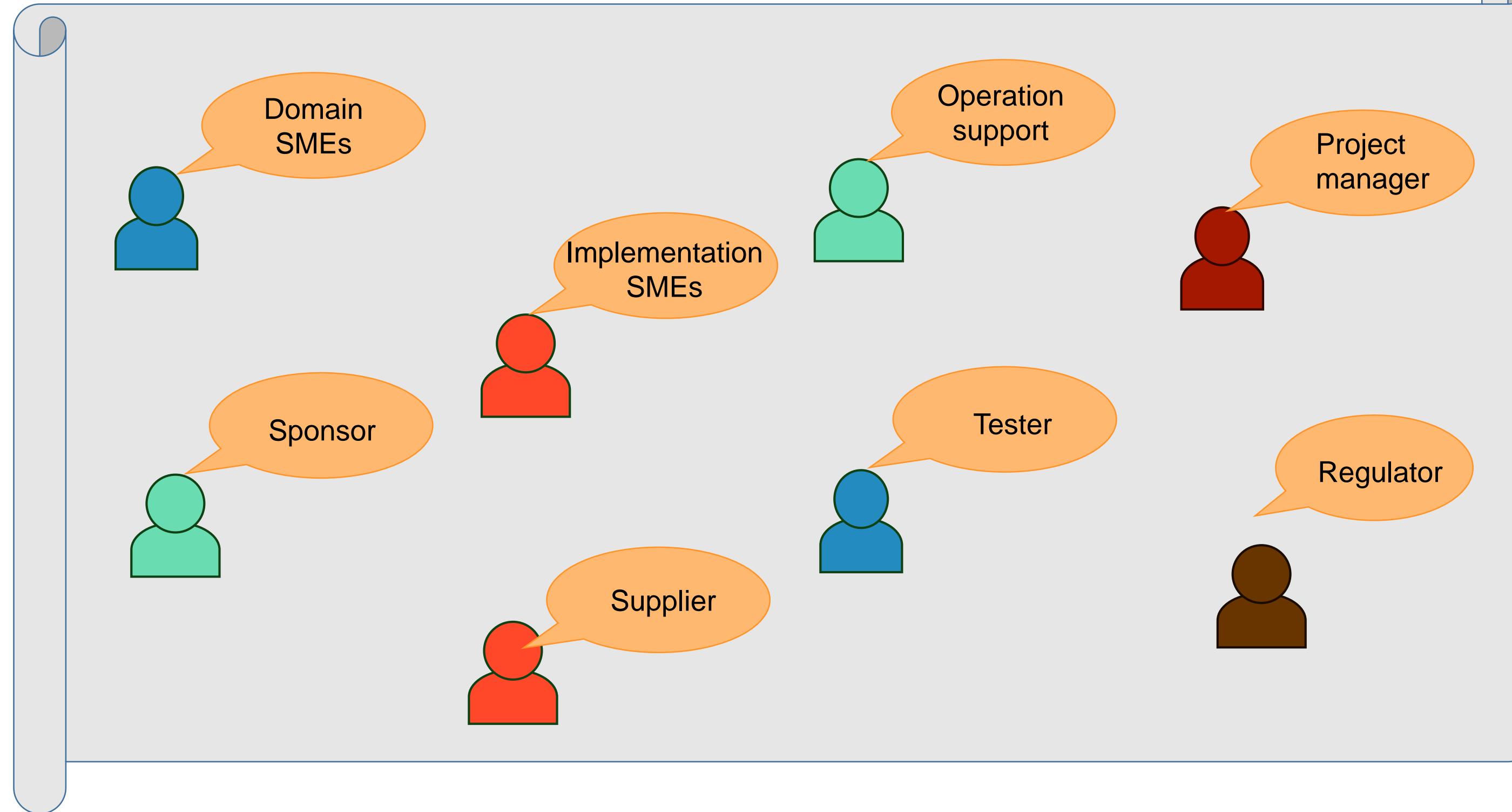
| ID | Risk Description                                                       | Consequences                                                             | Trigger               | Probability<br>(0 % to 100%) | Impact*<br>(1 to 5) | Risk Level | Risk Owner |
|----|------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------|------------------------------|---------------------|------------|------------|
| 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**

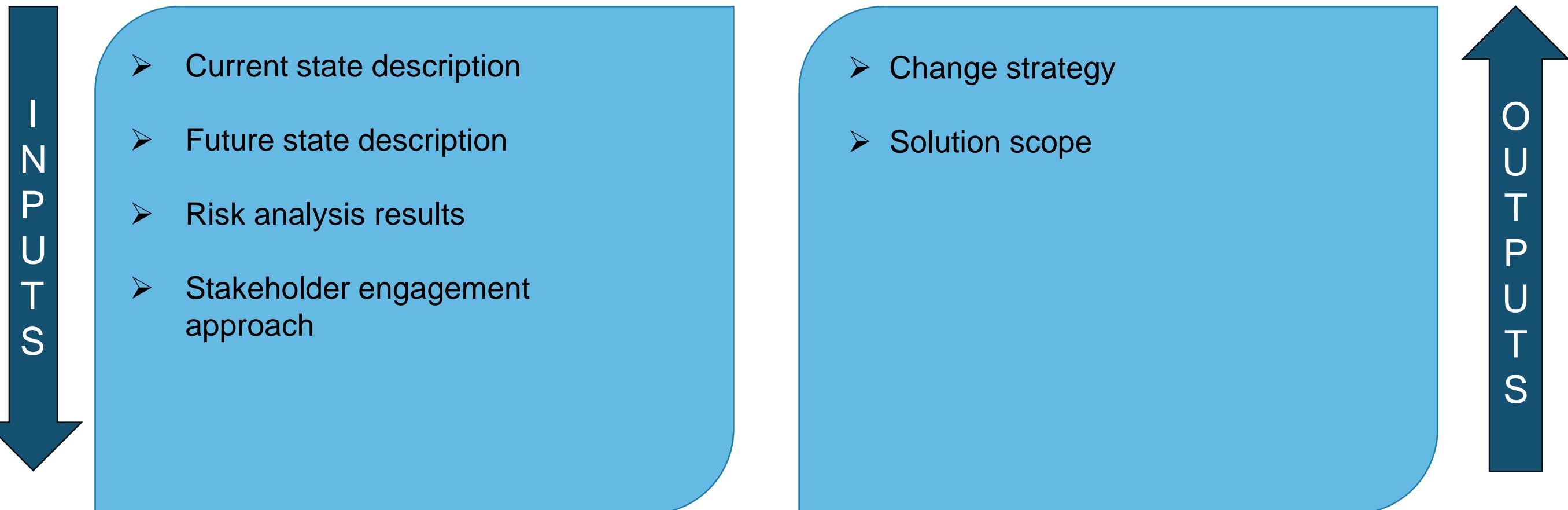
- ✓ Purpose
- ✓ Elements
- ✓ Guidelines and tools
- ✓ Techniques
- ✓ Stakeholders

# DEFINE CHANGE STRATEGY

## PURPOSE

### Purpose

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



# DEFINE CHANGE STRATEGY

## ELEMENTS

Solution scope defines the boundaries of the solution.

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

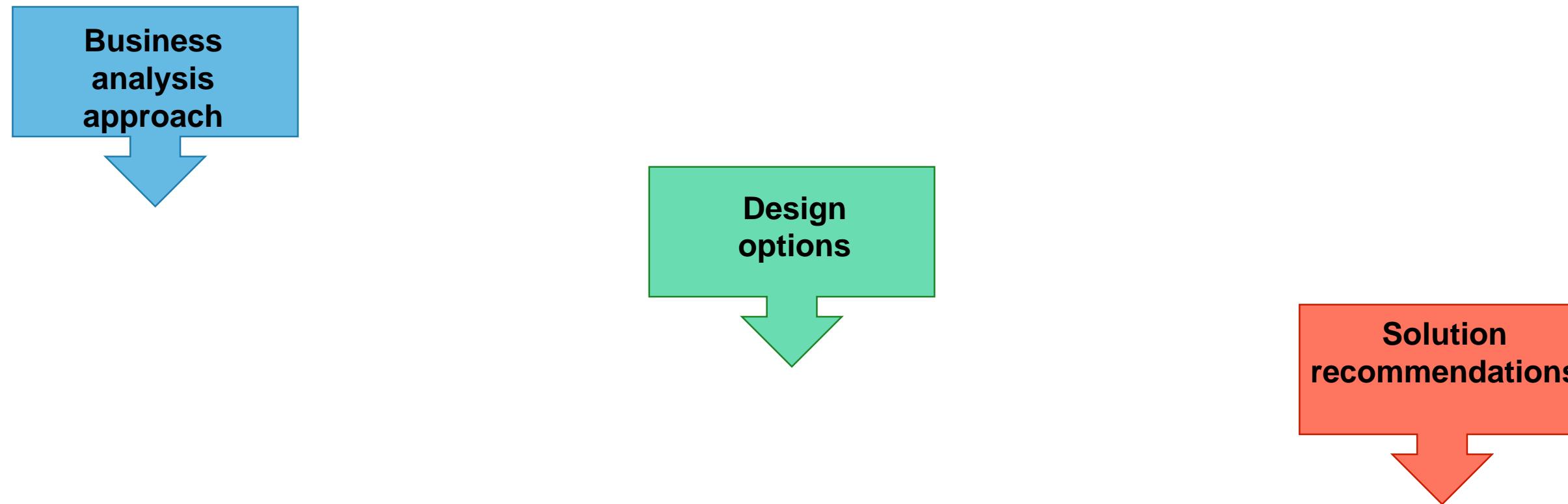
Enterprise readiness assesses whether the enterprise is ready to use, sustain, and realize value from the solution.

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.

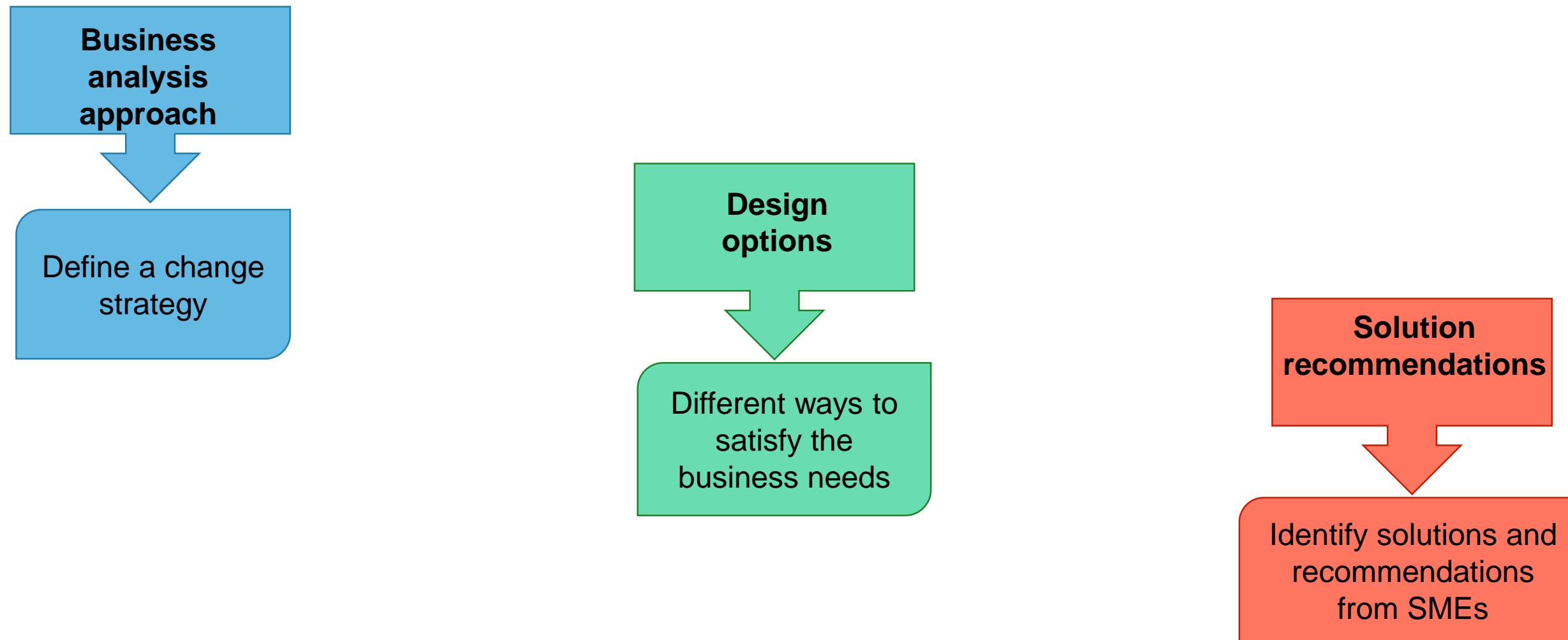
# DEFINE CHANGE STRATEGY

## GUIDELINES AND TOOLS



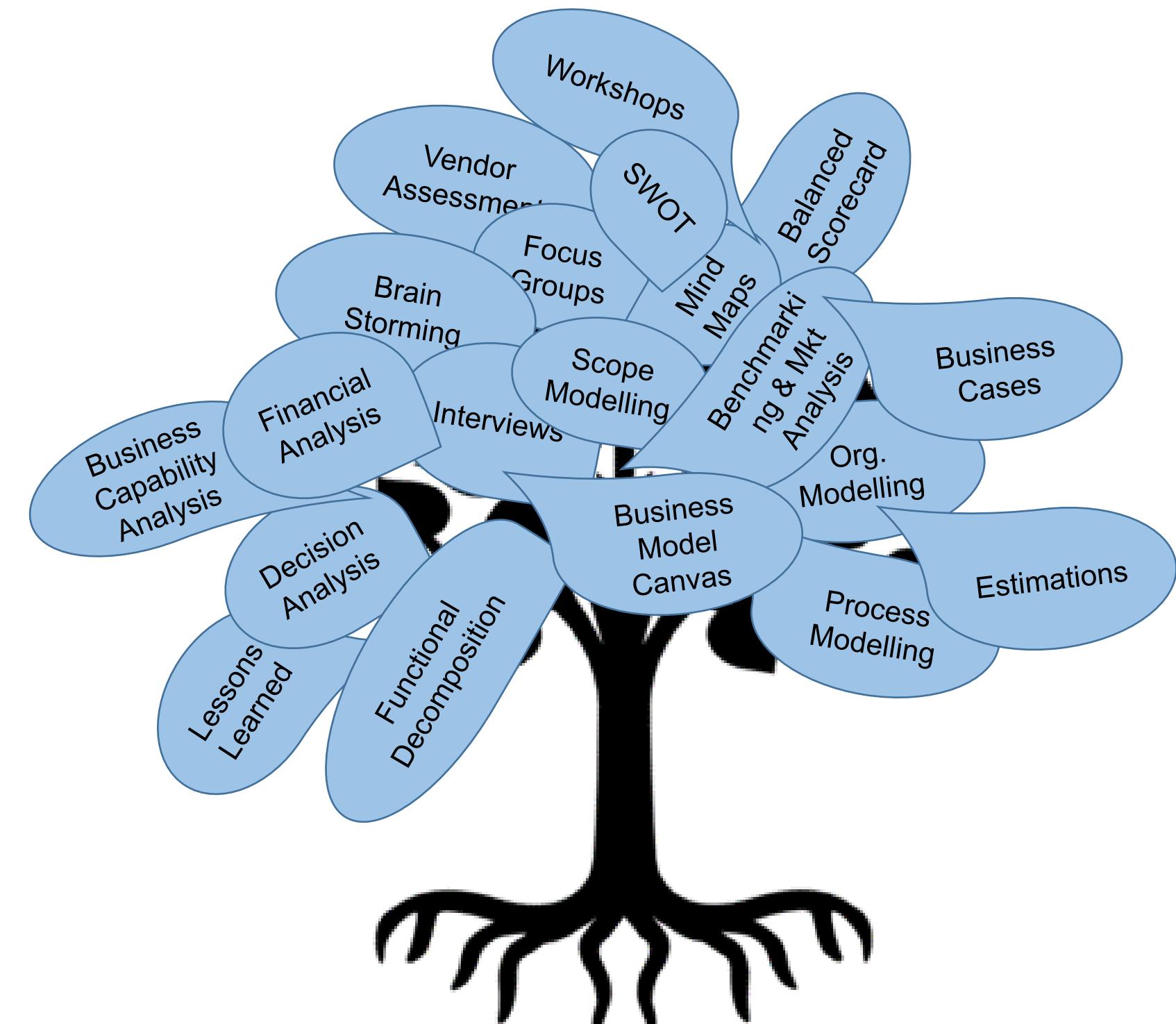
# DEFINE CHANGE STRATEGY (contd.)

## GUIDELINES AND TOOLS



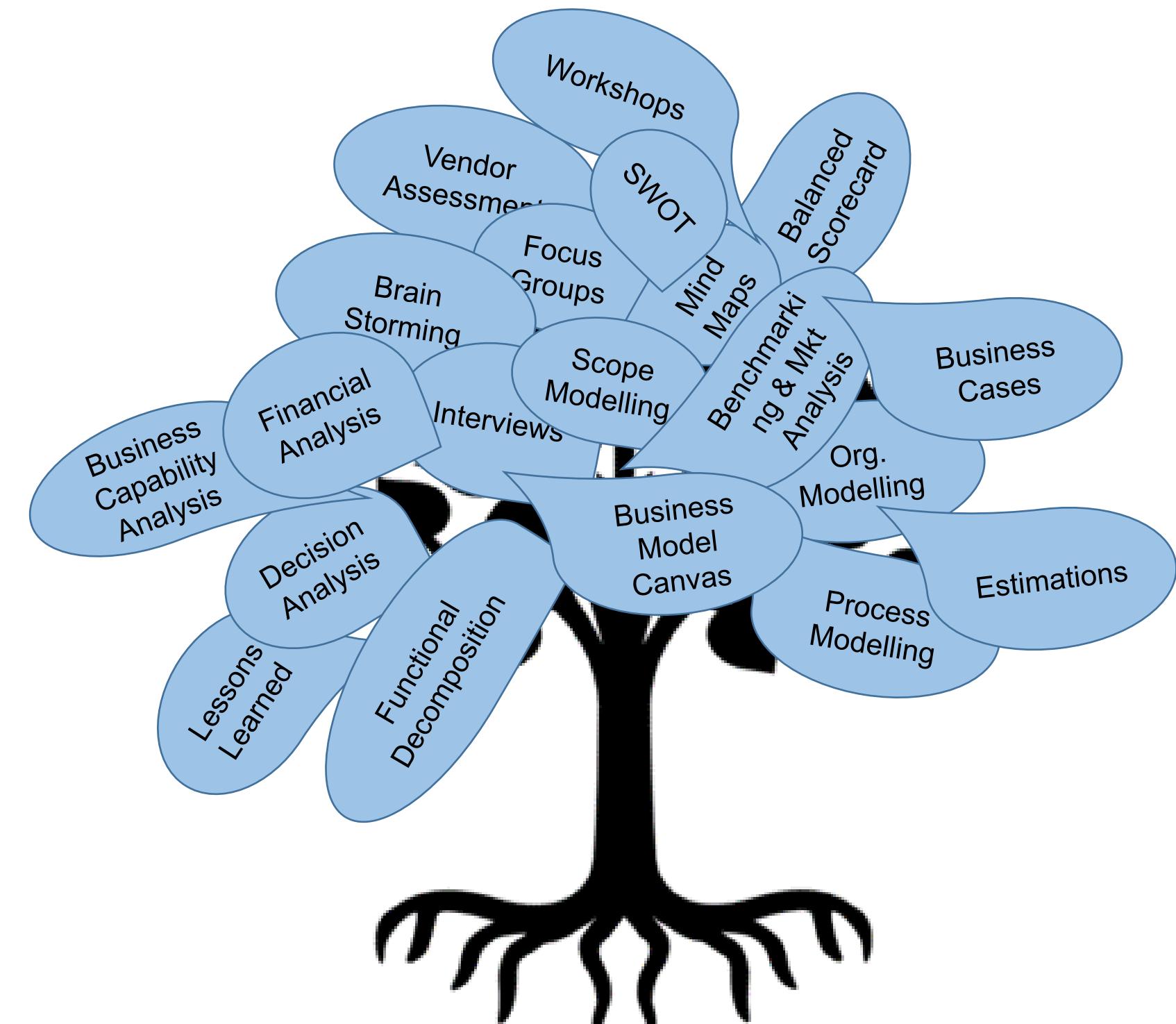
# DEFINE CHANGE STRATEGY

## 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

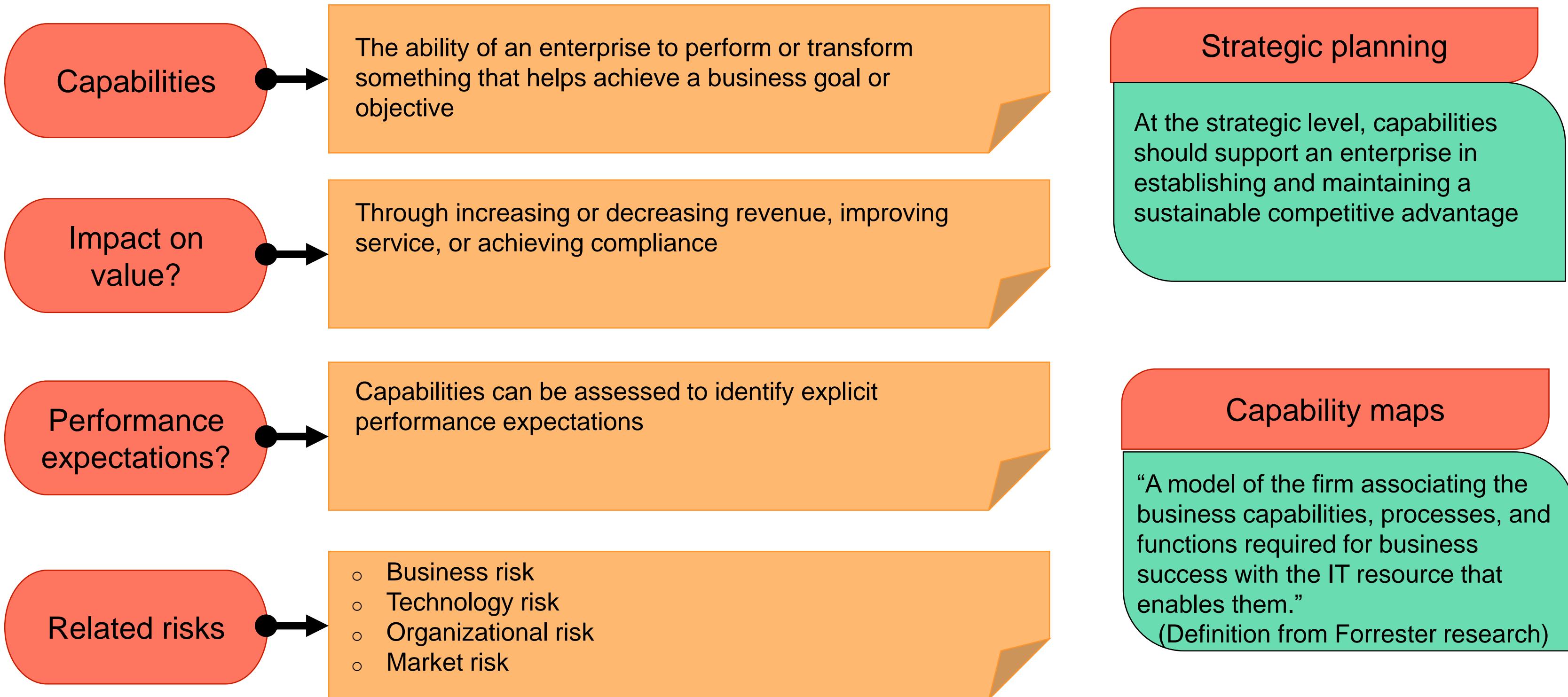
Assessing organizations ability to offer new products and services

### 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

Cost of change

Expected cost of building or acquiring a solution and transitioning the enterprise from current state to future state

Total cost of ownership

Cost of acquisition, using and supporting the solution for expected duration

Value realization

Value realized over time

Cost benefit analysis

Prediction of the expected net benefit

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:

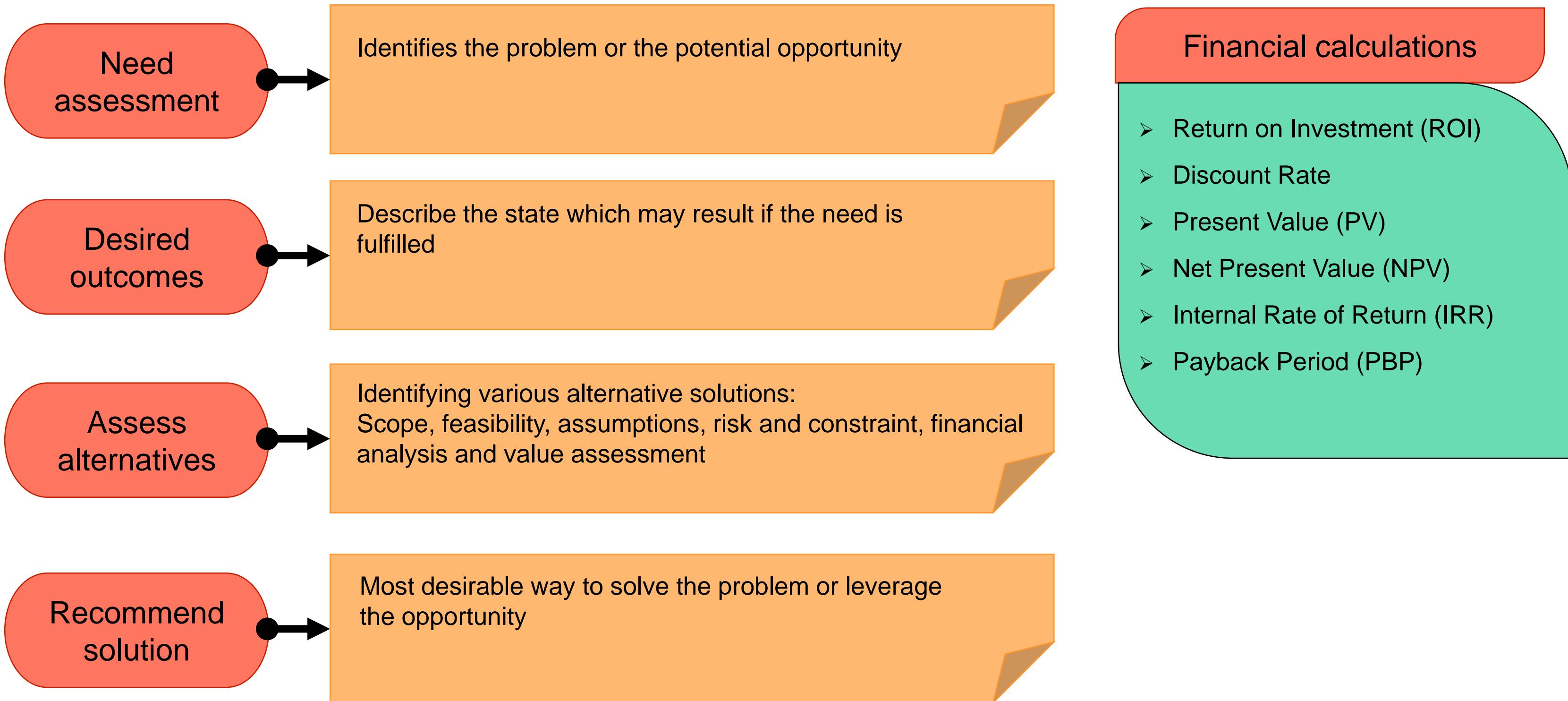
Provides a justification for a course of action based on the benefits to be realized

### 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

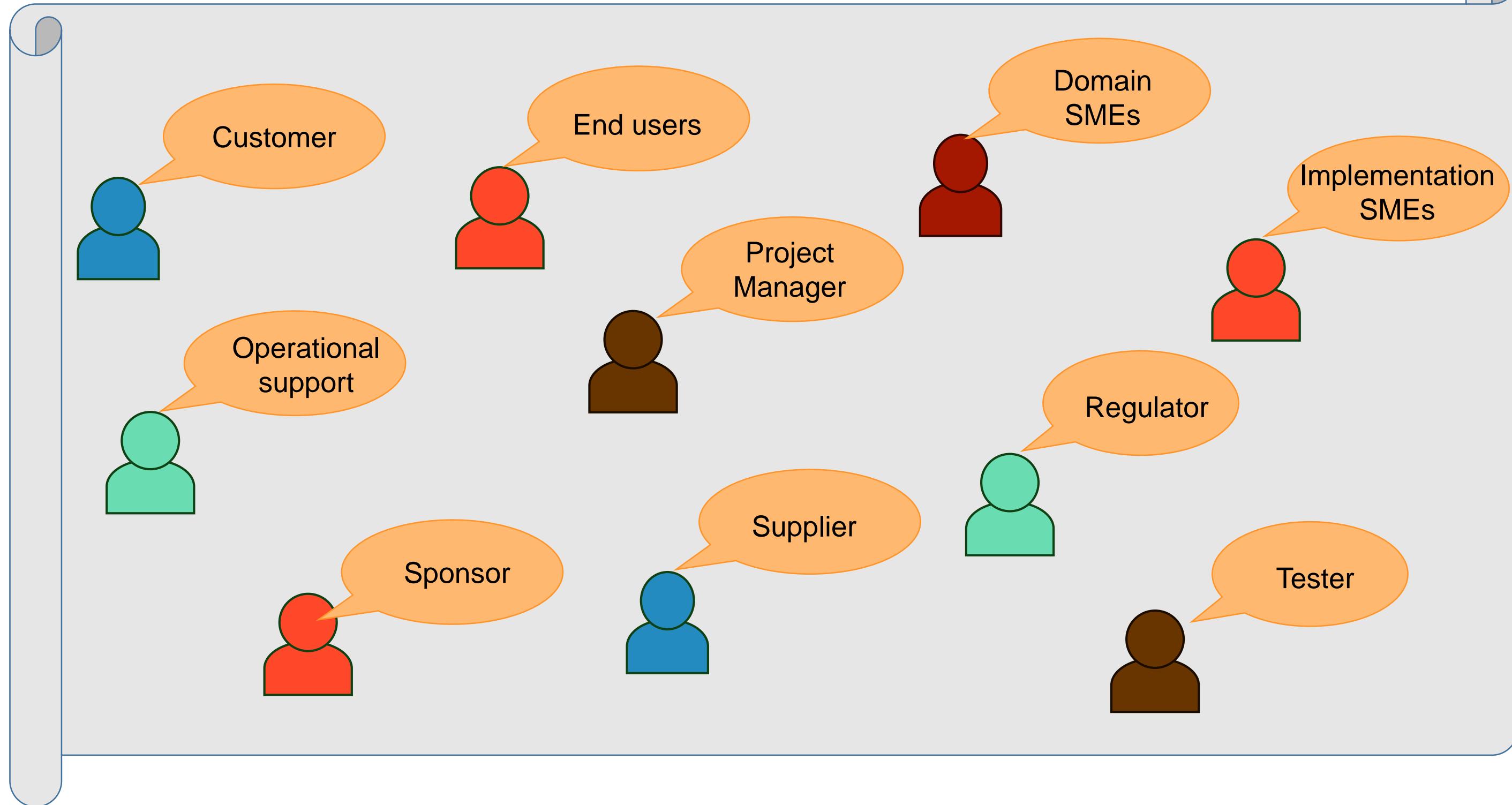


# DEFINE CHANGE STRATEGY

## 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.

- 
- The diagram features a vertical grey line with six colored circular markers (grey, yellow, red, blue, green, orange) positioned between the numbered callouts. The callouts are arranged from top to bottom: 1 (grey), 2 (yellow), 3 (red), 4 (blue), 5 (green), 6 (orange), and 7 (light blue).
- 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 Strategy Analysis includes tasks like 'Analyze Current State', 'Define Future State', 'Assess Risks', and 'Define Change Strategy'.
  - 3 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.
  - 4 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

|   | <b>Questions</b>                                                                                | <b>Response</b>                                                                                                                                                                                                                    |
|---|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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 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 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 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



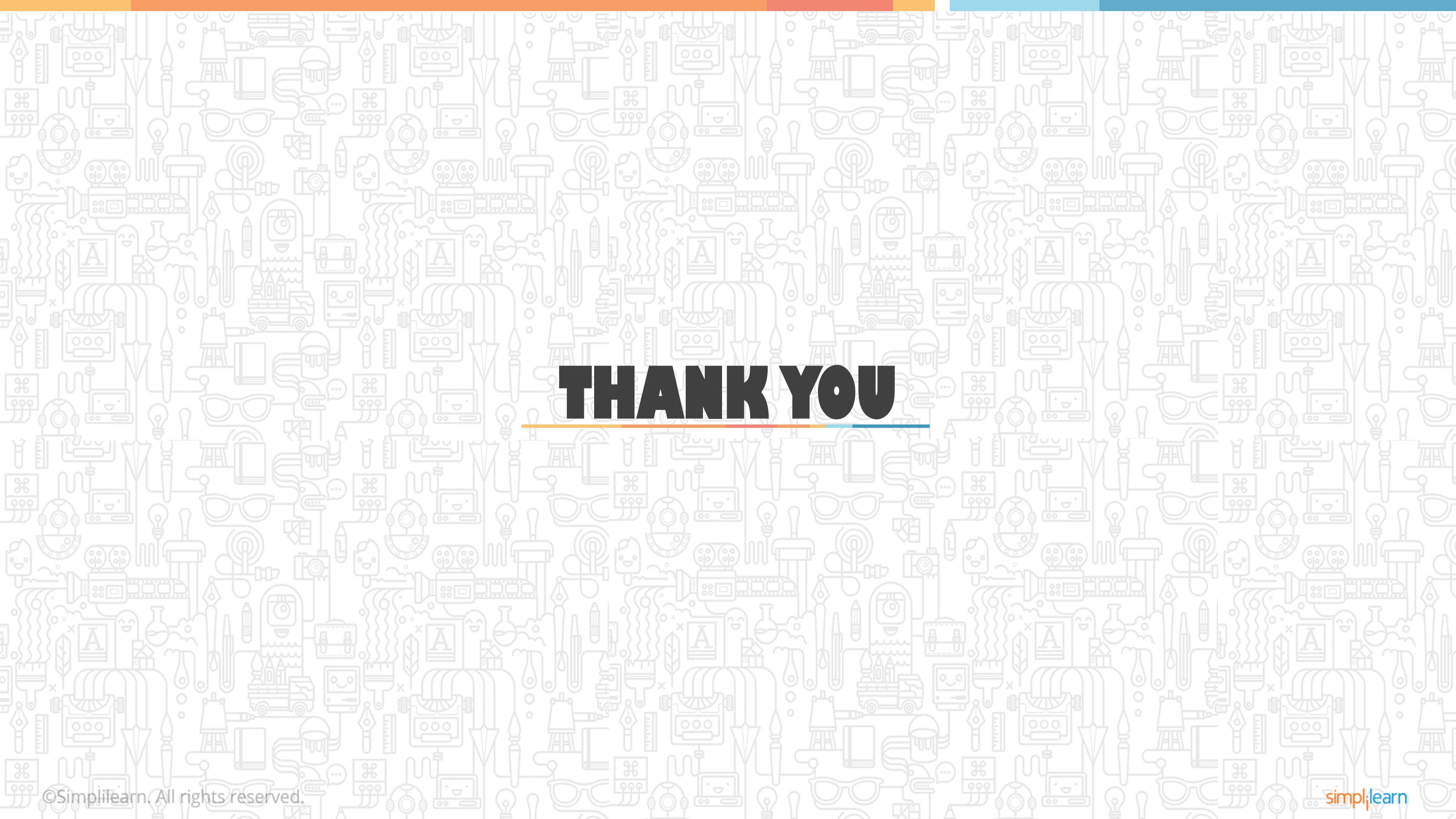
The correct answer is **b**.

**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”



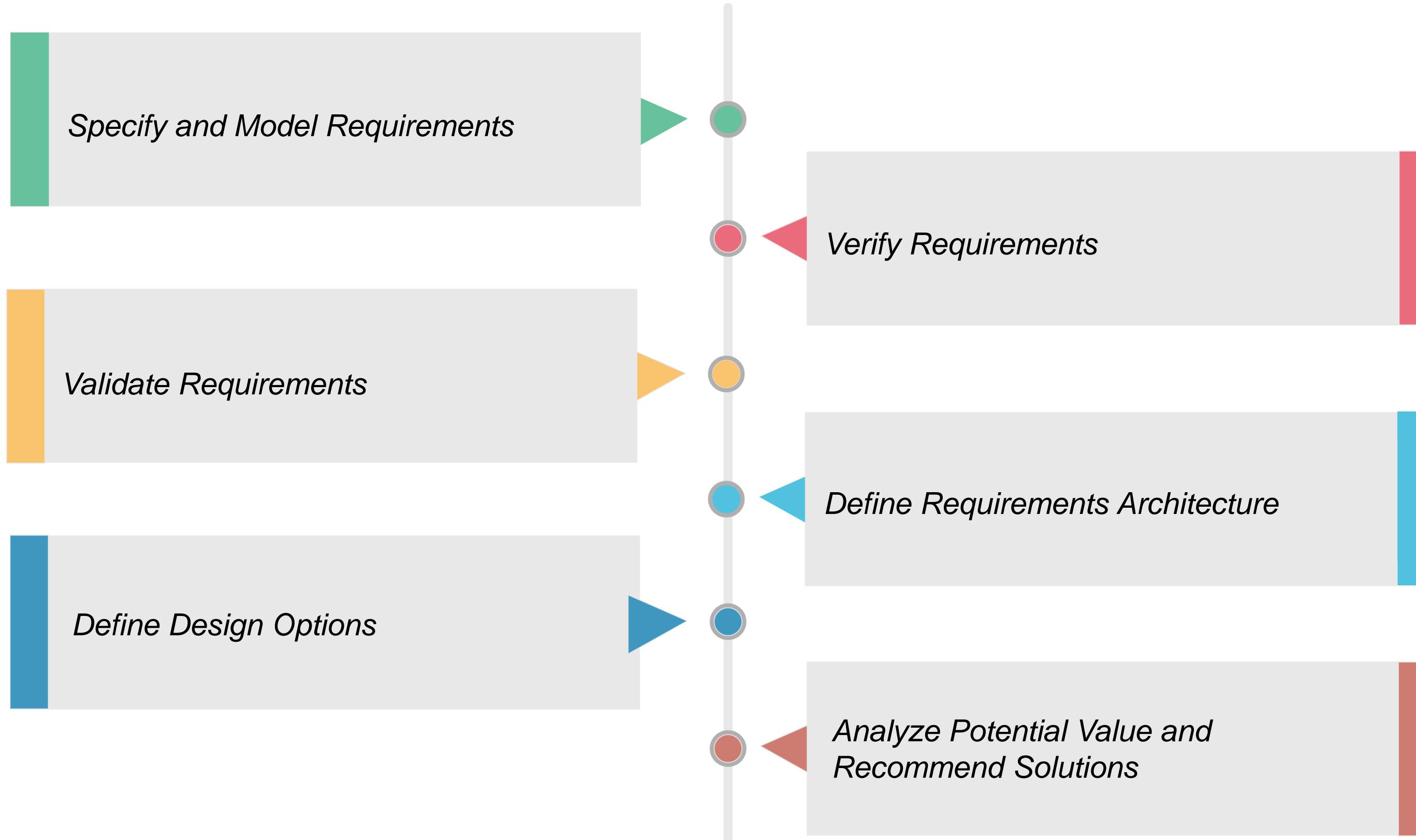
# THANK YOU

# **CBAP® Exam Preparation Course**

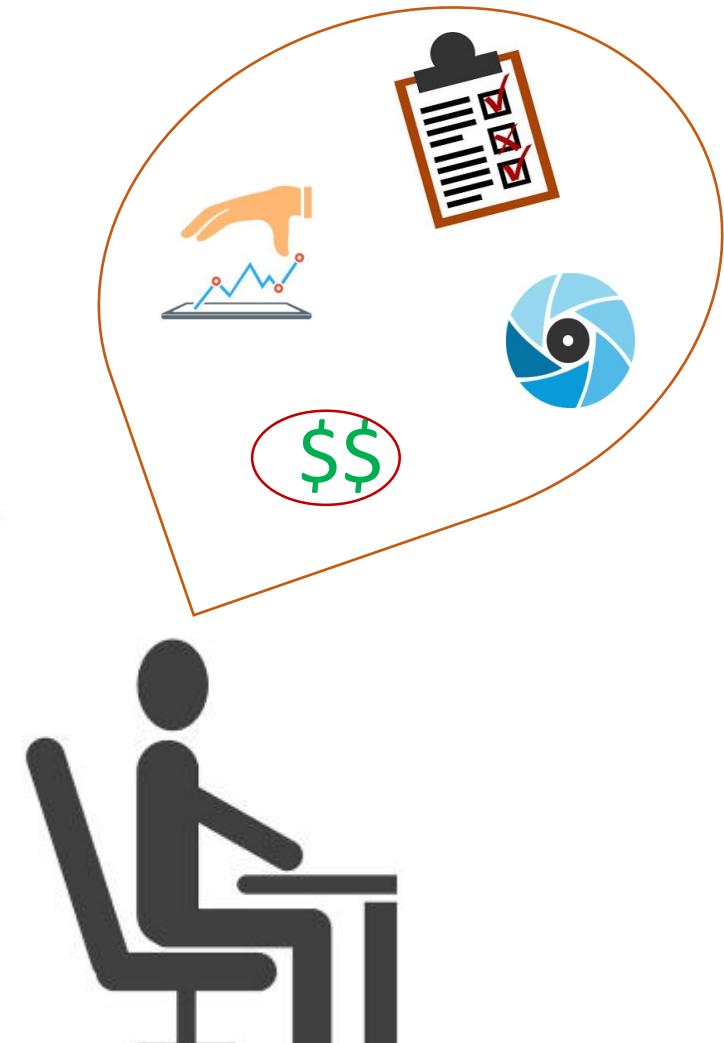
## **Lesson 7 – Requirements Analysis and Design Definition**



# WHAT'S IN IT FOR ME



# INTRODUCTION

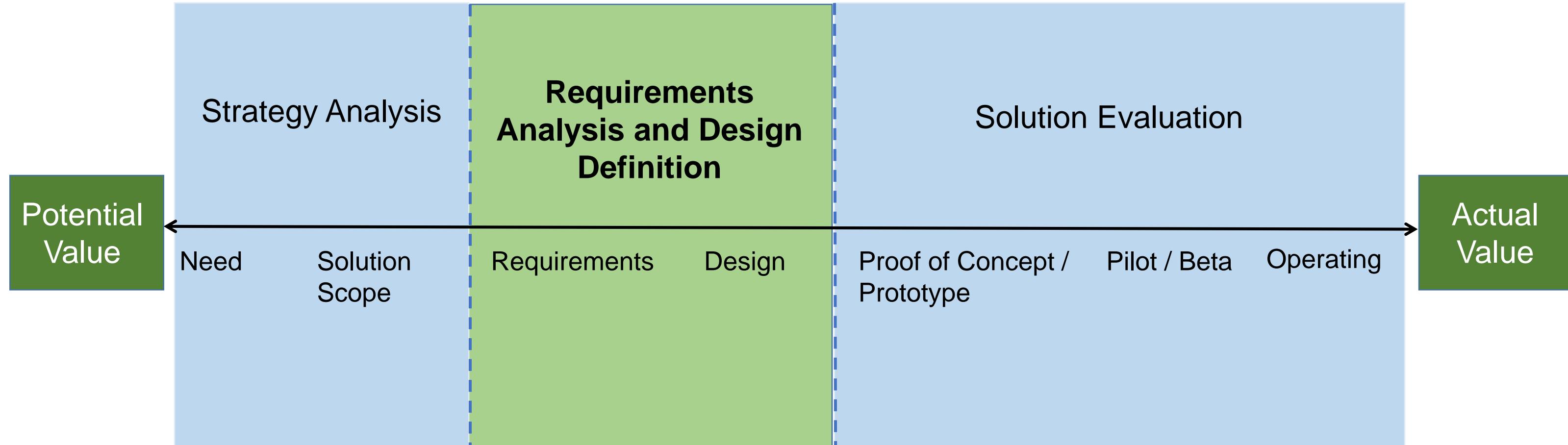


Business Analyst

## Requirements Analysis and Design Definition knowledge area:

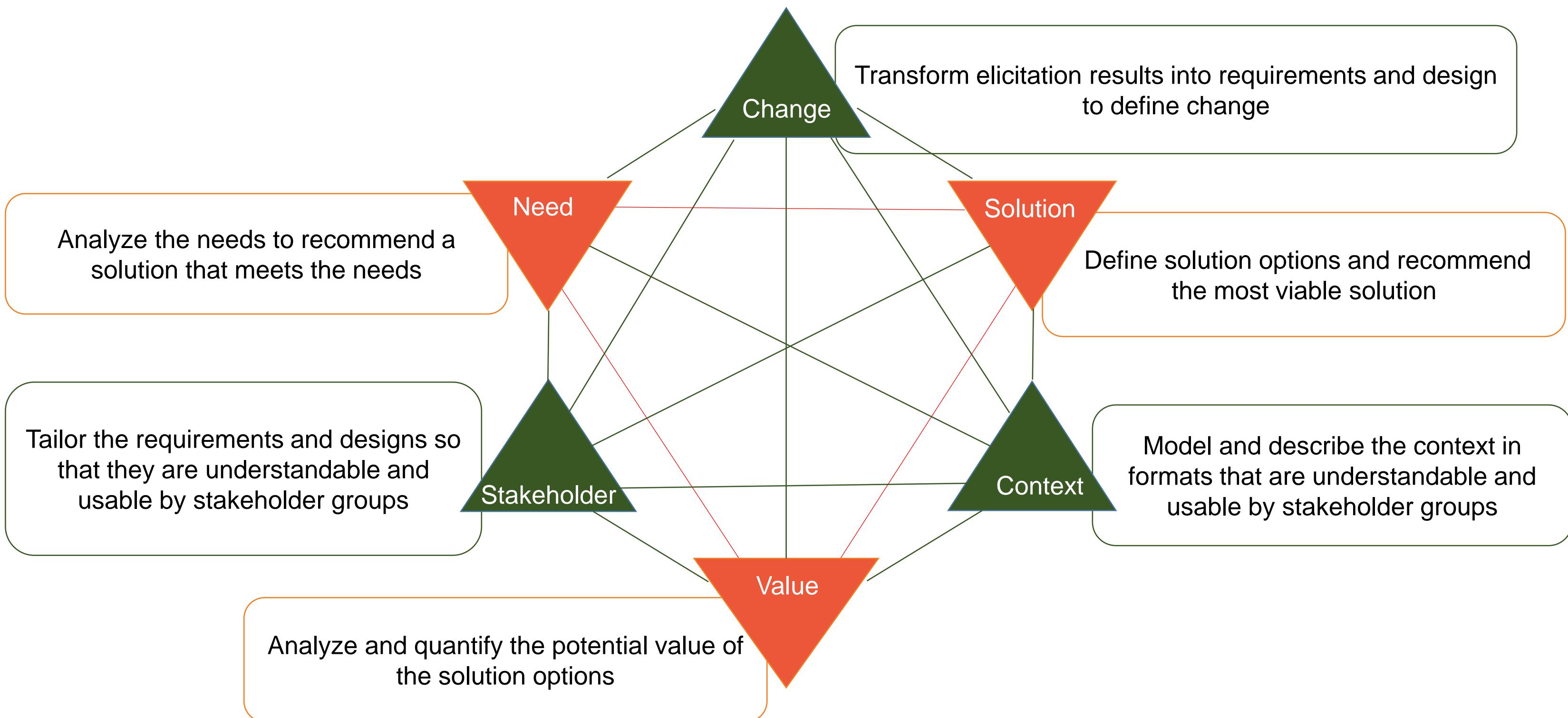
- Describes the tasks that the business analyst performs to:
  - Structure and organize the requirements discovered during elicitation activities,
  - Specify and model requirements and designs,
  - Validate and verify information,
  - Identify solution options that meet business needs, and
  - Estimate 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



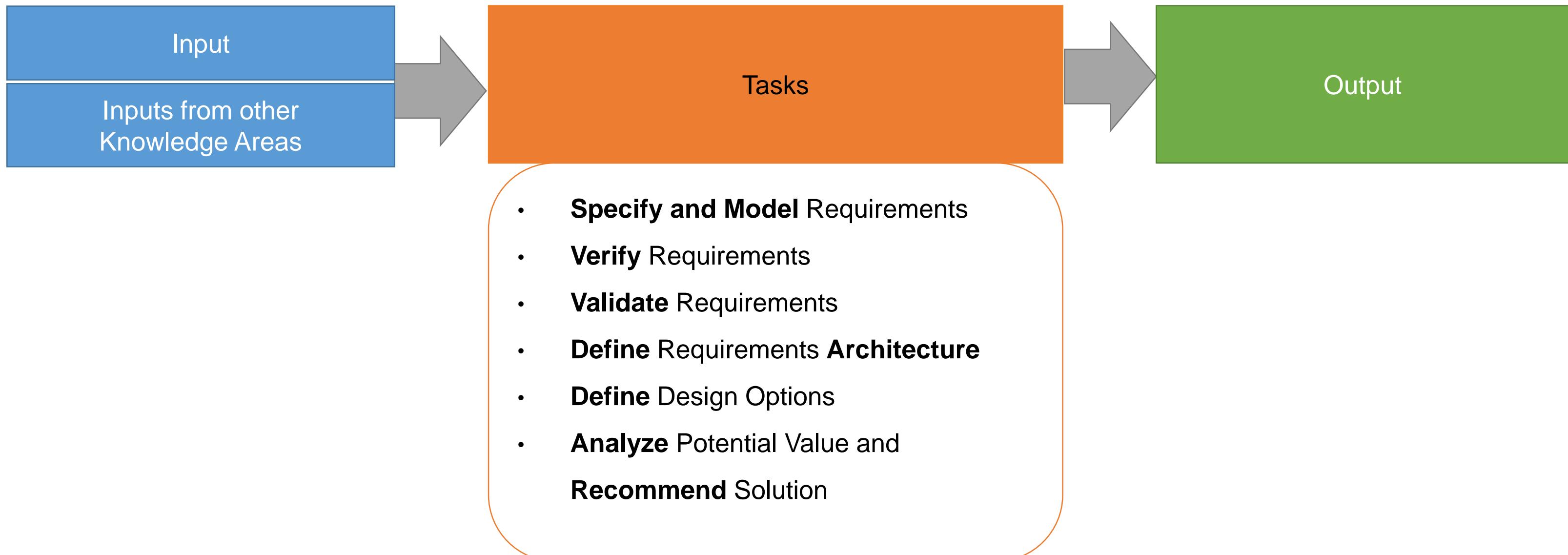
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION

## OVERVIEW



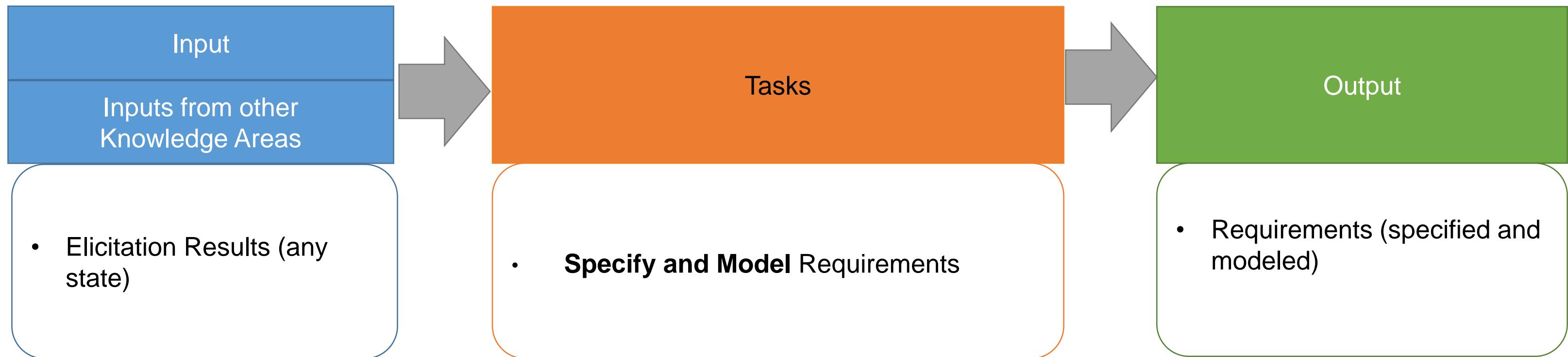
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT— OVERVIEW



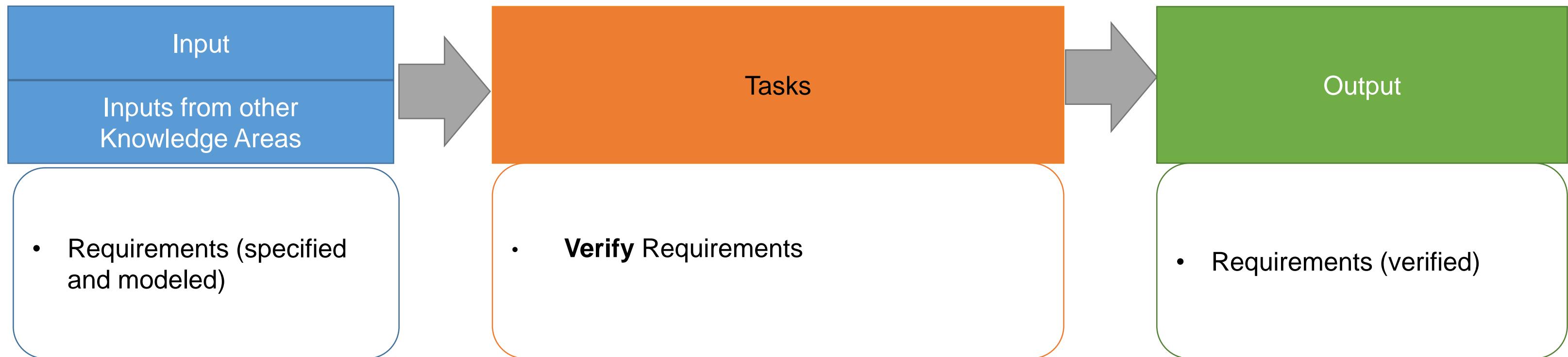
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT — OVERVIEW



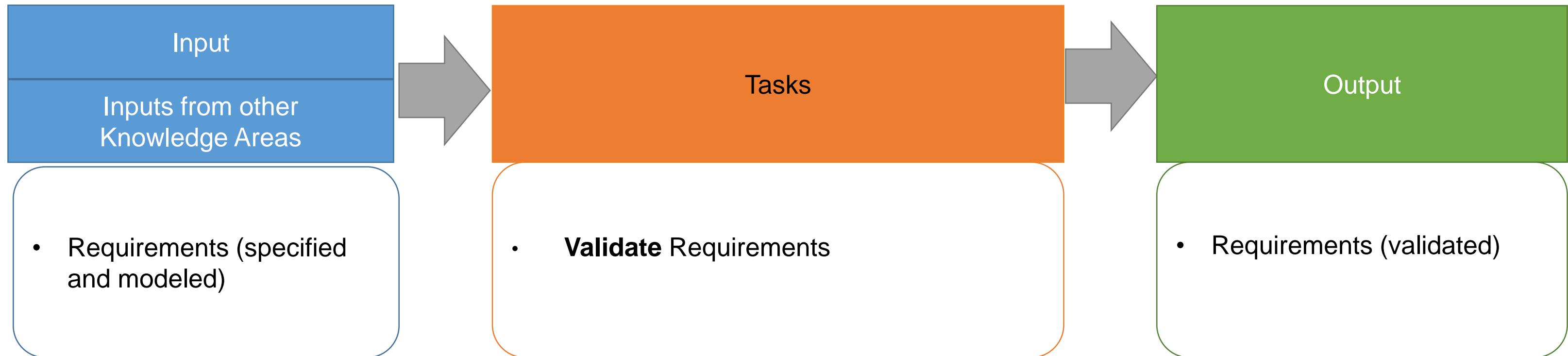
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT — OVERVIEW



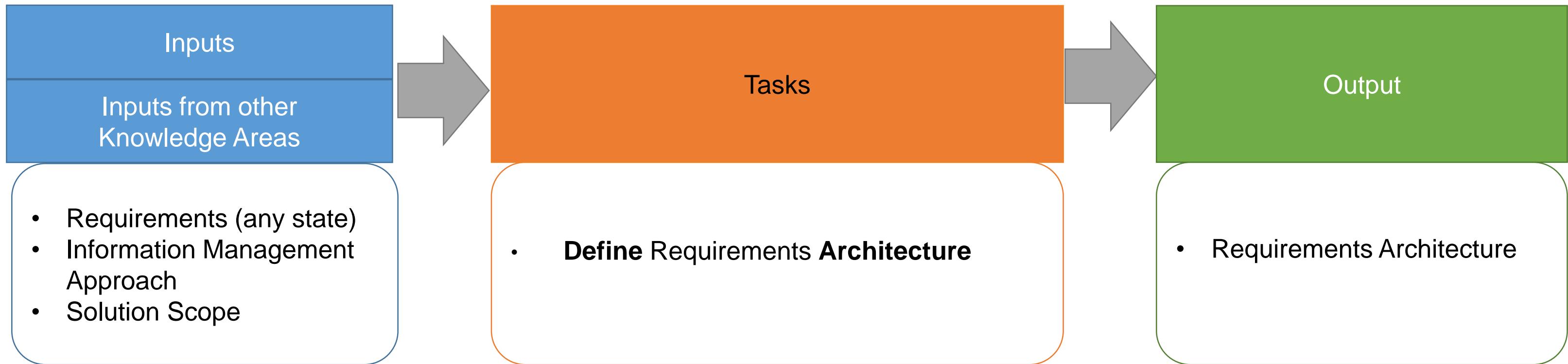
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS AND OUTPUT — OVERVIEW



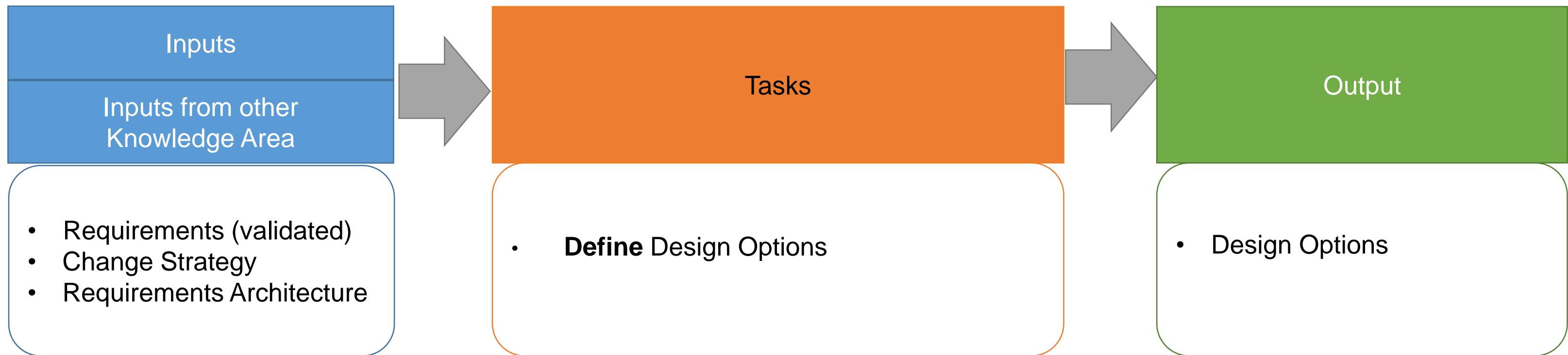
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS AND OUTPUT — OVERVIEW



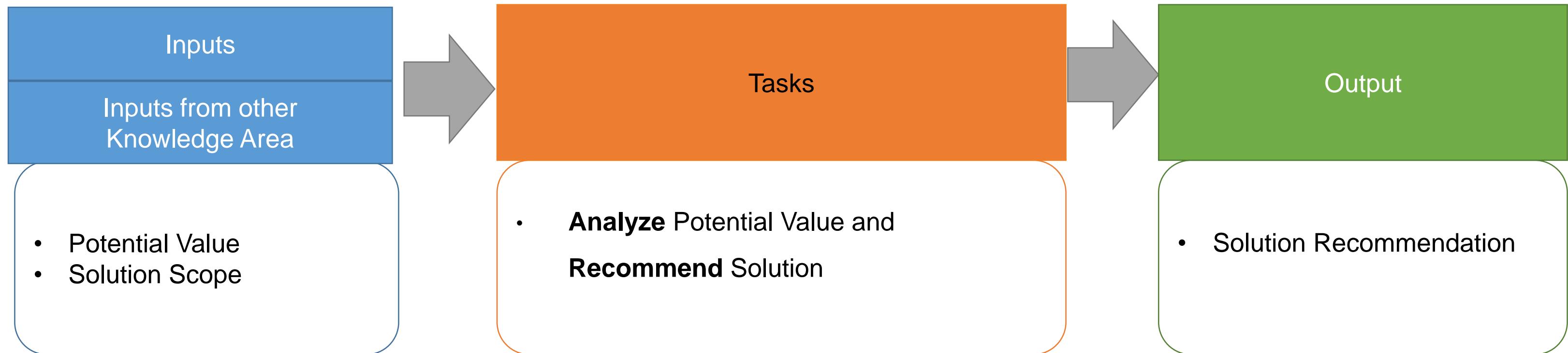
# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

## INPUT, TASKS, AND OUTPUT — OVERVIEW



# REQUIREMENTS ANALYSIS AND DESIGN DEFINITION (contd.)

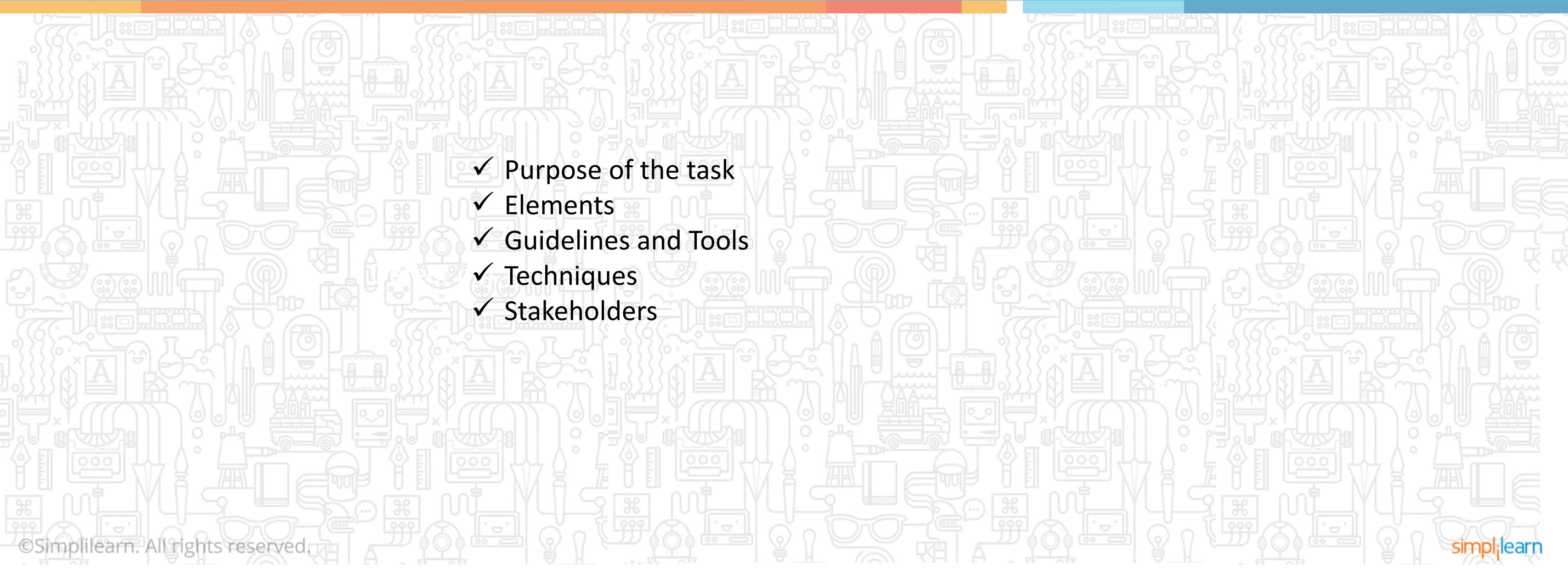
## INPUT, TASKS AND OUTPUT — OVERVIEW



# Lesson 7: Requirements Analysis and Design Definition

## Topic 7.1: Specify and Model Requirements

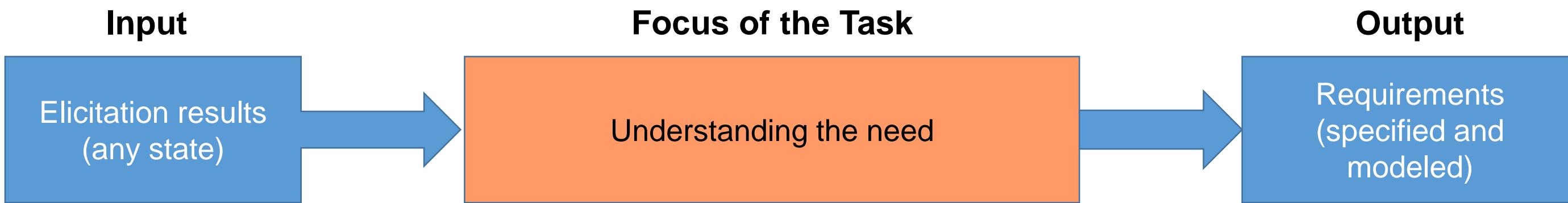
- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders



# SPECIFY AND MODEL REQUIREMENTS

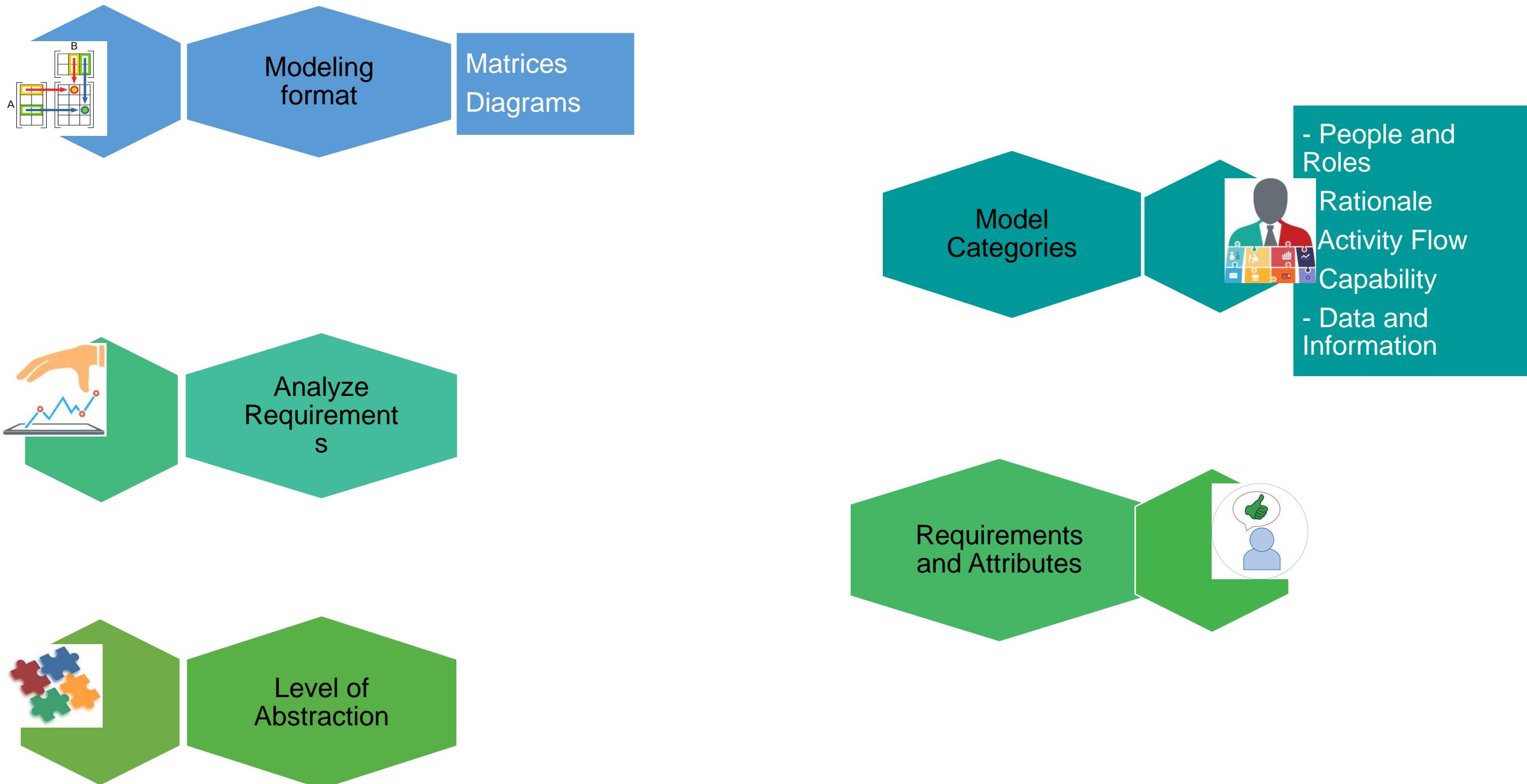
## PURPOSE

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                 |                             |

# NON-FUNCTIONAL REQUIREMENTS AND ANALYSIS

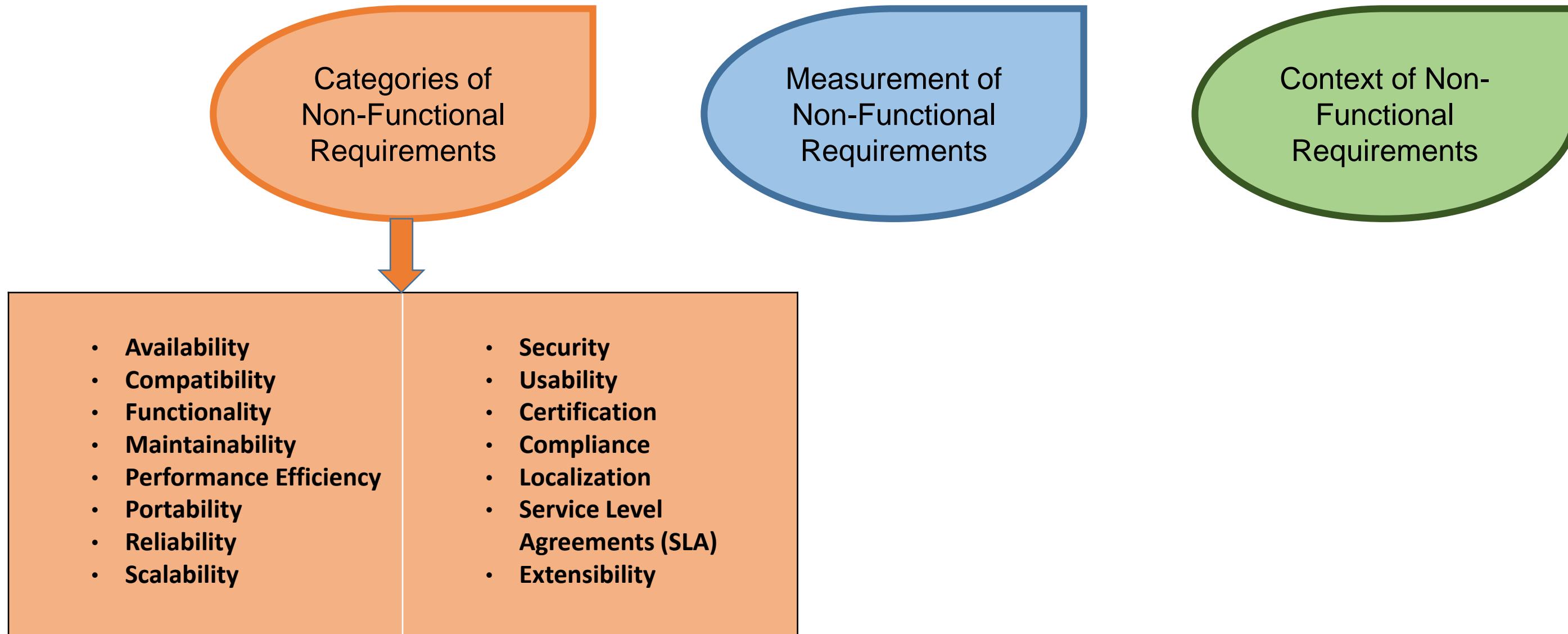
## OVERVIEW

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

# NON-FUNCTIONAL REQUIREMENTS AND ANALYSIS (contd.)

## 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> |

# BUSINESS RULES ANALYSIS (contd.)

## 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

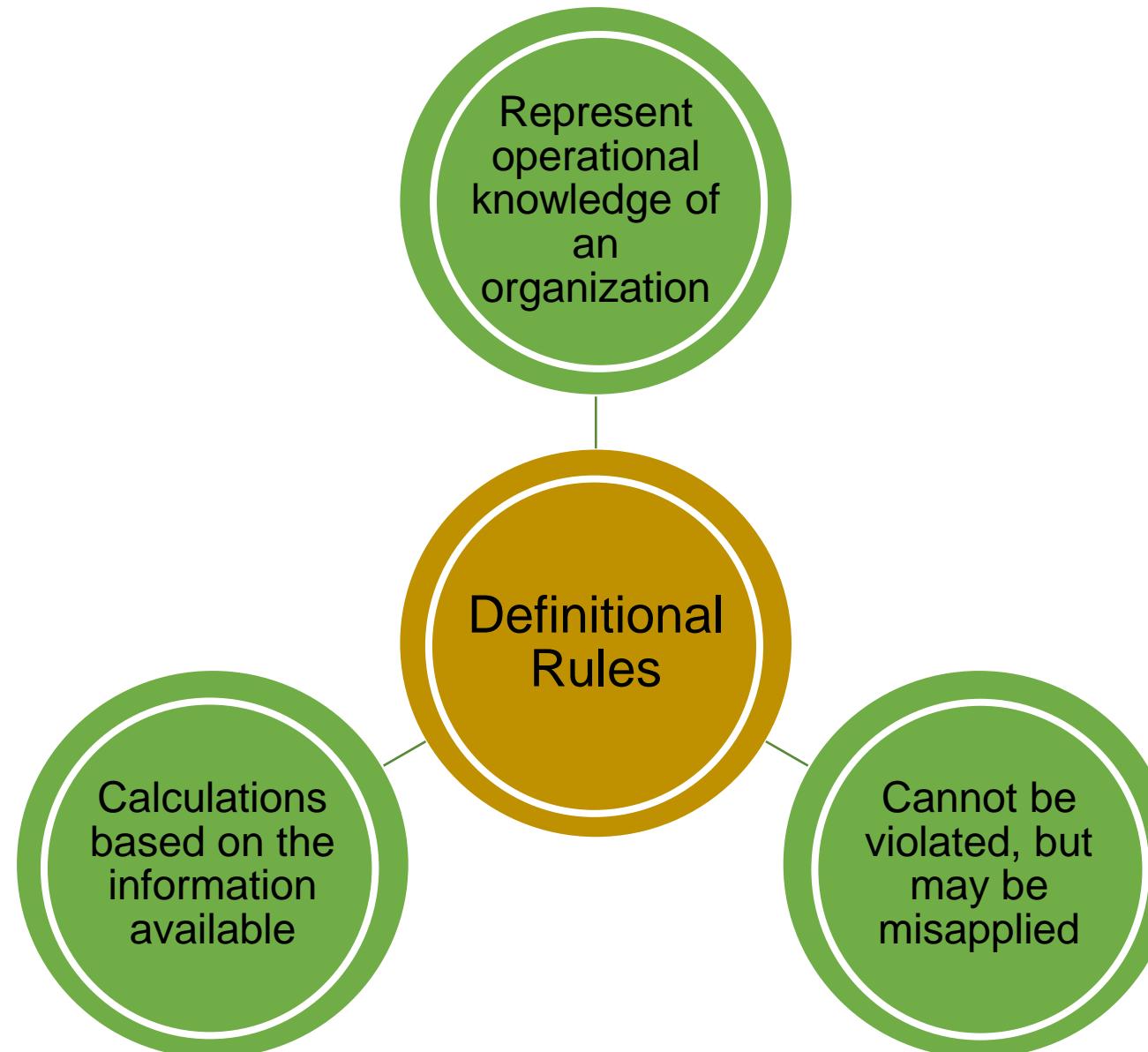
**Map** the rules to decisions

**Maintain** the rules

# BUSINESS RULES ANALYSIS (contd.)

## ELEMENTS — DEFINITIONAL RULES

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



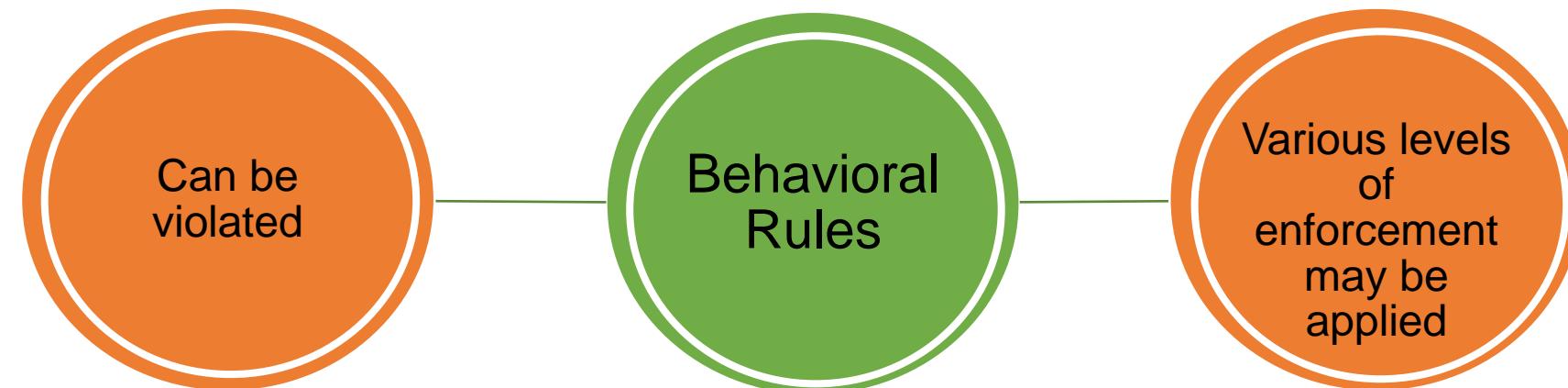
### Examples:

- 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.

# BUSINESS RULES ANALYSIS (contd.)

## 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.

# BUSINESS RULES ANALYSIS (contd.)

## DECISION MODELING - OVERVIEW

Shows how repeatable business decisions are made

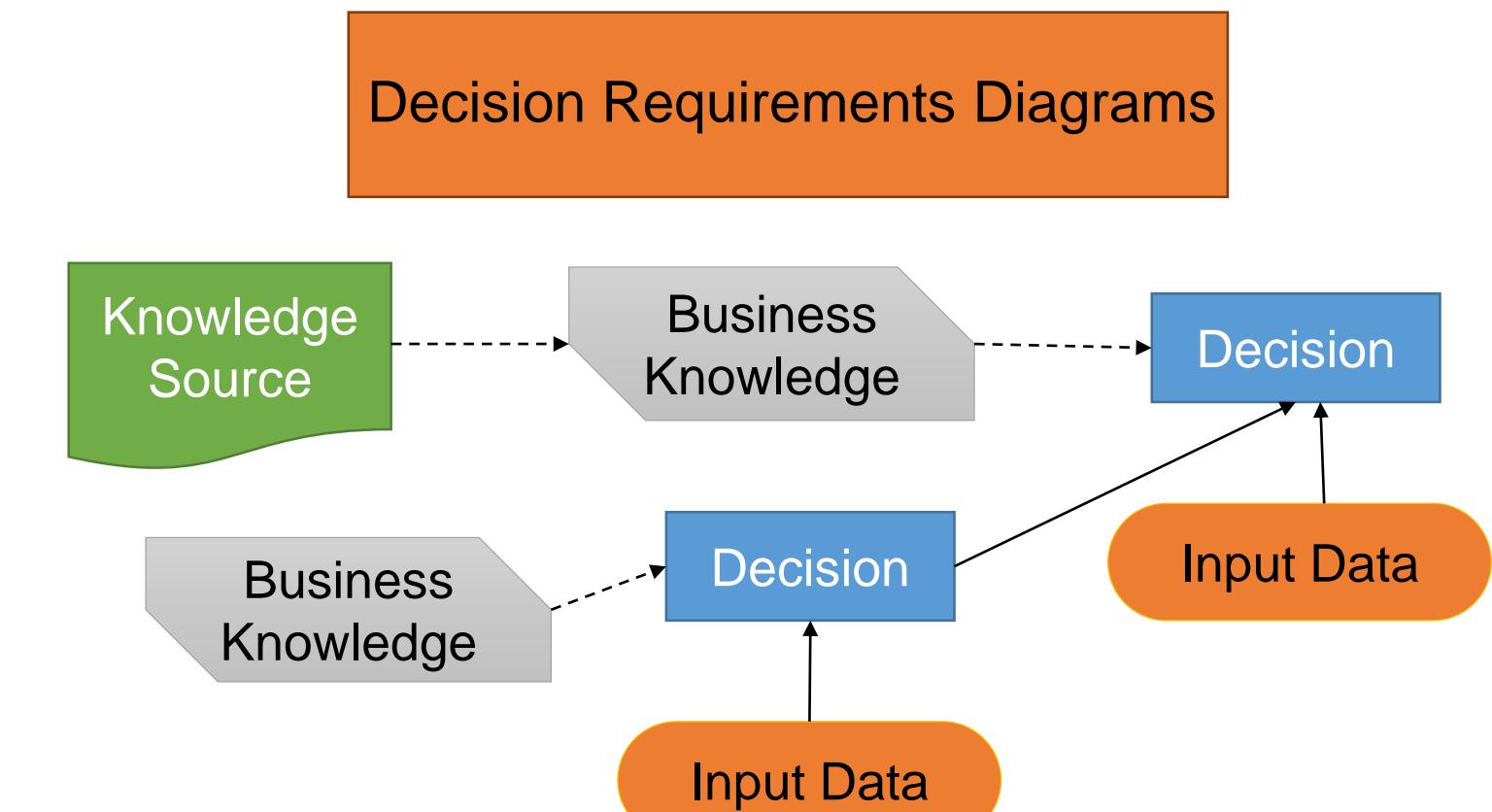
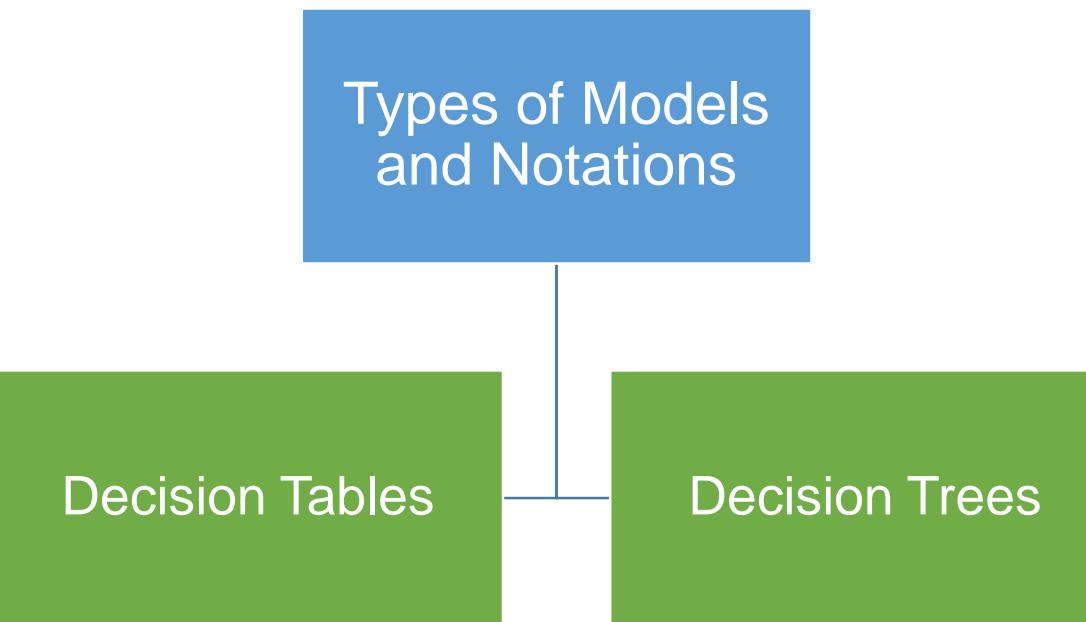
Shows how data and knowledge are combined to make a specific decisions

Is linked to processes, performance measures, and organization

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

# BUSINESS RULES ANALYSIS (contd.)

## DECISION MODELING - ELEMENTS



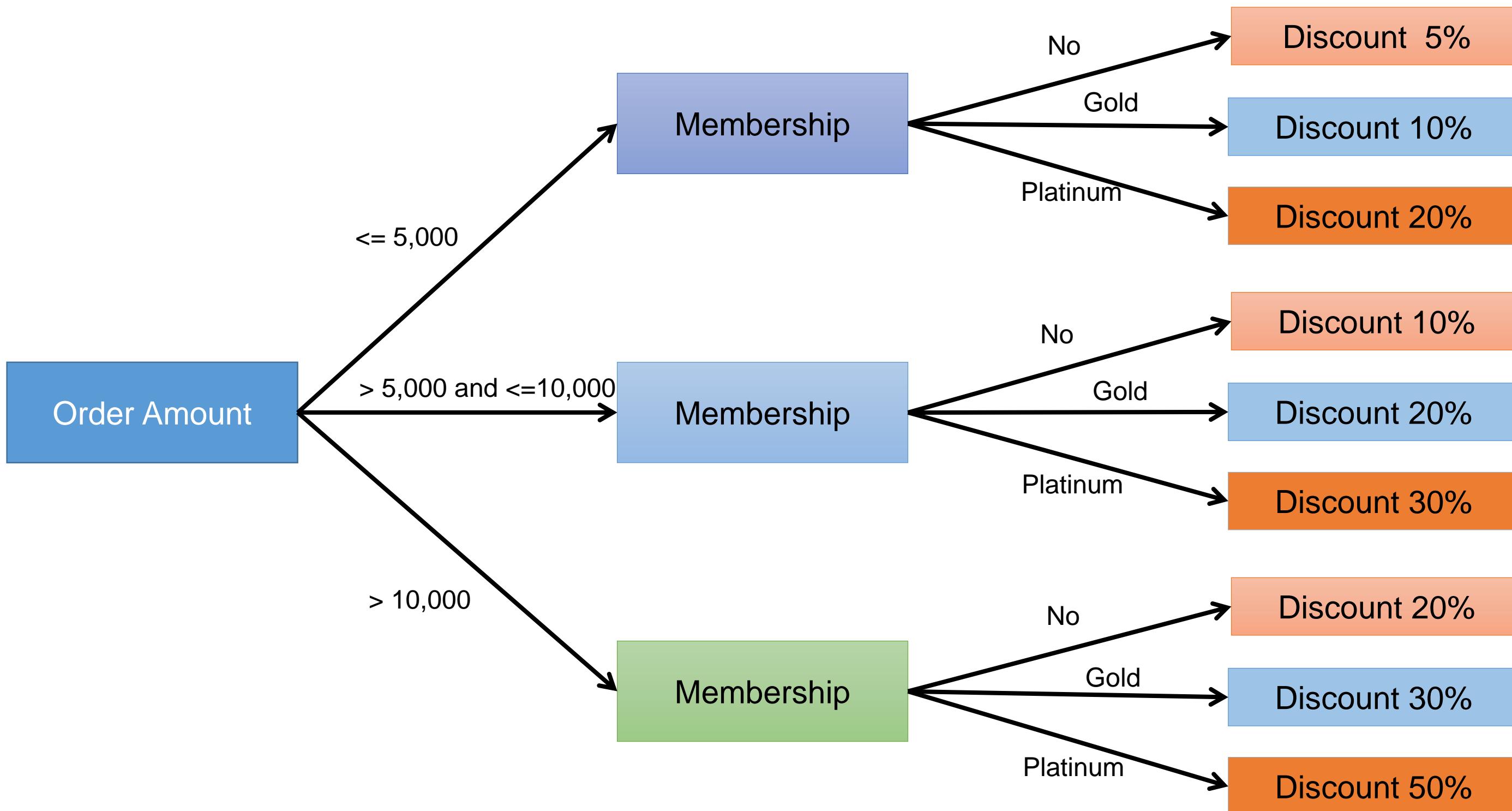
# BUSINESS RULES ANALYSIS (contd.)

## EXAMPLE — DECISION TABLE

| Condition 1 - Age   | Condition 2 – Smoking Yes/No | Condition 3 – Pre-Existing Diseased or Operated | Outcome or Decision (Eligibility, Base 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

# CONCEPT MODELING (contd.)

## ELEMENTS

Noun Concepts

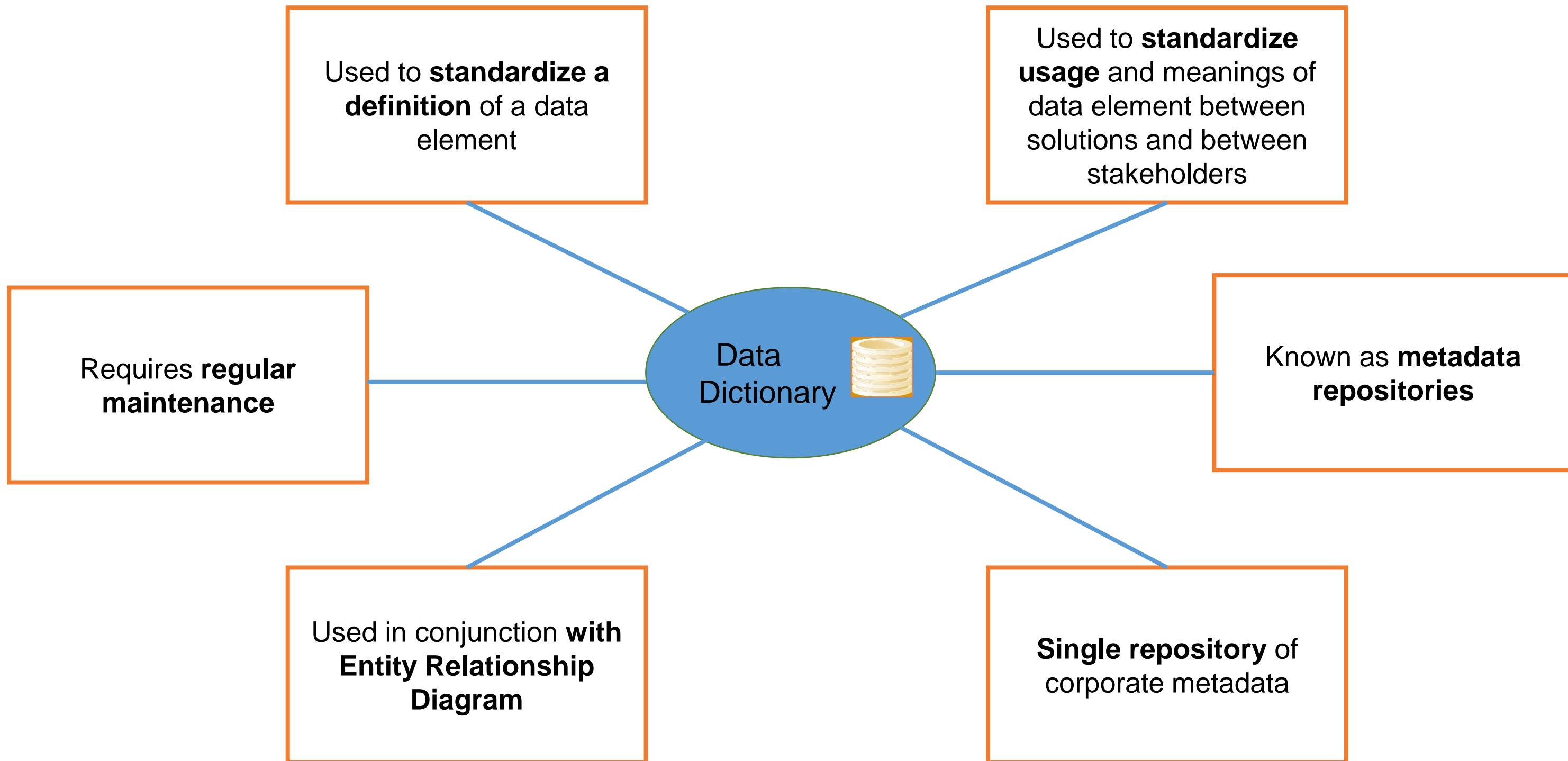
Verb Concepts

Other Connections

- Categorizations
- Classification
- Partitive connection
- Roles

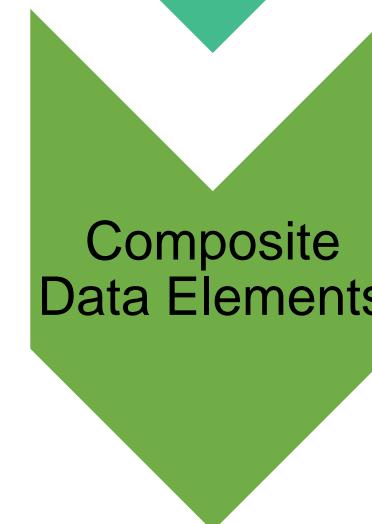
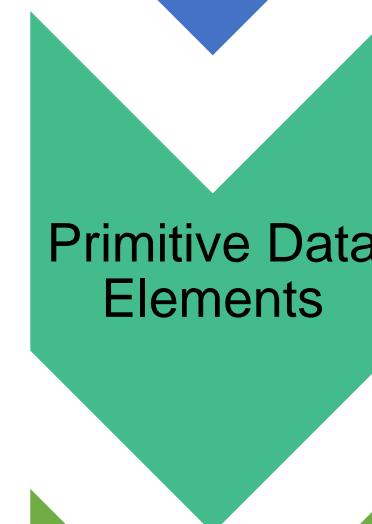
# DATA DICTIONARY

## OVERVIEW



# DATA DICTIONARY (contd.)

## ELEMENTS



- The data dictionary describes data element characteristics

- Name
- Aliases
- Values/Meaning
- Description

- Sequence
- Repetitions
- Optional Elements

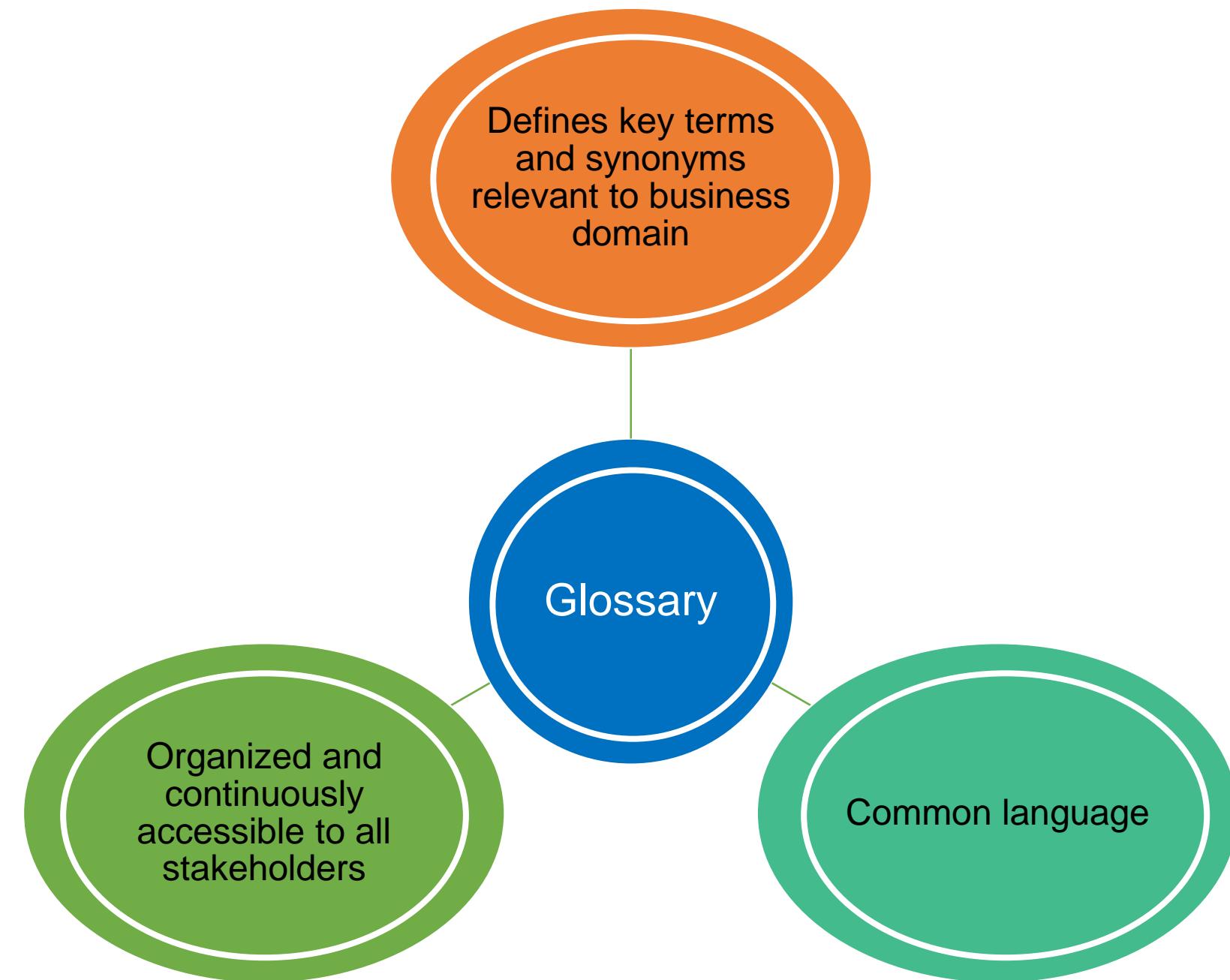
# DATA DICTIONARY (contd.)

## 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



# GLOSSARY (contd.)

## ELEMENTS

A term is included in the glossary when

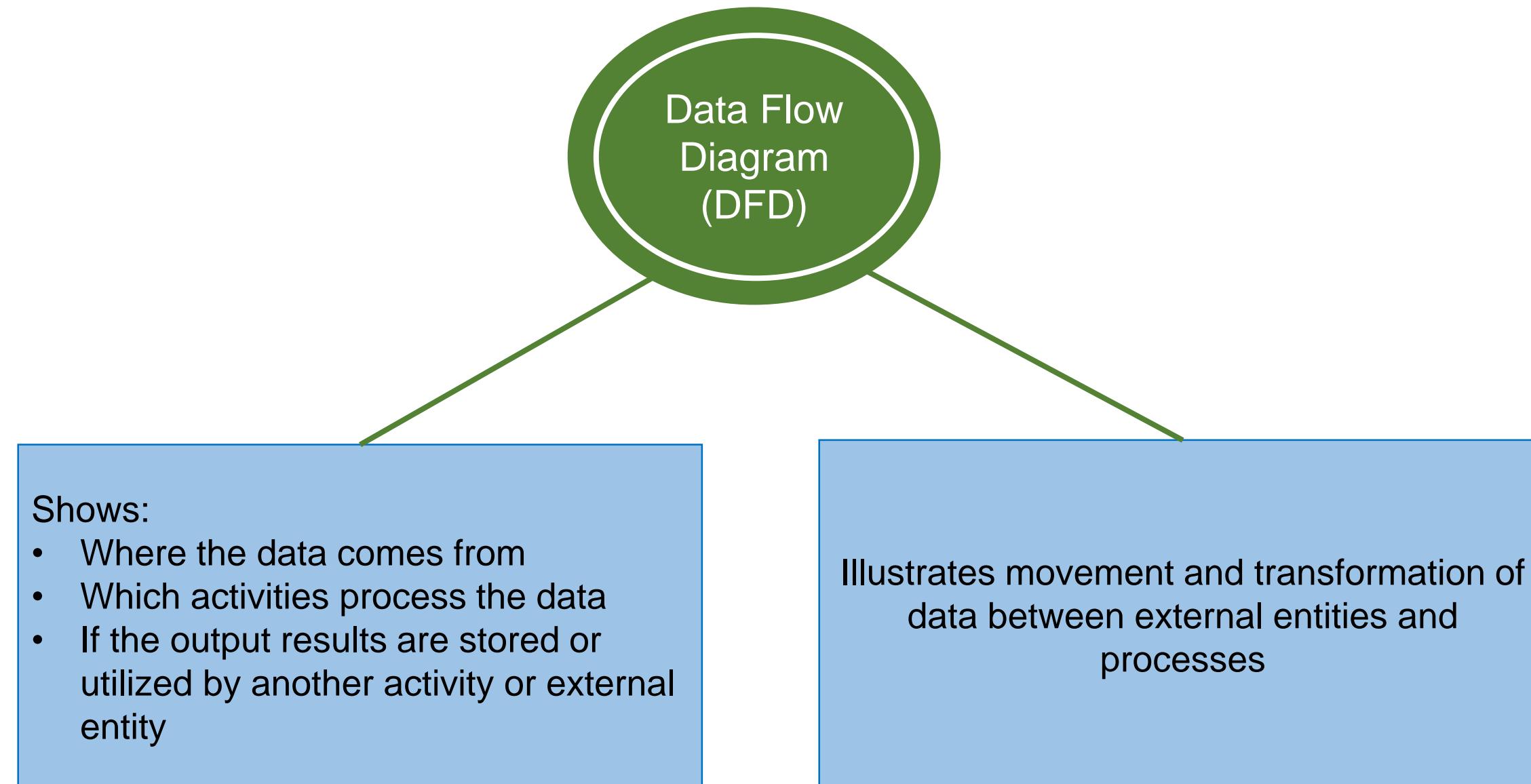
- The term is unique to a domain
- Multiple definitions exist
- The definition is outside of term's common use
- There are chances of misunderstanding

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



### Three simple rules of Data Flow Diagrams:

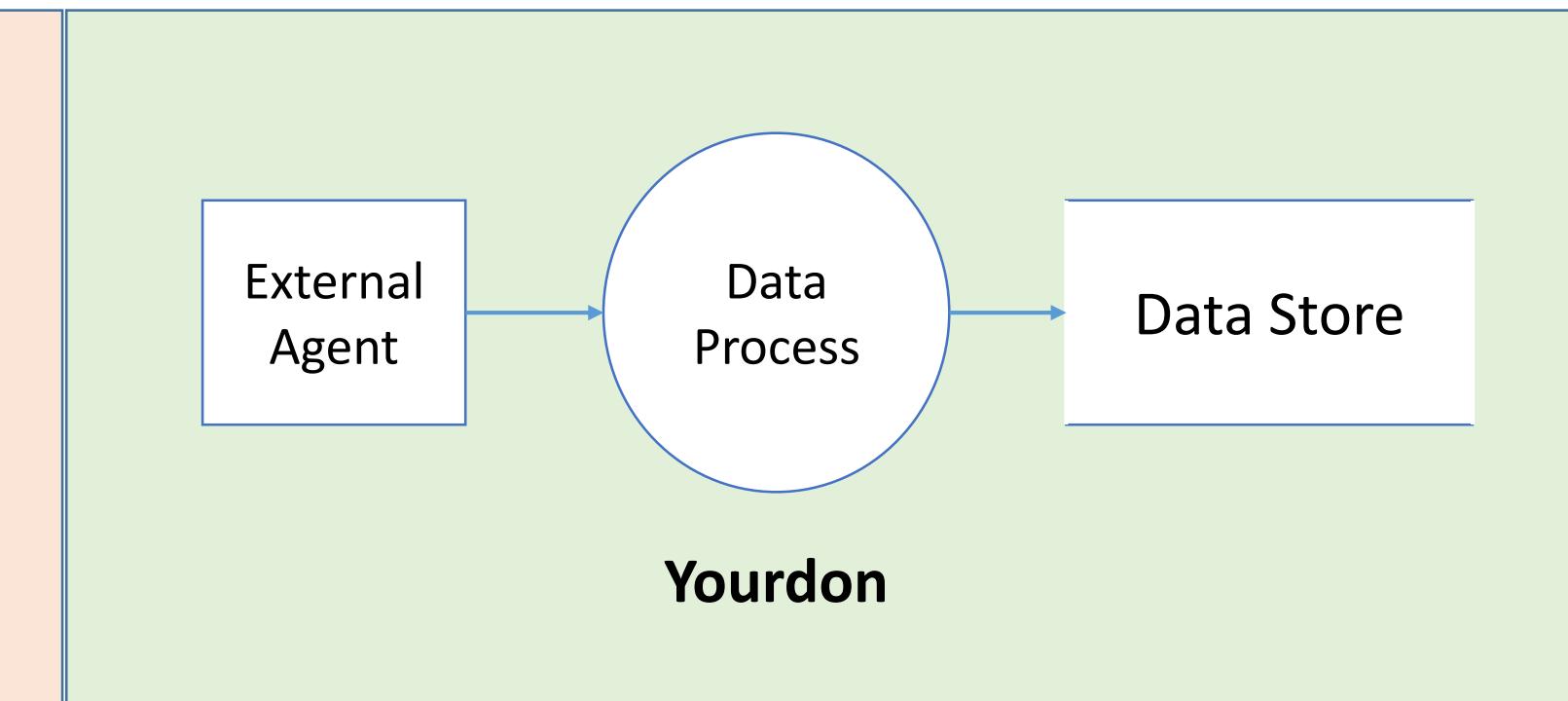
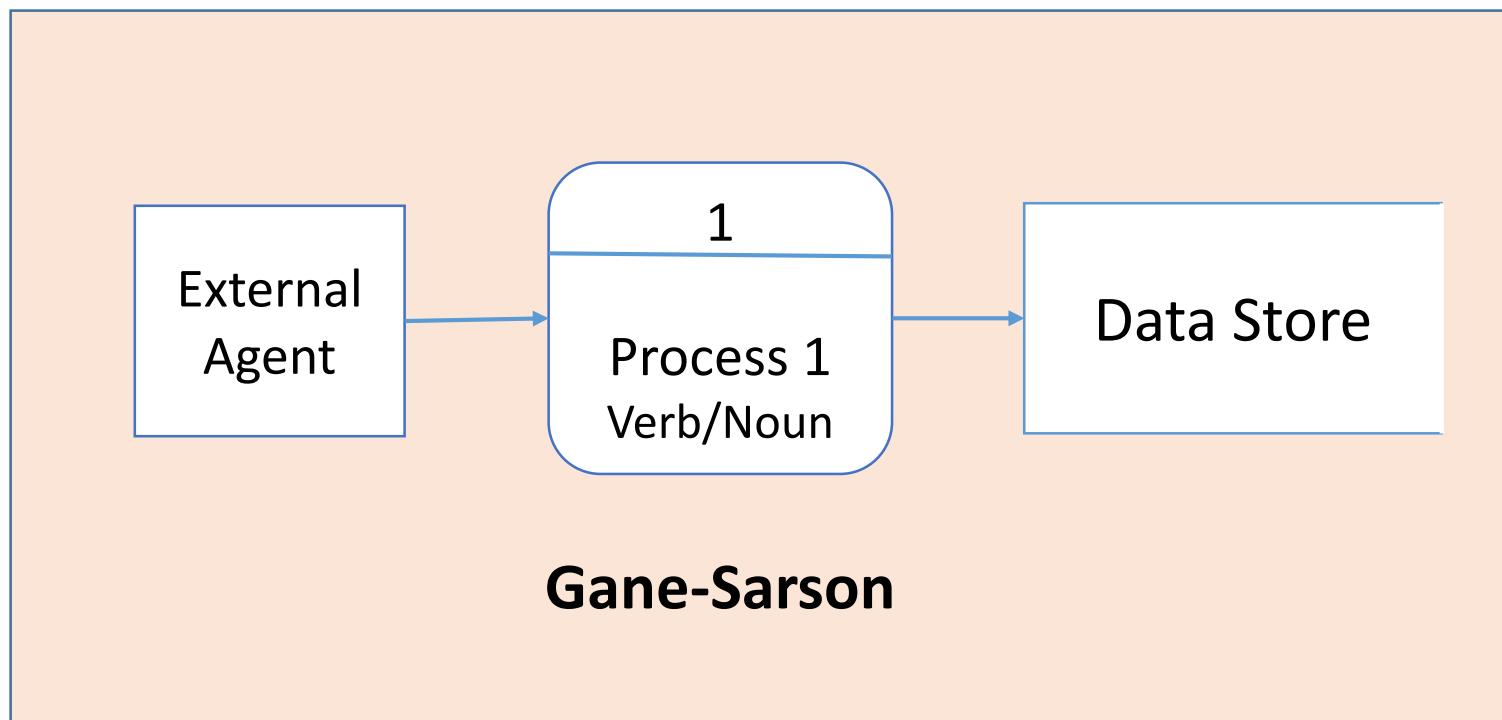
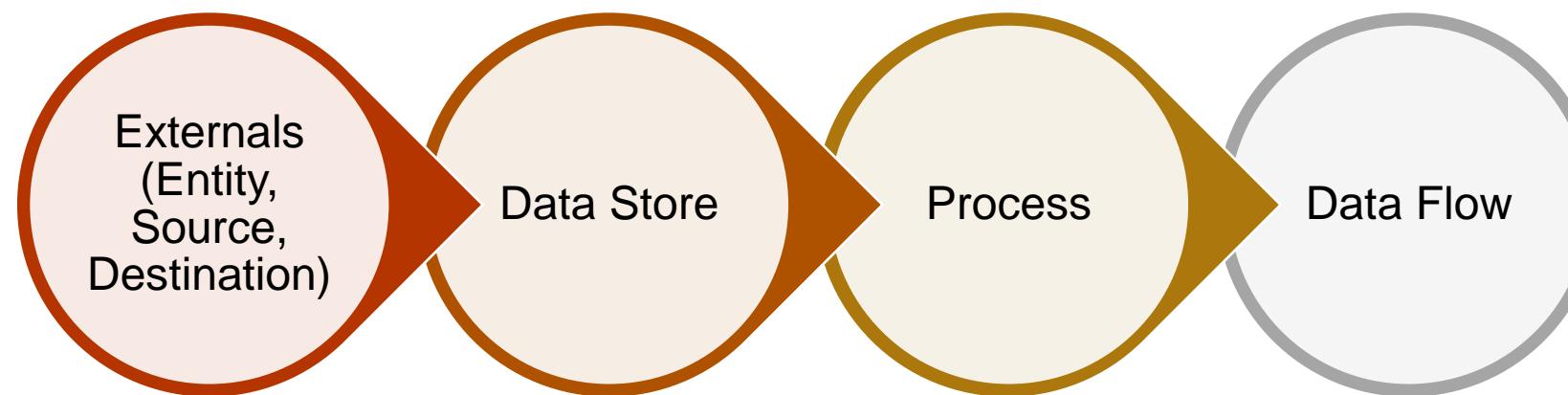
**Rule 1:** Inputs (data) must either come directly from an external party or be created by another process.

**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.)

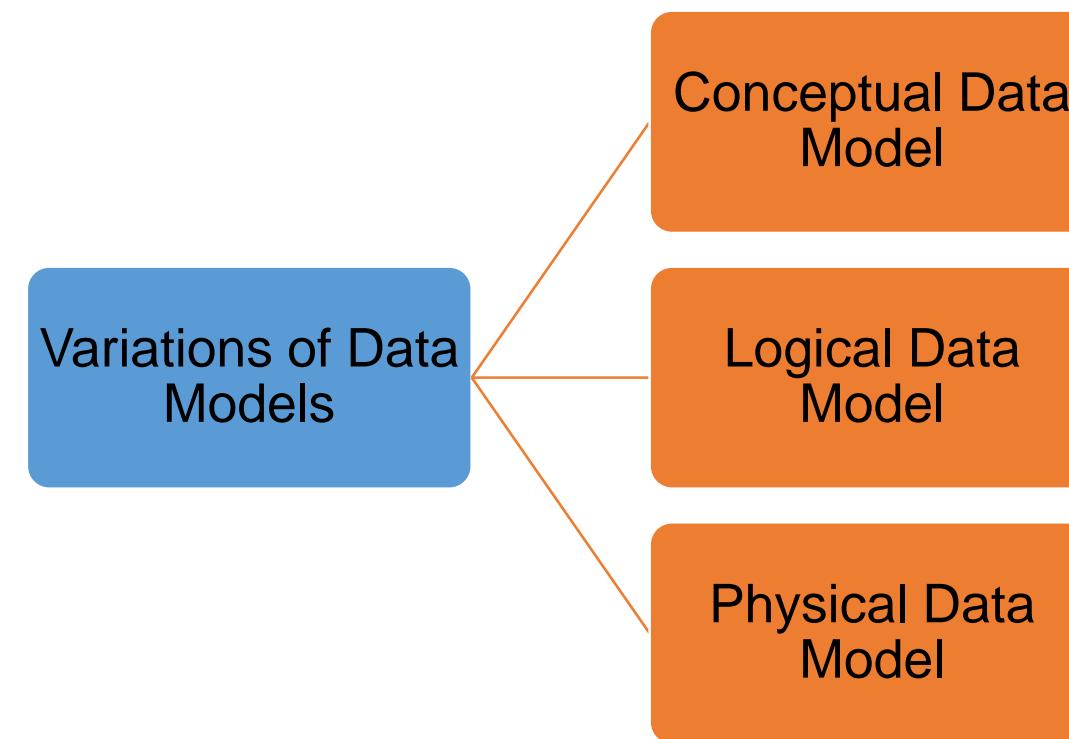
## ELEMENTS



# 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.



# DATA MODELING (contd.)

## 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

# DATA MODELING (contd.)

## 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

# DATA MODELING (contd.)

## 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

# DATA MODELING (contd.)

## ELEMENTS

Entity or Class

Attribute

- Name
- Value or Meaning
- Description

Relationship or Association

Cardinality and Ordinality

Metadata

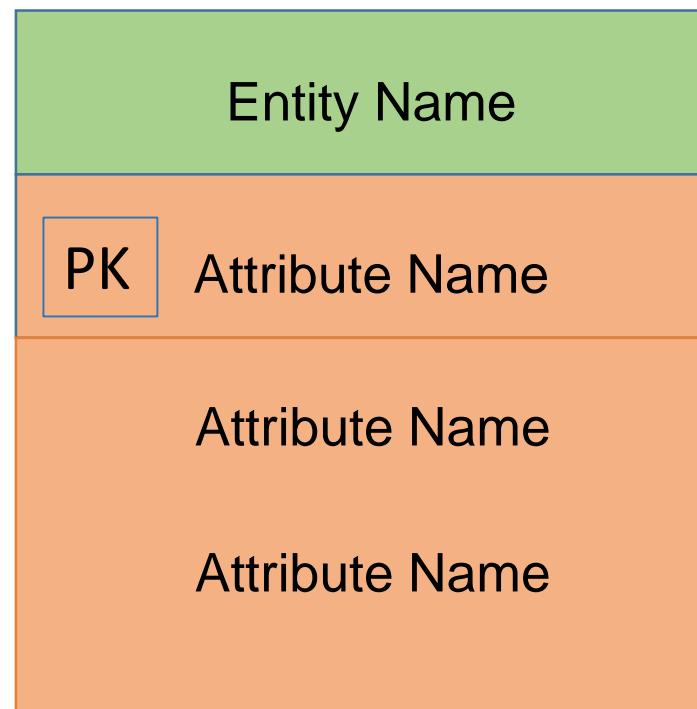
Diagrams

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

# DATA MODELING (contd.)

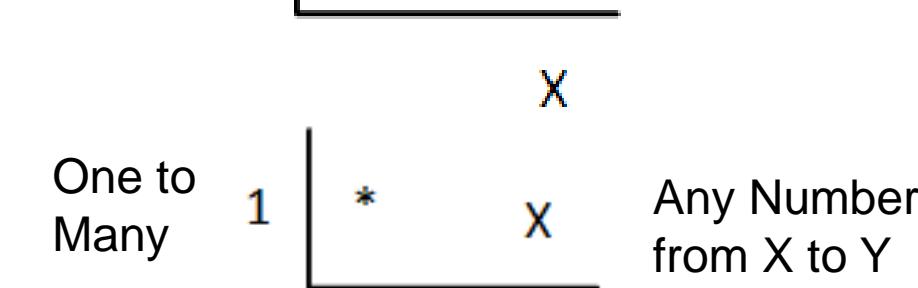
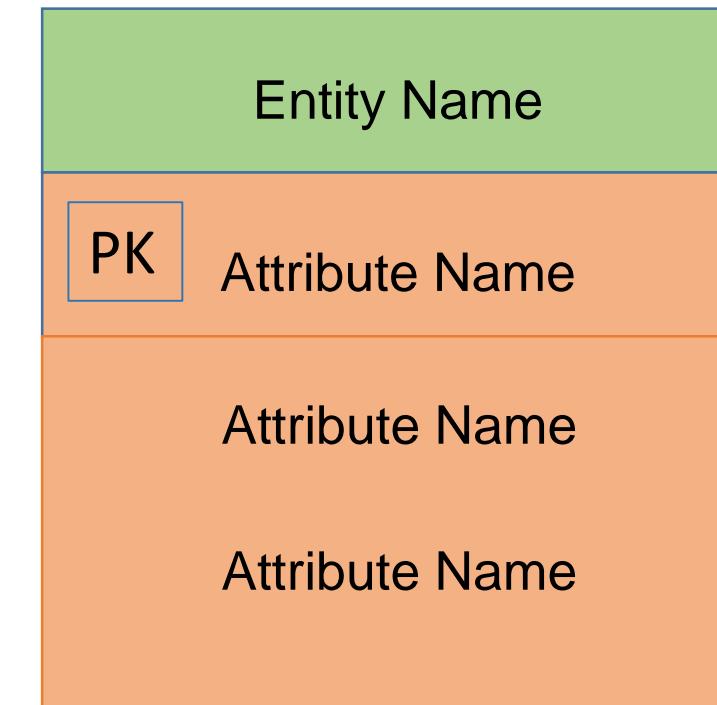
## ENTITY RELATIONSHIP DIAGRAMS

### Crow's Foot Notation



### Cardinality

### UML Database Notation



### Multiplicity

# 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)

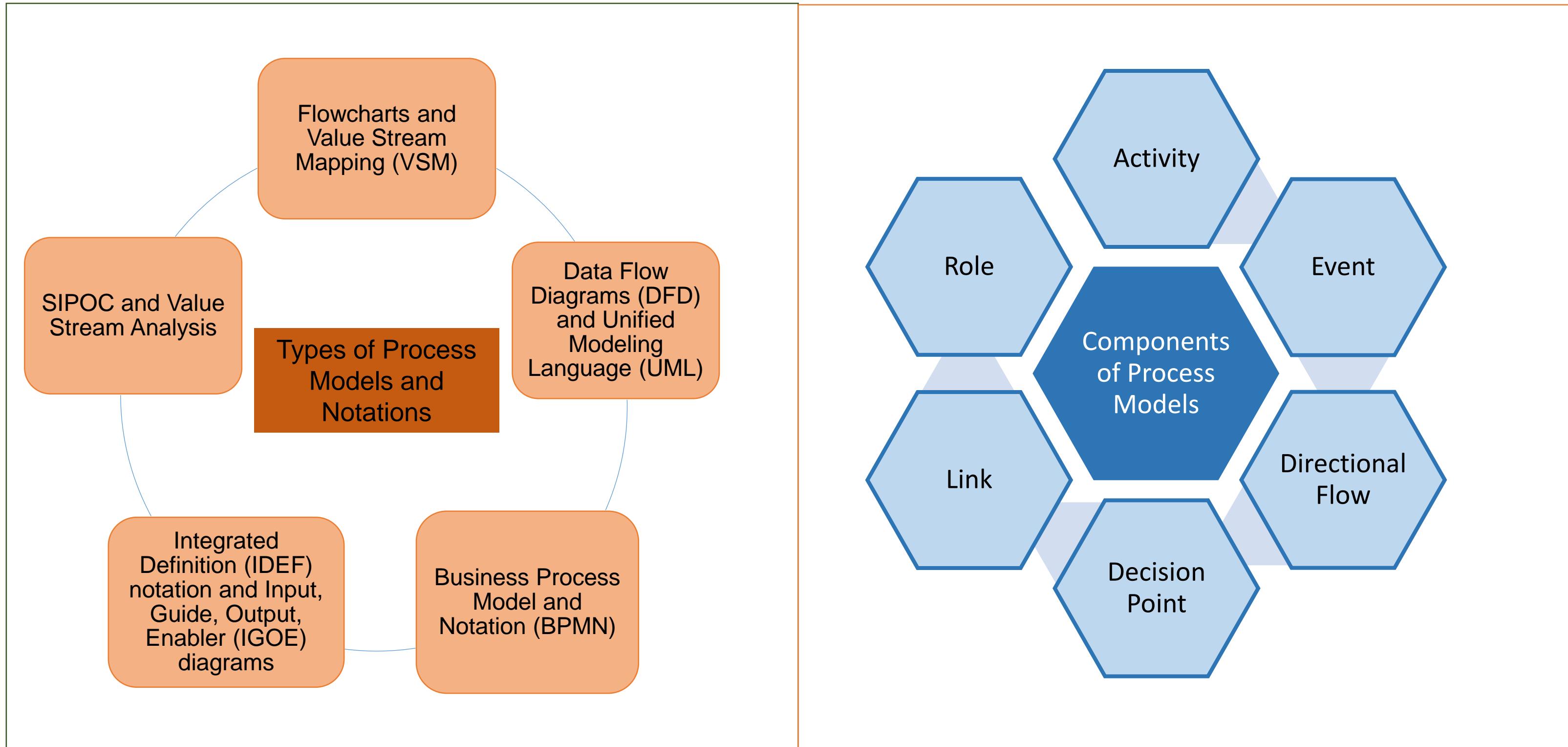
Used to define current state of process (as-is model) or potential future state (to-be model)

Process model includes

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

# PROCESS MODELING (contd.)

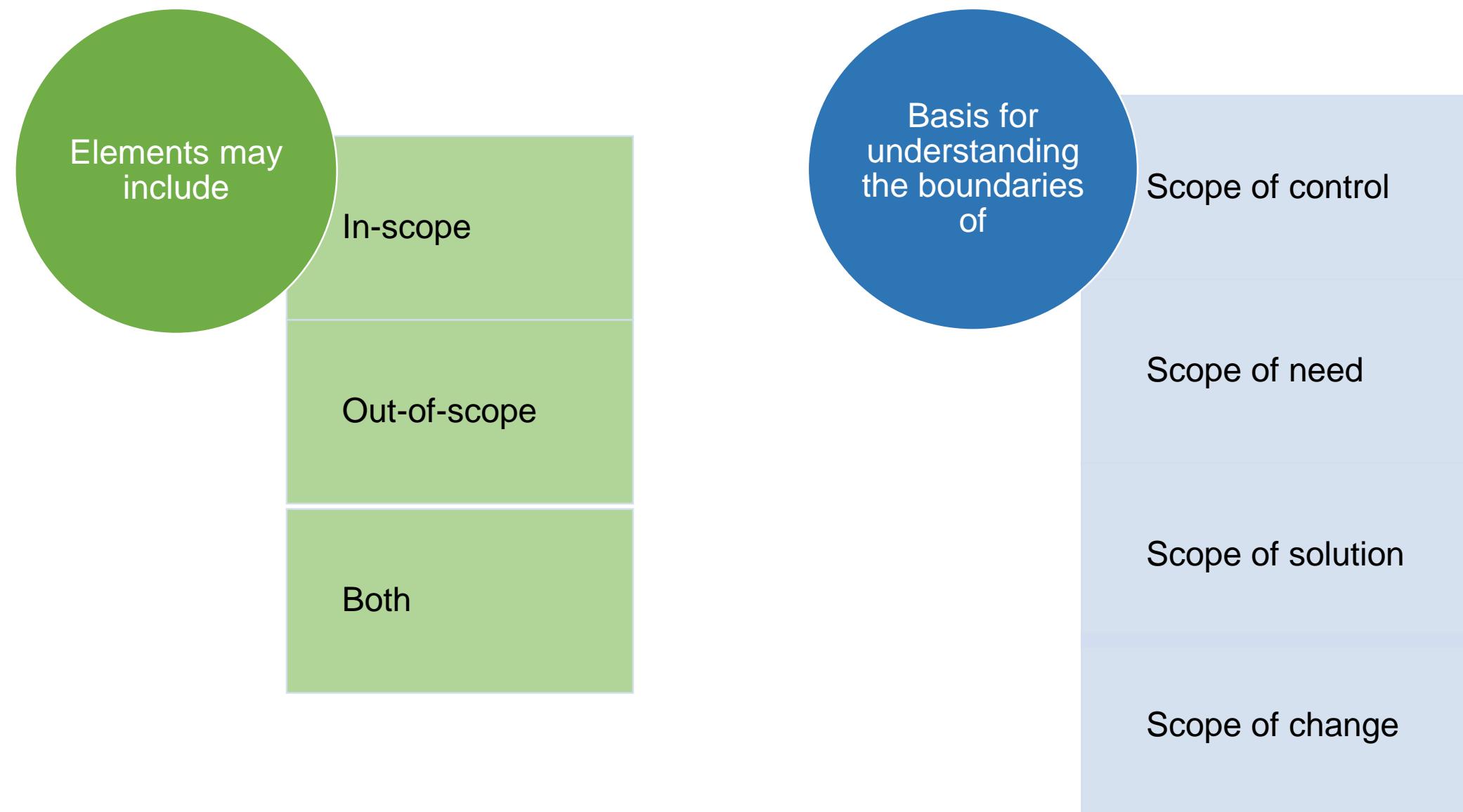
## ELEMENTS



# SCOPE MODELS

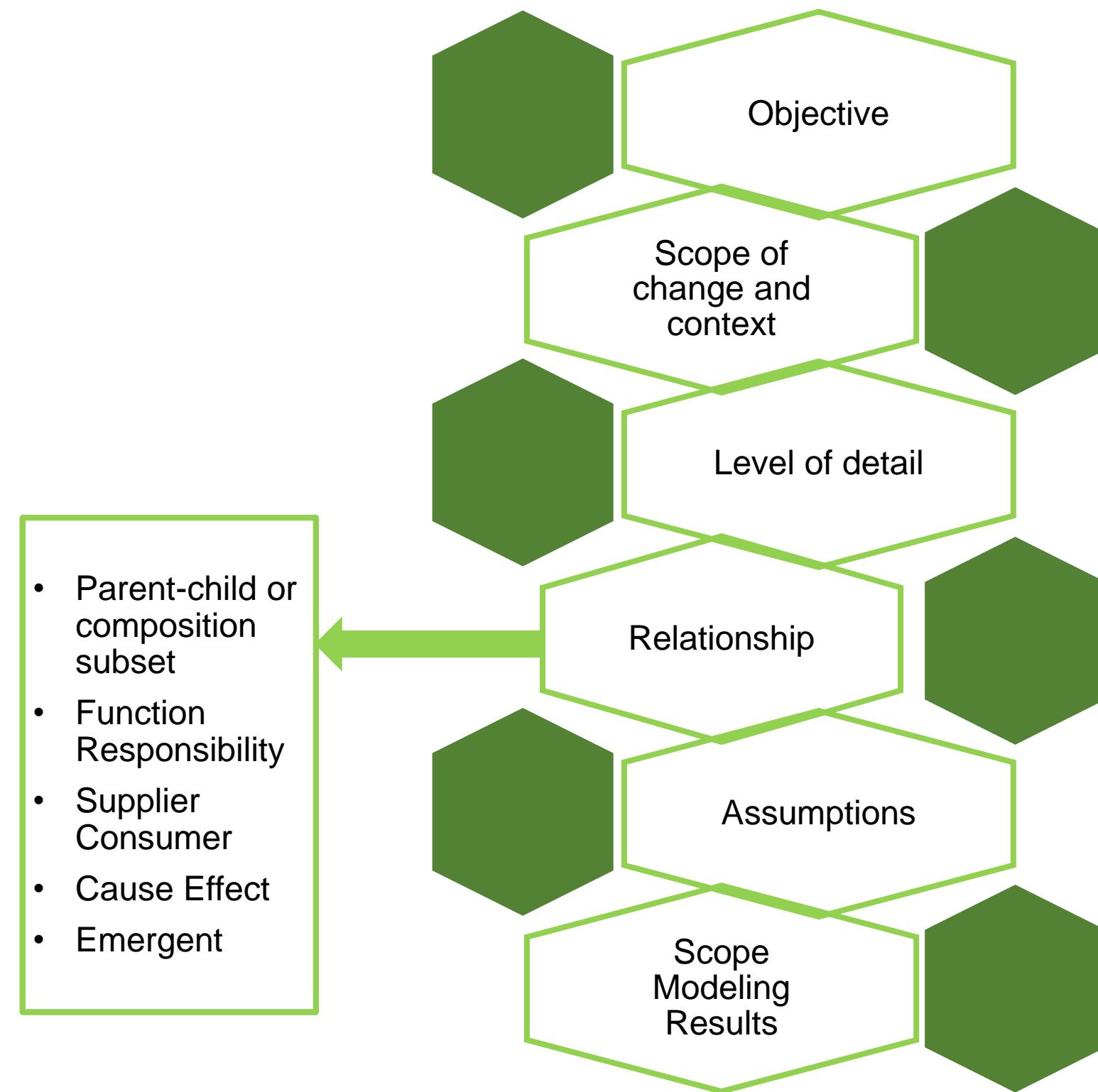
## OVERVIEW

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



# SCOPE MODELS (contd.)

## ELEMENTS



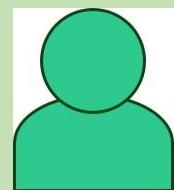
# USE CASES AND SCENARIOS

## OVERVIEW

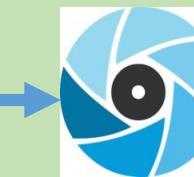
Use cases and scenarios describe how a person or system interacts with the solution being modeled to achieve a goal.

A use case describes several scenarios.

### Use Cases



Primary  
Actor



Solution or  
Secondary actors

Interaction

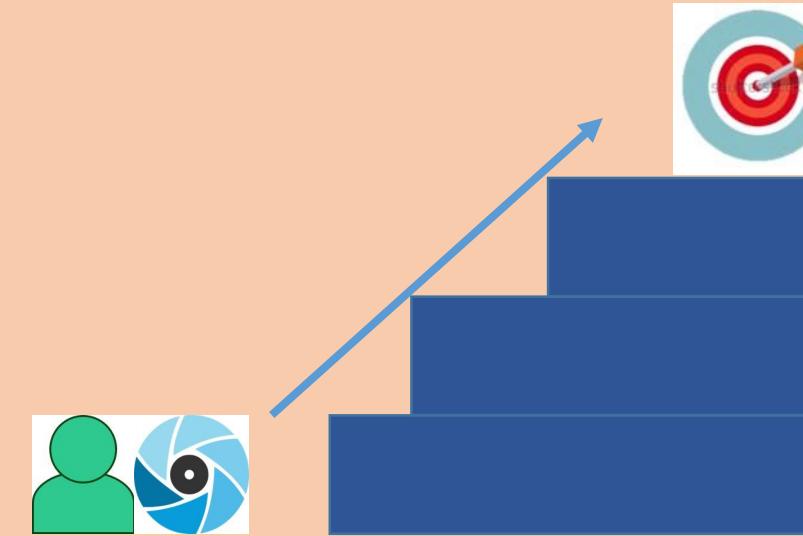
### Use Case Diagrams

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.

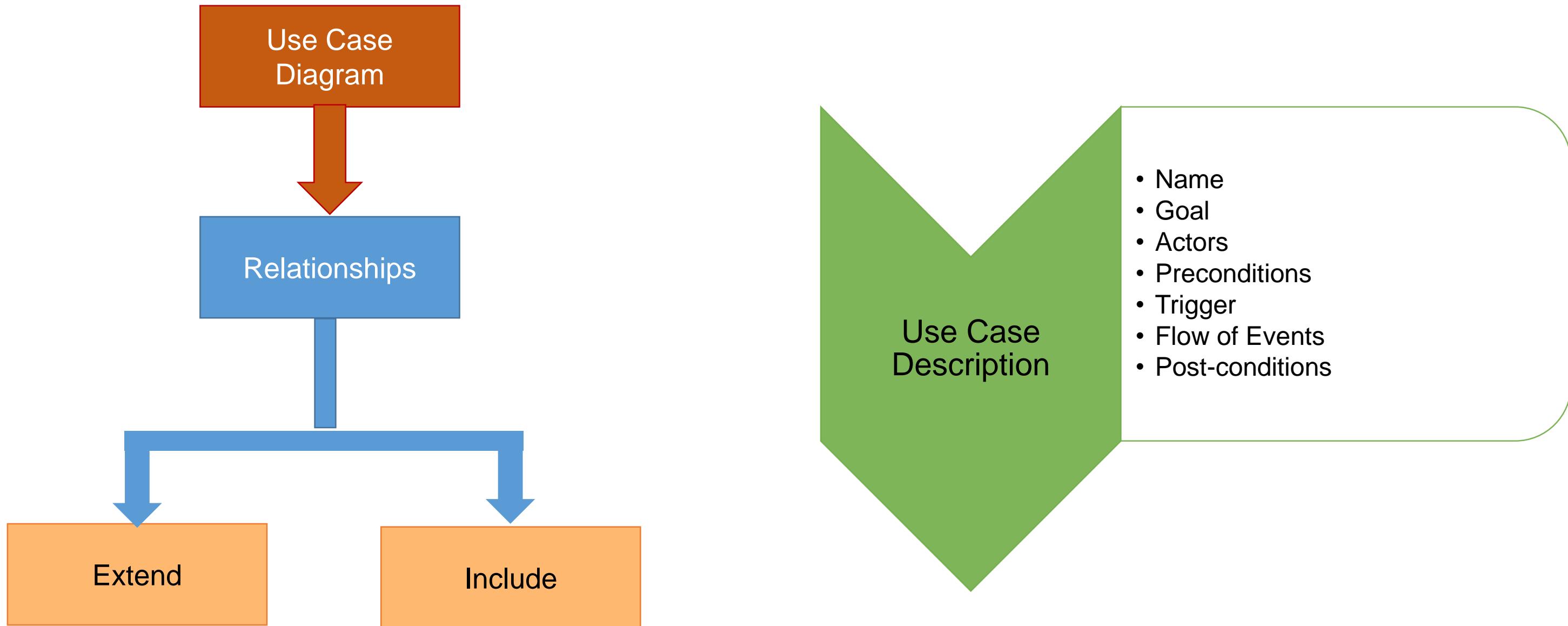
Goal



Actors or Solution

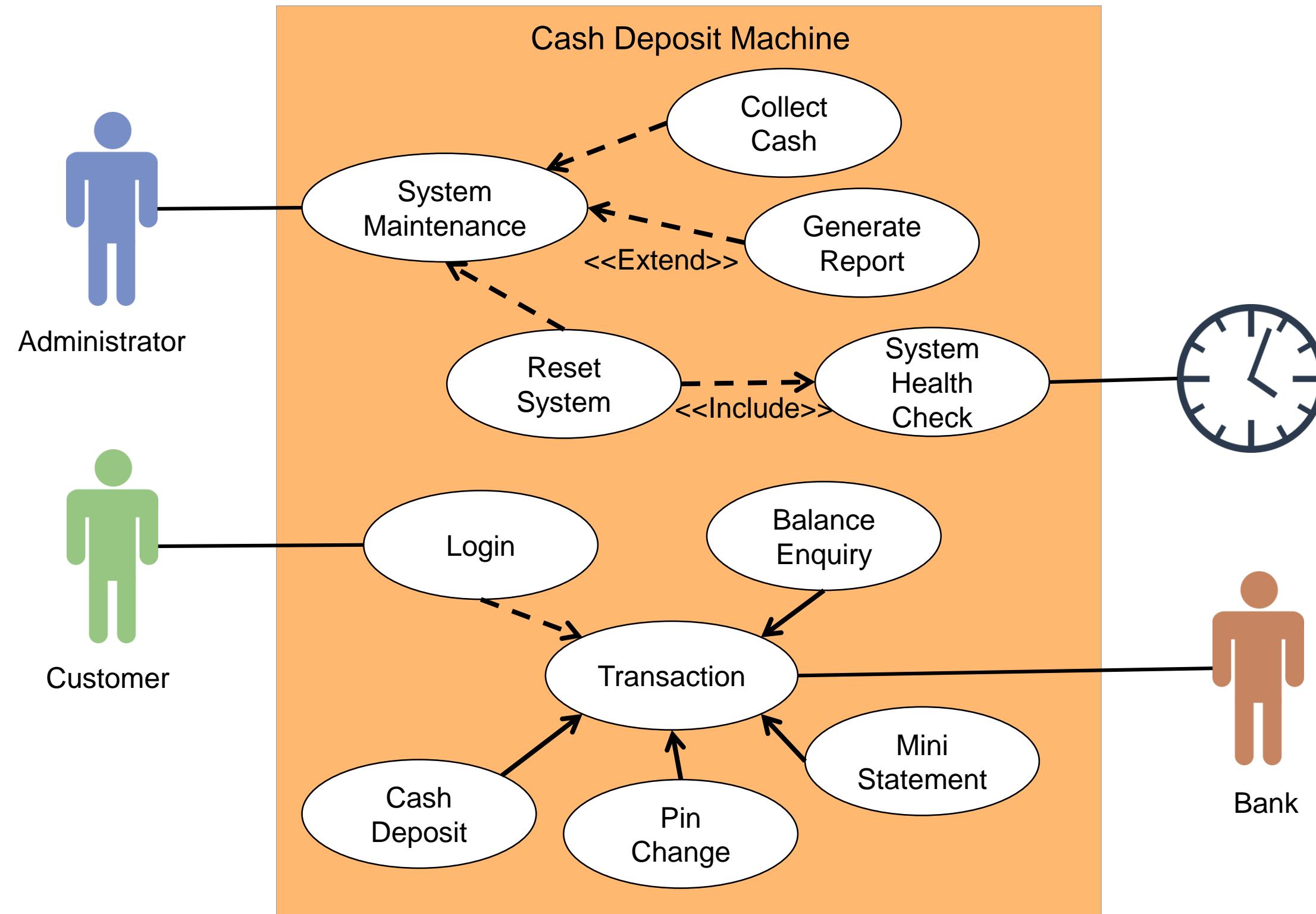
# USE CASES AND SCENARIOS (contd.)

## 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

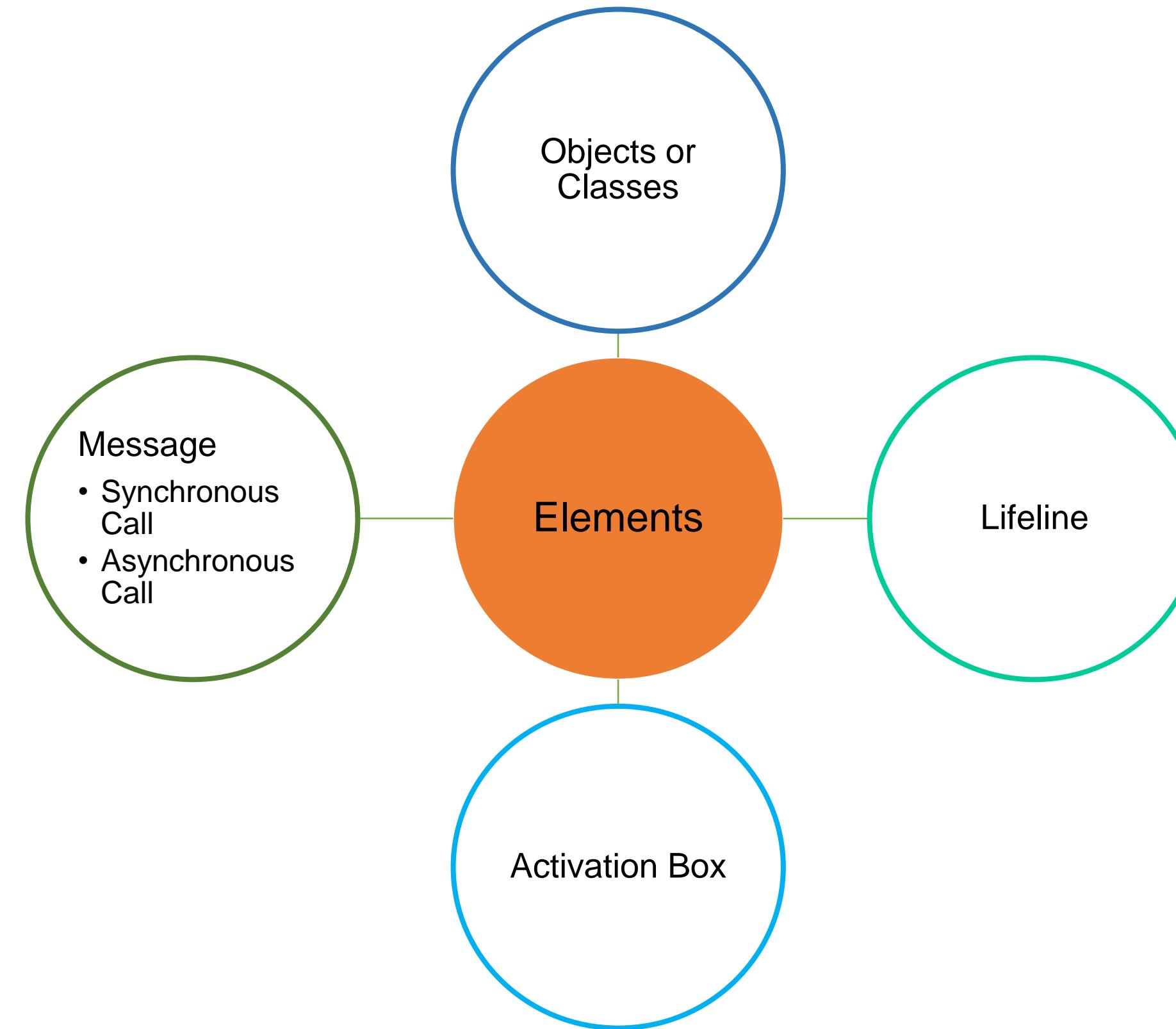
A Sequence Diagram  
or Event Diagram

Shows how user interface components or software components interact

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

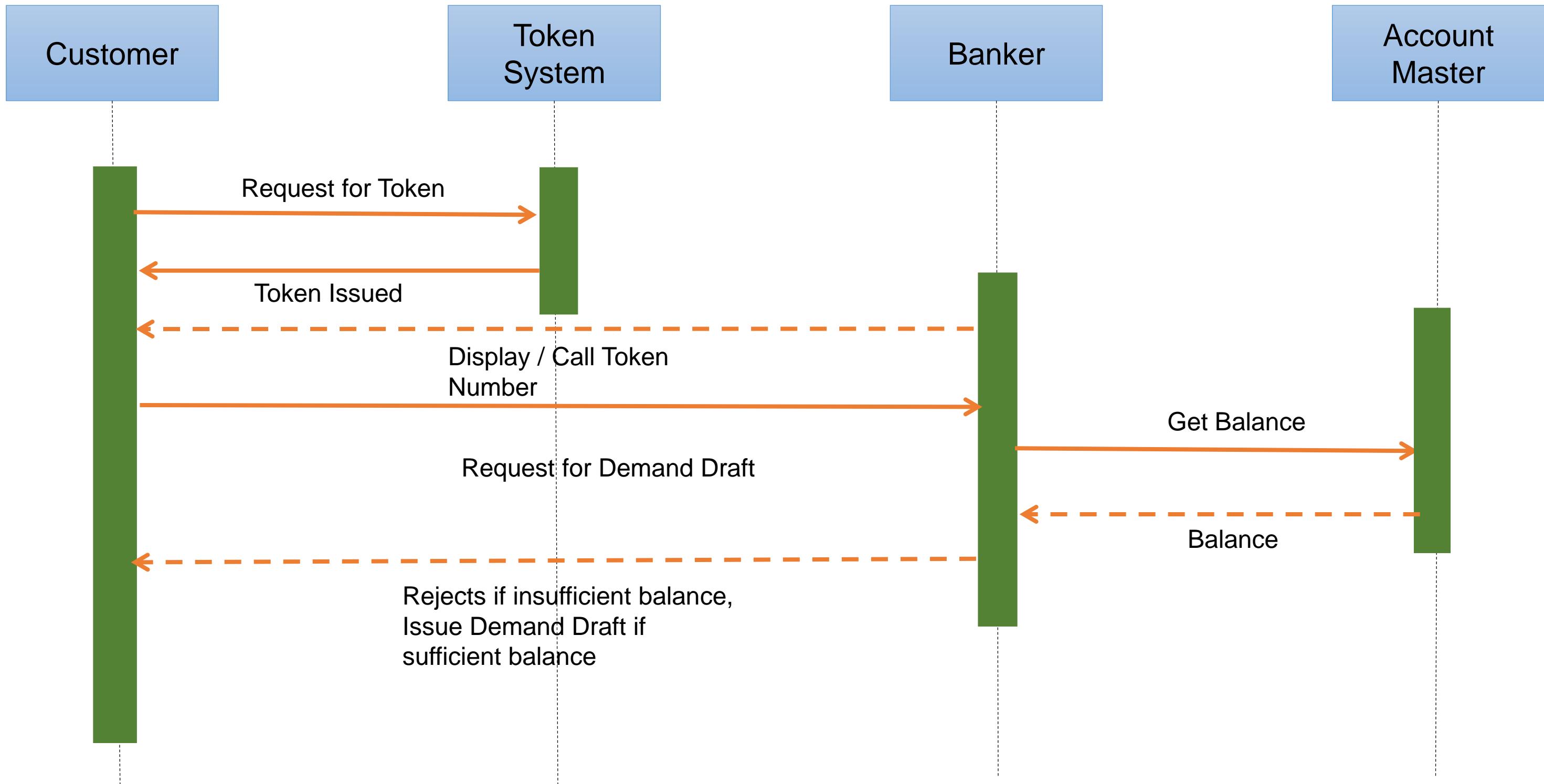
# SEQUENCE DIAGRAM (contd.)

## ELEMENTS



# SEQUENCE DIAGRAM (contd.)

## EXAMPLE



# STATE MODELING

## OVERVIEW

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

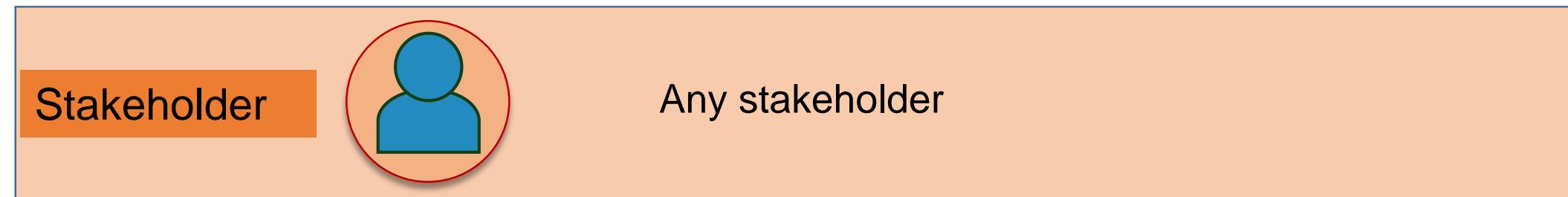
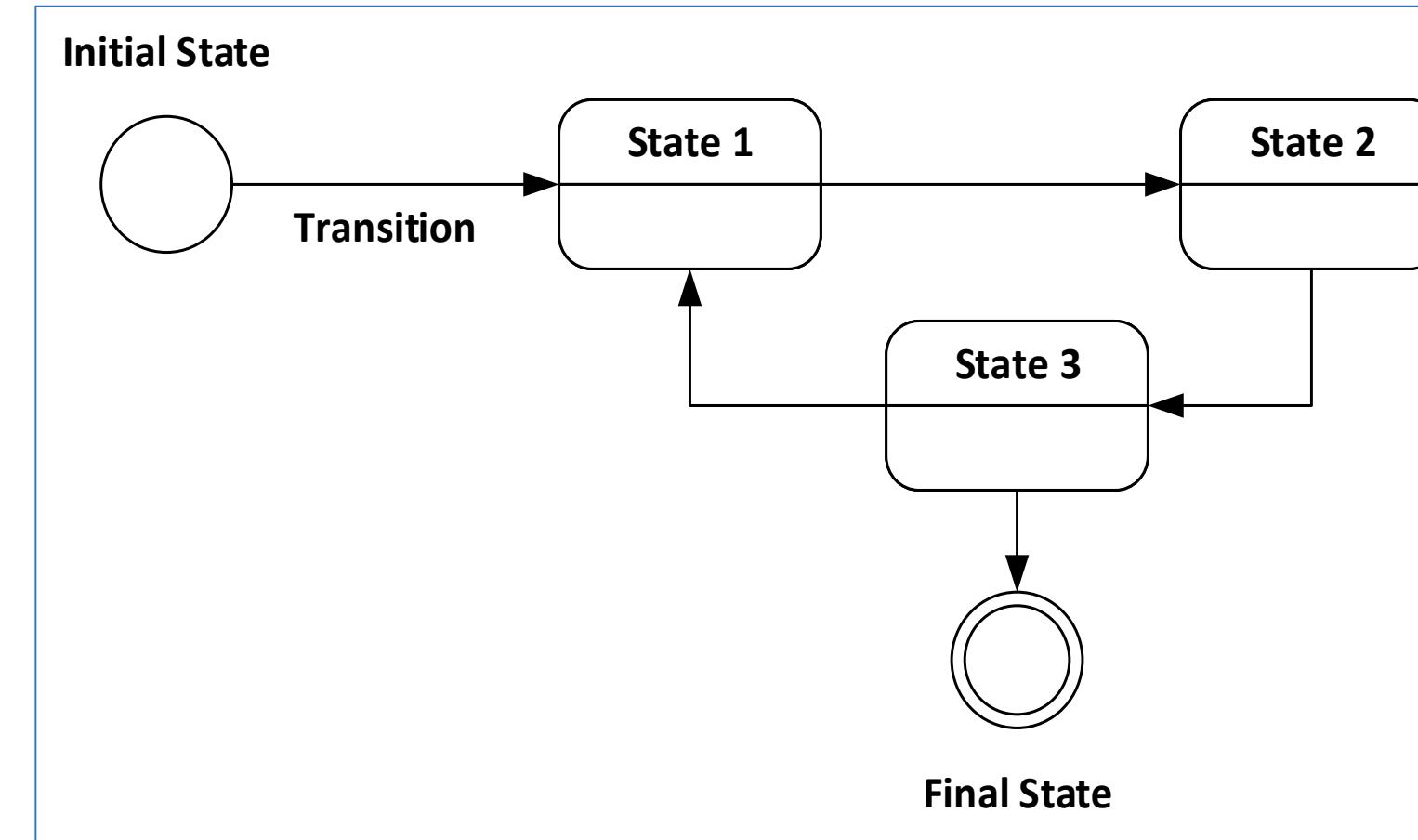
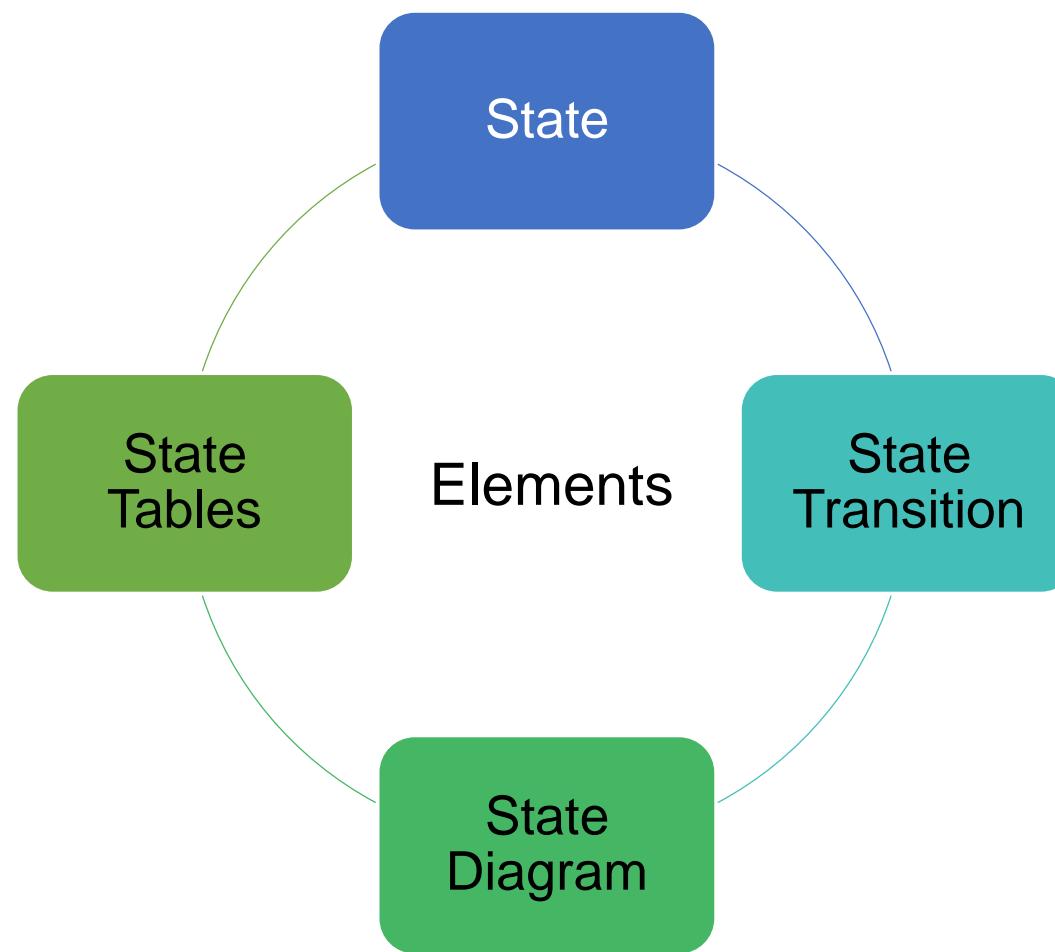
How an entity changes from one state to another

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

# STATE MODELING (contd.)

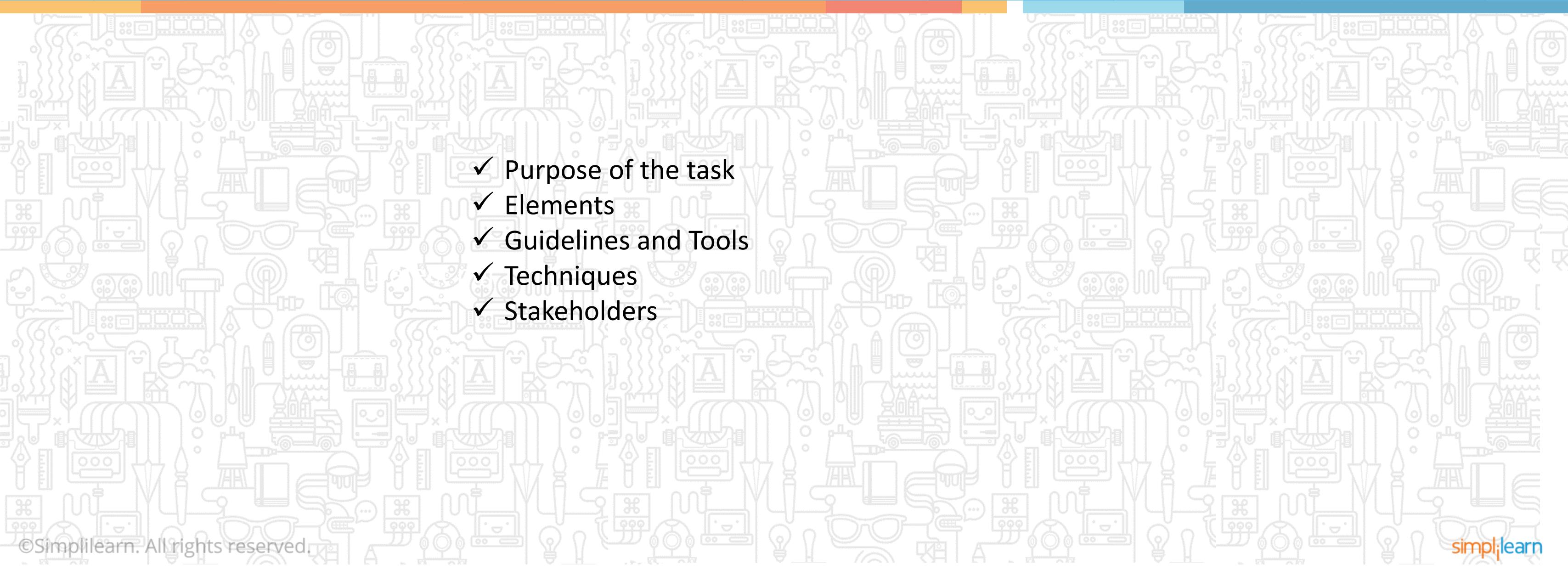
## ELEMENTS AND STAKEHOLDERS



# Lesson 7: Solution Evaluation

## Topic 7.2: Verify Requirements

- ✓ 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)

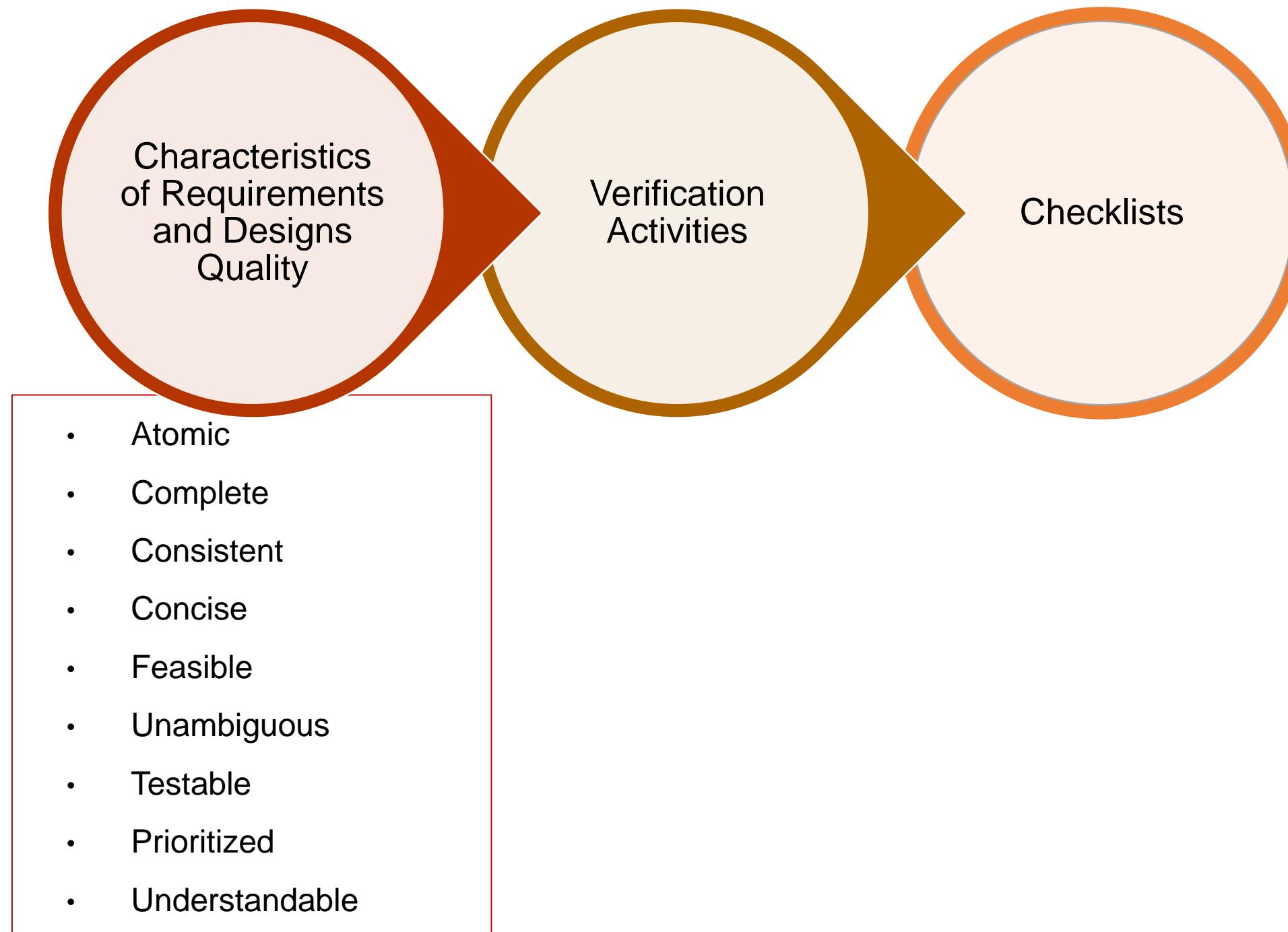
# VERIFY REQUIREMENTS

## ELEMENTS



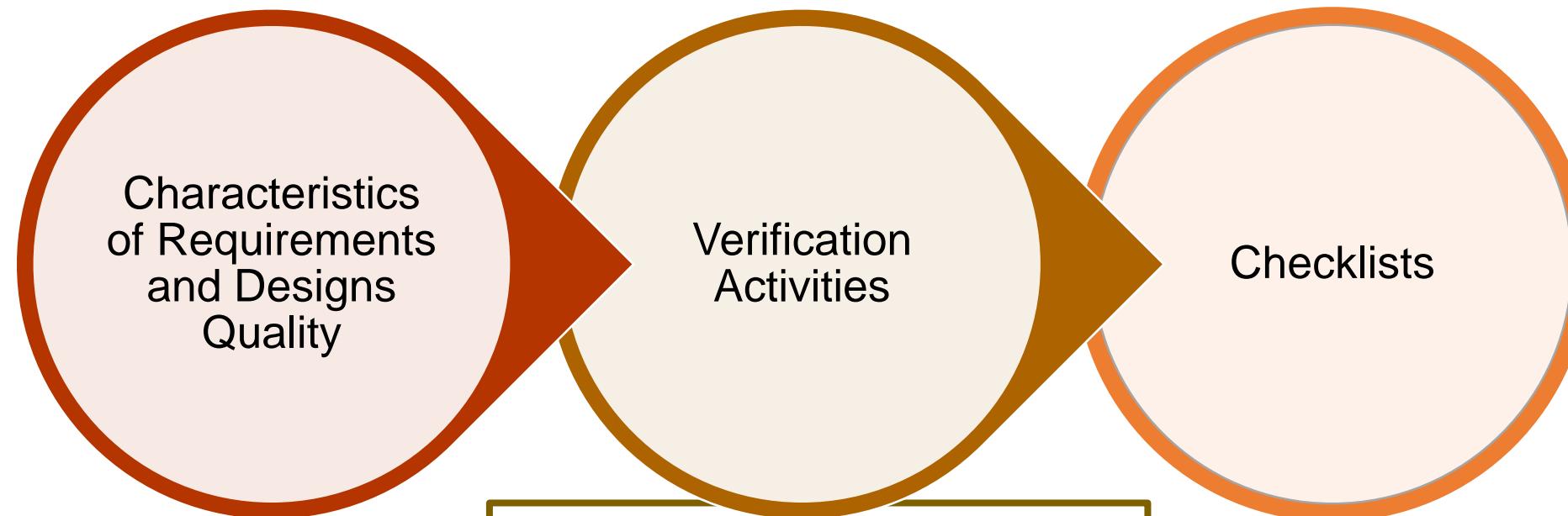
# VERIFY REQUIREMENTS (contd.)

## 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.)

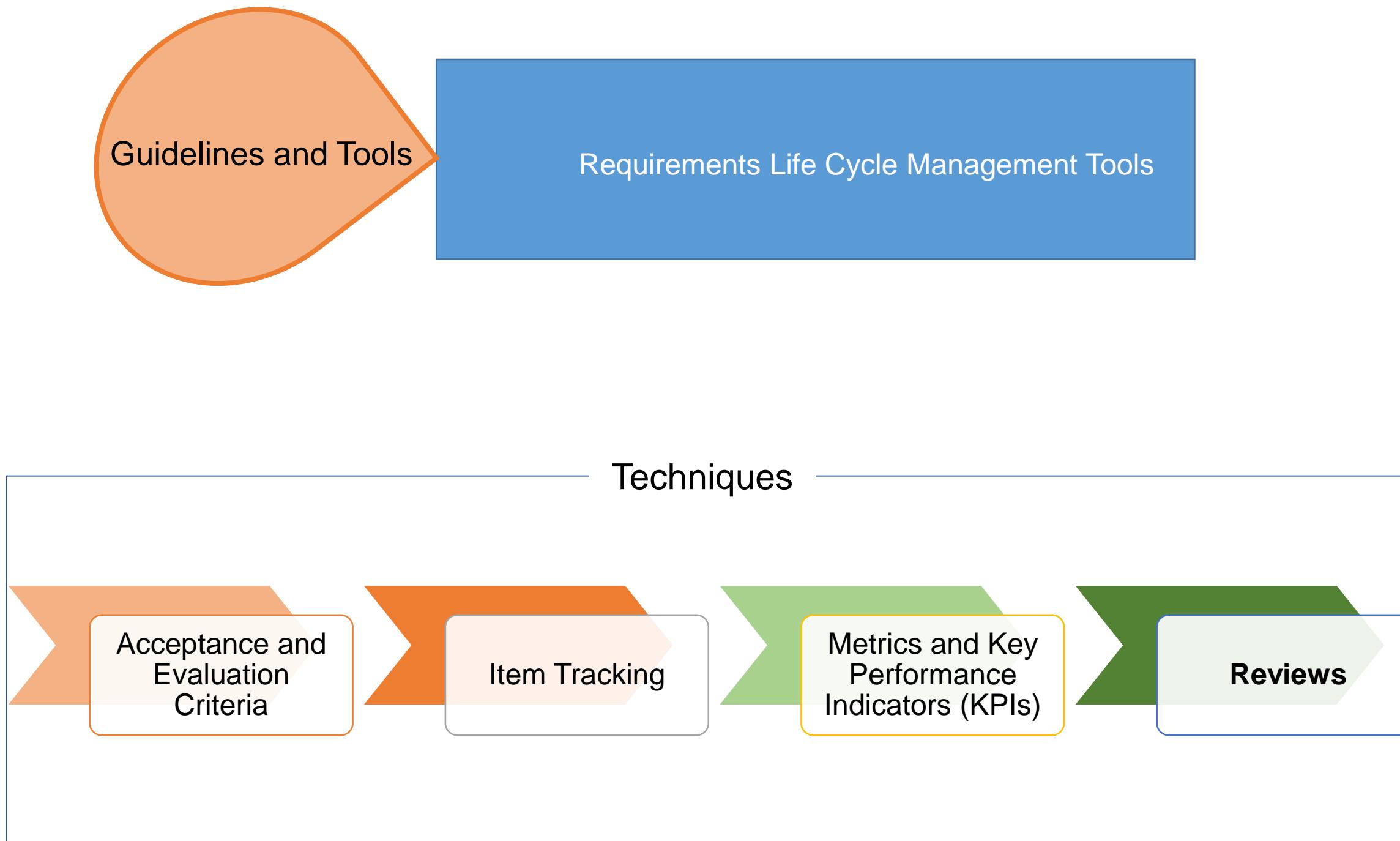
## ELEMENTS



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

# VERIFY REQUIREMENTS

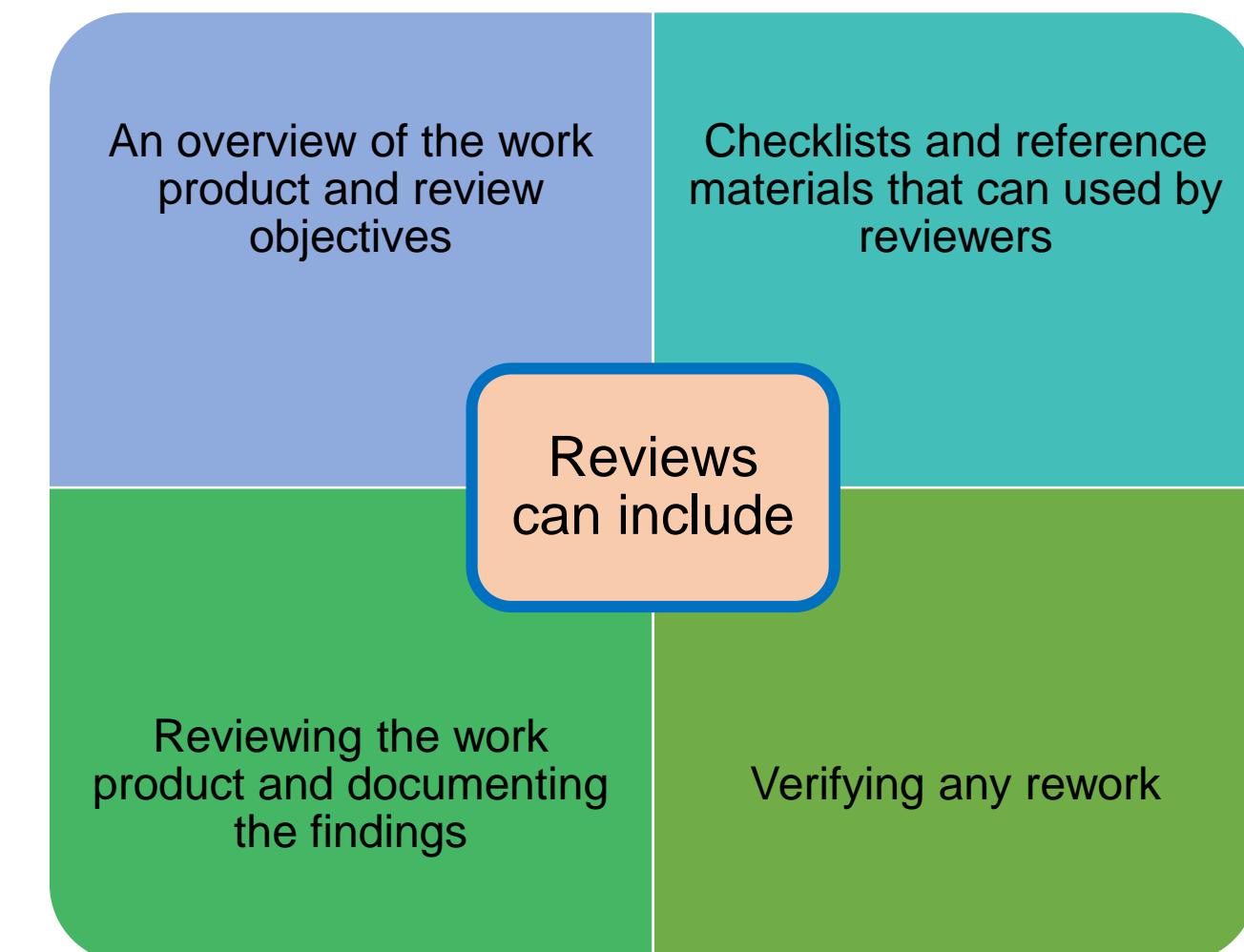
## GUIDELINES AND TOOLS — TECHNIQUES



# VERIFY REQUIREMENTS

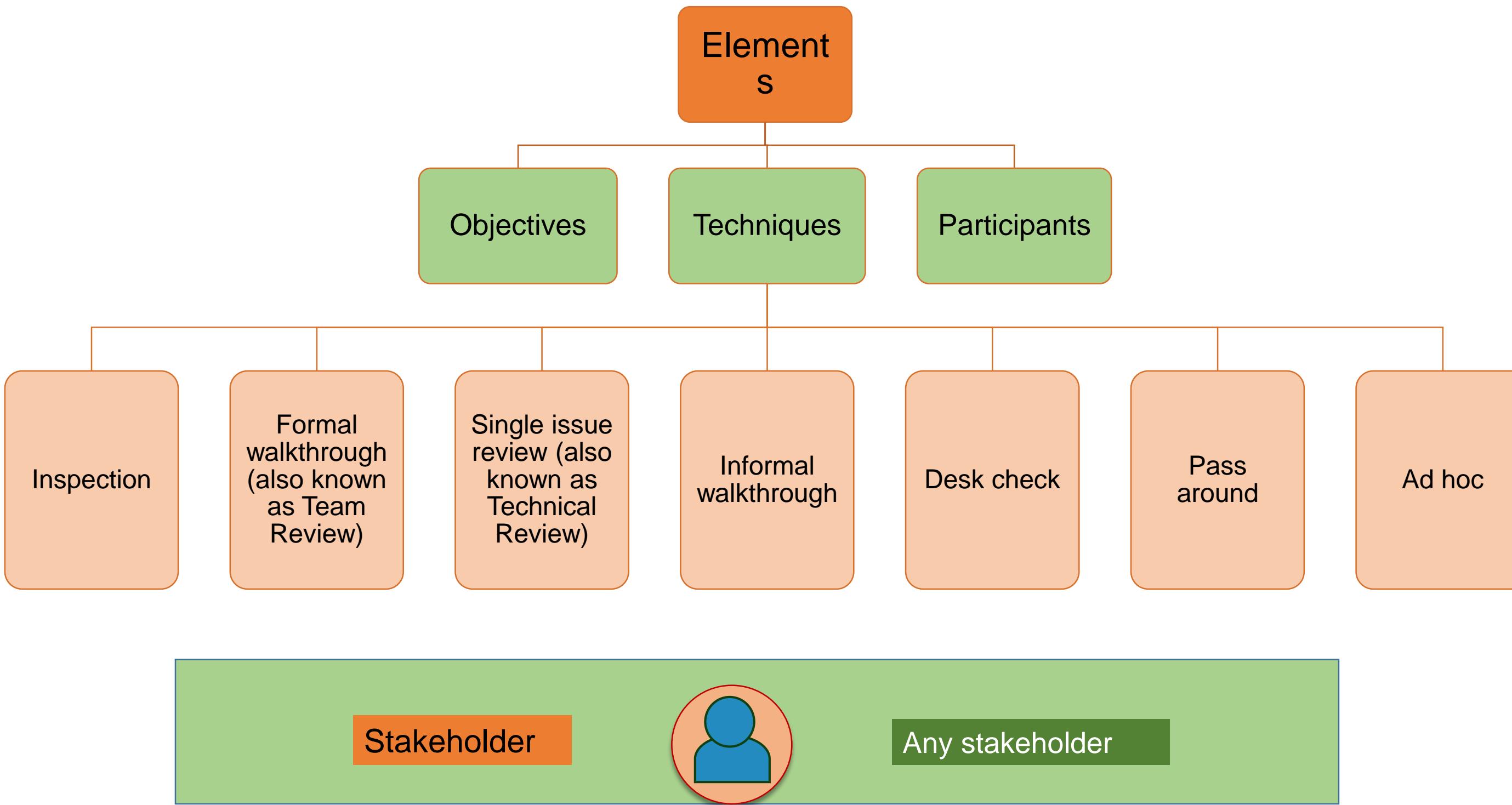
## REVIEWS — OVERVIEW

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



# VERIFY REQUIREMENTS

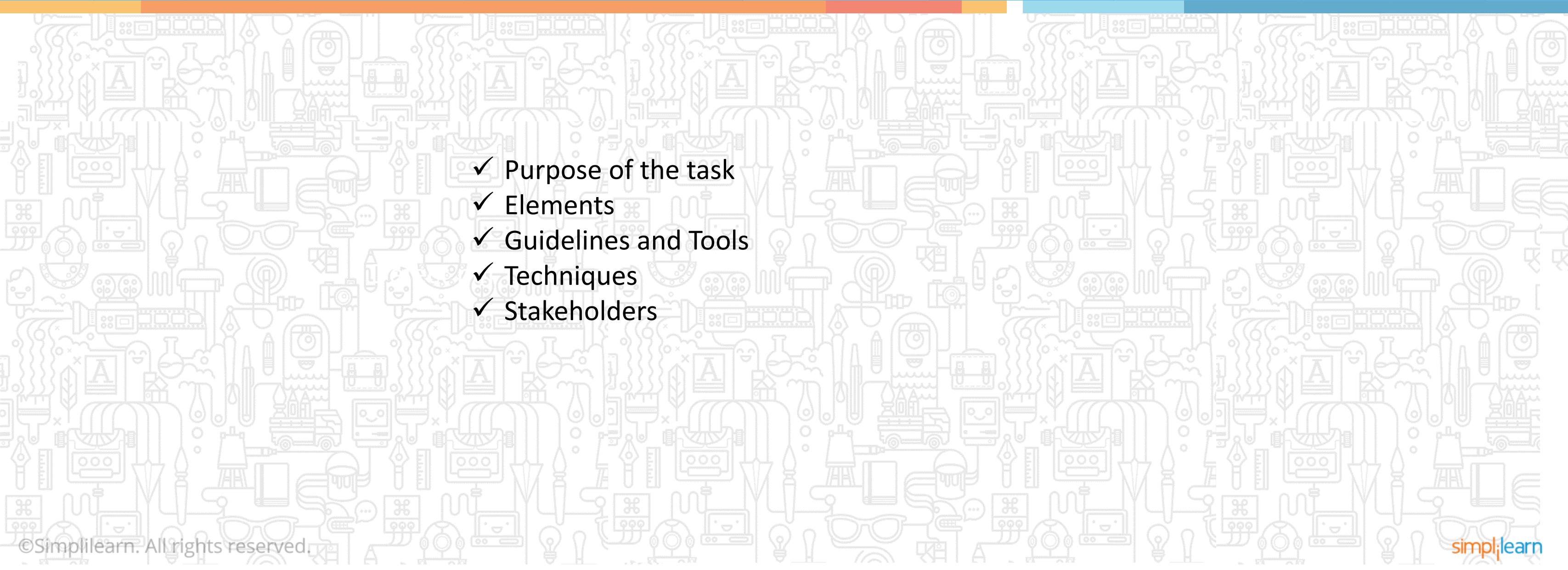
## REVIEWS — ELEMENTS AND STAKEHOLDERS



# Lesson 7: Requirements Analysis and Design Definition

## Topic 7.3: Validate Requirements

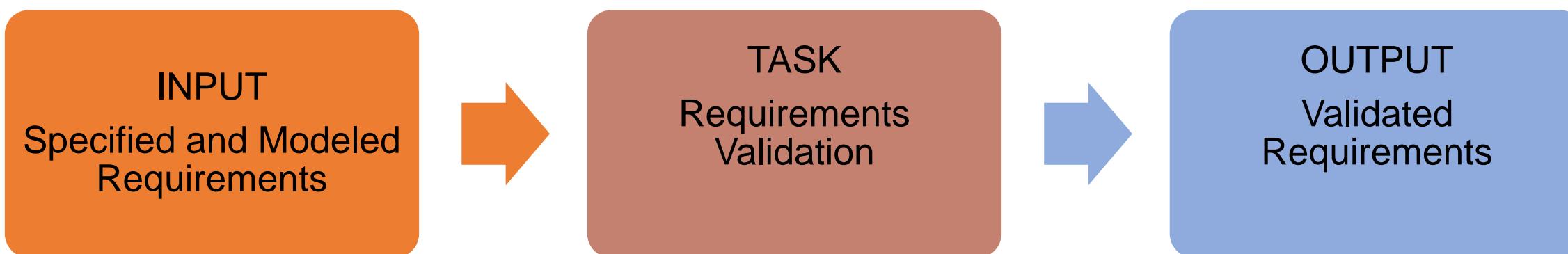
- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders



# 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.)

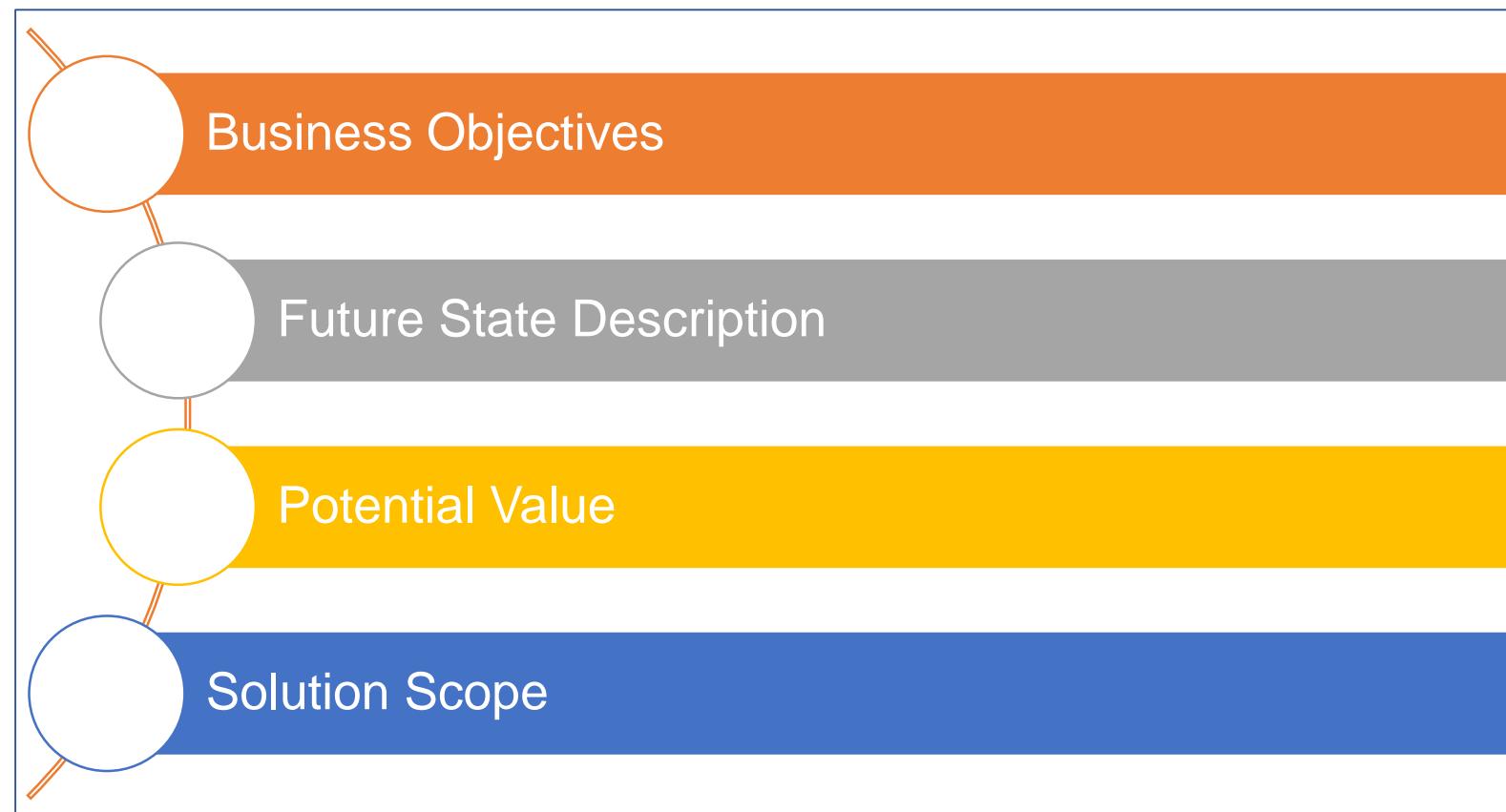
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## ELEMENTS



# VALIDATE REQUIREMENTS (contd.)

## GUIDELINES AND TOOLS



# VALIDATE REQUIREMENTS (contd.)

## TECHNIQUES AND STAKEHOLDERS

- Acceptance and Evaluation Criteria

- Document Analysis

- Financial Analysis

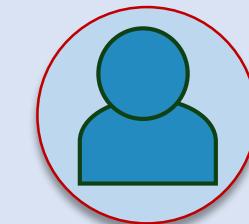
- Item Tracking

- Metrics and Key Performance Indicators (KPIs)

- Reviews

- Risk Analysis and Management

Stakeholder

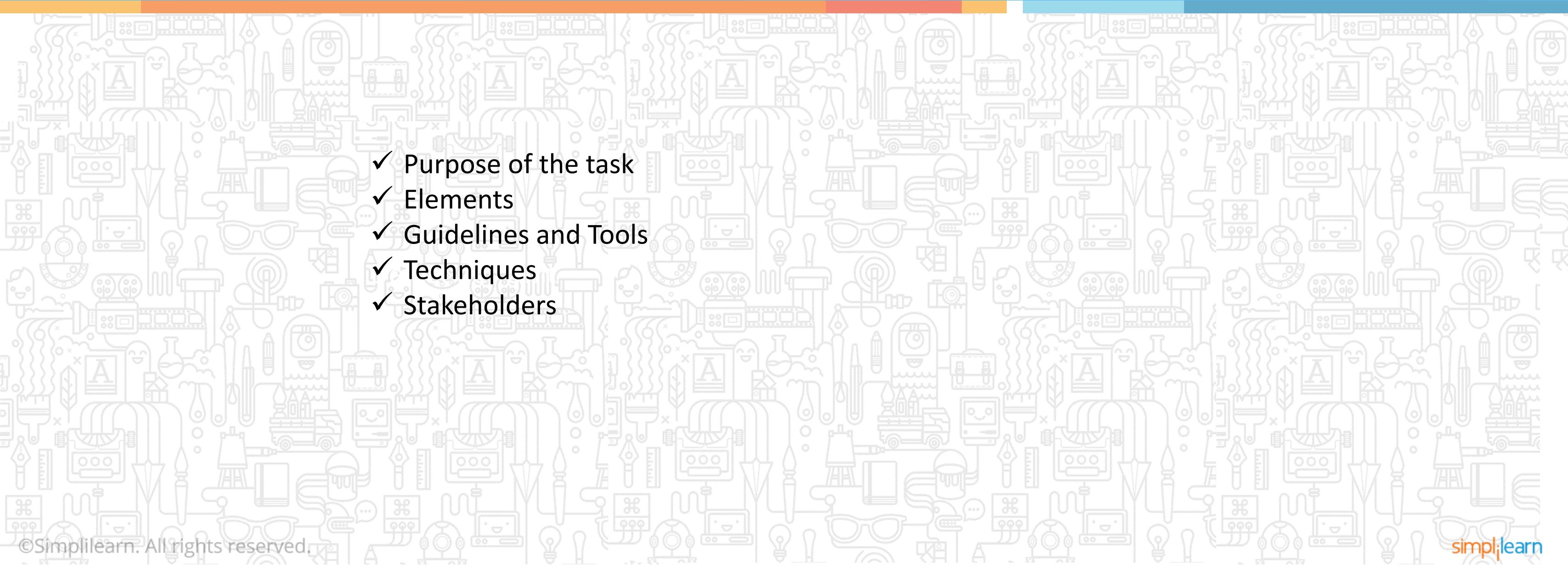


Any stakeholder

# Lesson 7: Requirements Analysis and Design Definition

## Topic 7.4: Define Requirements Architecture

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



# DEFINE REQUIREMENTS ARCHITECTURE

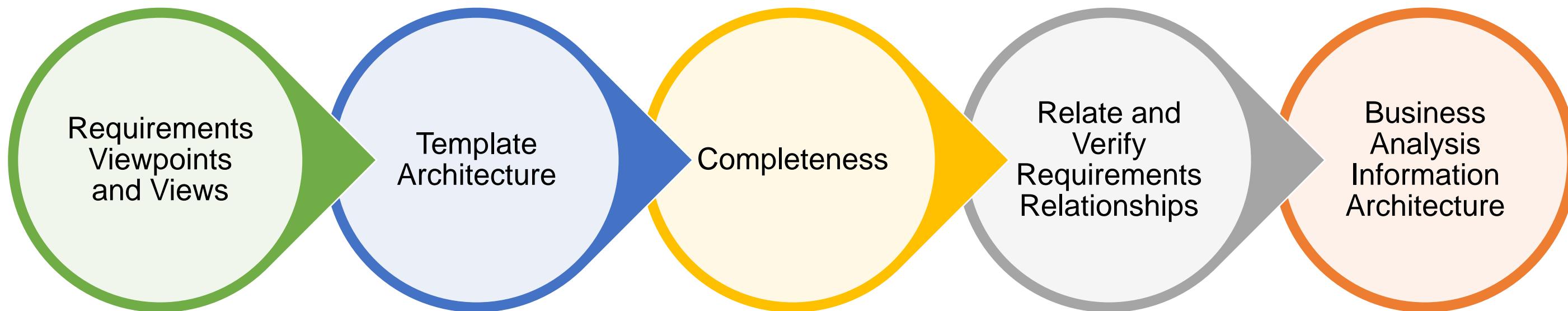
## PURPOSE

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.)

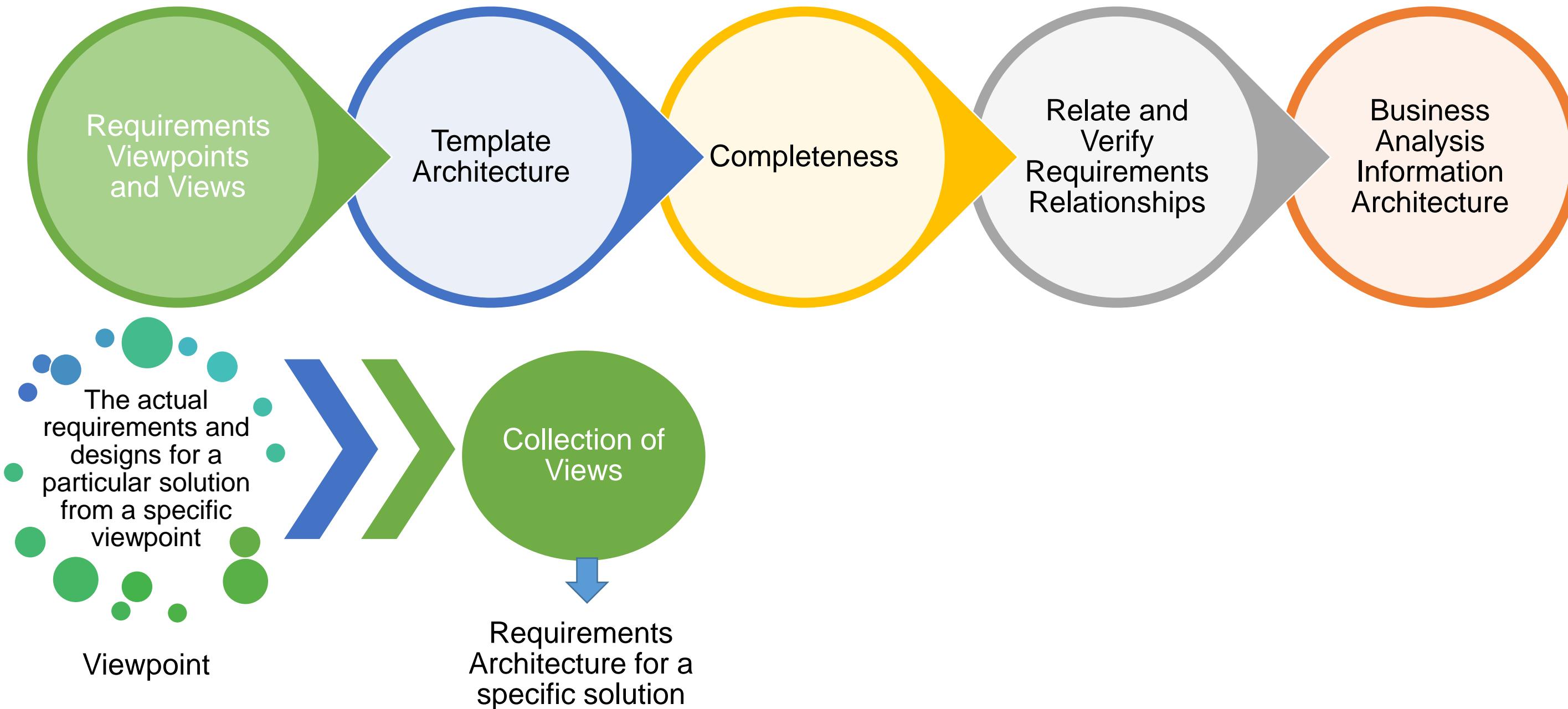
## ELEMENTS



# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS

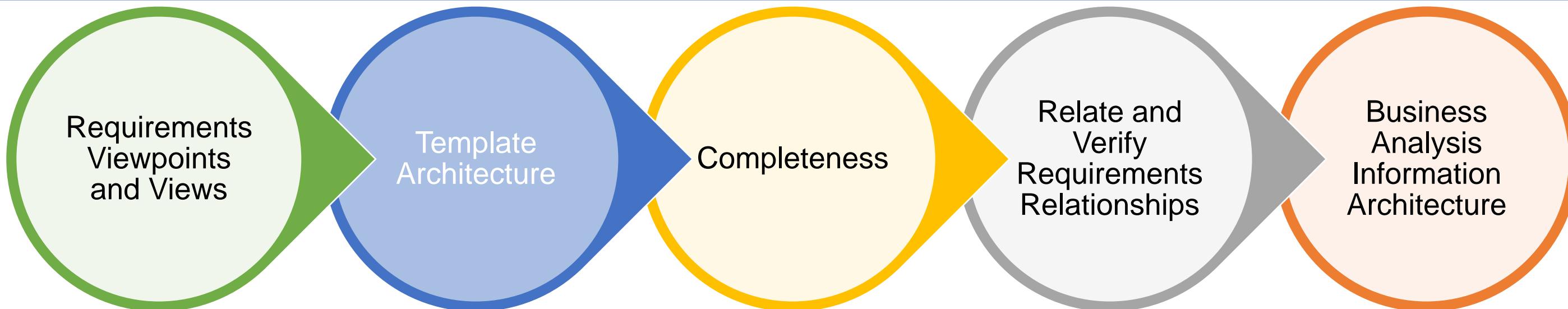
A viewpoint is a set of conventions that define how the requirements will be represented and organized.



# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS

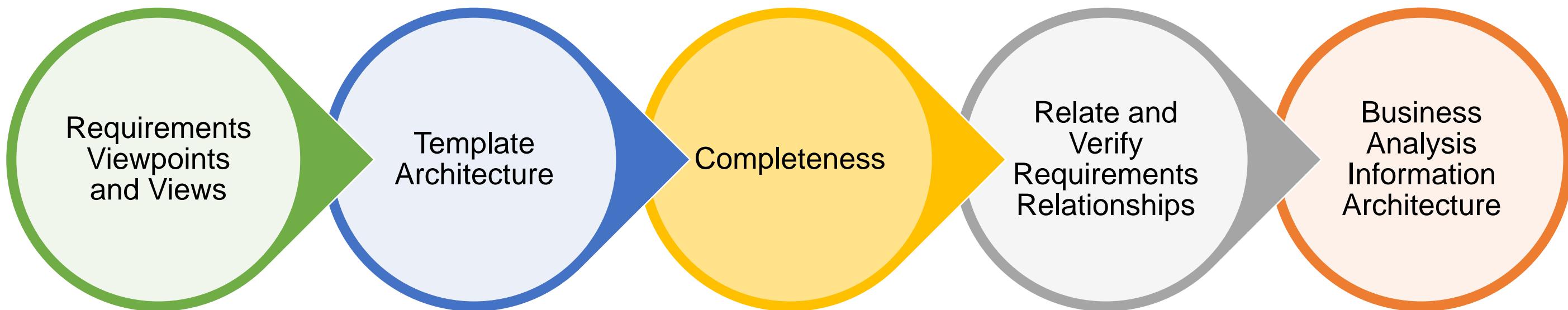
An architectural framework is a collection of viewpoints that are standard across the industry, sector, or organization.



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

# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

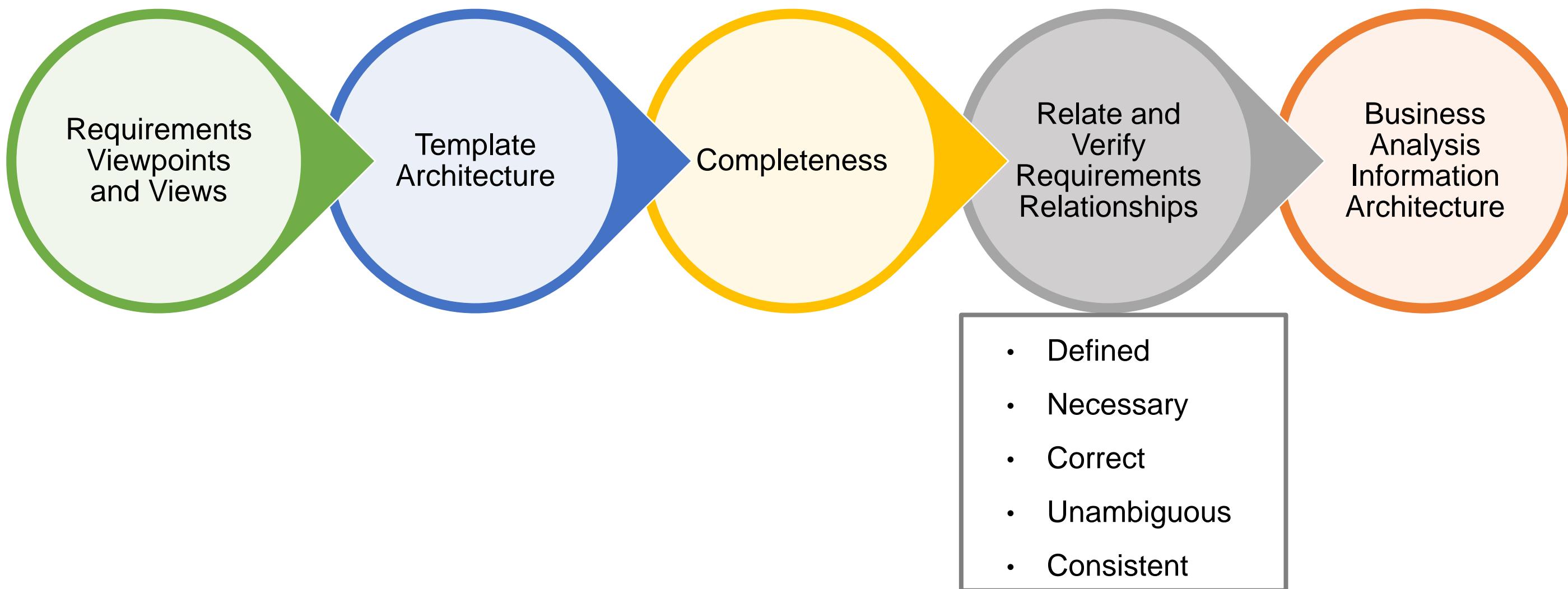
## ELEMENTS



An architecture helps ensuring that a set of requirements is complete

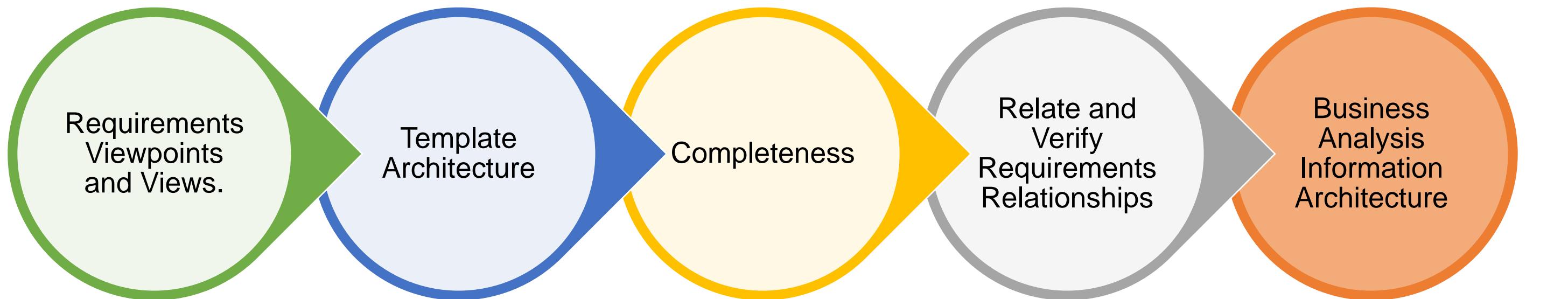
# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## ELEMENTS



# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

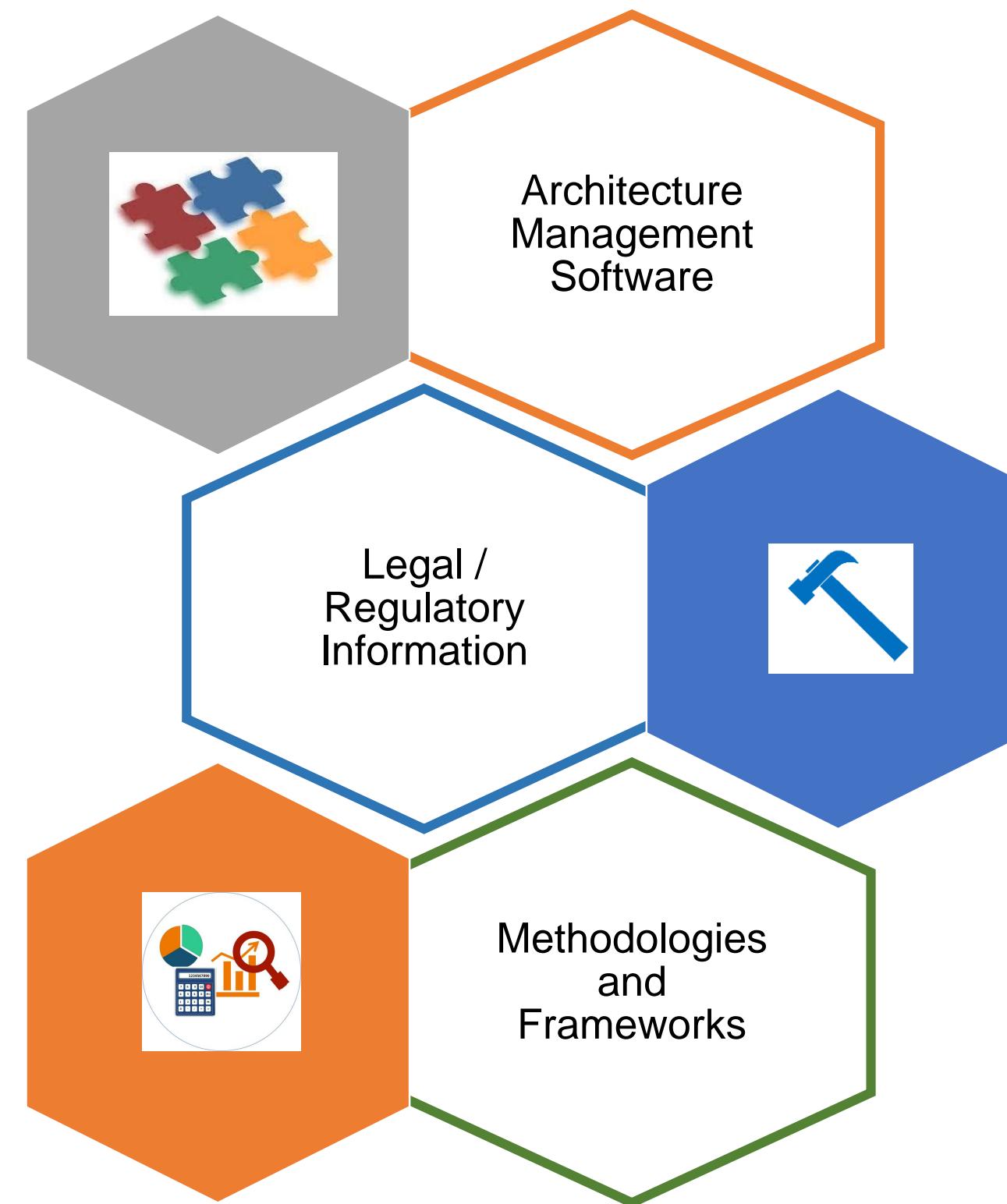
## ELEMENTS



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

# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## GUIDELINES and TOOLS

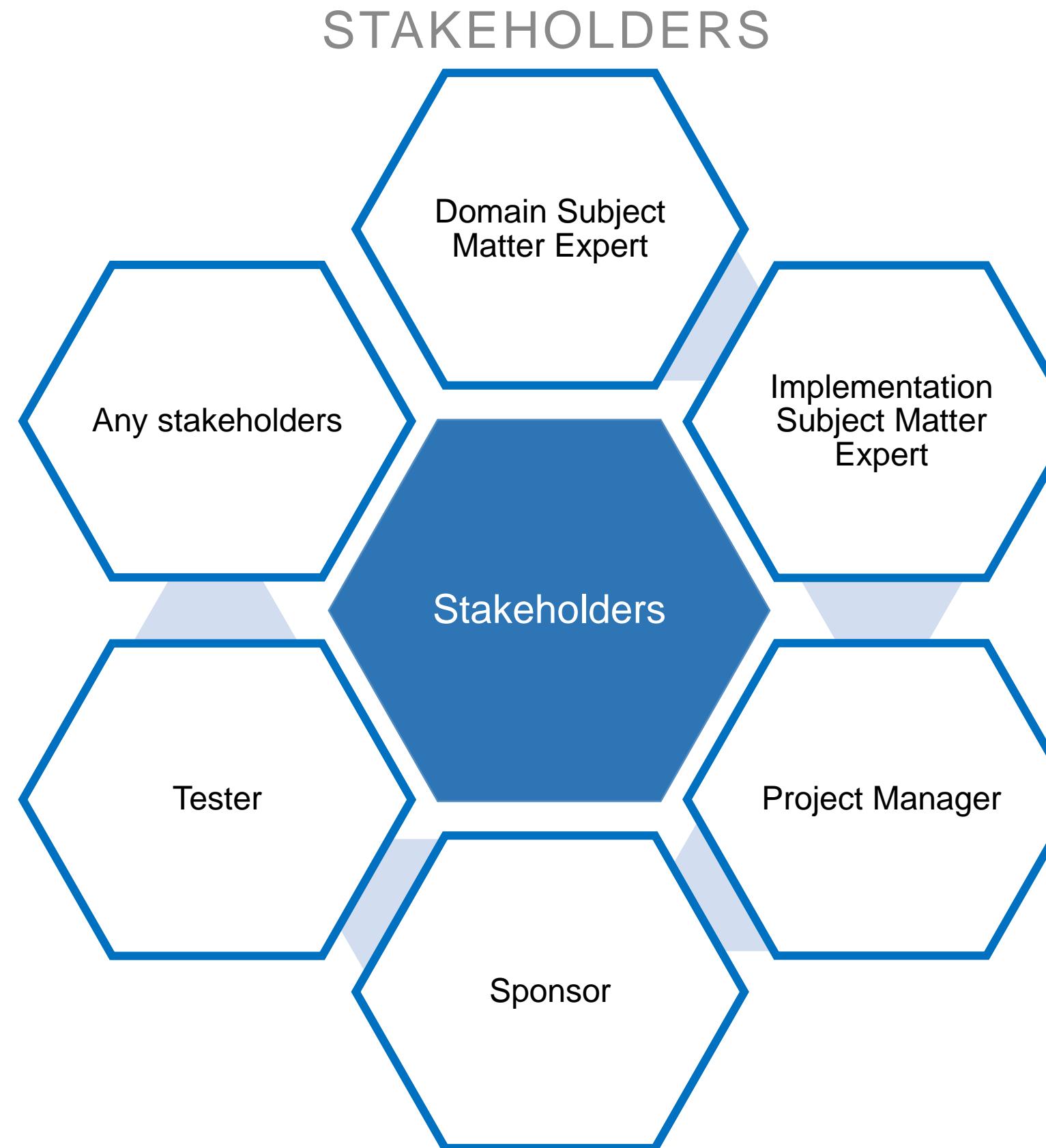


# DEFINE REQUIREMENTS ARCHITECTURE (contd.)

## TECHNIQUES



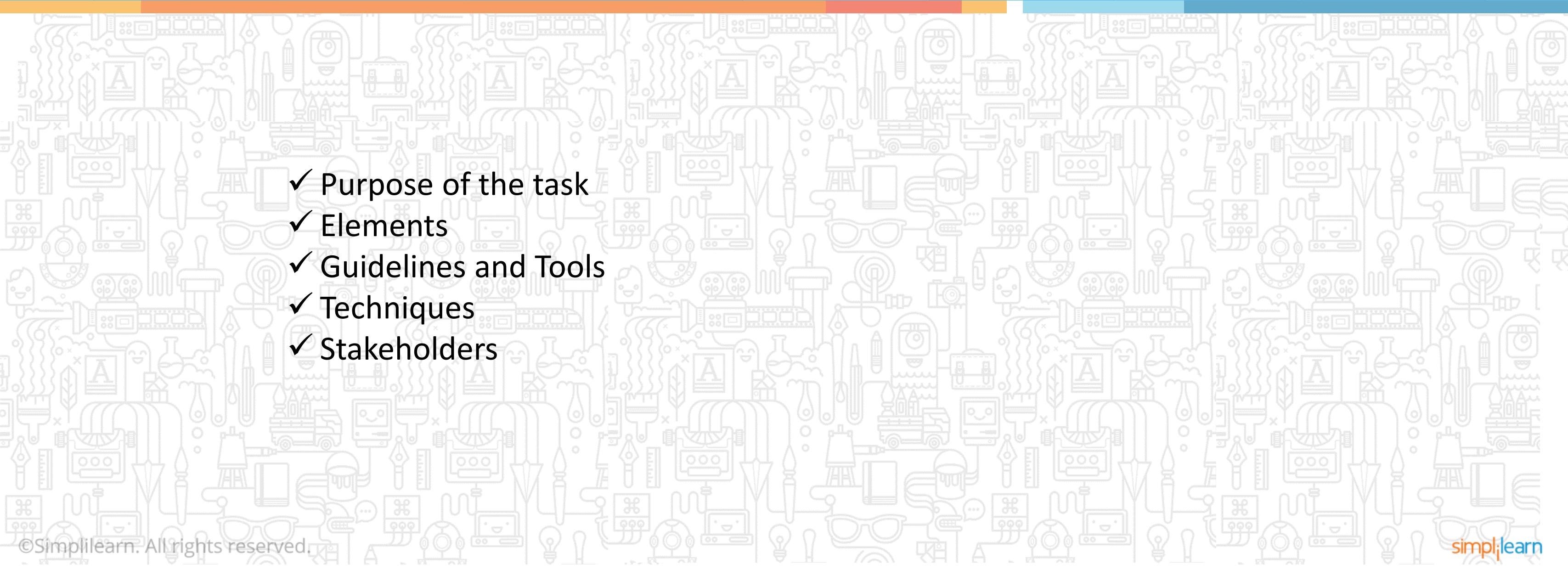
# DEFINE REQUIREMENTS ARCHITECTURE (contd.)



# Lesson 7: Requirements Analysis and Design Definition

## Topic 7.5: Define Design Options

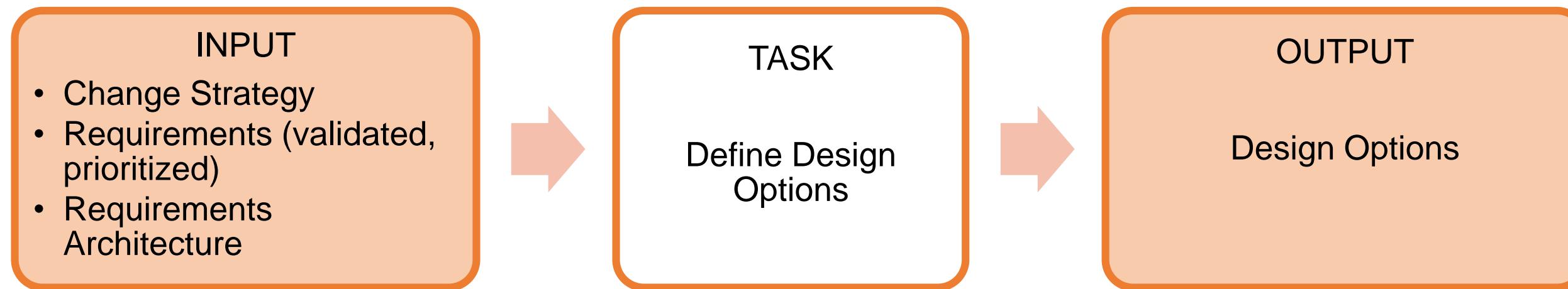
- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders



# DEFINE DESIGN OPTIONS

## PURPOSE

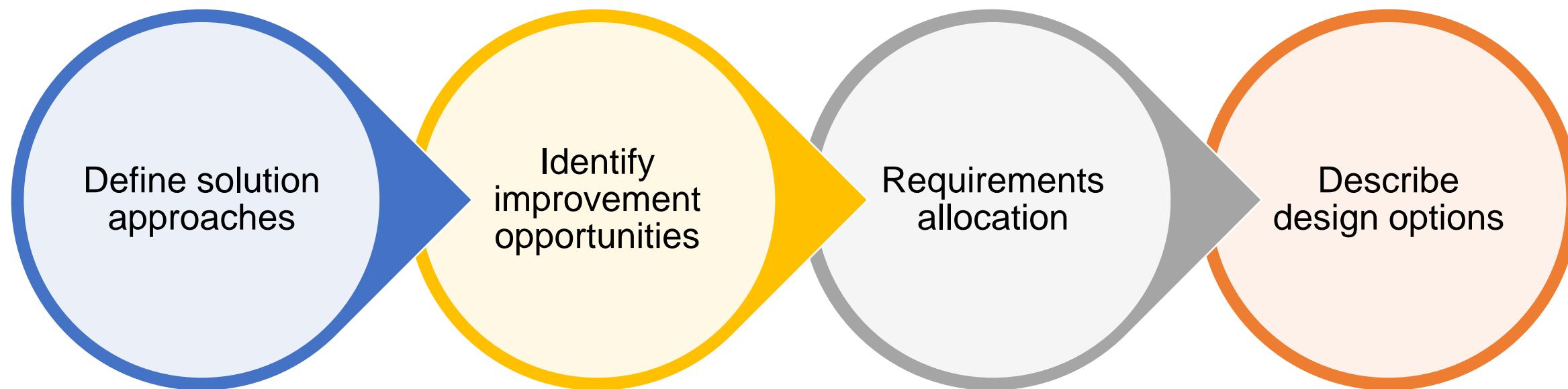
The purpose of this task is to define the solution approach, identify opportunities to improve the business, allocate requirements across solution components, and represent design options.



# DEFINE DESIGN OPTIONS (contd.)

---

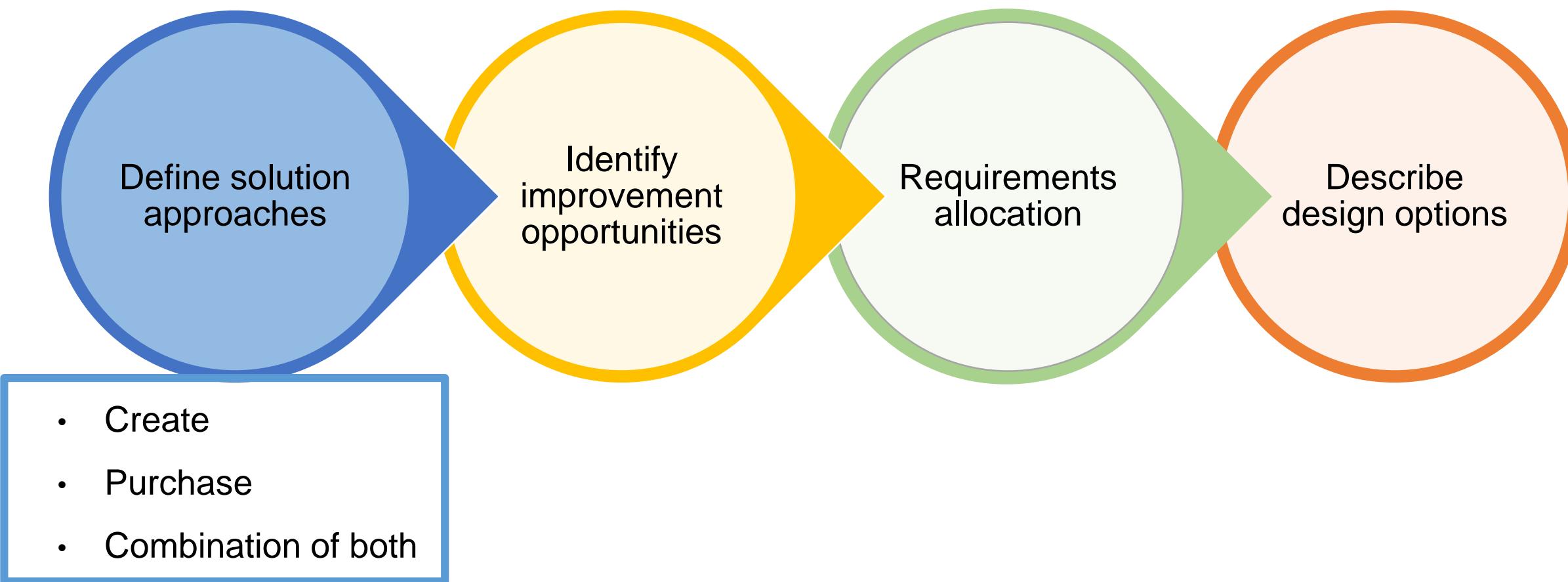
## ELEMENTS



# DEFINE DESIGN OPTIONS (contd.)

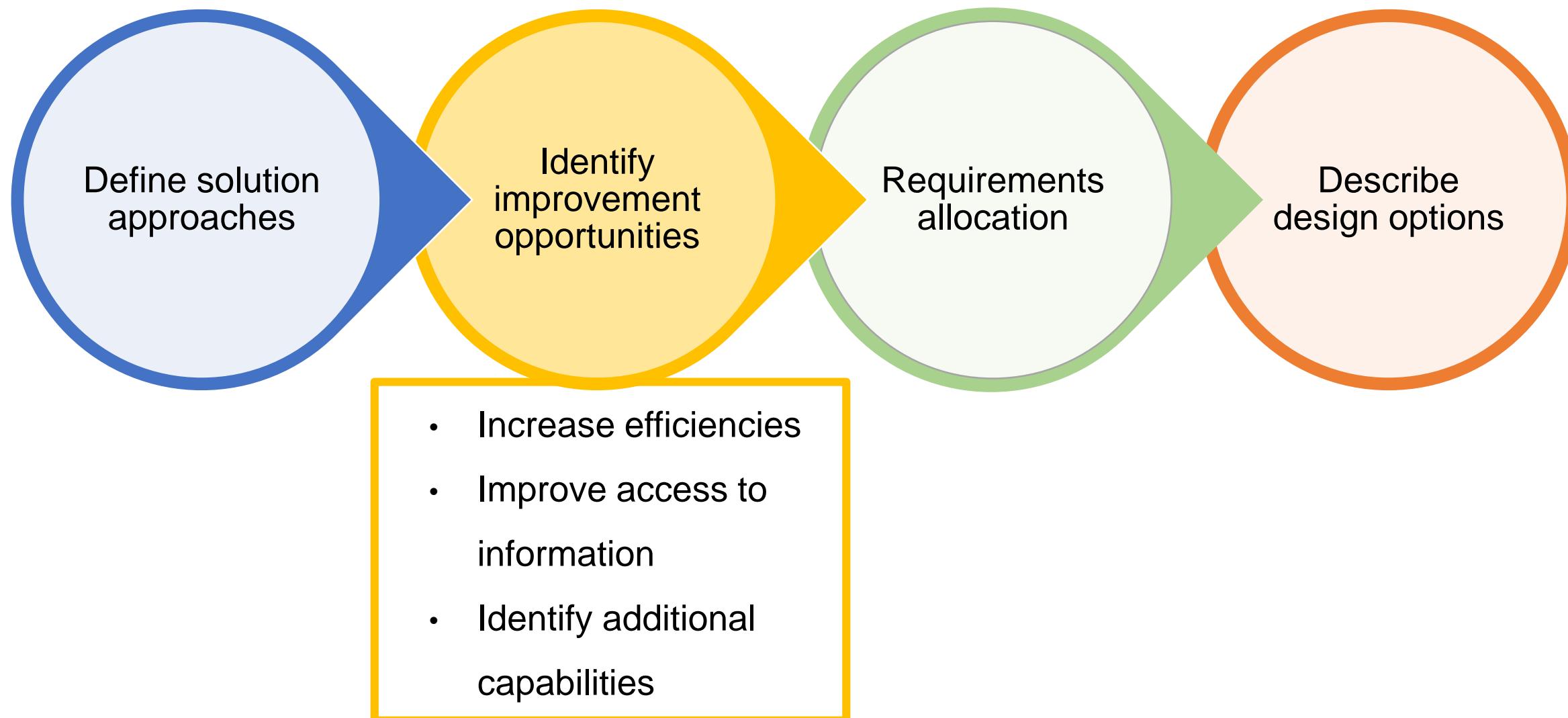
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## ELEMENTS



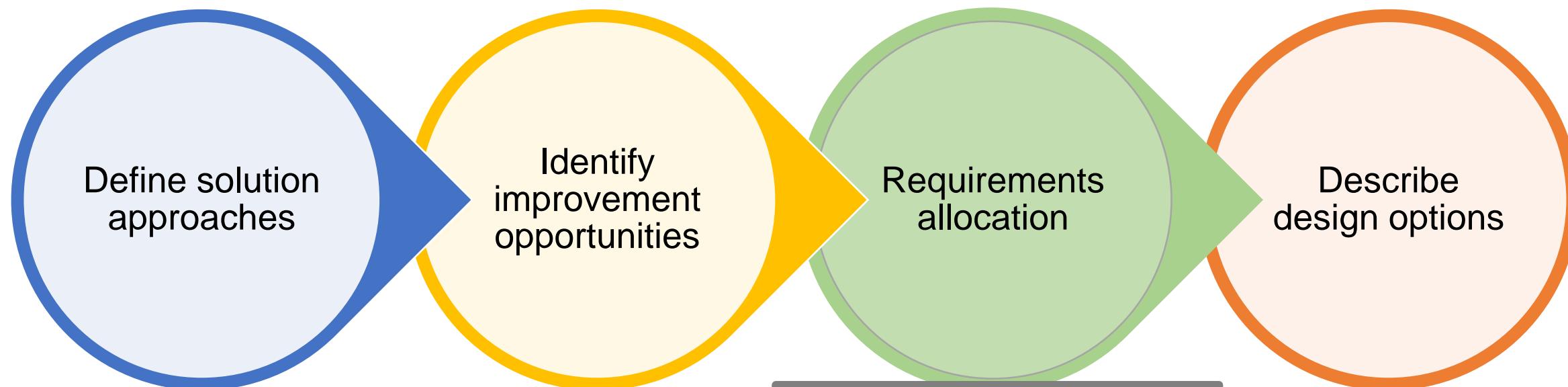
# DEFINE DESIGN OPTIONS (contd.)

## ELEMENTS



# DEFINE DESIGN OPTIONS (contd.)

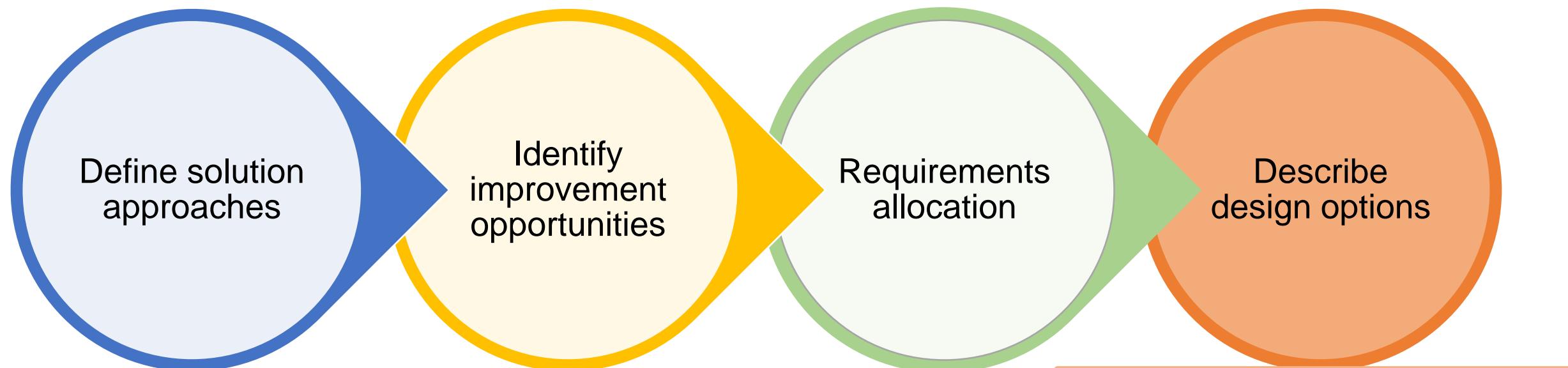
## ELEMENTS



The process of assigning requirements to solution components and releases

# DEFINE DESIGN OPTIONS (contd.)

## ELEMENTS



- Design options are developed considering the desired future state
- Solution performance measures are defined for each solution option

# DEFINE DESIGN OPTIONS (contd.)

## GUIDELINES and TOOLS



Existing Solutions

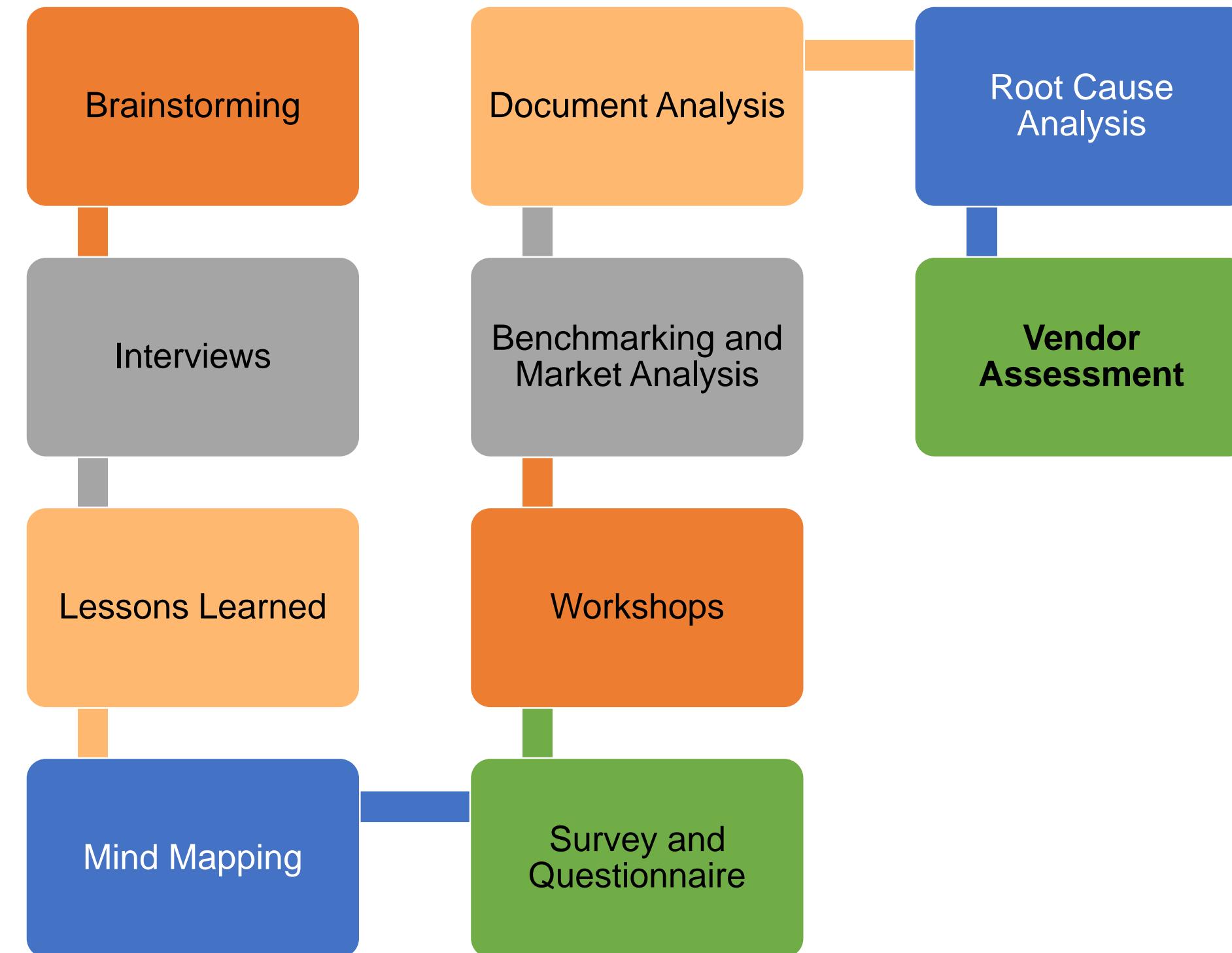
Future State Description

Requirements (traced)

Solution Scope

# DEFINE DESIGN OPTIONS (contd.)

## TECHNIQUES



# VENDOR ASSESSMENT

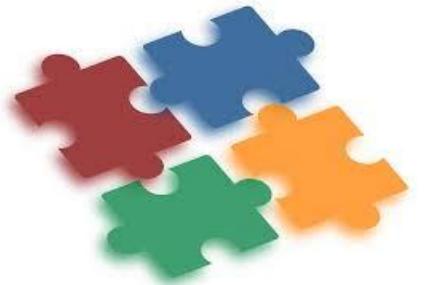
## OVERVIEW

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

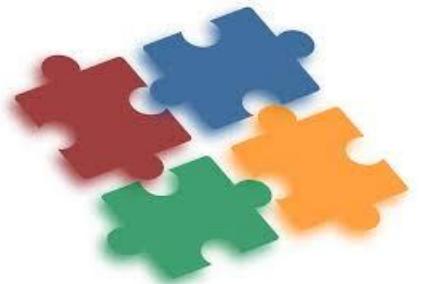
Vendor Market  
Position

Terms and  
Conditions

Vendor  
Experience,  
Reputation,  
and Stability

# VENDOR ASSESSMENT (contd.)

## ELEMENTS



Knowledge and Expertise

Licensing and Pricing Models

Vendor Market Position

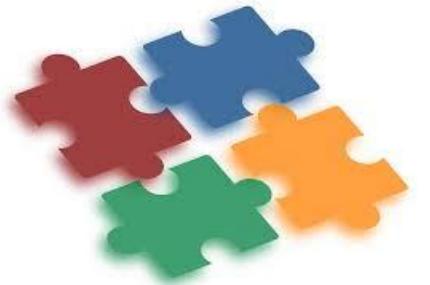
Terms and Conditions

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

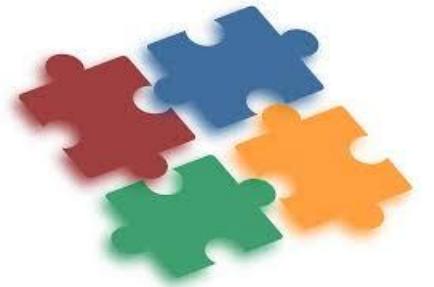
Terms and Conditions

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

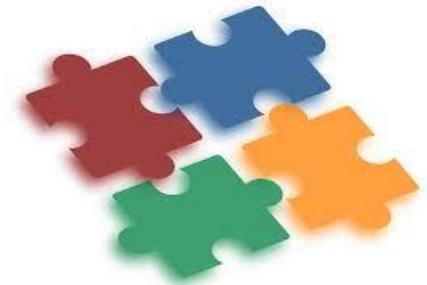
Terms and Conditions

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

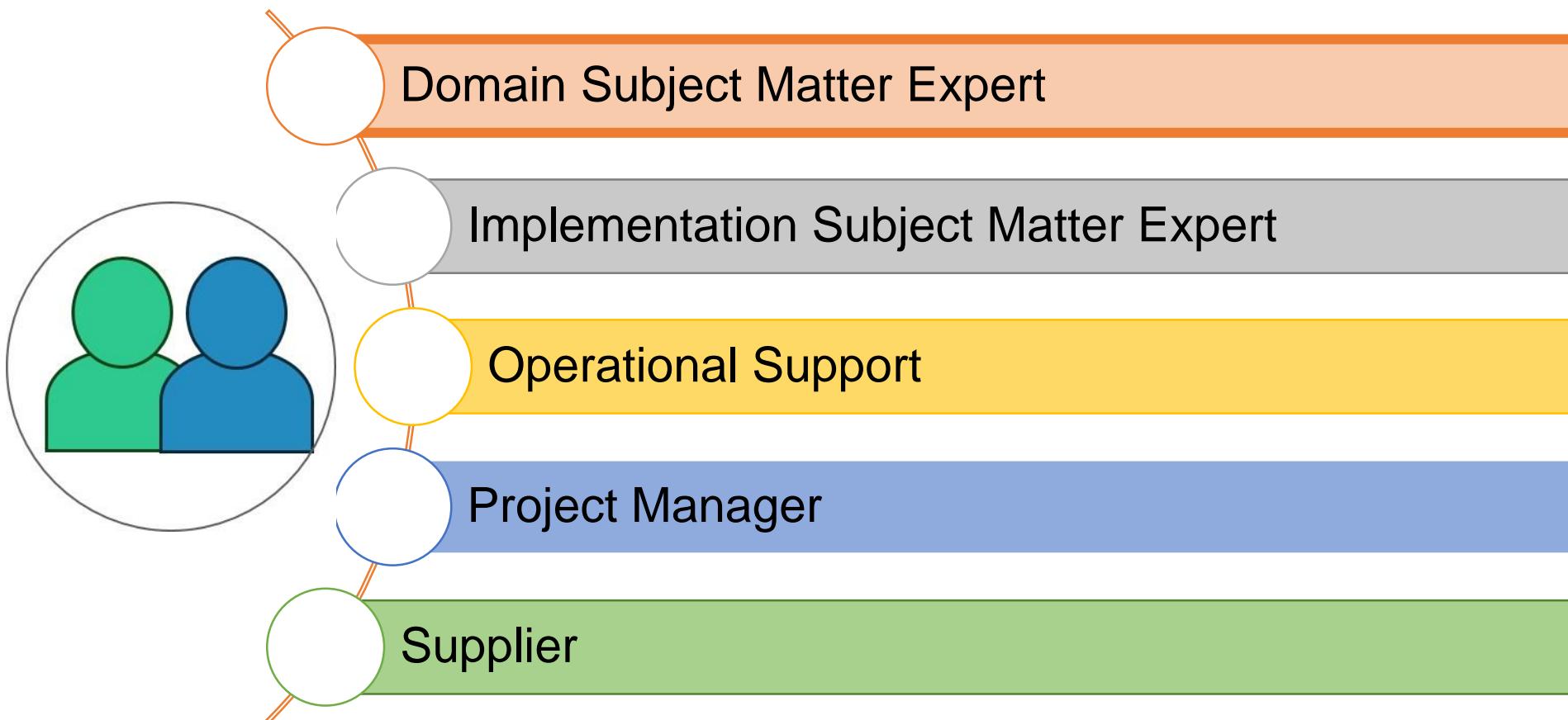
Terms and  
Conditions

Vendor  
Experience,  
Reputation,  
and Stability

Vendor's experience with  
other customers may  
provide valuable  
information

# DEFINE DESIGN OPTIONS (contd.)

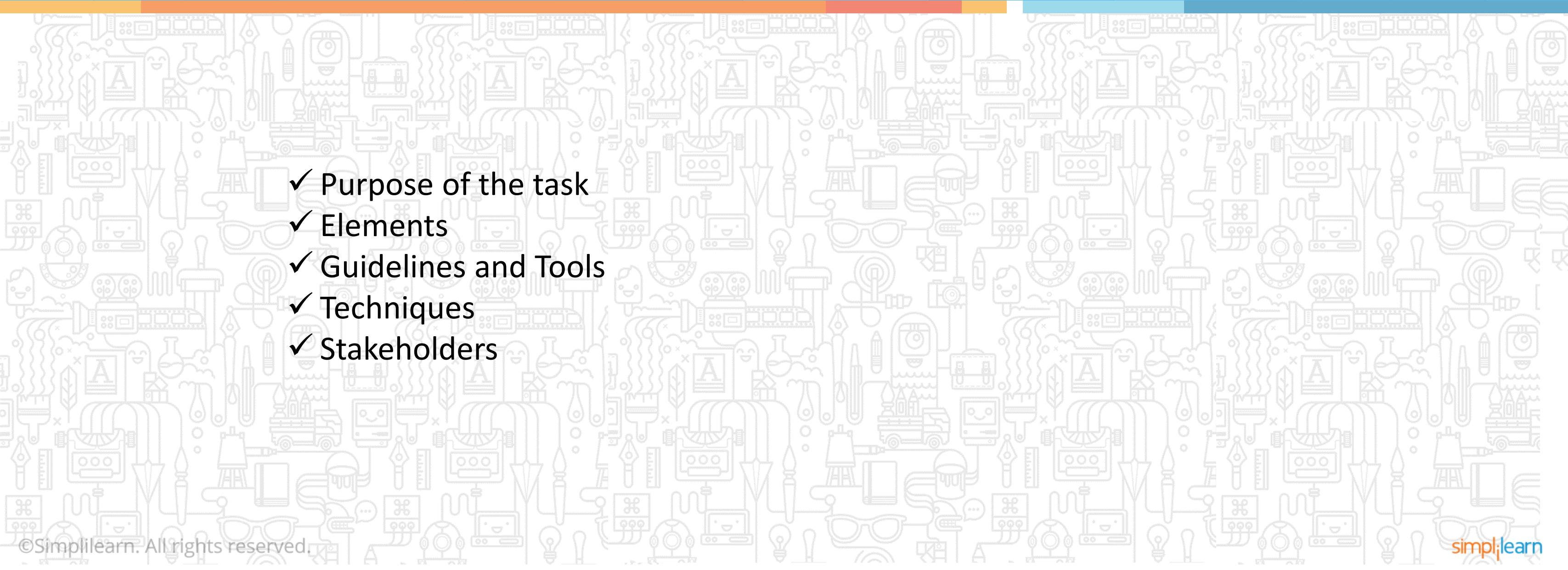
## STAKEHOLDERS



# Lesson 7: Requirements Analysis and Design Definition

## Topic 7.6: Analyze Potential Value and Recommend Solution

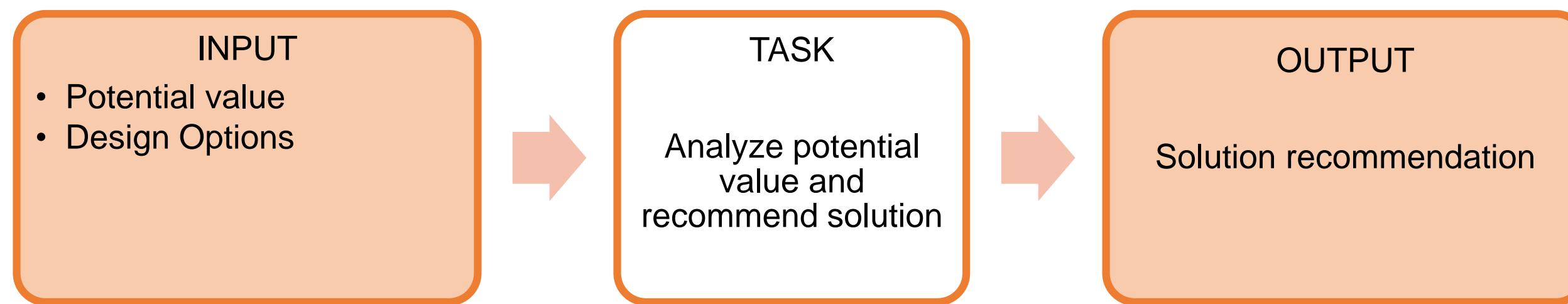
- ✓ Purpose of the task
- ✓ Elements
- ✓ Guidelines and Tools
- ✓ Techniques
- ✓ Stakeholders



# 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

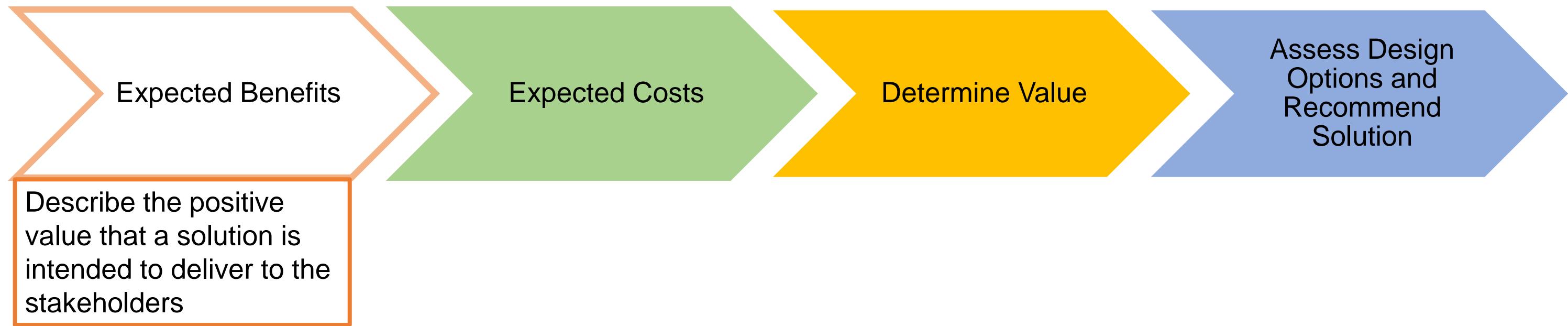
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## ELEMENTS



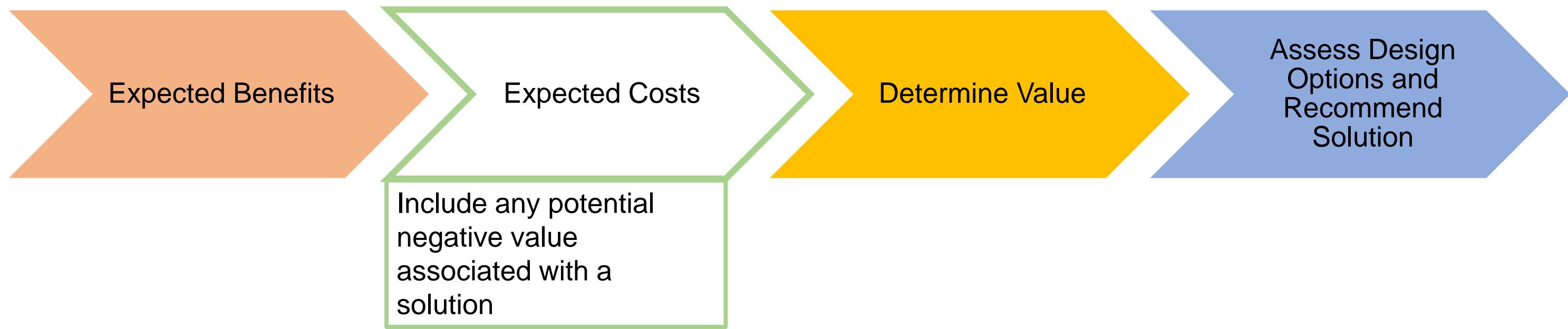
# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## ELEMENTS



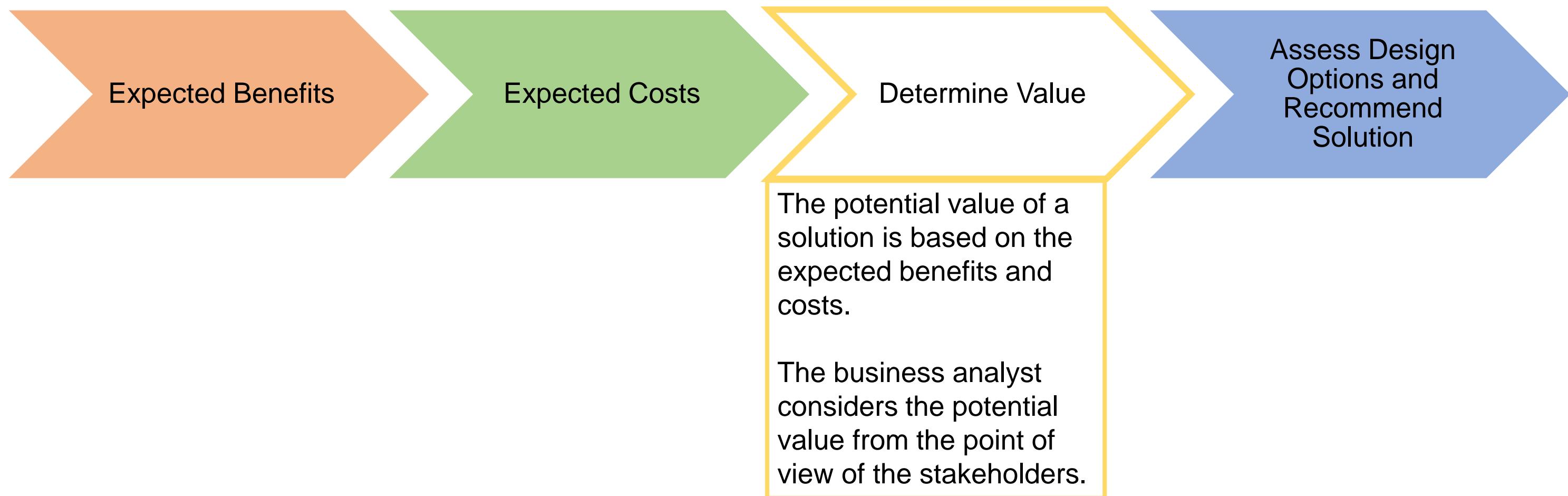
# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## ELEMENTS



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

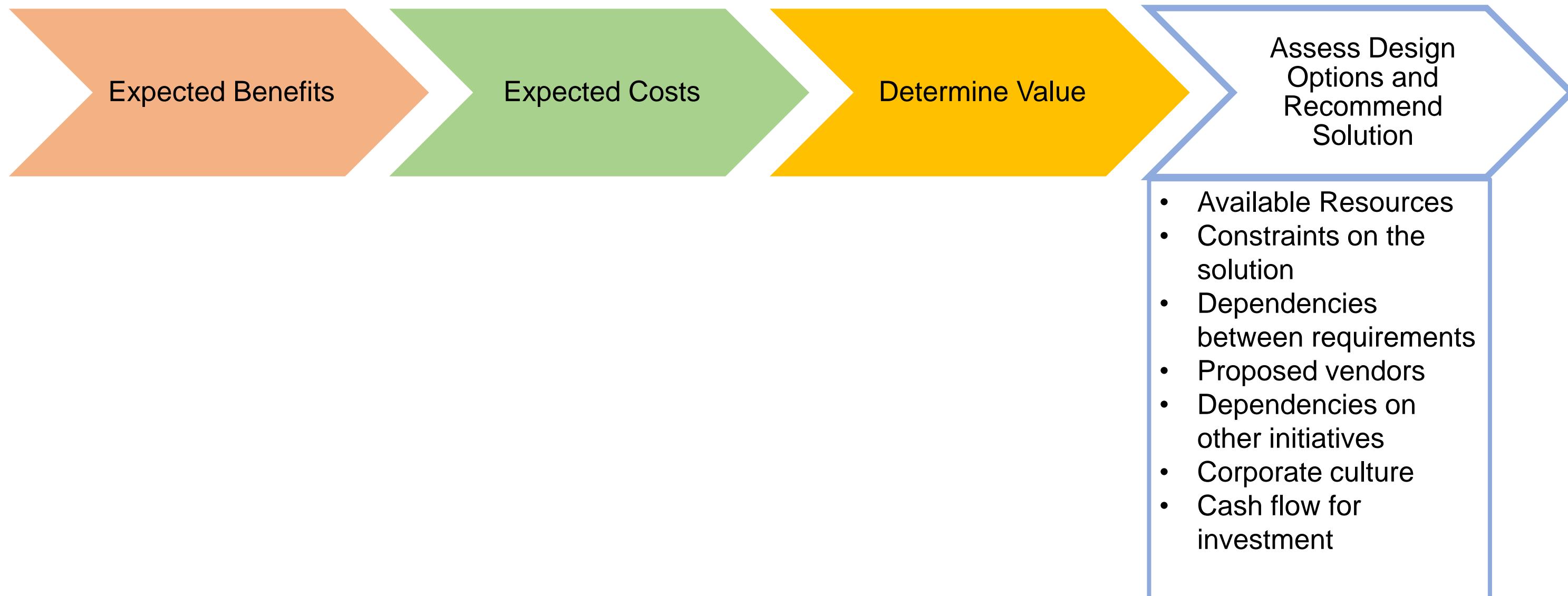
## ELEMENTS



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

---

## ELEMENTS



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## GUIDELINES AND TOOLS



Business Objectives

Current State Description

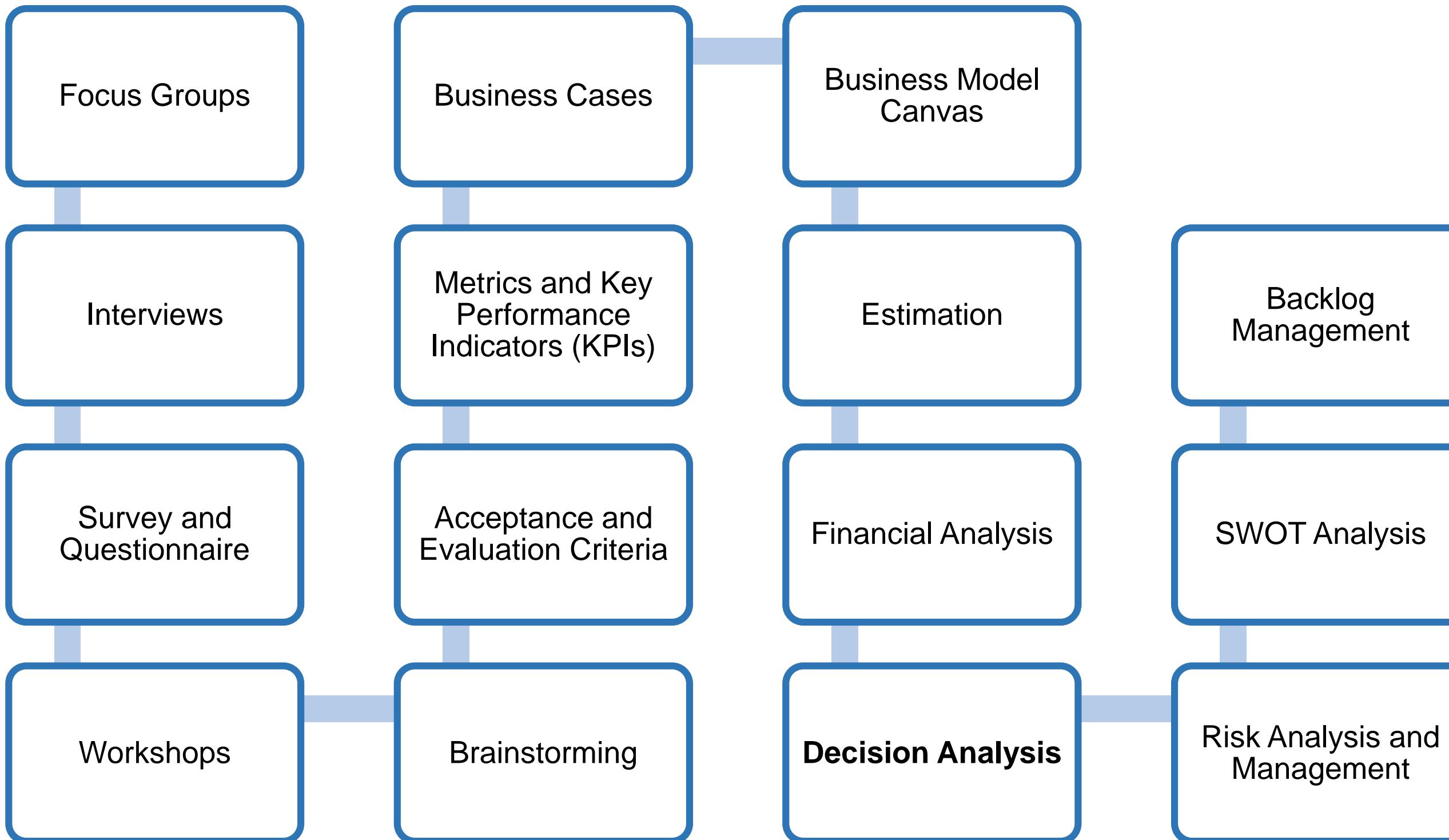
Future State Description

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                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|  A yellow horizontal bar with a small white square at its left end. |  A green horizontal bar with a small white square at its left end. |  A blue horizontal bar with a small white square at its left end. |

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.)

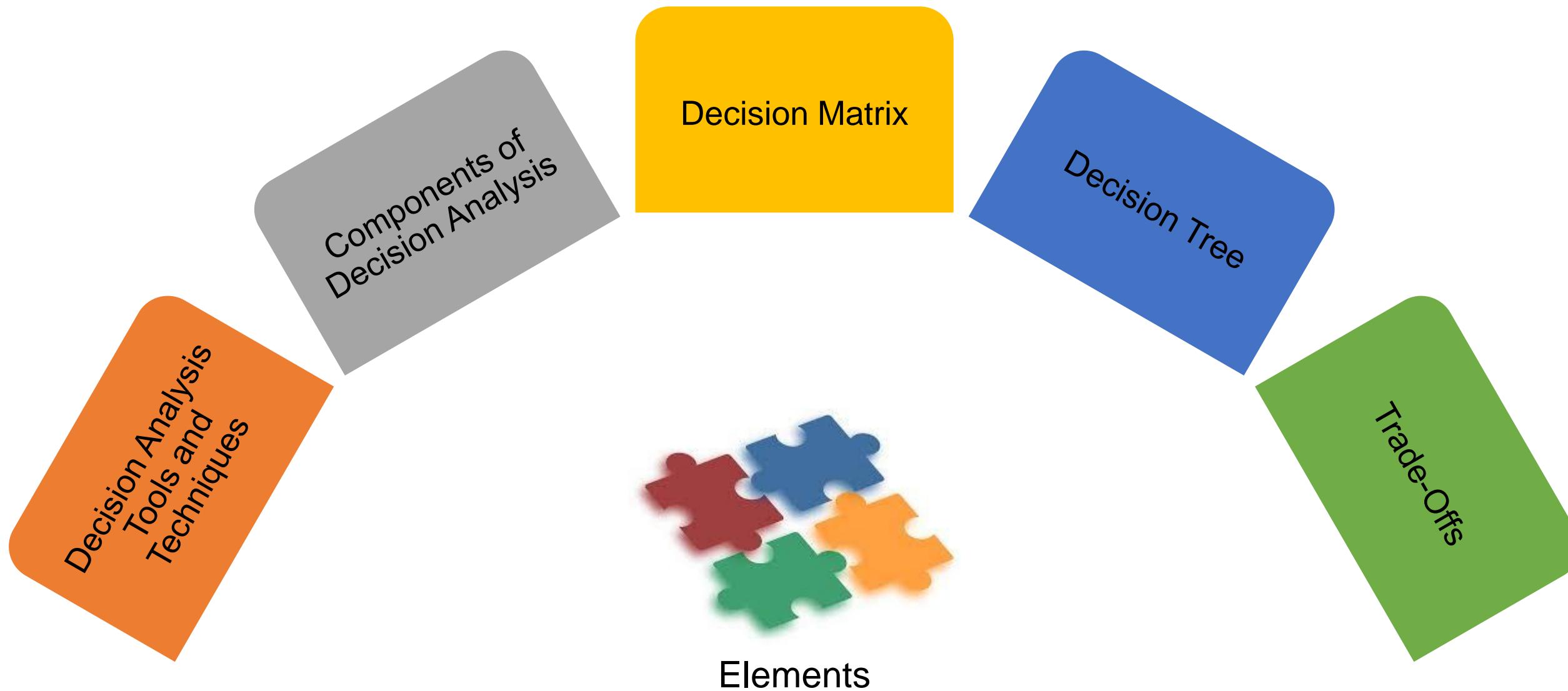
## DECISION ANALYSIS — OVERVIEW

**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> |

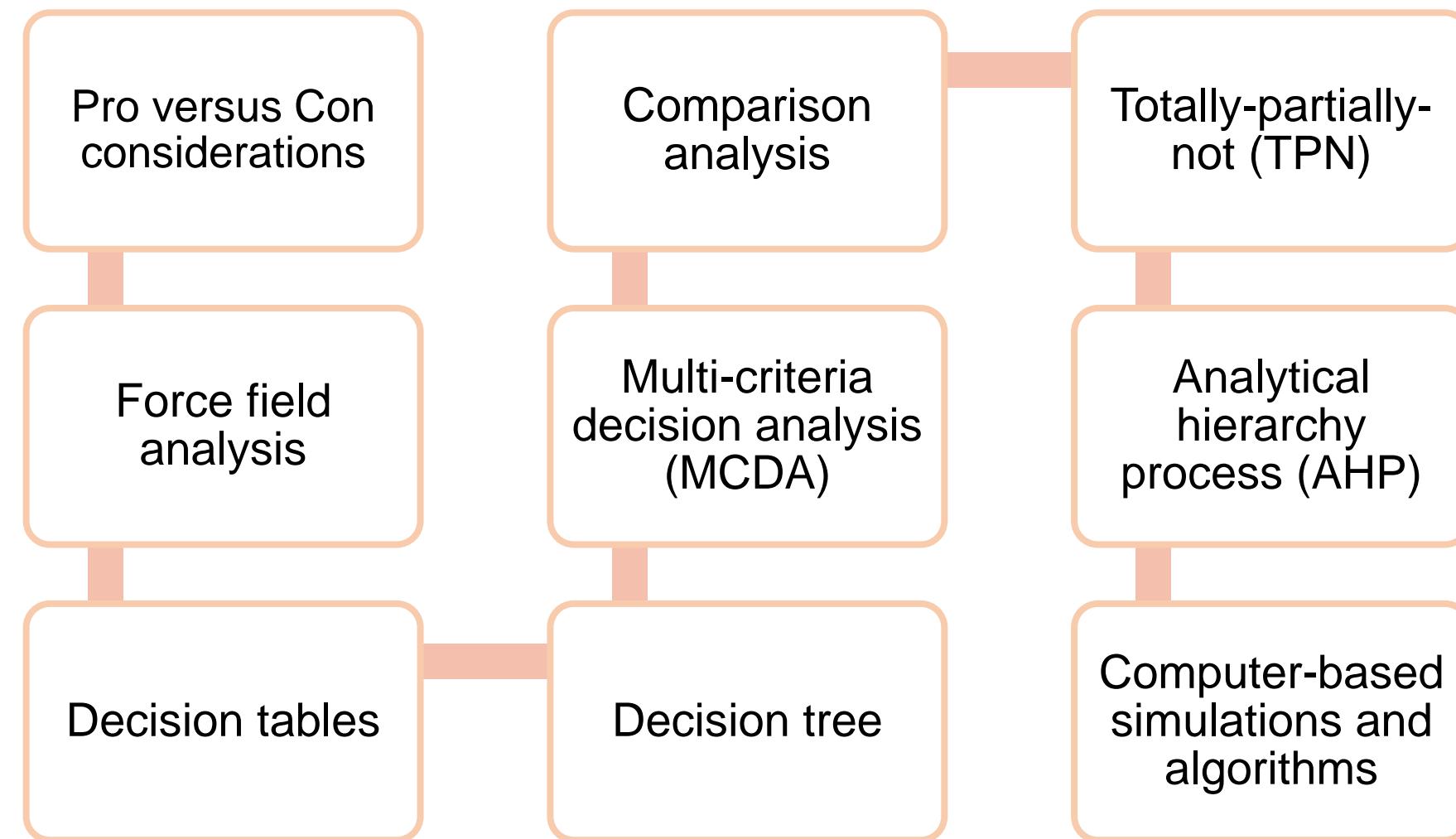
# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## DECISION ANALYSIS — ELEMENTS



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## DECISION ANALYSIS — TOOLS AND TECHNIQUES



# ANALYZE POTENTIAL VALUE AND RECOMMEND SOLUTION

## COMPONENTS OF DECISION ANALYSIS



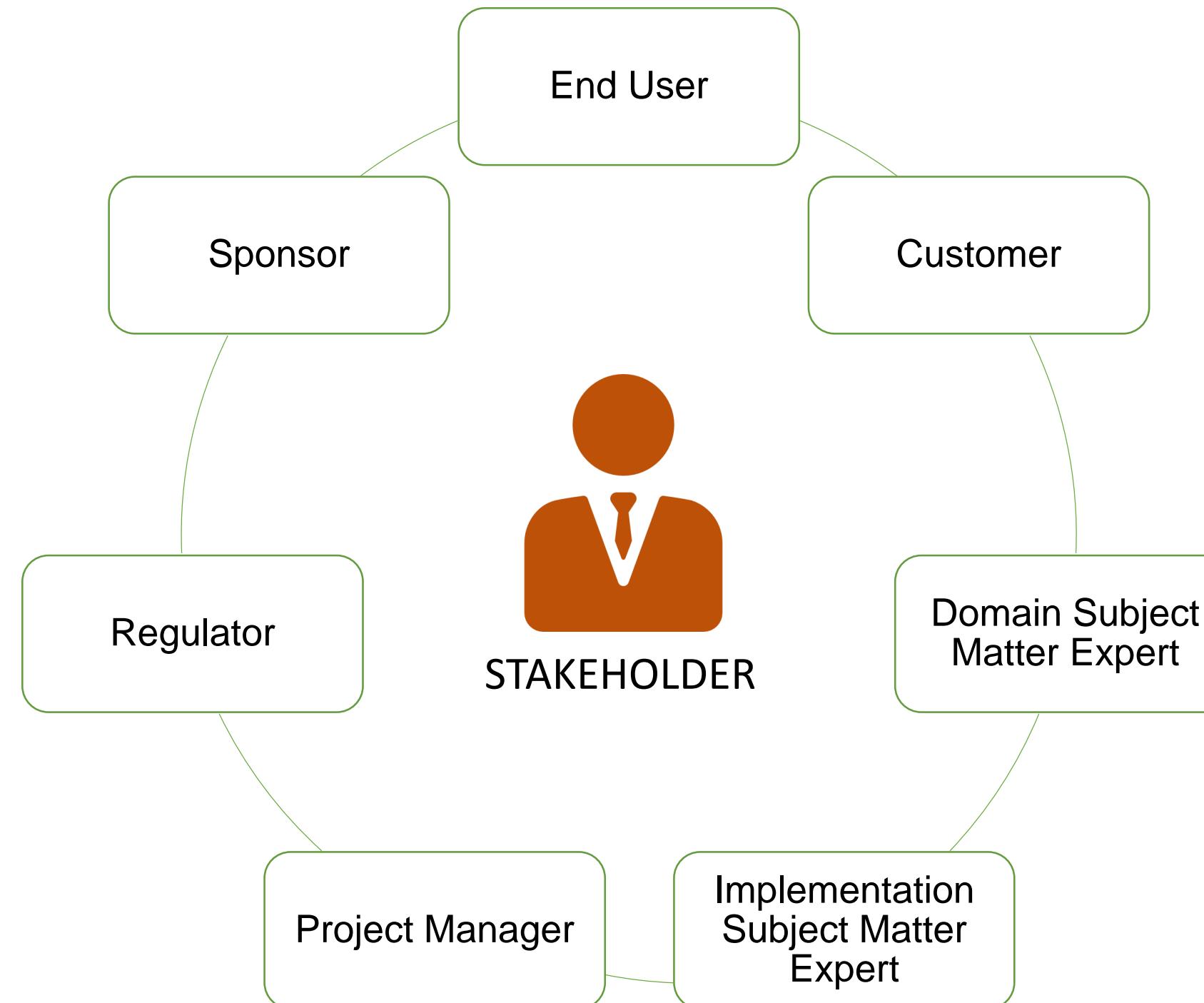
**Decision matrix** – a decision table where each criterion is evaluated for each alternative and the total the number of criteria is matched for each alternate

**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

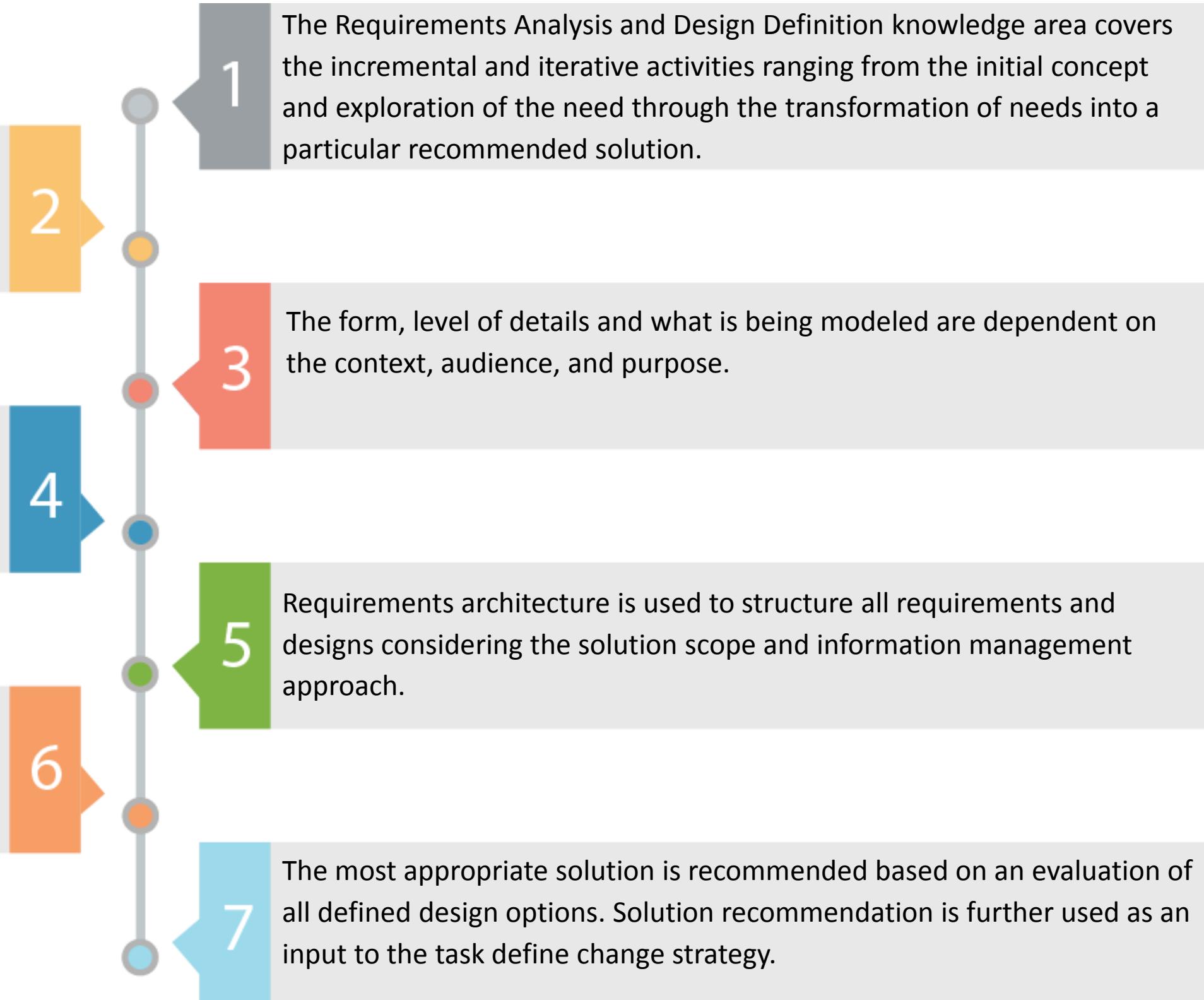


## KEY TAKEAWAYS

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

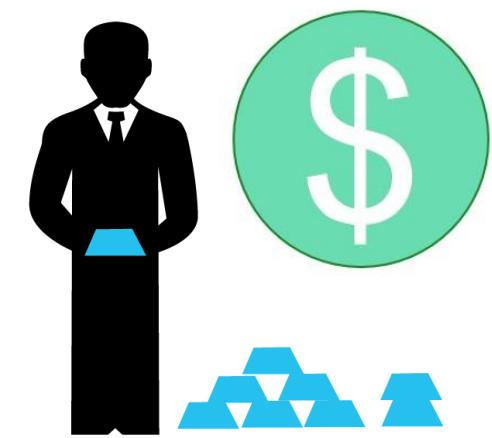
# CASE STUDY

---

## 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

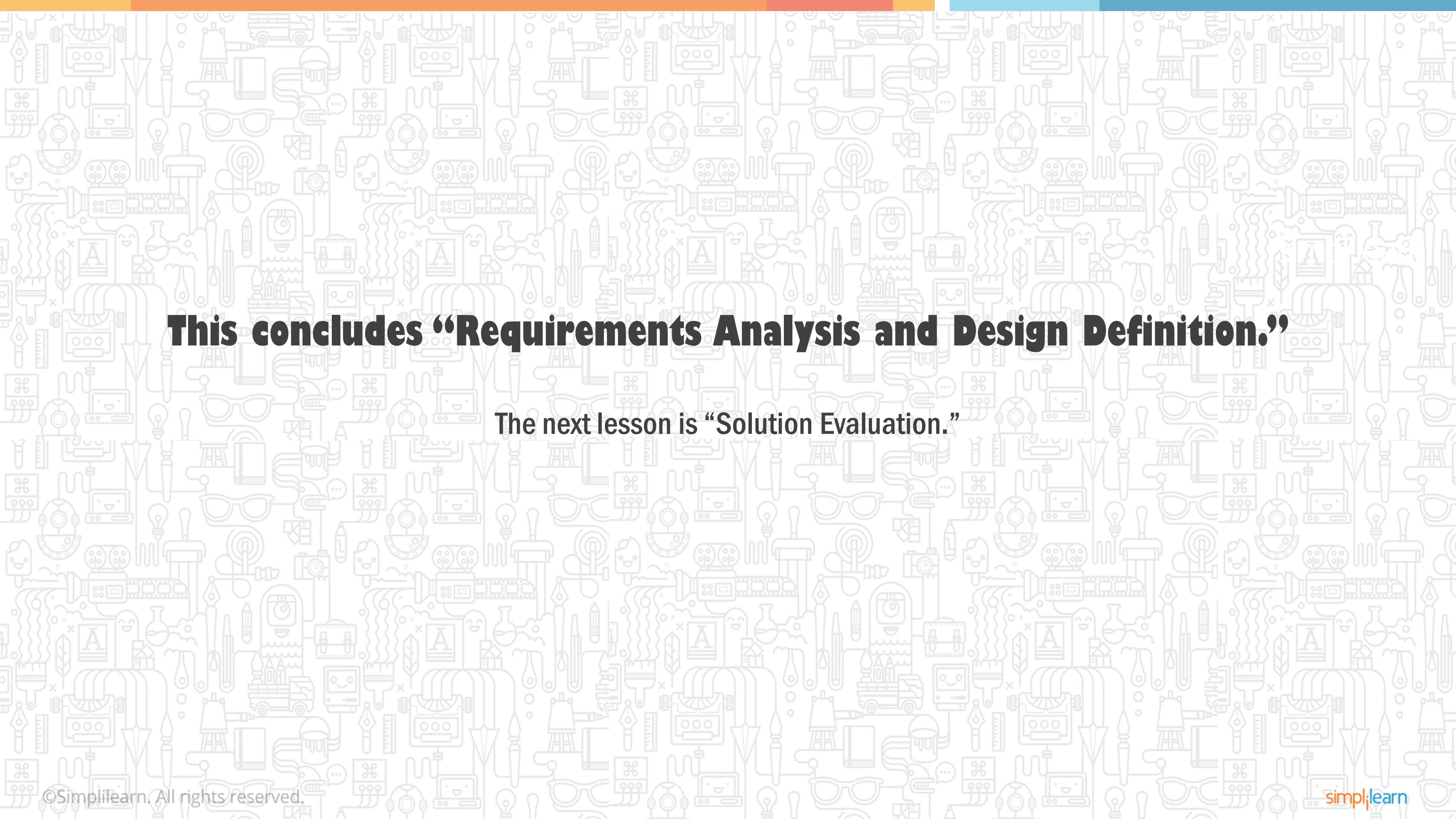
A use case diagram includes \_\_\_\_\_.

- 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



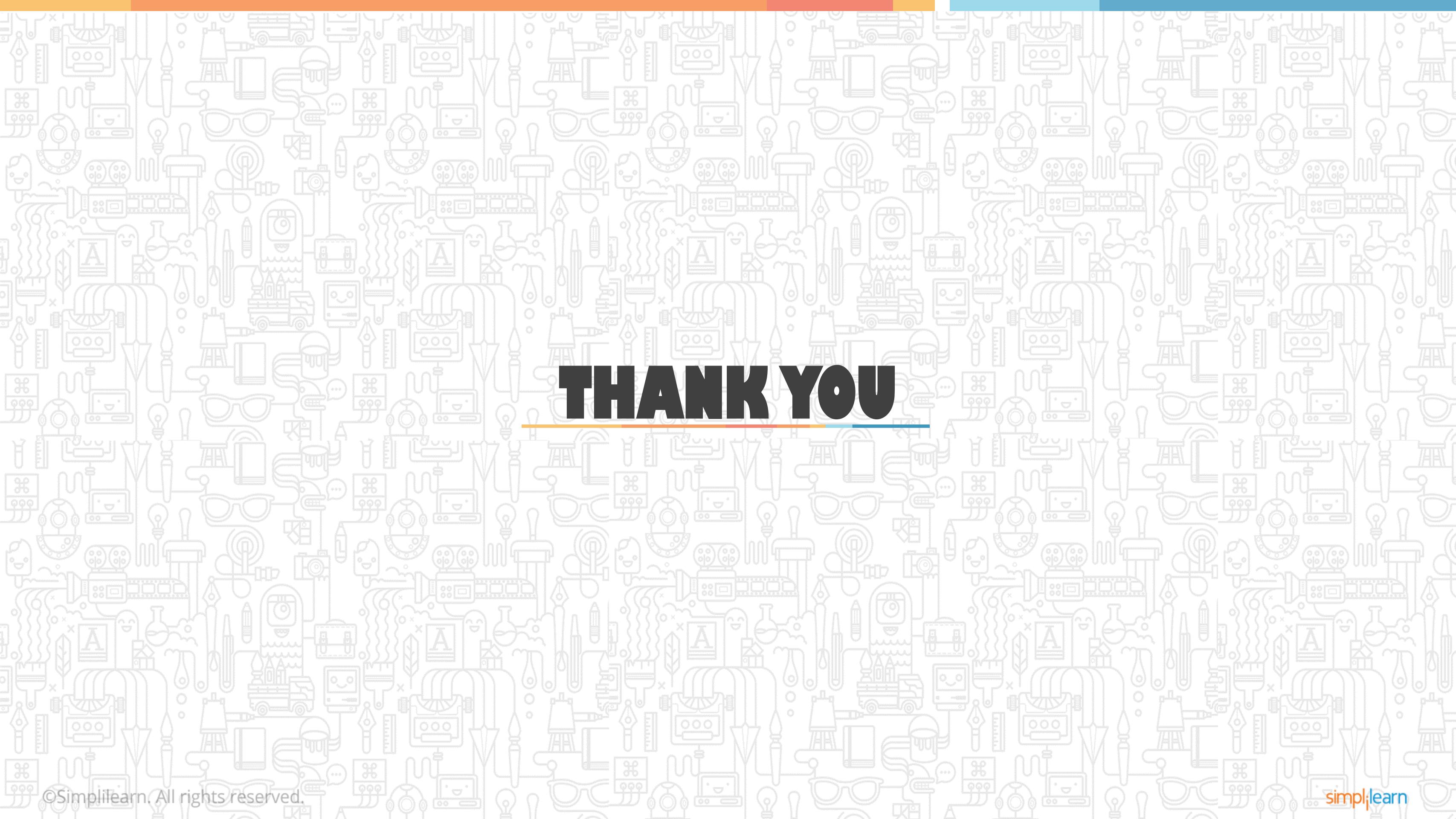
The correct answer is **a.**

**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

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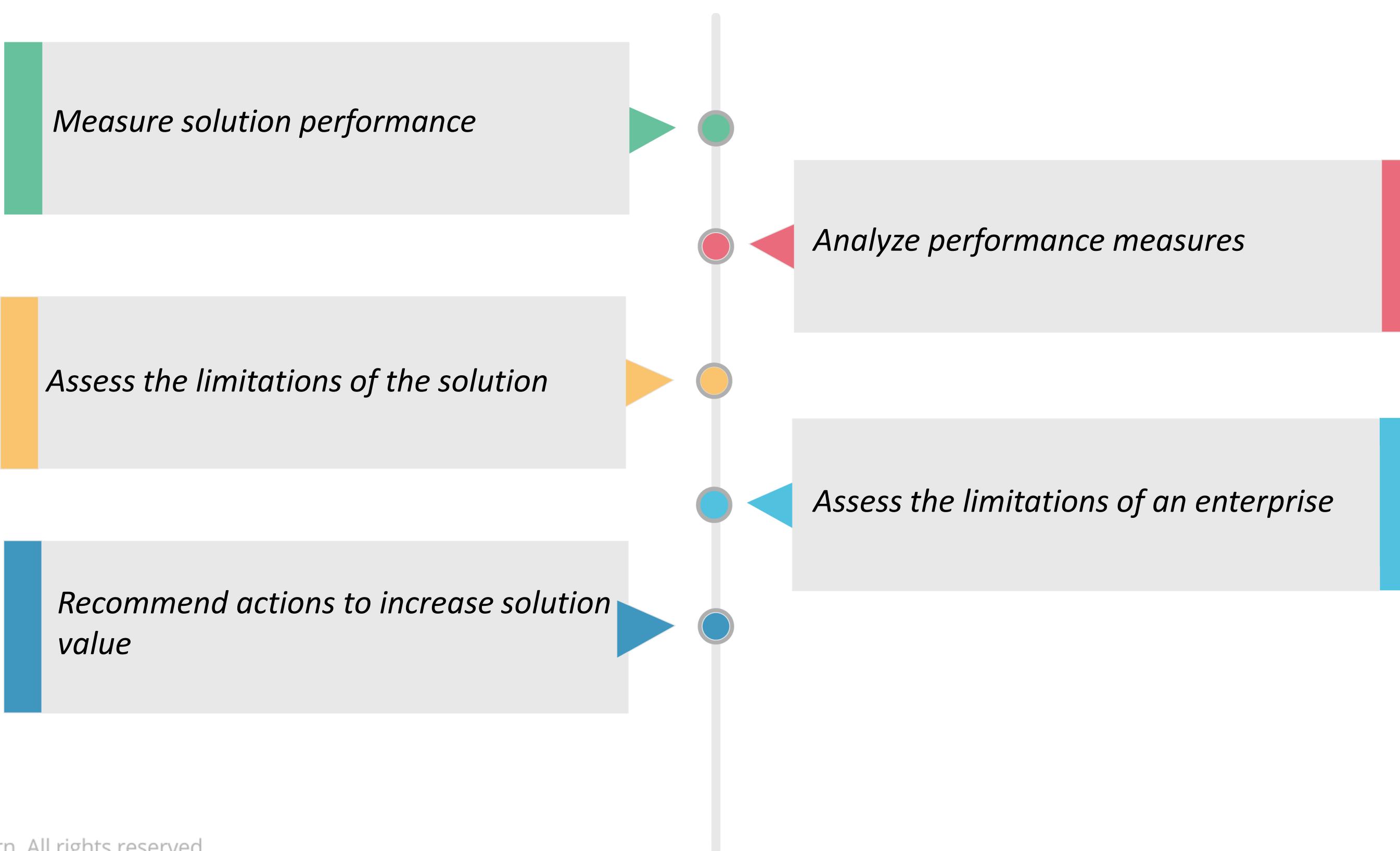
# CBAP® Exam Preparation Course

## Lesson 8 – Solution Evaluation

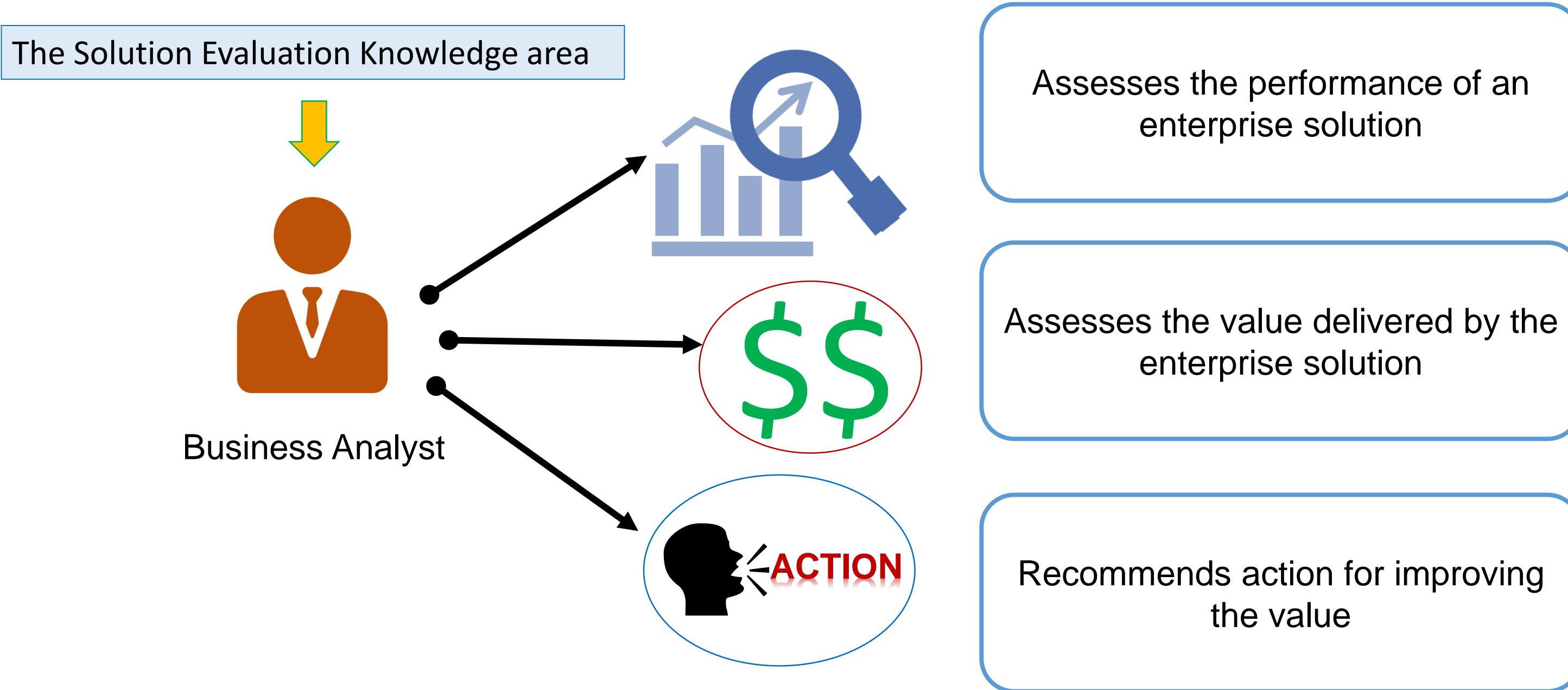


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# WHAT'S IN IT FOR ME

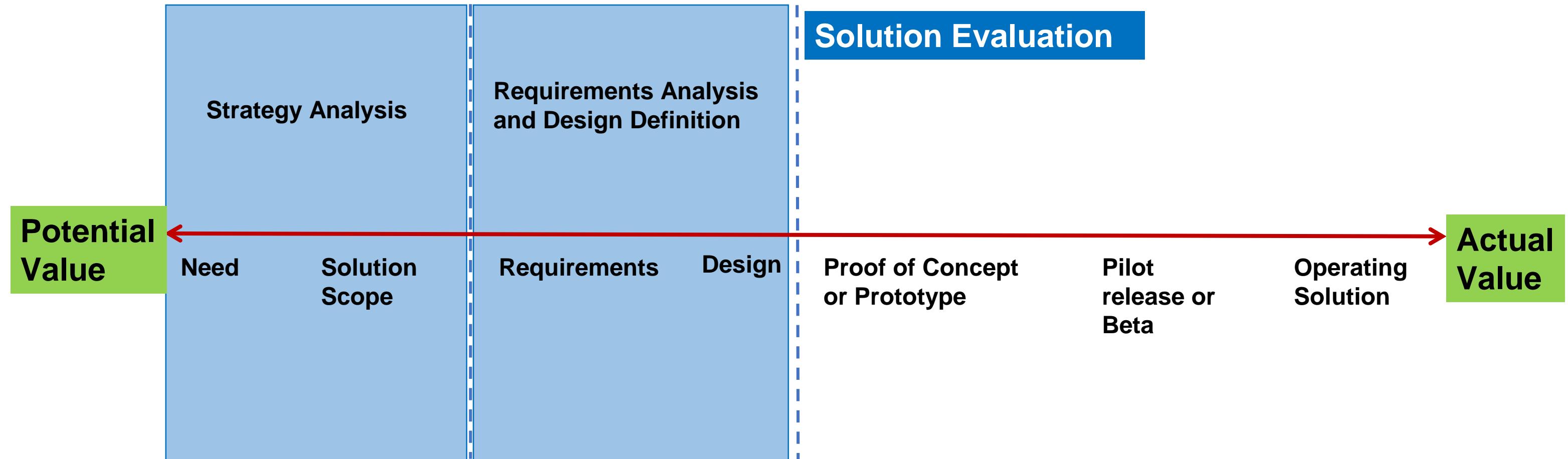


# INTRODUCTION



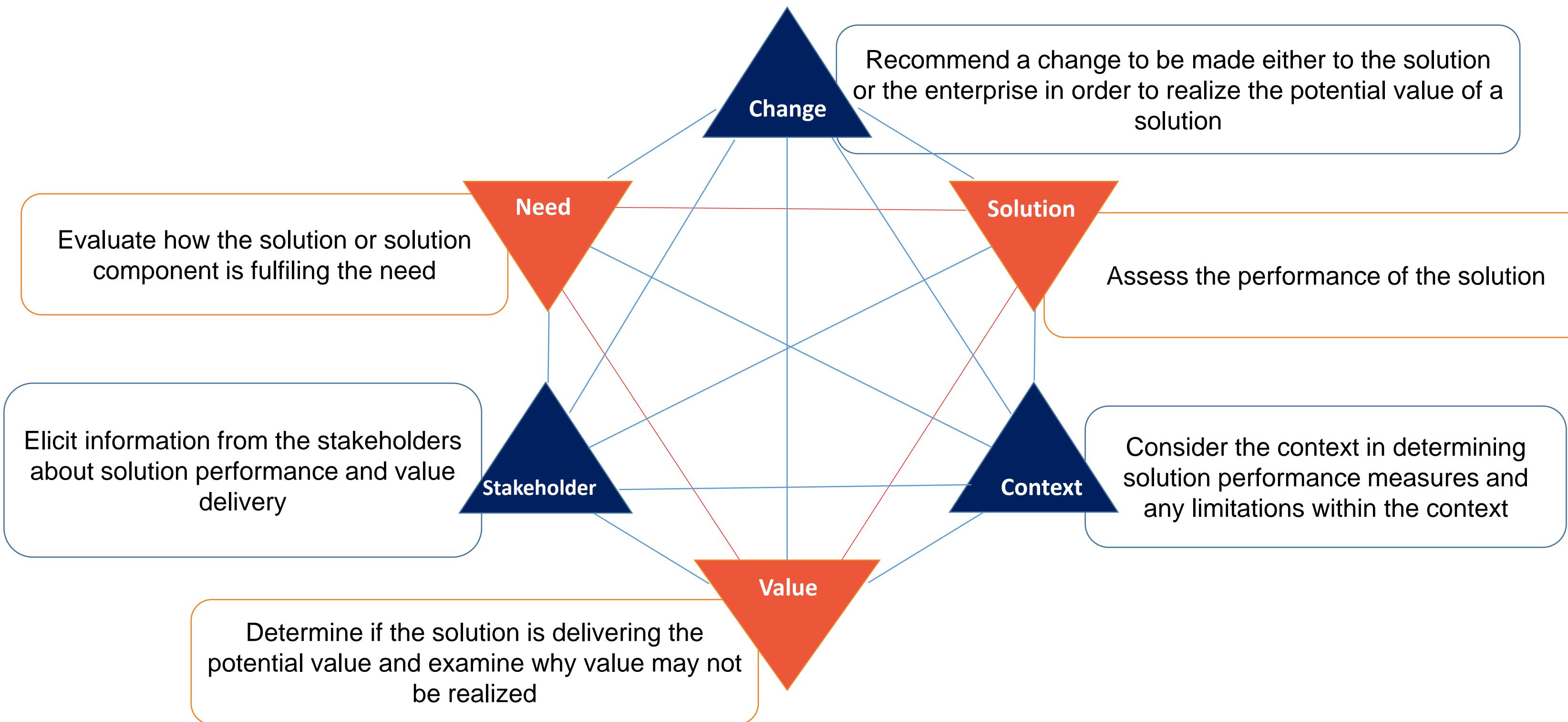
# SOLUTION EVALUATION

## BUSINESS ANALYSIS VALUE SPECTRUM



# SOLUTION EVALUATION

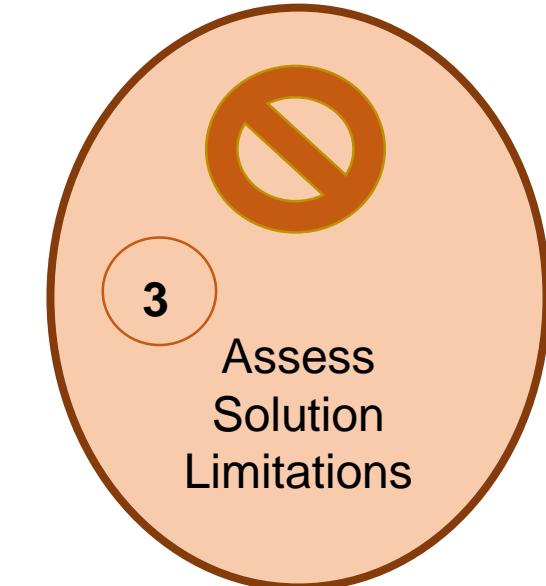
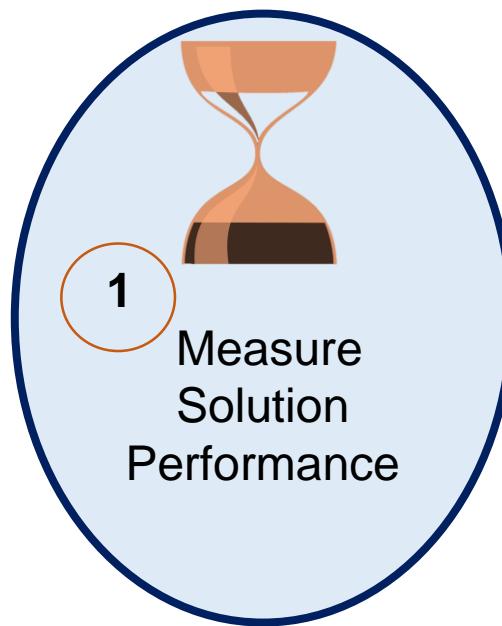
## OVERVIEW



# SOLUTION EVALUATION

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## INPUTS, TASKS, AND OUTPUT



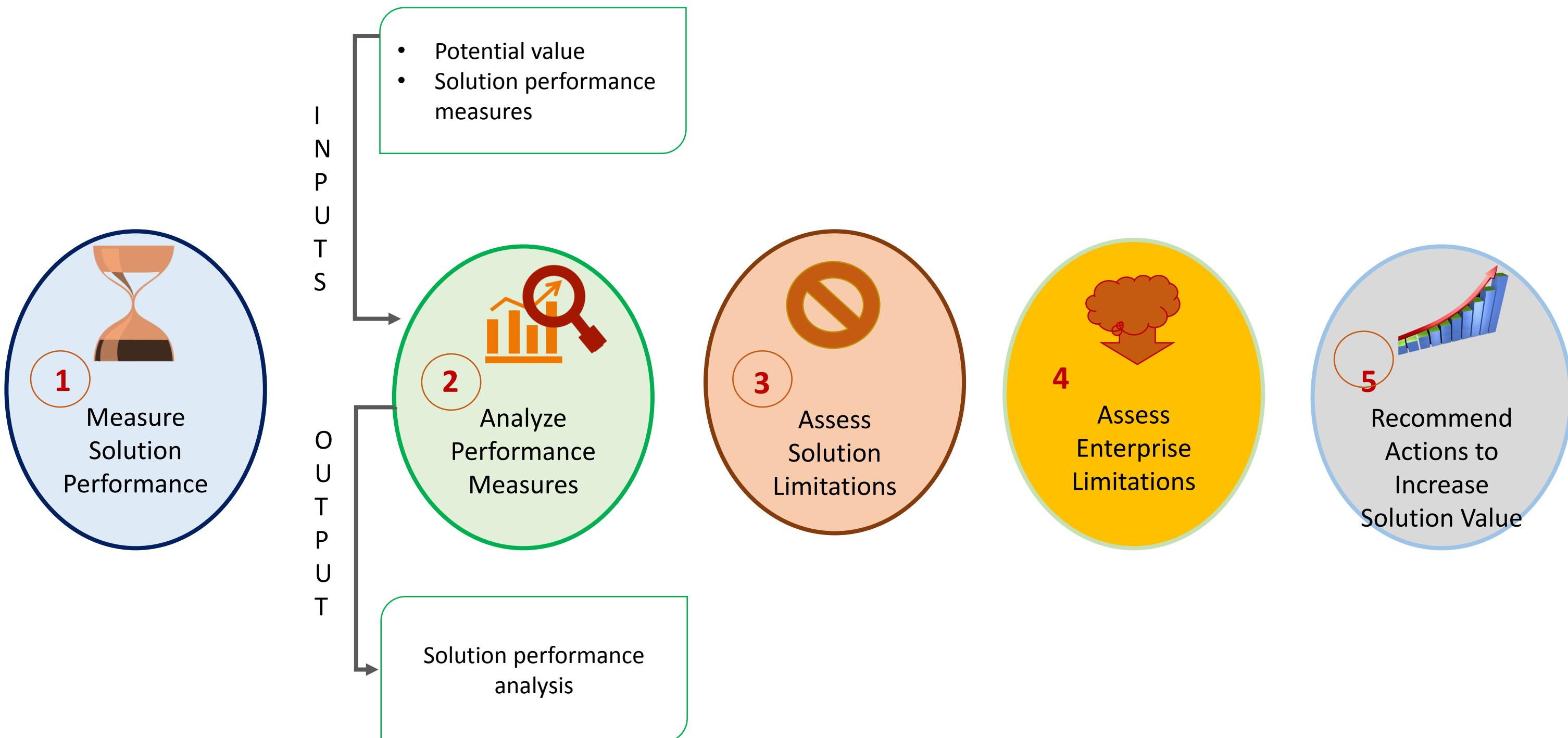
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



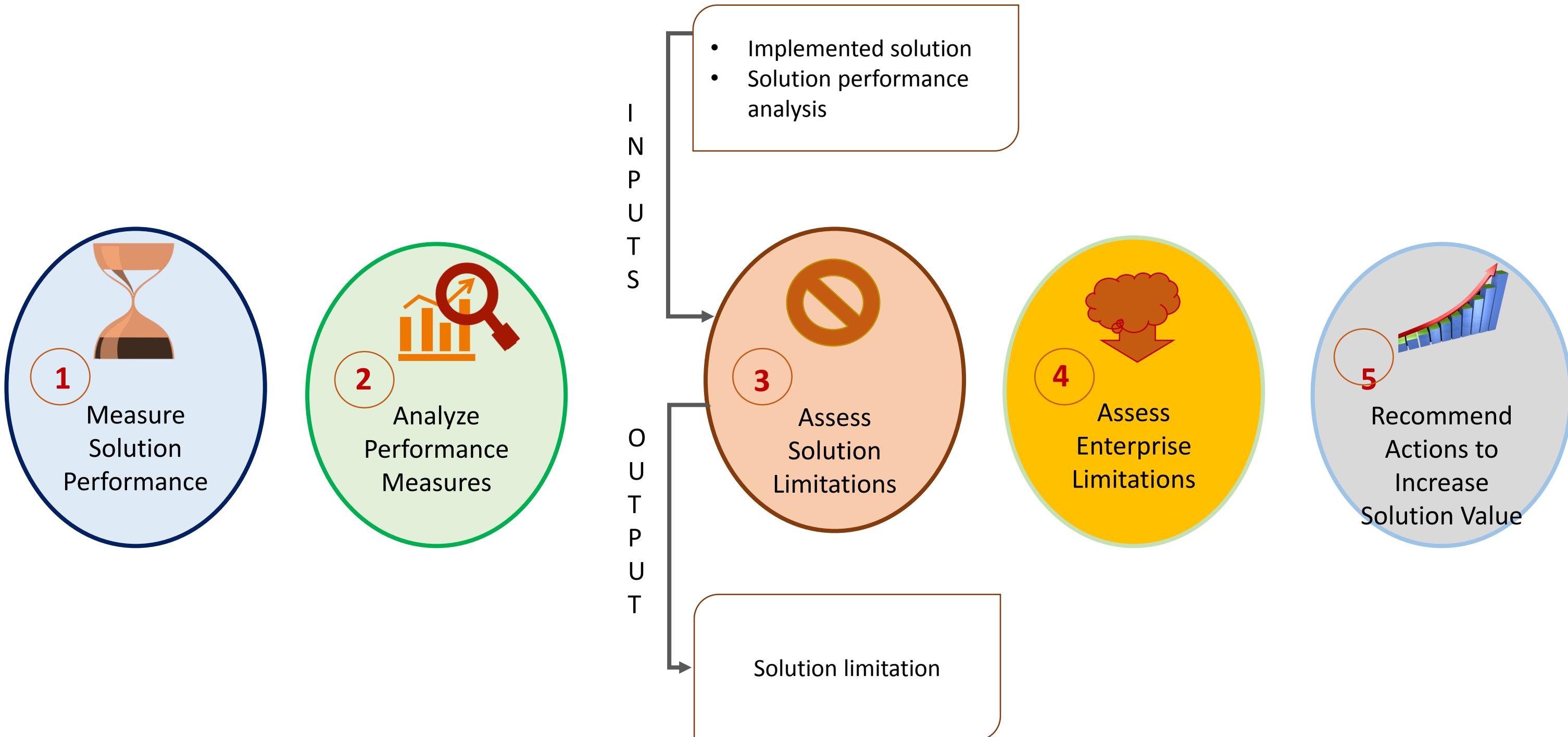
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



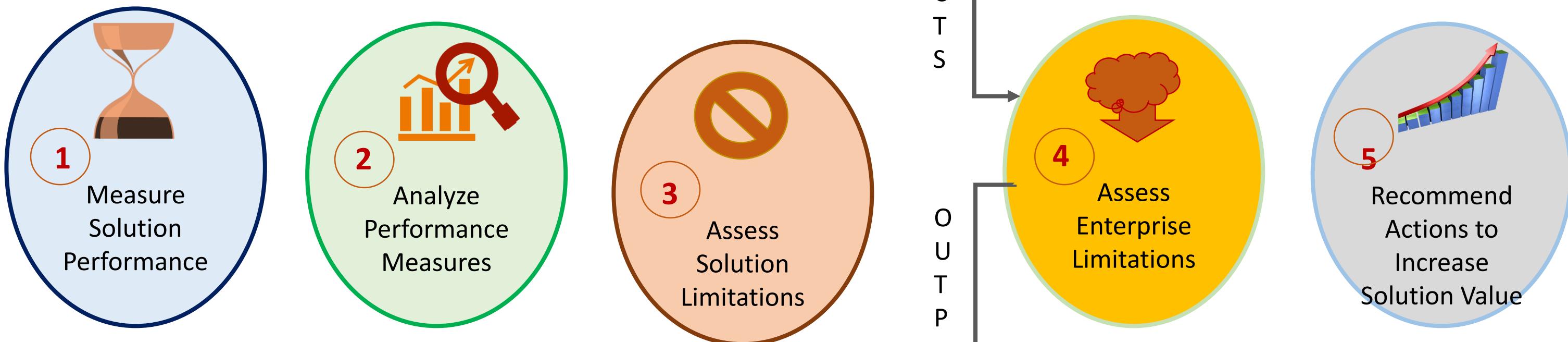
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



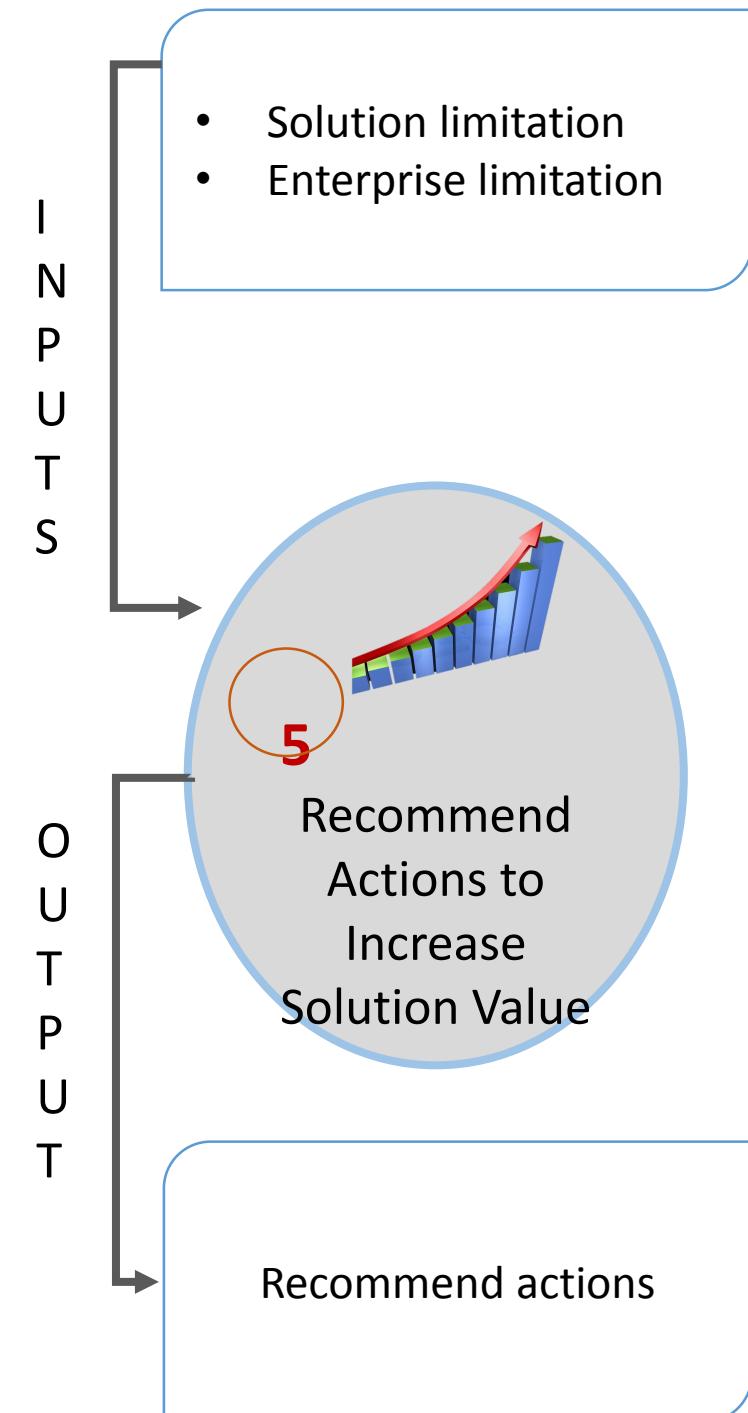
## SOLUTION EVALUATION (contd.)

### INPUTS, TASKS, AND OUTPUT



## SOLUTION EVALUATION (contd.)

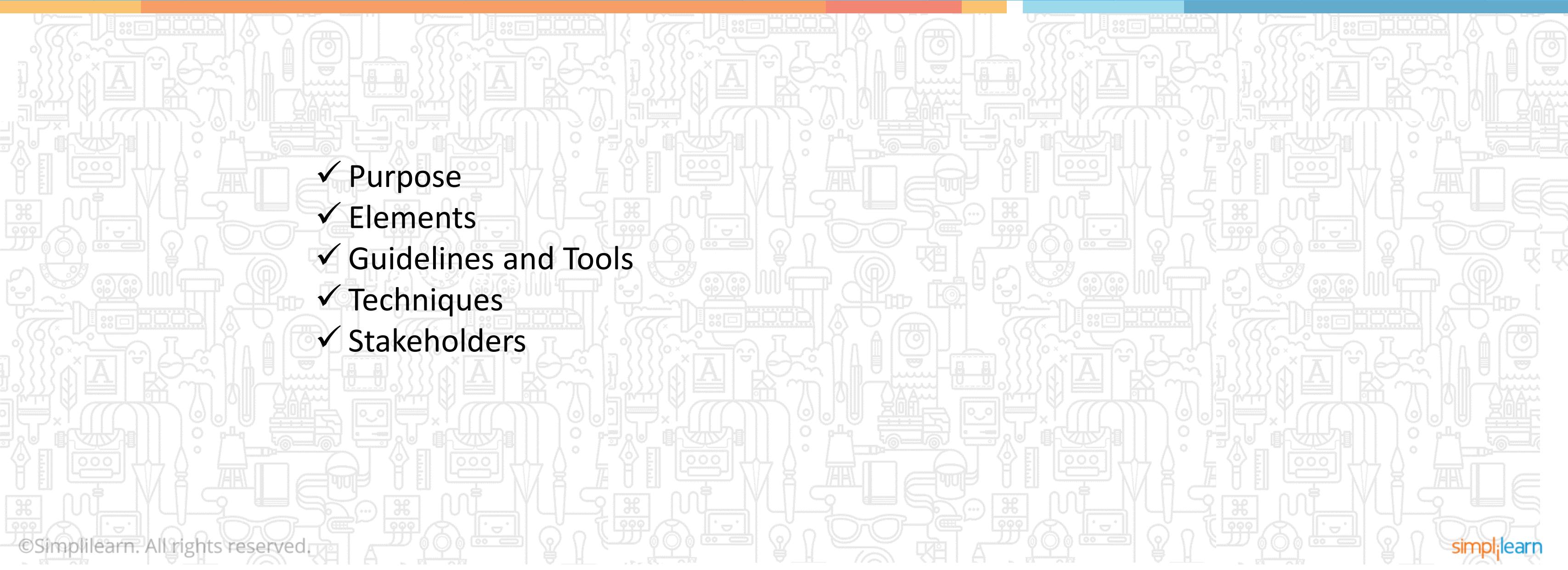
### INPUTS, TASKS, AND OUTPUT



# Lesson 8: Solution Evaluation

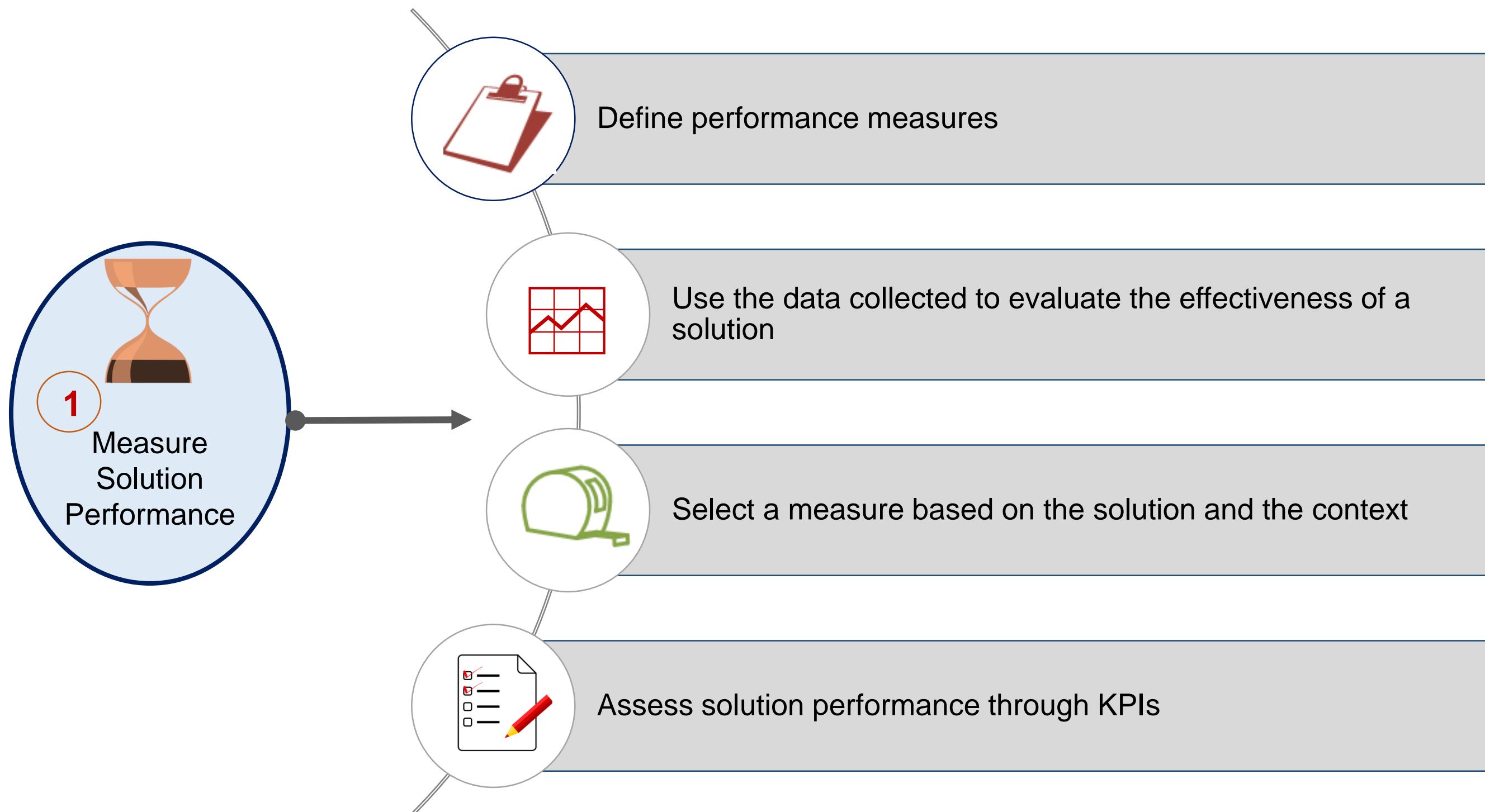
## Topic 8.1: Measure Solution Performance

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



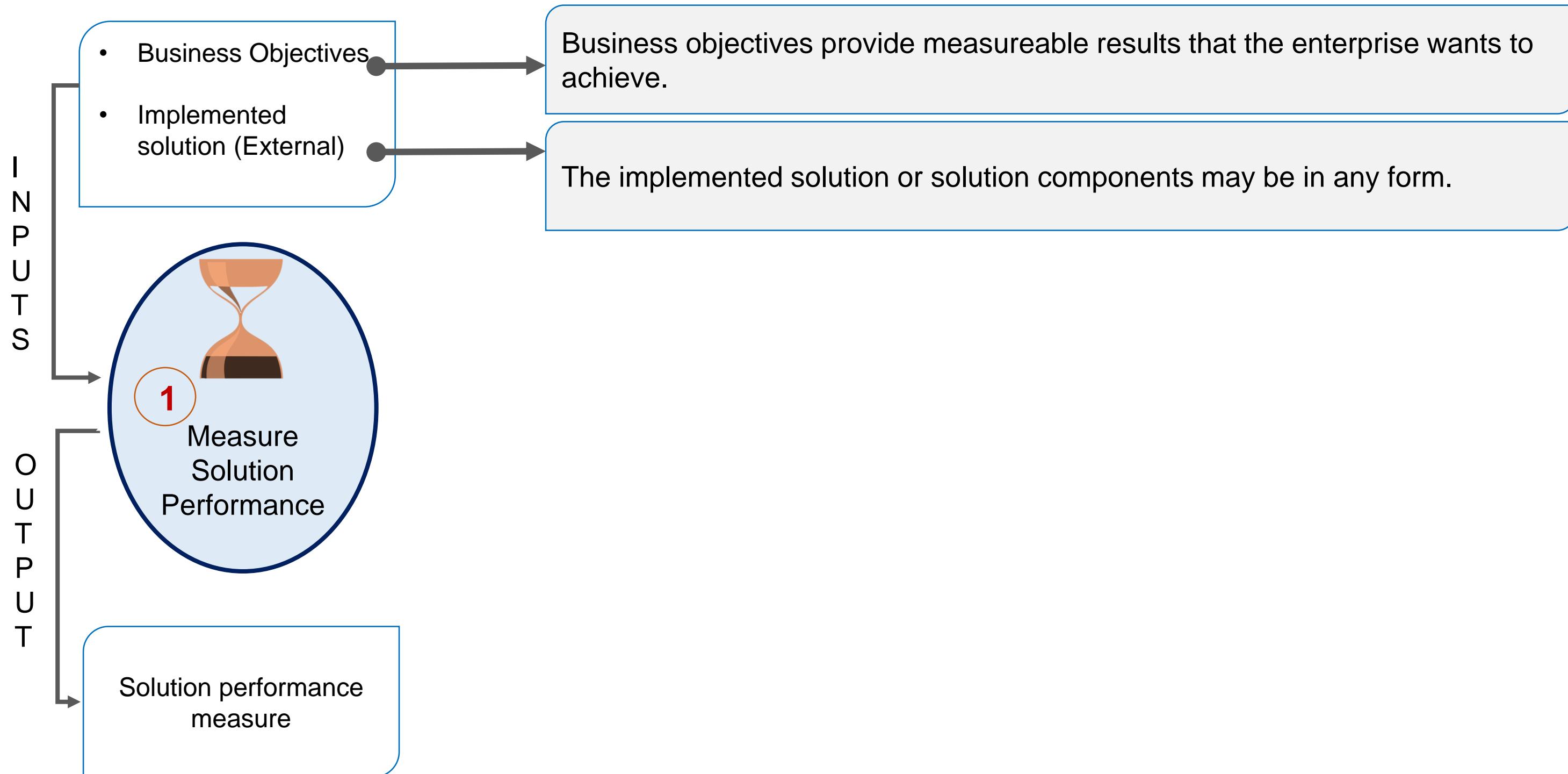
# MEASURE SOLUTION PERFORMANCE

## PURPOSE



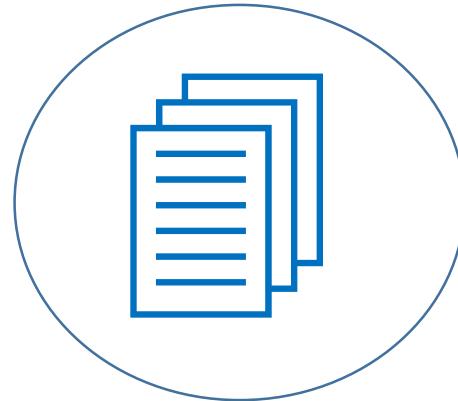
## MEASURE SOLUTION PERFORMANCE (contd.)

### PURPOSE



# MEASURE SOLUTION PERFORMANCE

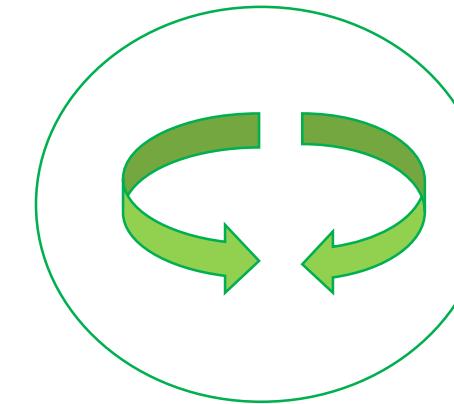
## ELEMENTS



### DEFINE



### VALIDATE



### COLLECT

#### Solution performance measures

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

## MEASURE SOLUTION PERFORMANCE (contd.)

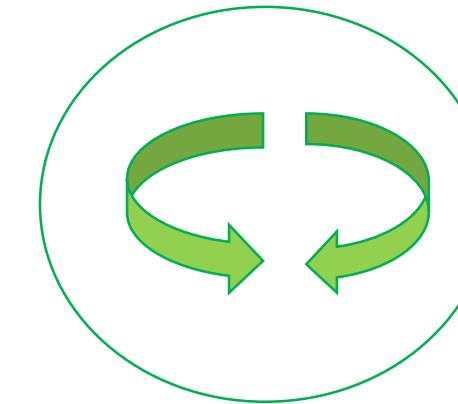
### ELEMENTS



**DEFINE**



**VALIDATE**



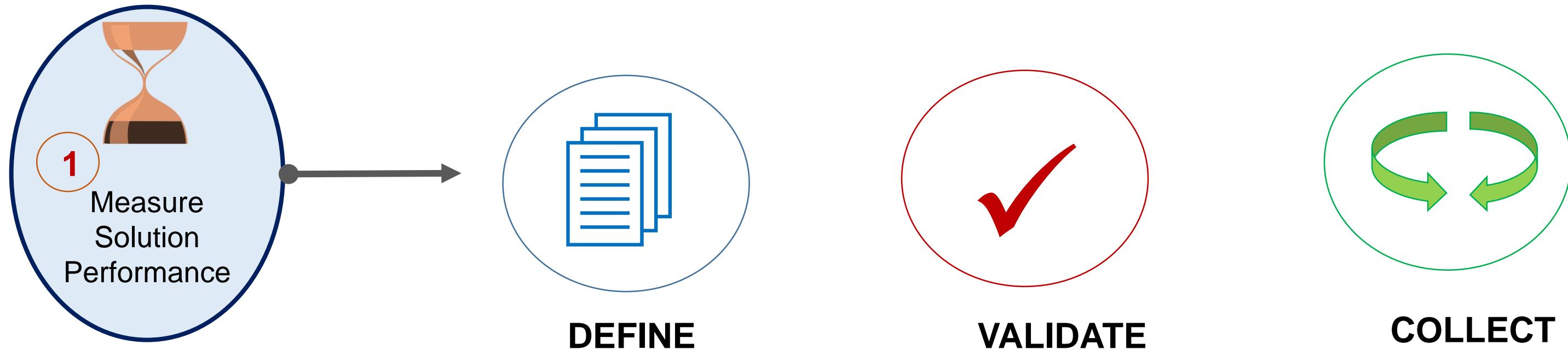
**COLLECT**

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



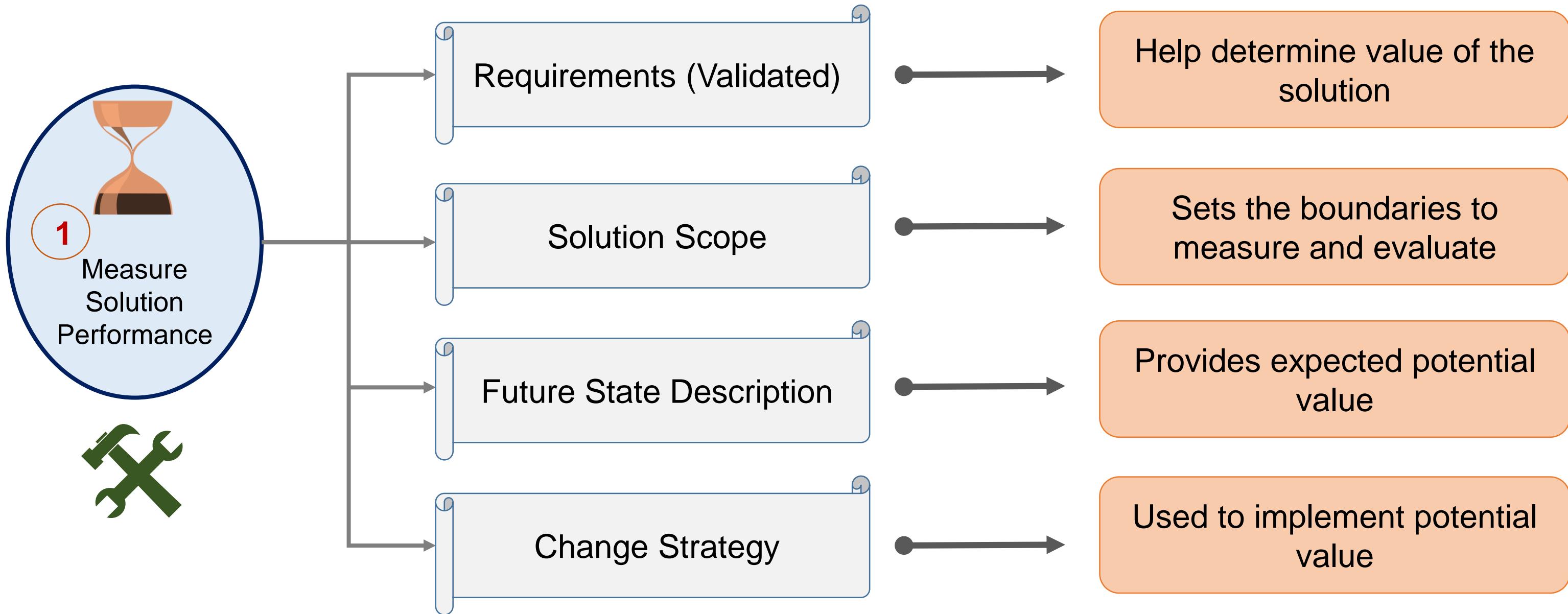
To collect performance measures:

- Consider volume or sample size
- Consider frequency and timing

# MEASURE SOLUTION PERFORMANCE

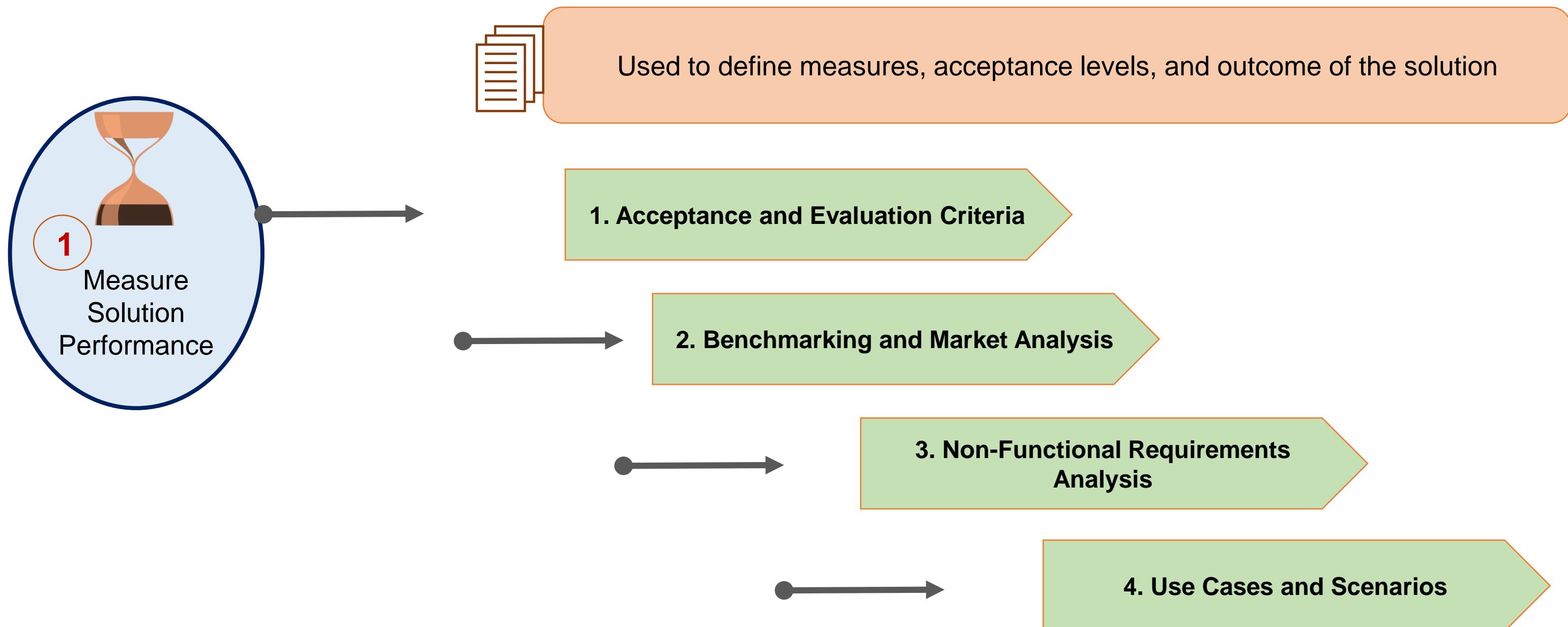
## GUIDELINES AND TOOLS

The business analyst may use the following guidelines and tools.



# MEASURE SOLUTION PERFORMANCE TECHNIQUES

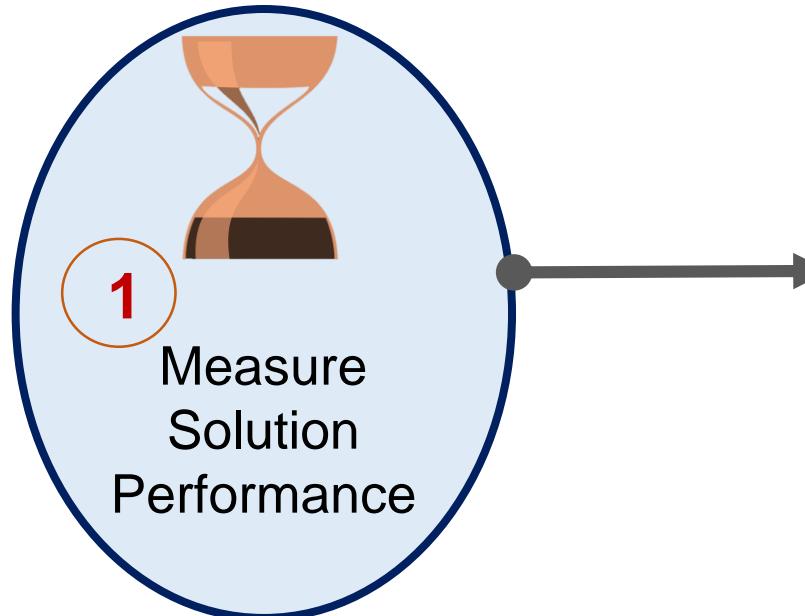
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

There are 13 techniques for measuring solution performance.



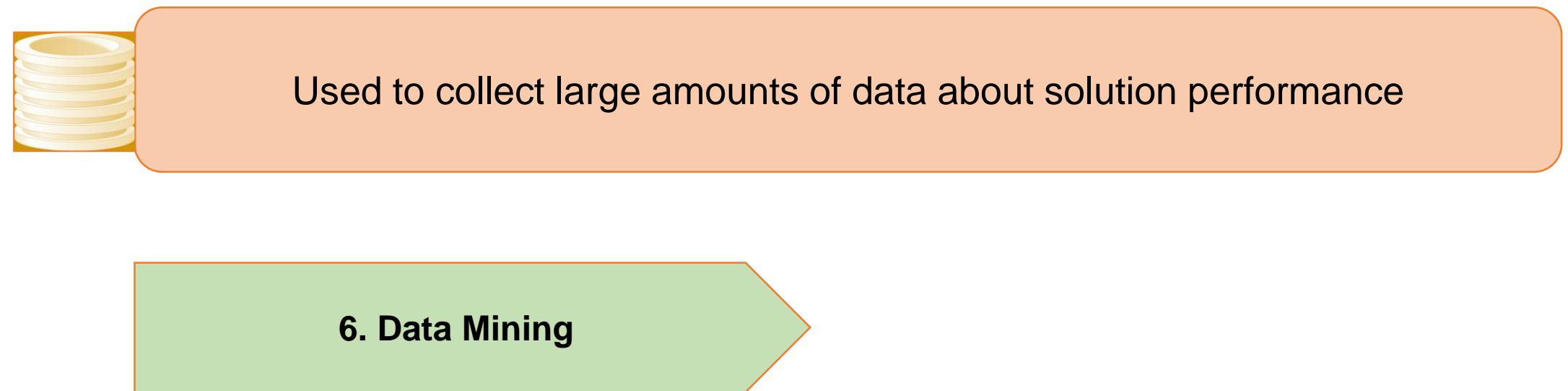
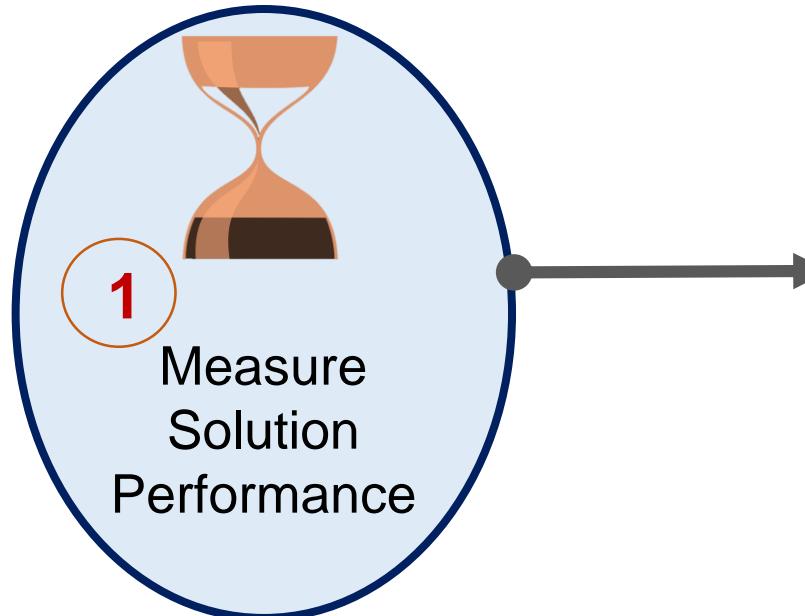
Used to define performance measures for a proposed solution

**5. Business Cases**

## MEASURE SOLUTION PERFORMANCE (contd.)

### TECHNIQUES

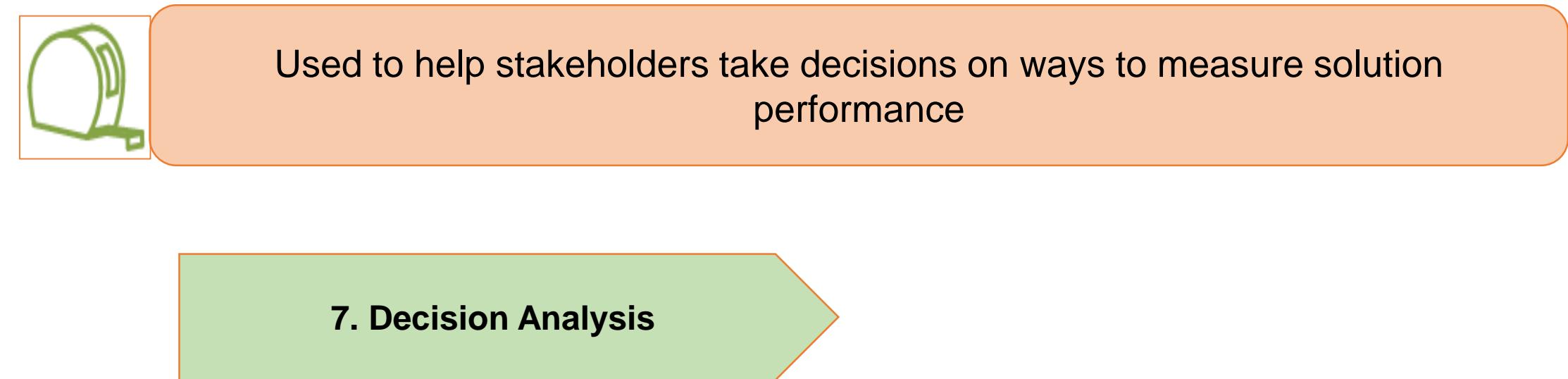
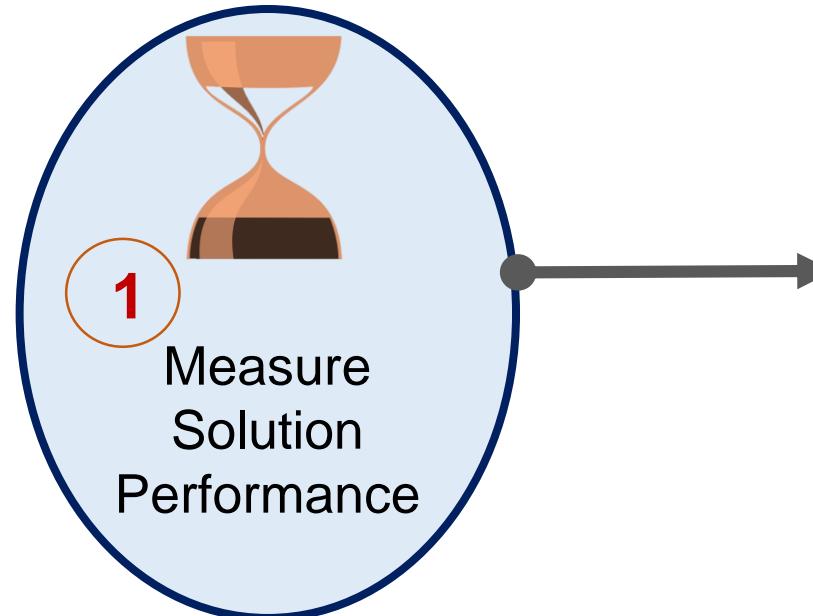
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

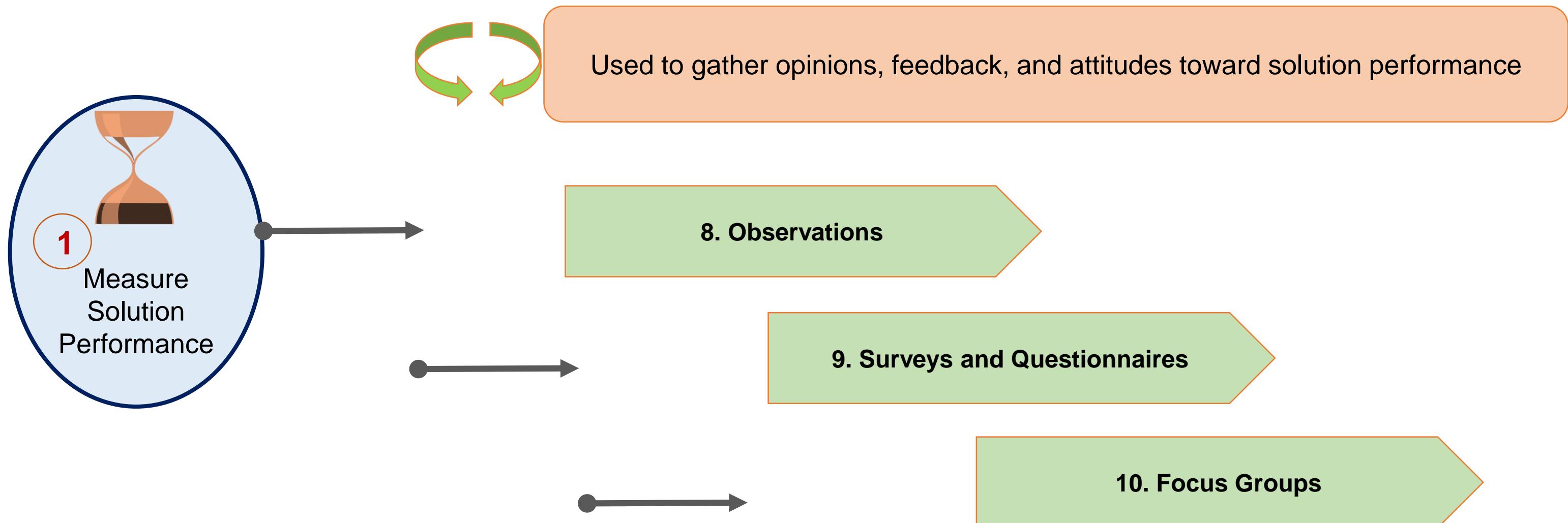
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

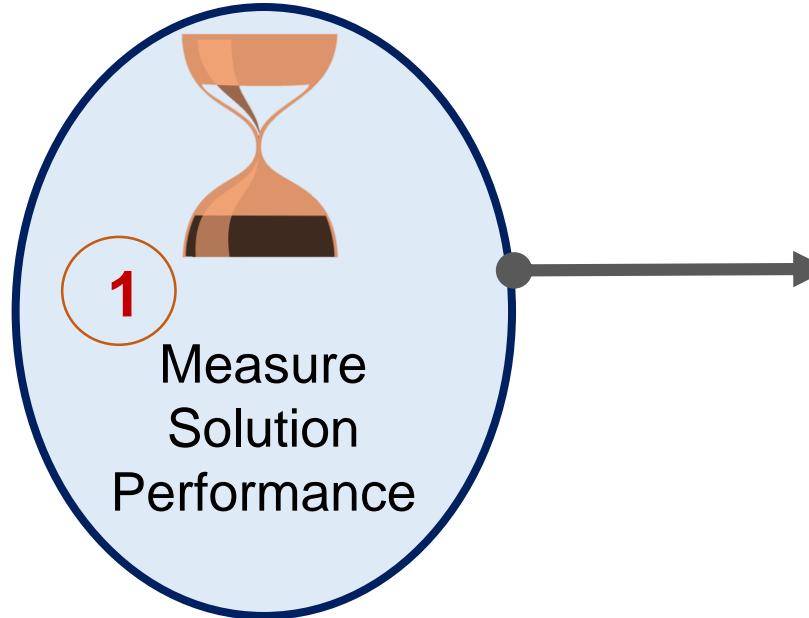
There are 13 techniques for measuring solution performance.



# MEASURE SOLUTION PERFORMANCE (contd.)

## TECHNIQUES

There are 13 techniques for measuring solution performance.



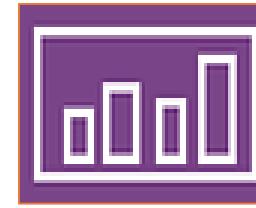
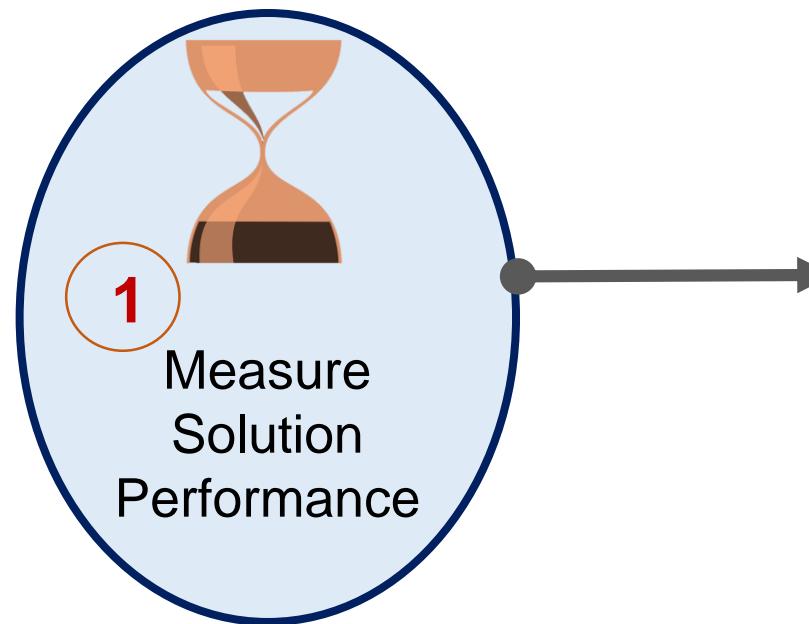
Used to simulate the solution in order to determine solution performance

**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.)

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## TECHNIQUES

There are 13 techniques for measuring solution performance.

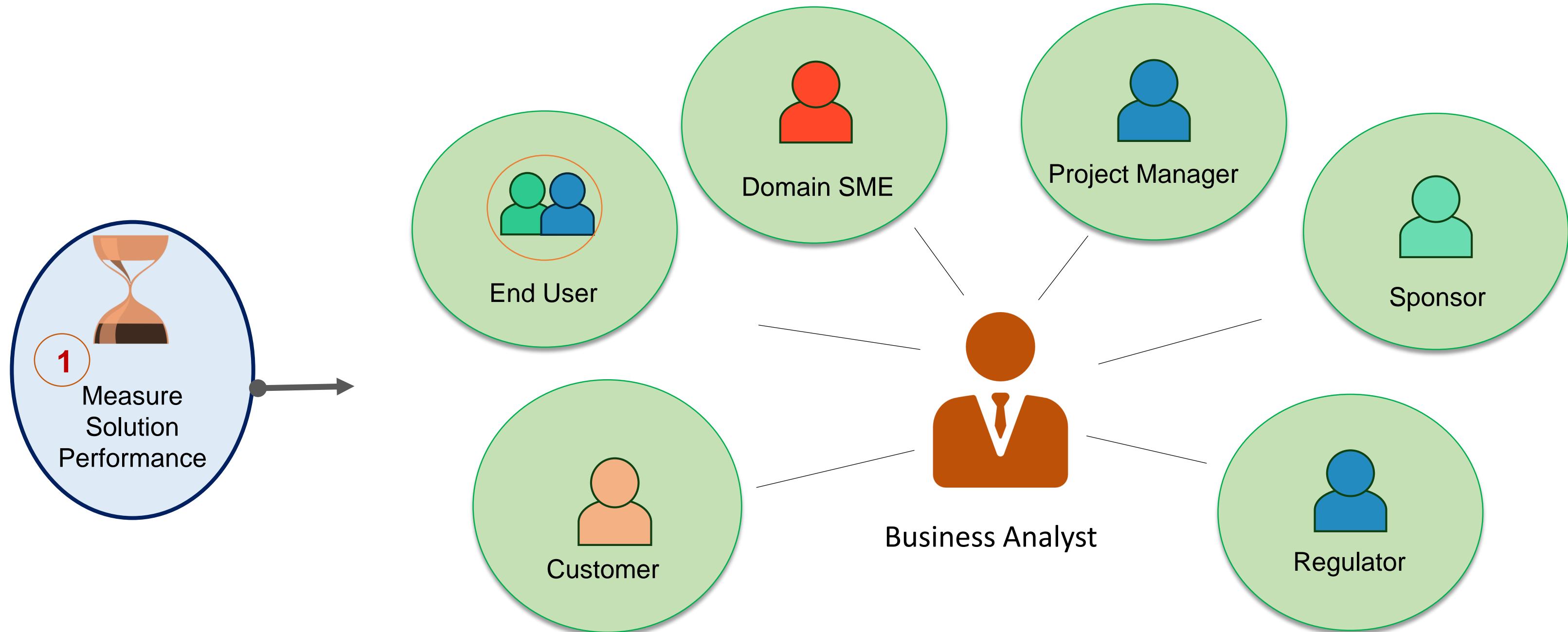


Used to evaluate and select performance measures of vendors that must be included in the solution performance assessment

**13. Vendor Assessment**

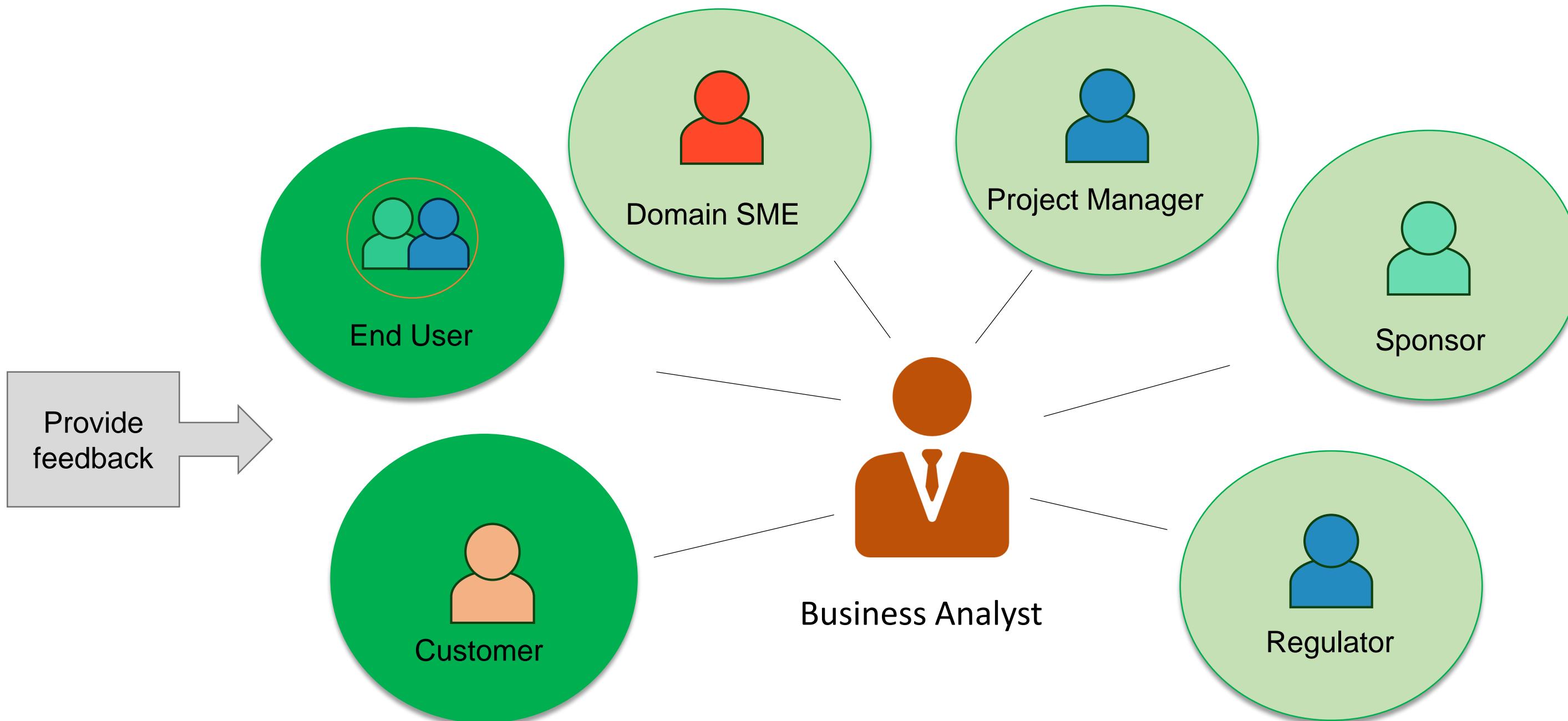
# MEASURE SOLUTION PERFORMANCE

## STAKEHOLDERS

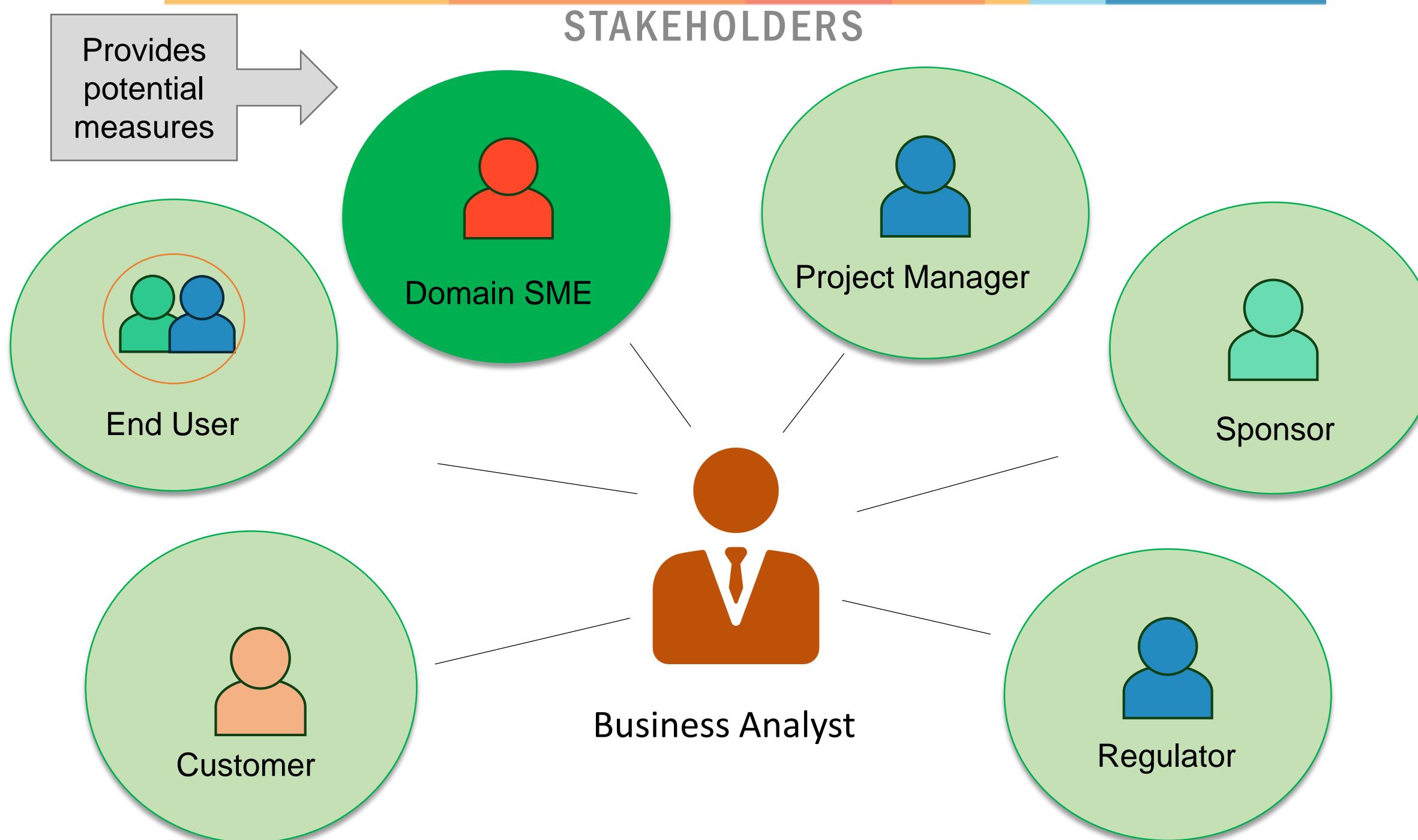


## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS

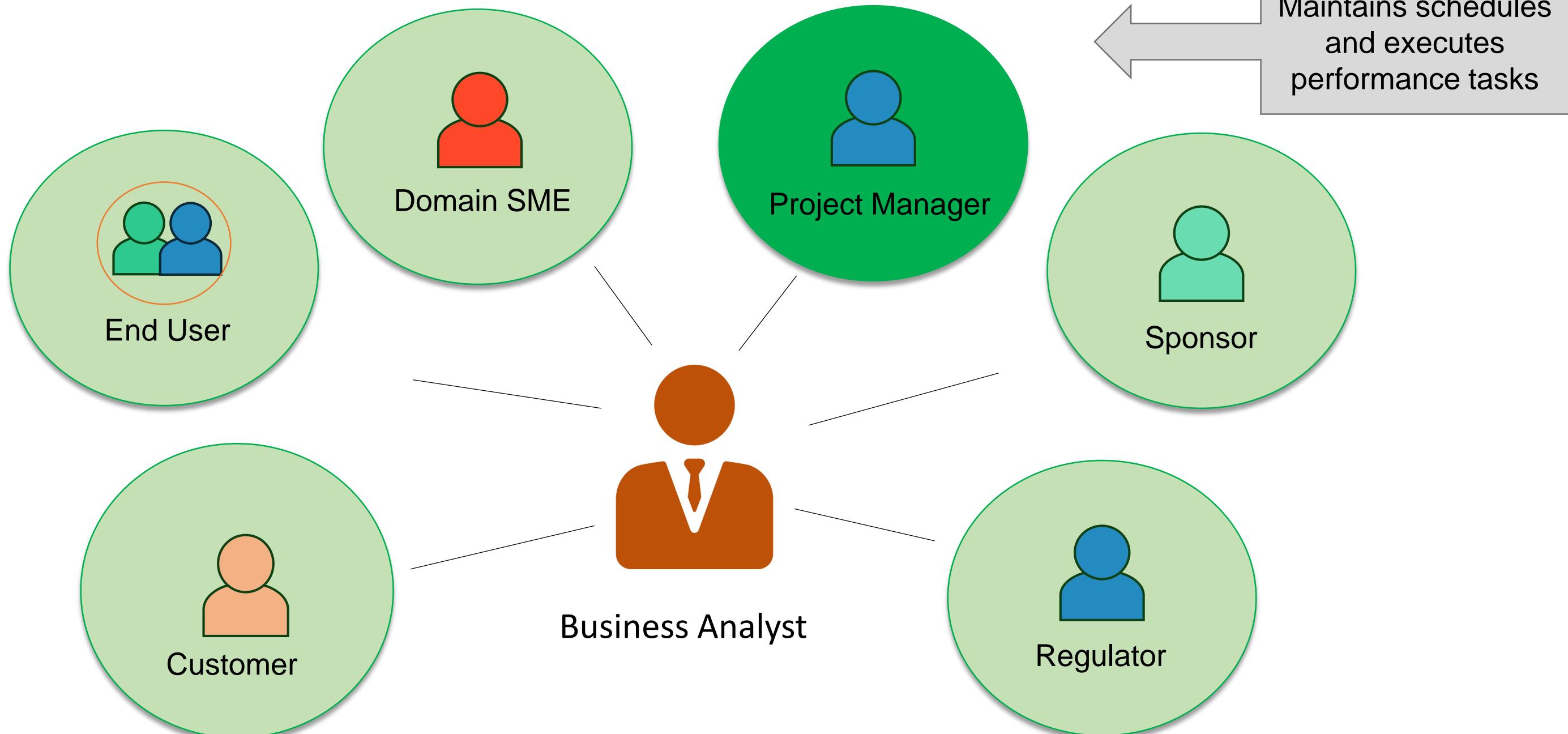


## MEASURE SOLUTION PERFORMANCE (contd.)



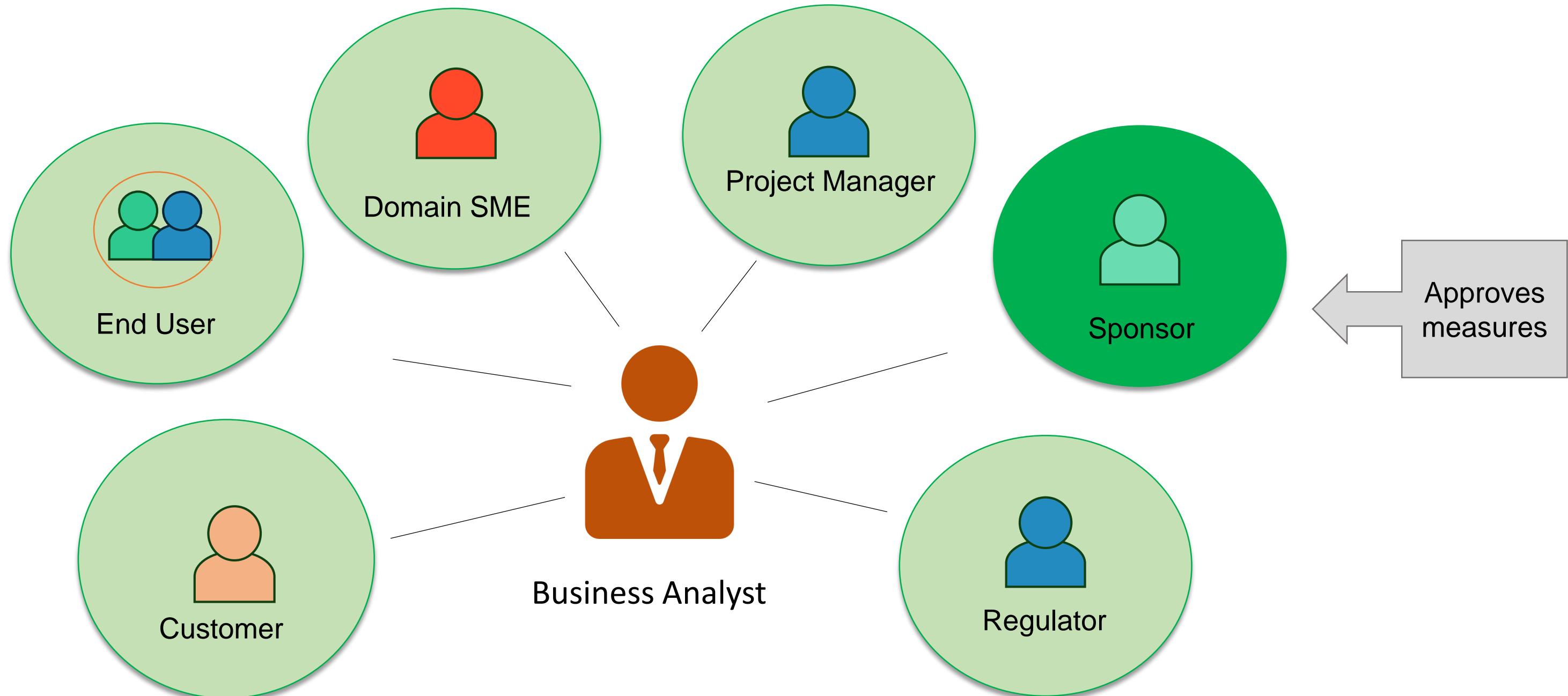
## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS



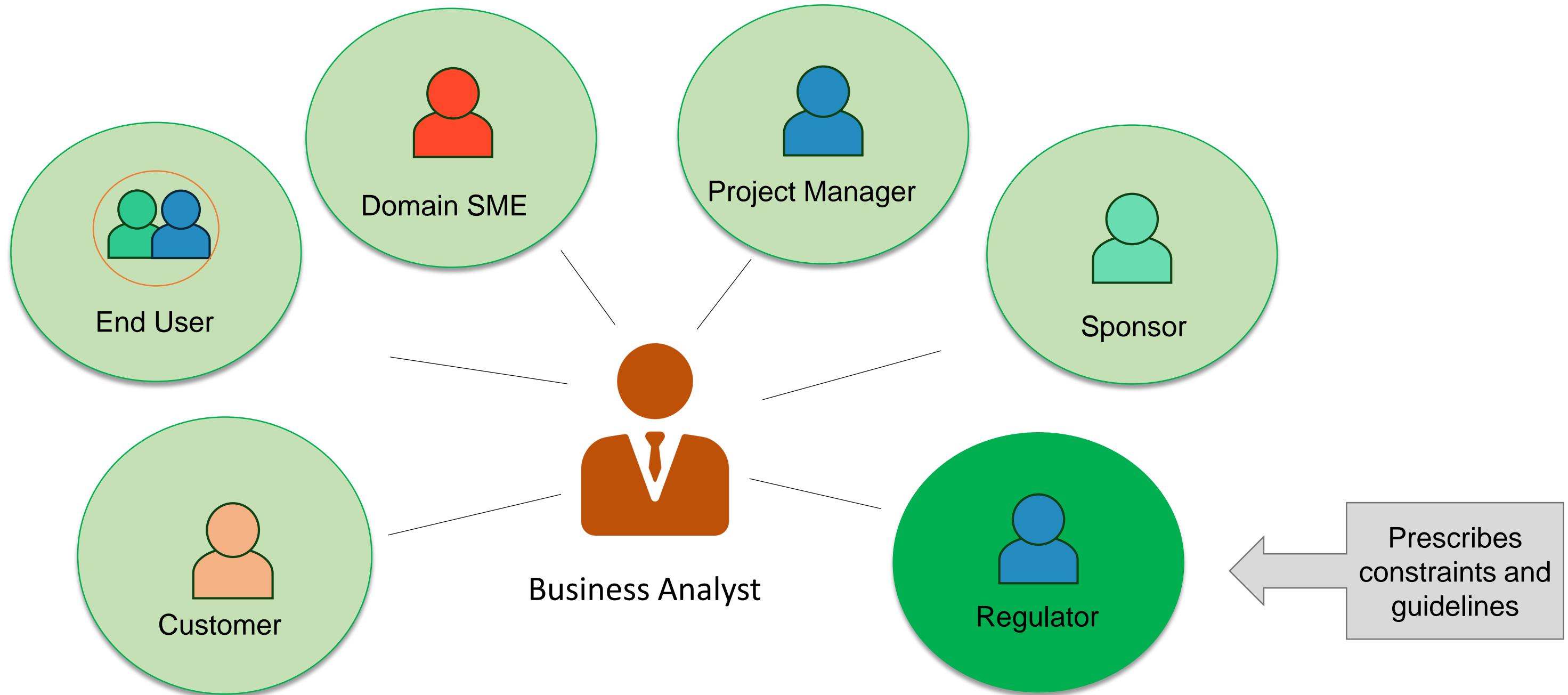
## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS



## MEASURE SOLUTION PERFORMANCE (contd.)

### STAKEHOLDERS



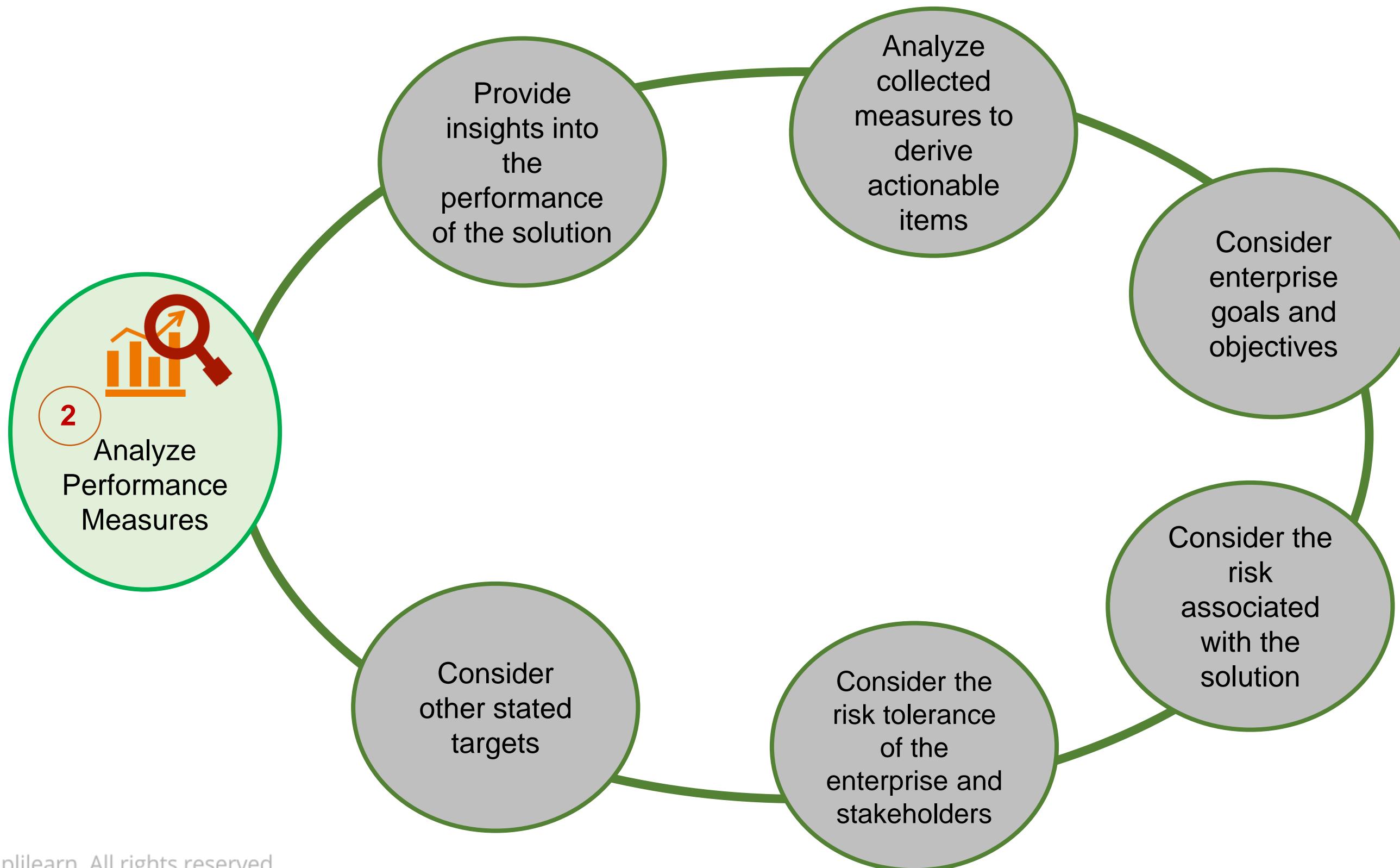
# Lesson 8: Solution Evaluation

## Topic 8.2: Analyze Performance Measures

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

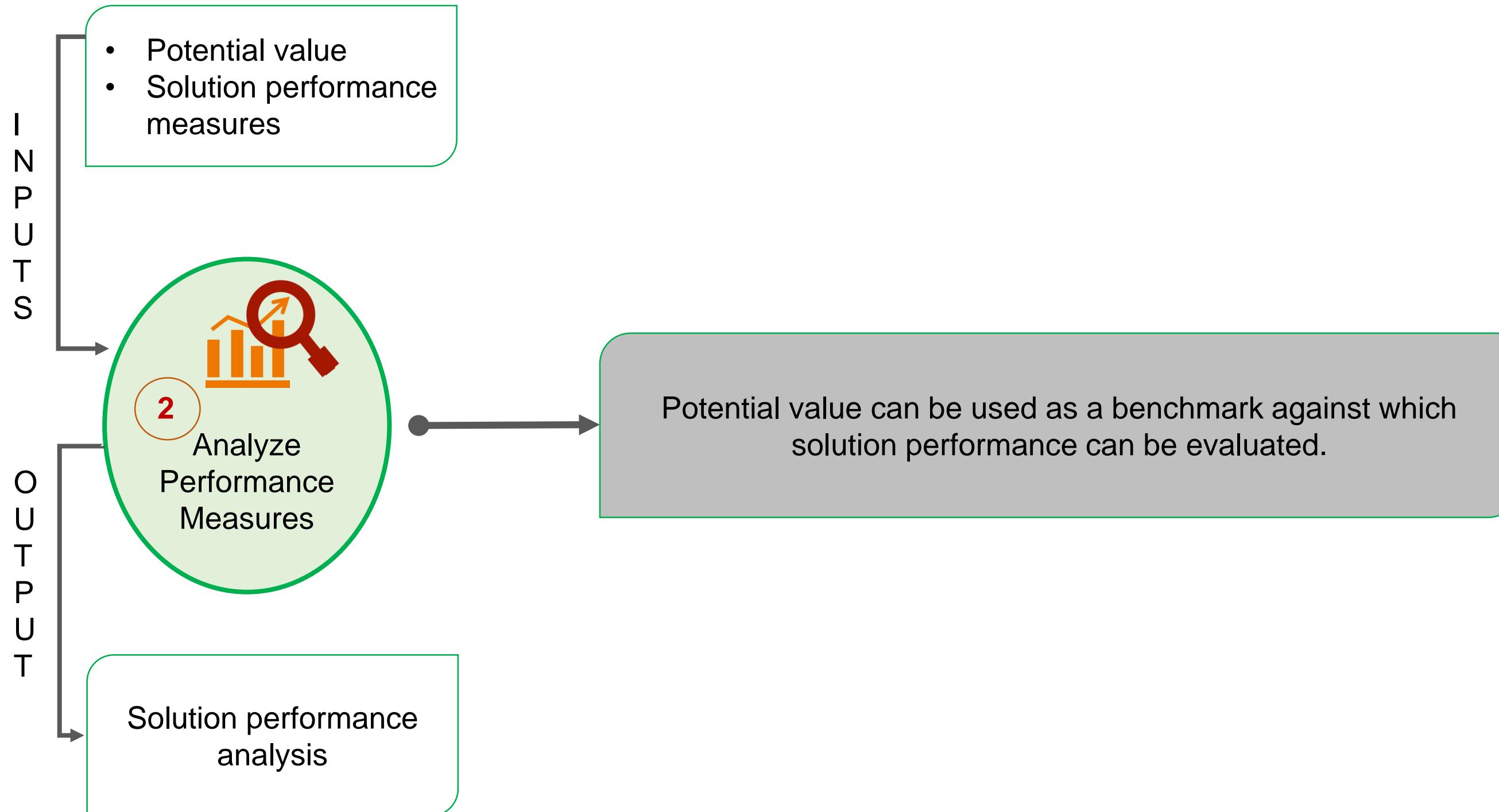
# ANALYZE PERFORMANCE MEASURES

## PURPOSE



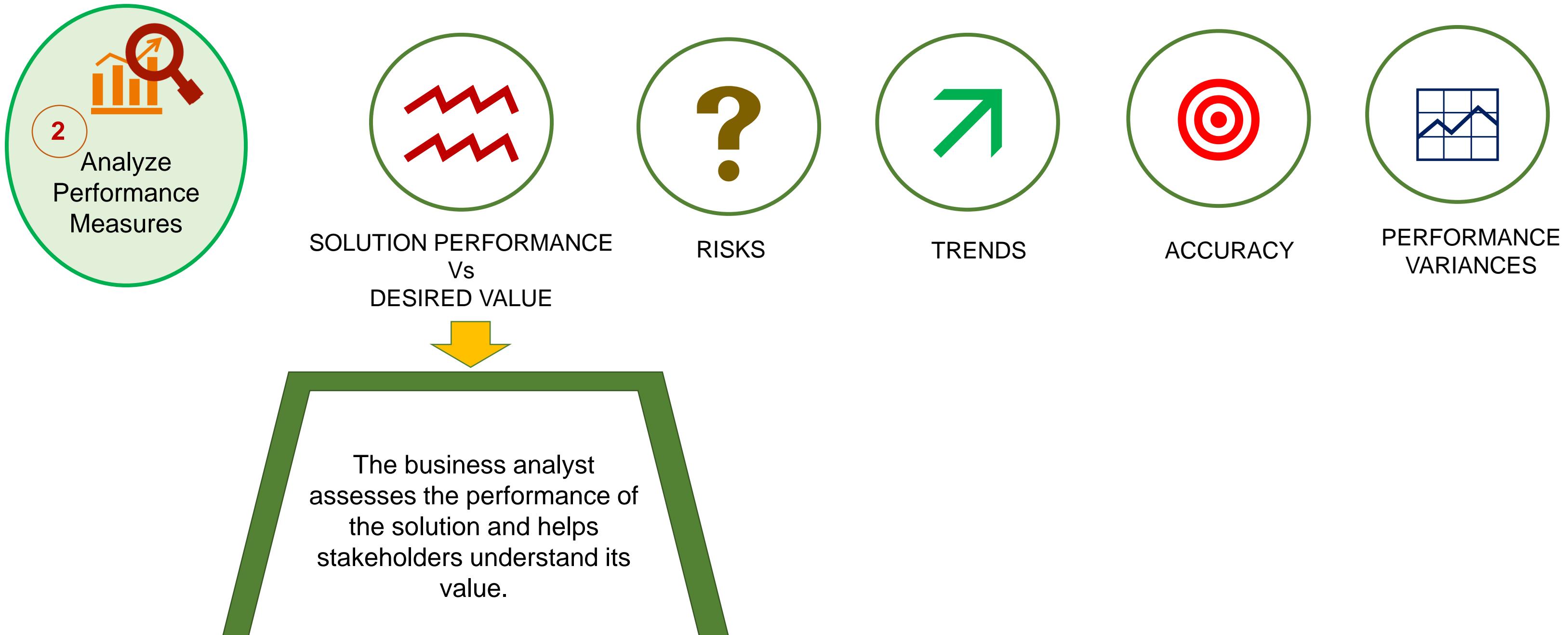
## ANALYZE PERFORMANCE MEASURES

### PURPOSE



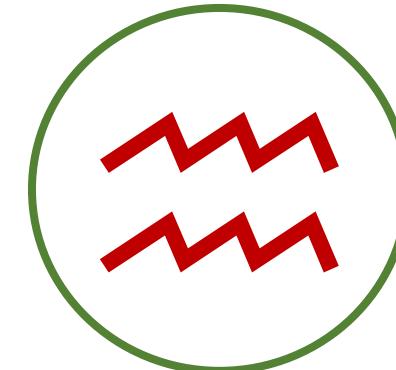
# ANALYZE PERFORMANCE MEASURES

## ELEMENTS



## ANALYZE PERFORMANCE MEASURES (contd.)

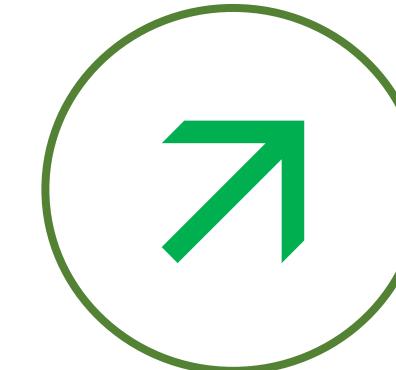
### ELEMENTS



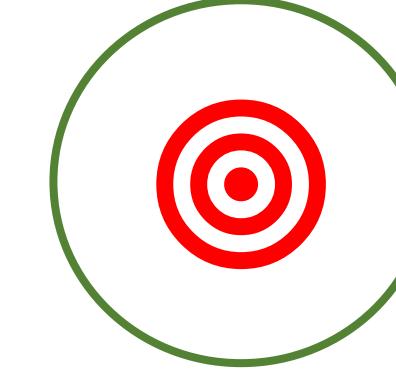
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



RISKS



TRENDS



ACCURACY



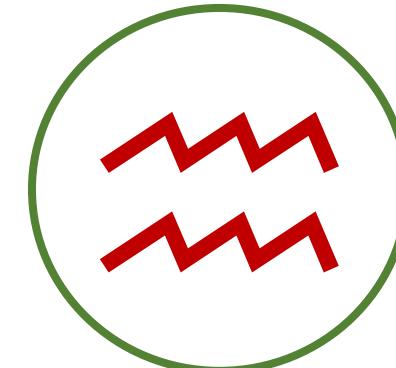
PERFORMANCE  
VARIANCES



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

## ANALYZE PERFORMANCE MEASURES (contd.)

### ELEMENTS



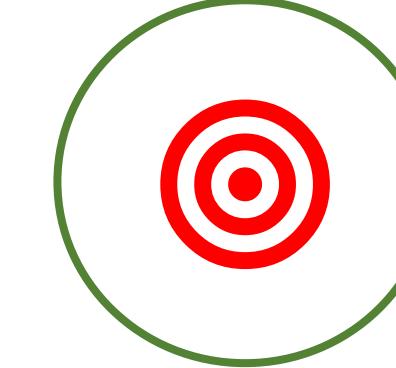
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



RISKS



TRENDS



ACCURACY

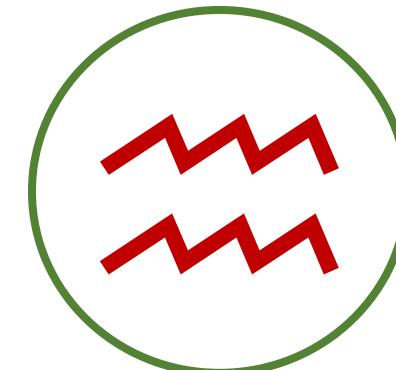


PERFORMANCE  
VARIANCES

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

## ANALYZE PERFORMANCE MEASURES (contd.)

### ELEMENTS



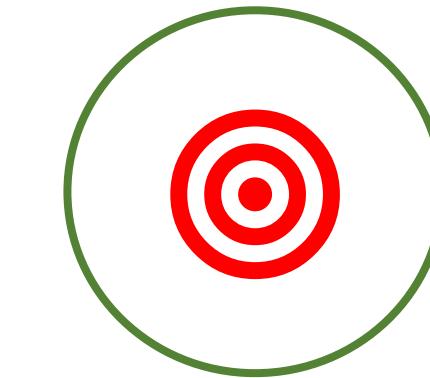
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



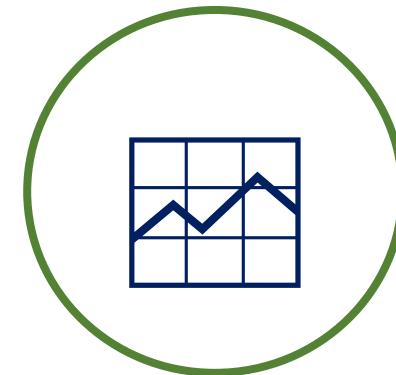
RISKS



TRENDS



ACCURACY



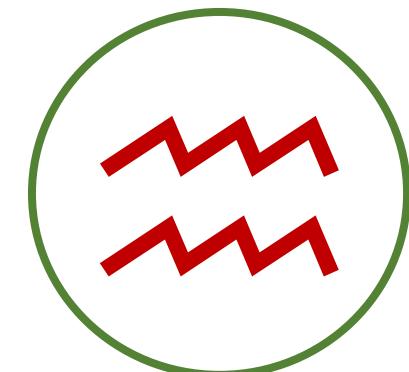
PERFORMANCE  
VARIANCES



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

## ANALYZE PERFORMANCE MEASURES (contd.)

### ELEMENTS



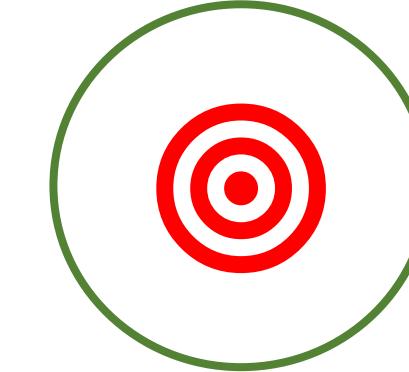
SOLUTION PERFORMANCE  
Vs.  
DESIRED VALUE



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

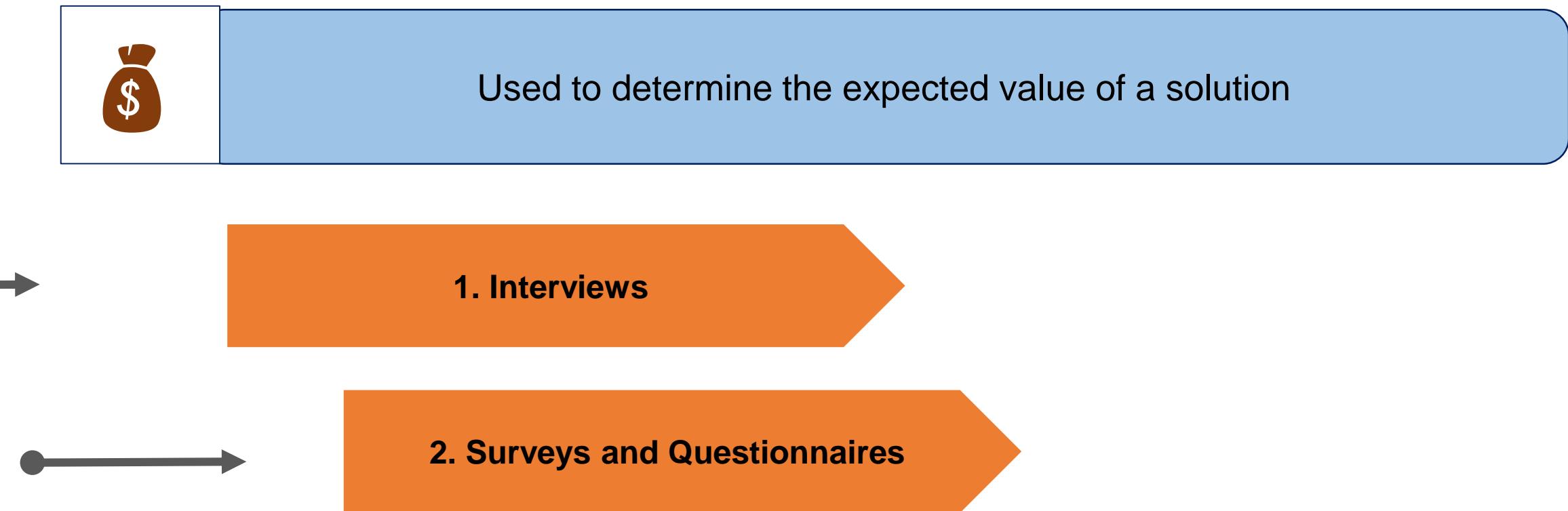
## GUIDELINES AND TOOLS

The business analyst may use the following guidelines and tools.



# ANALYZE PERFORMANCE MEASURES TECHNIQUES

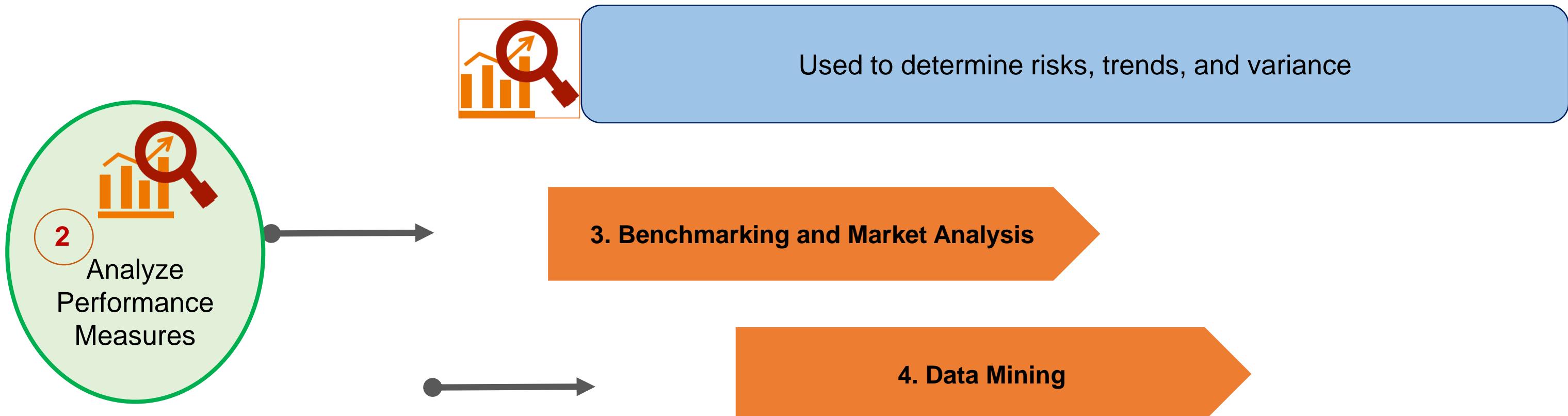
There are 9 techniques for analyzing performance measures.



# ANALYZE PERFORMANCE MEASURES (contd.)

## TECHNIQUES

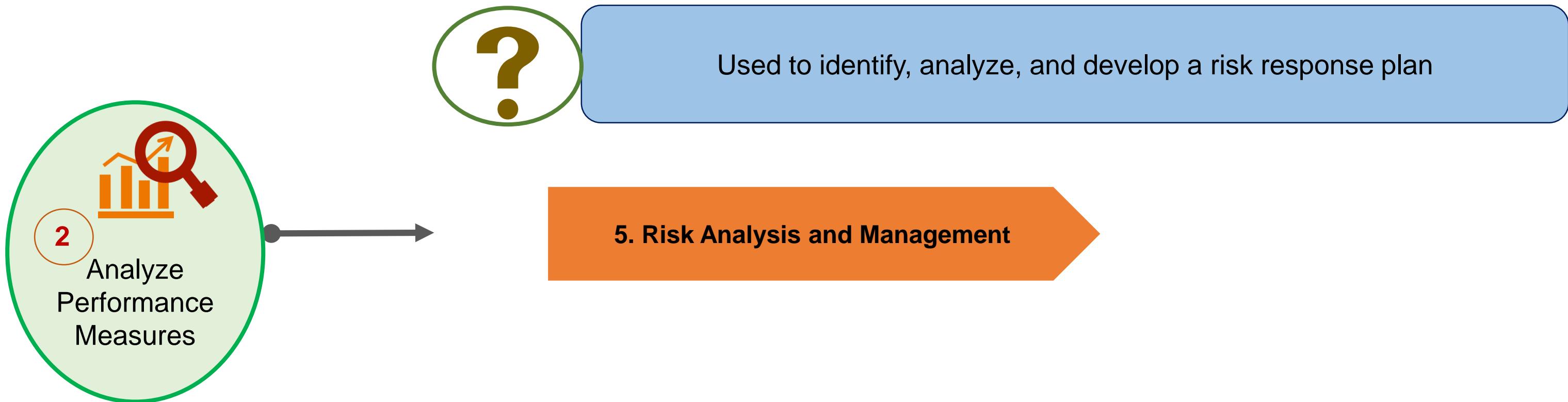
There are 9 techniques for analyzing performance measures.



## ANALYZE PERFORMANCE MEASURES (contd.)

### TECHNIQUES

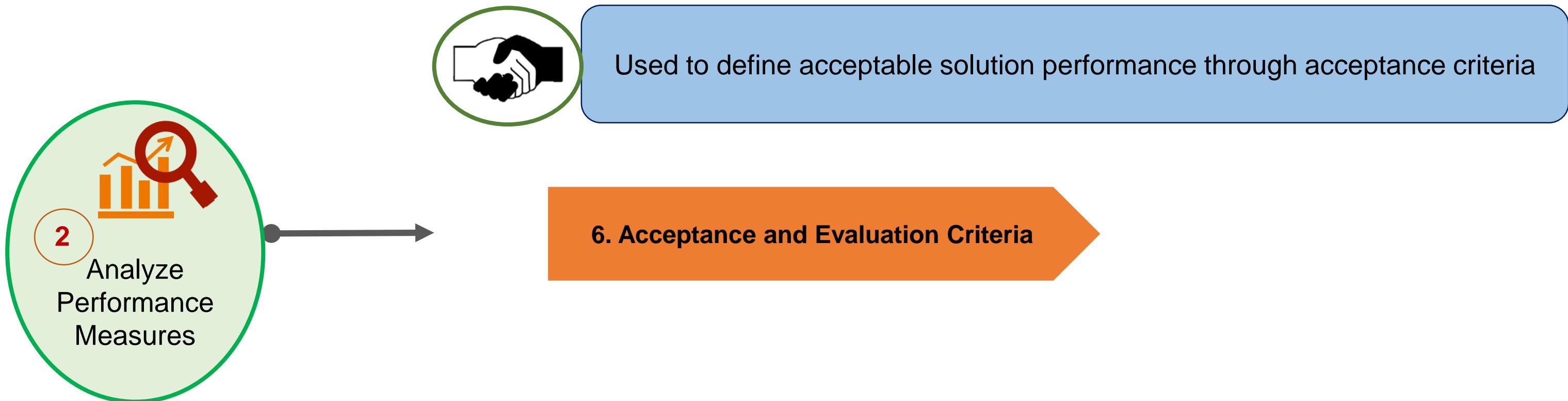
There are 9 techniques for analyzing performance measures.



## ANALYZE PERFORMANCE MEASURES (contd.)

### TECHNIQUES

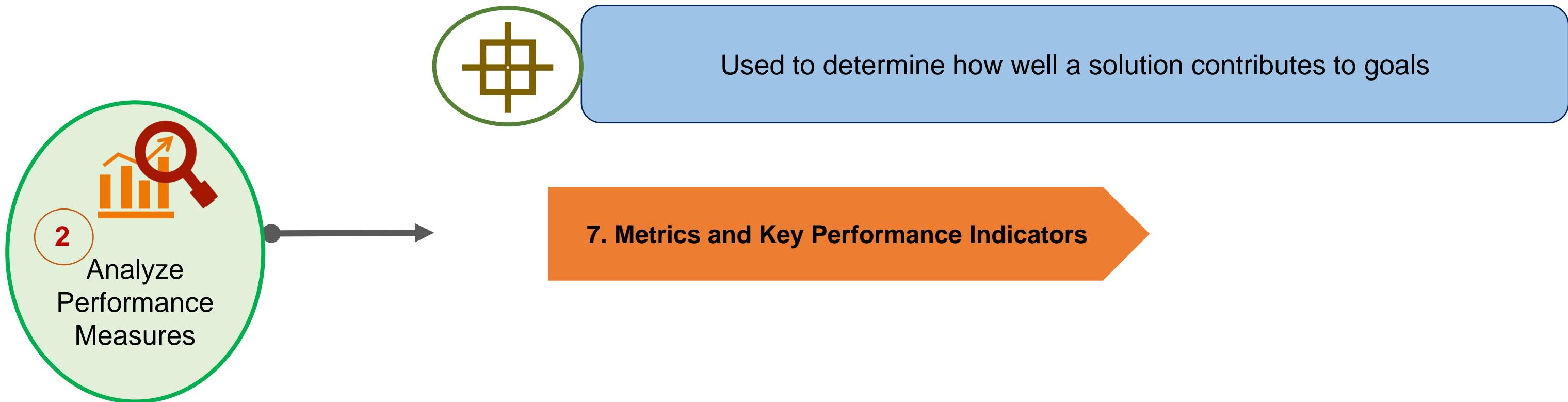
There are 9 techniques for analyzing performance measures.



## ANALYZE PERFORMANCE MEASURES (contd.)

### TECHNIQUES

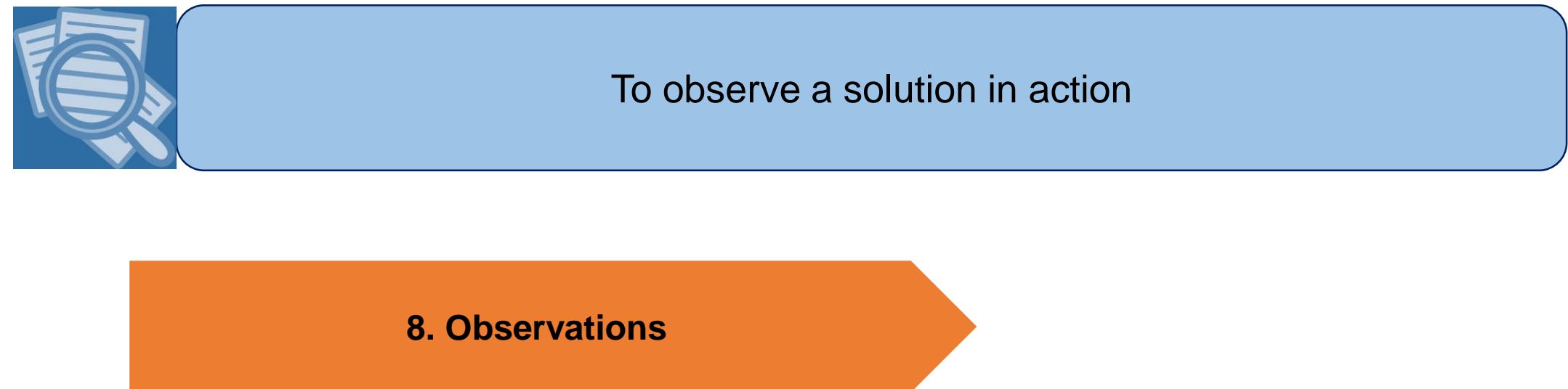
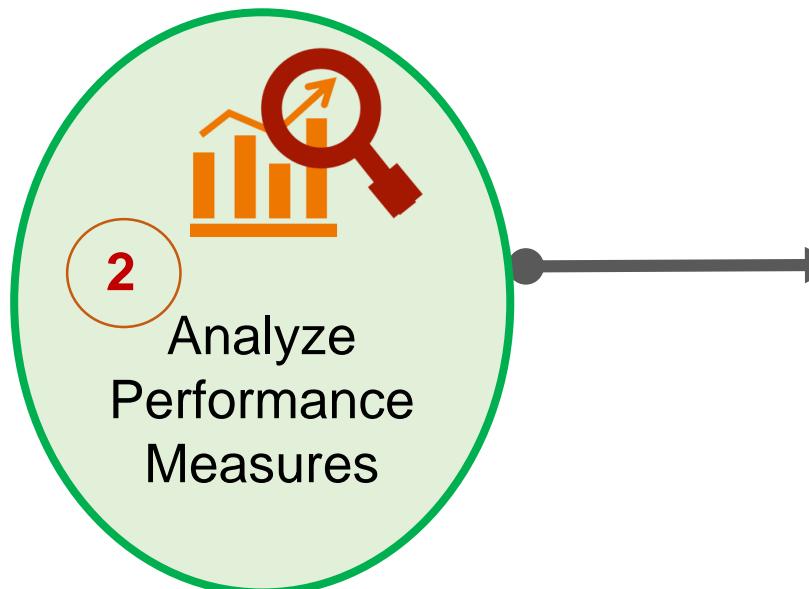
There are 9 techniques for analyzing performance measures.



# ANALYZE PERFORMANCE MEASURES (contd.)

## TECHNIQUES

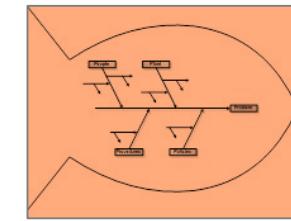
There are 9 techniques for analyzing performance measures.



## ANALYZE PERFORMANCE MEASURES (contd.)

### TECHNIQUES

There are 9 techniques for analyzing performance measures.



Used to determine causes of performance variance

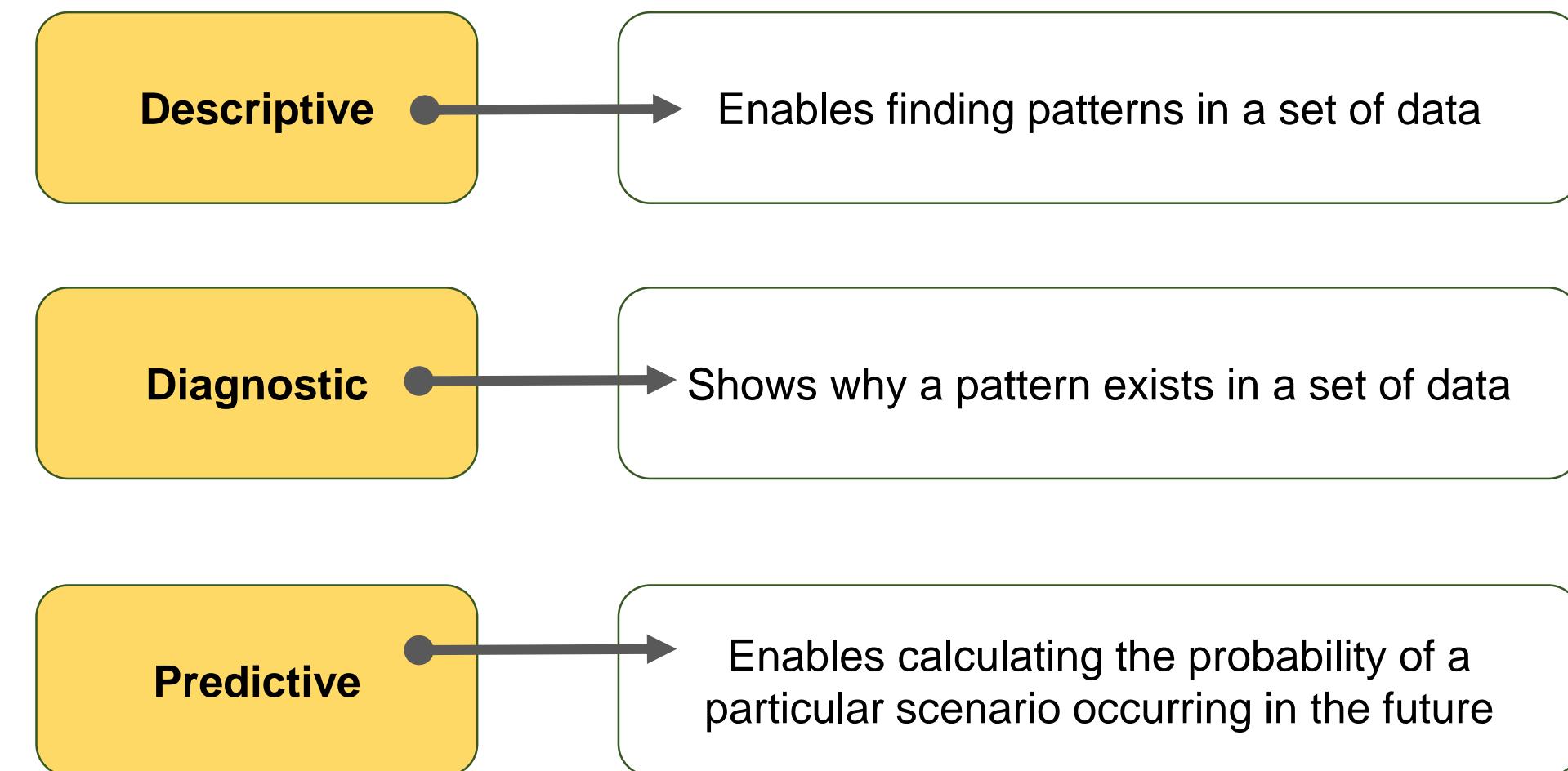
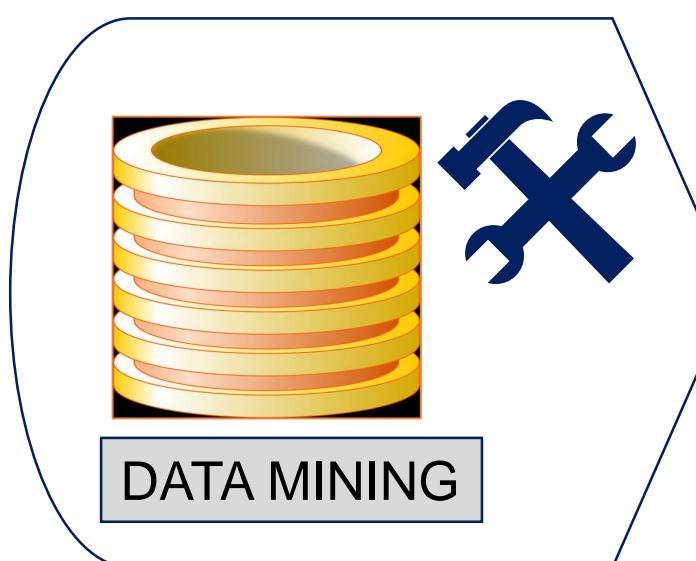
**9. Root Cause Analysis**

# ANALYZE PERFORMANCE MEASURES

## DATA MINING

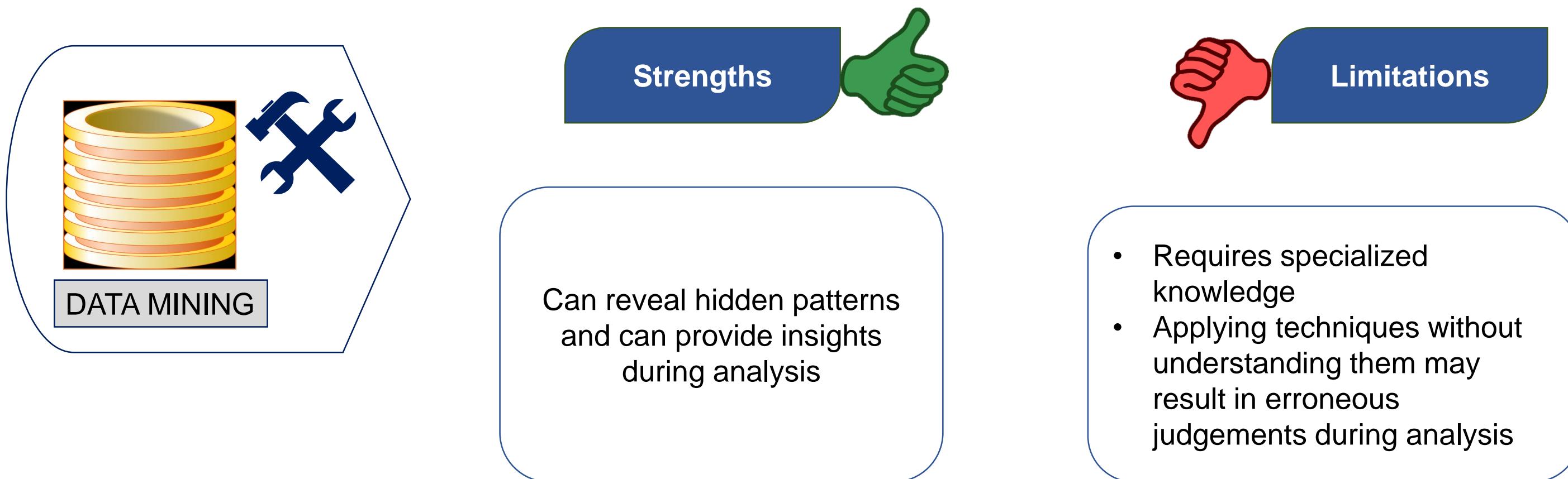
### Data Mining:

- 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.



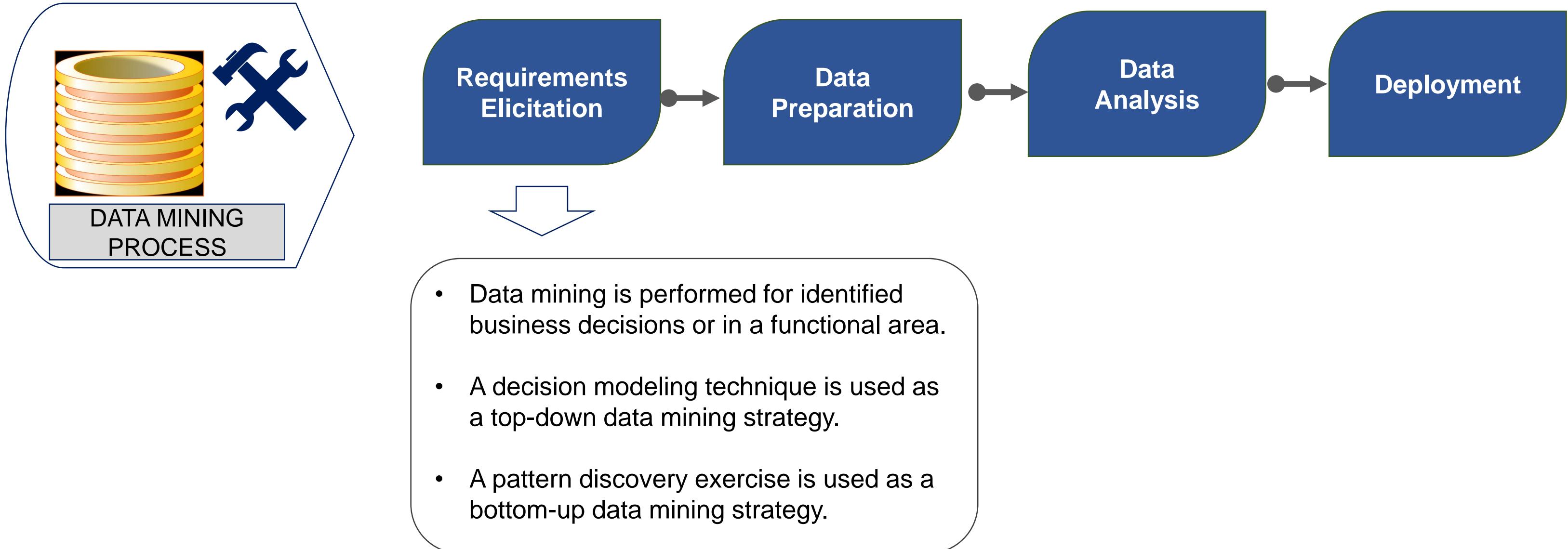
# ANALYZE PERFORMANCE MEASURES

## DATA MINING – STRENGTHS AND LIMITATIONS



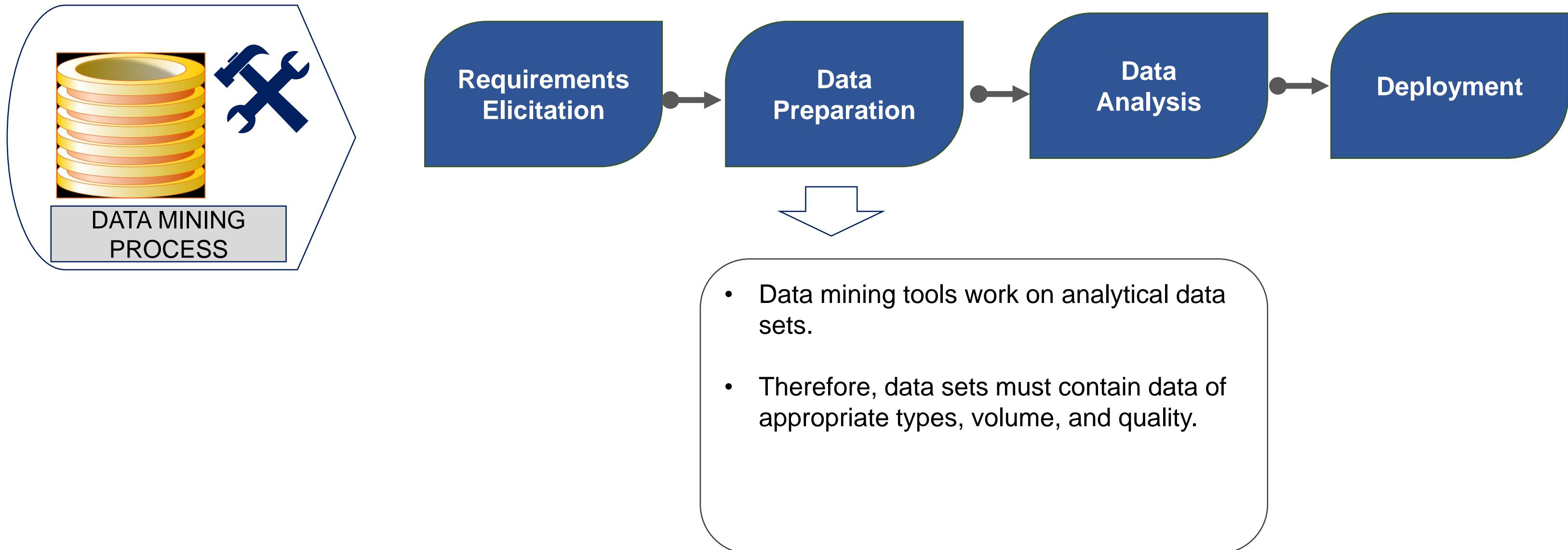
# ANALYZE PERFORMANCE MEASURES

## DATA MINING - PROCESS



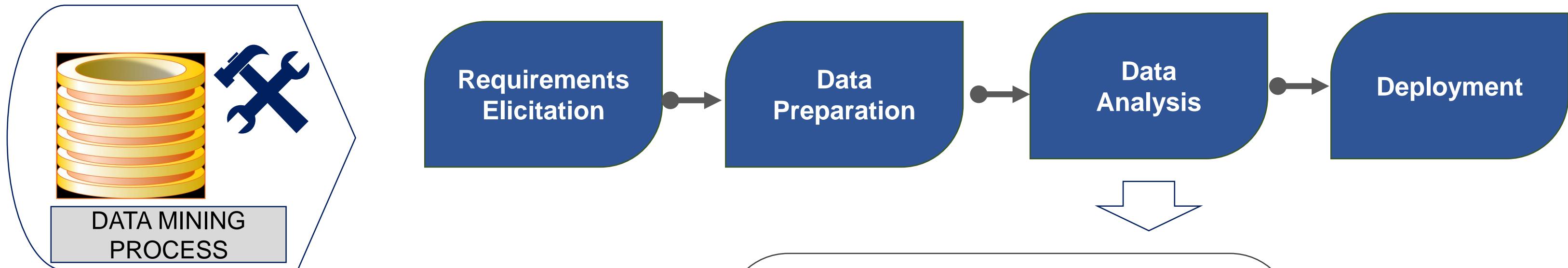
## ANALYZE PERFORMANCE MEASURES (contd.)

### DATA MINING - PROCESS



## ANALYZE PERFORMANCE MEASURES (contd.)

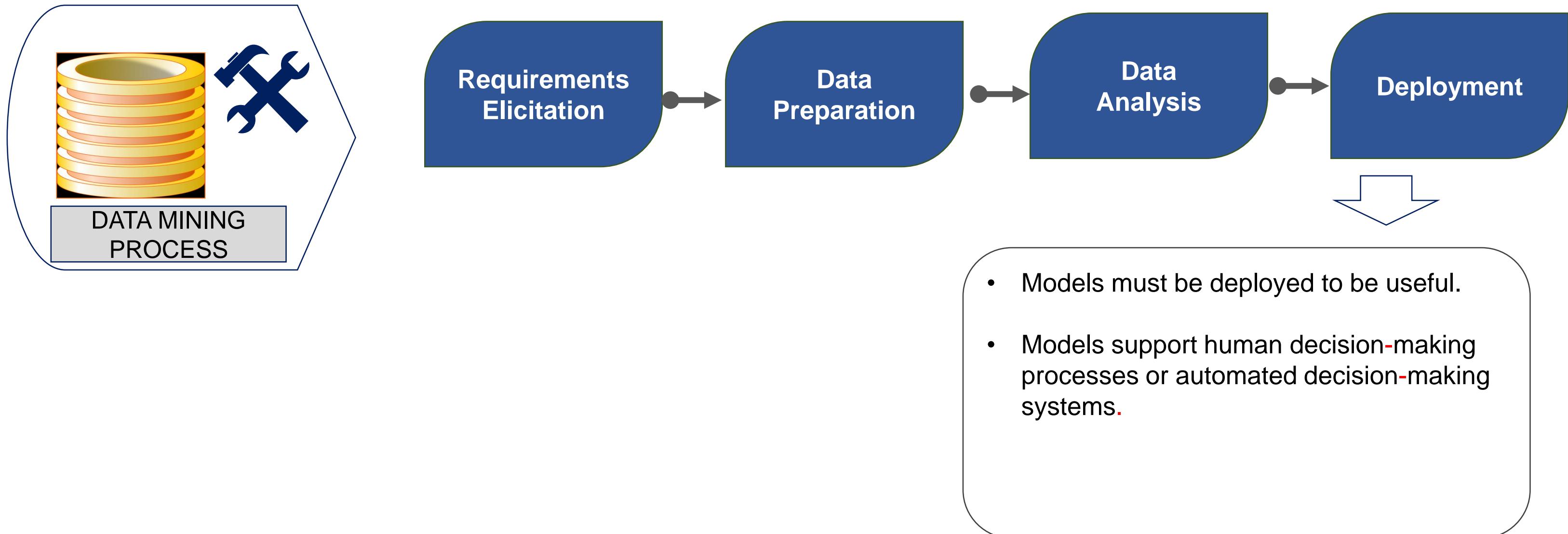
### DATA MINING - PROCESS



- A wide variety of statistical measures are applied and visualization tools are used.
- Examples of tools used:
  - Classification and Regression Trees
  - C5
  - Linear and Logistic Regression
  - Neural Networks
  - Support vector Machines
  - Predictive Scorecards

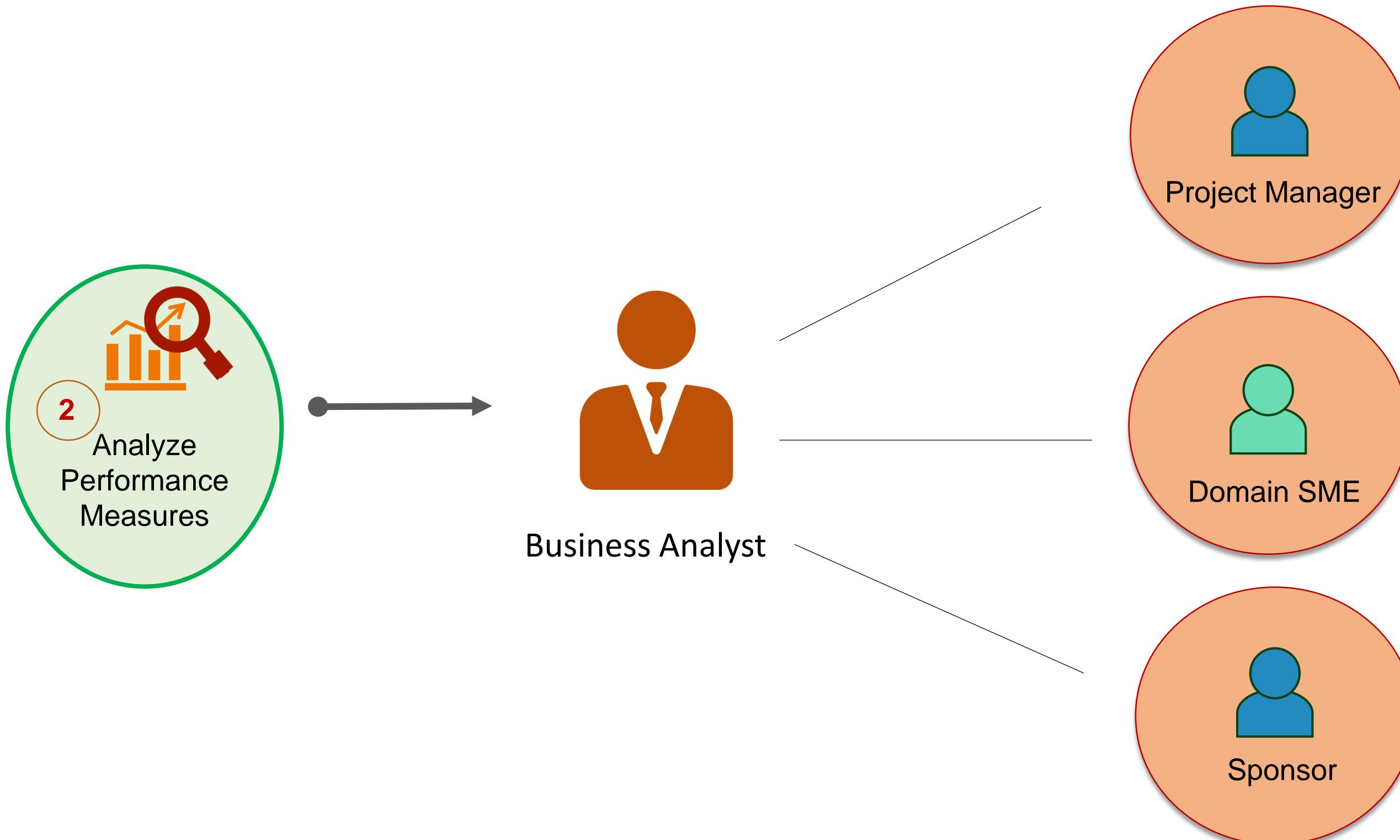
## ANALYZE PERFORMANCE MEASURES (contd.)

### DATA MINING - PROCESS



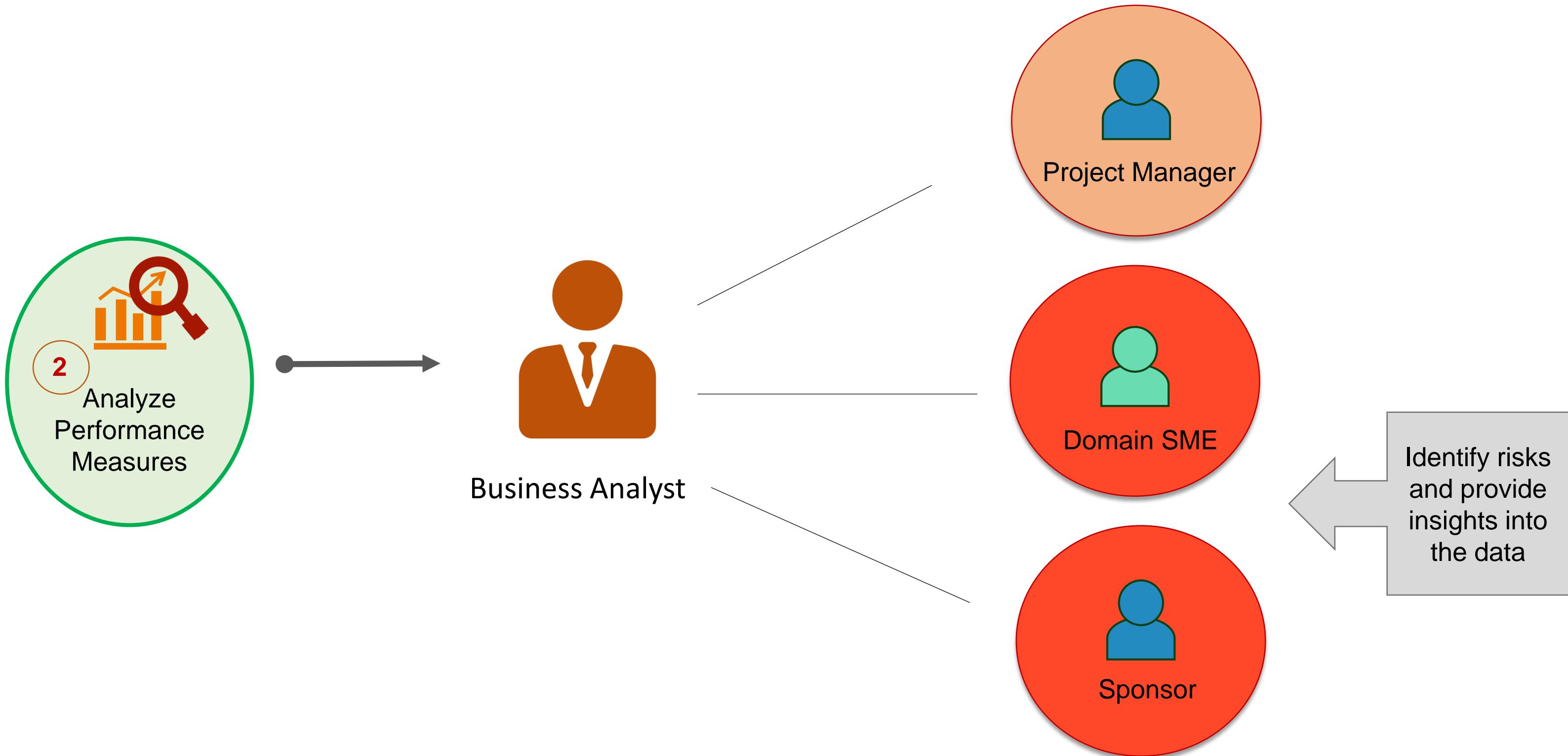
## ANALYZE PERFORMANCE MEASURES

### STAKEHOLDERS



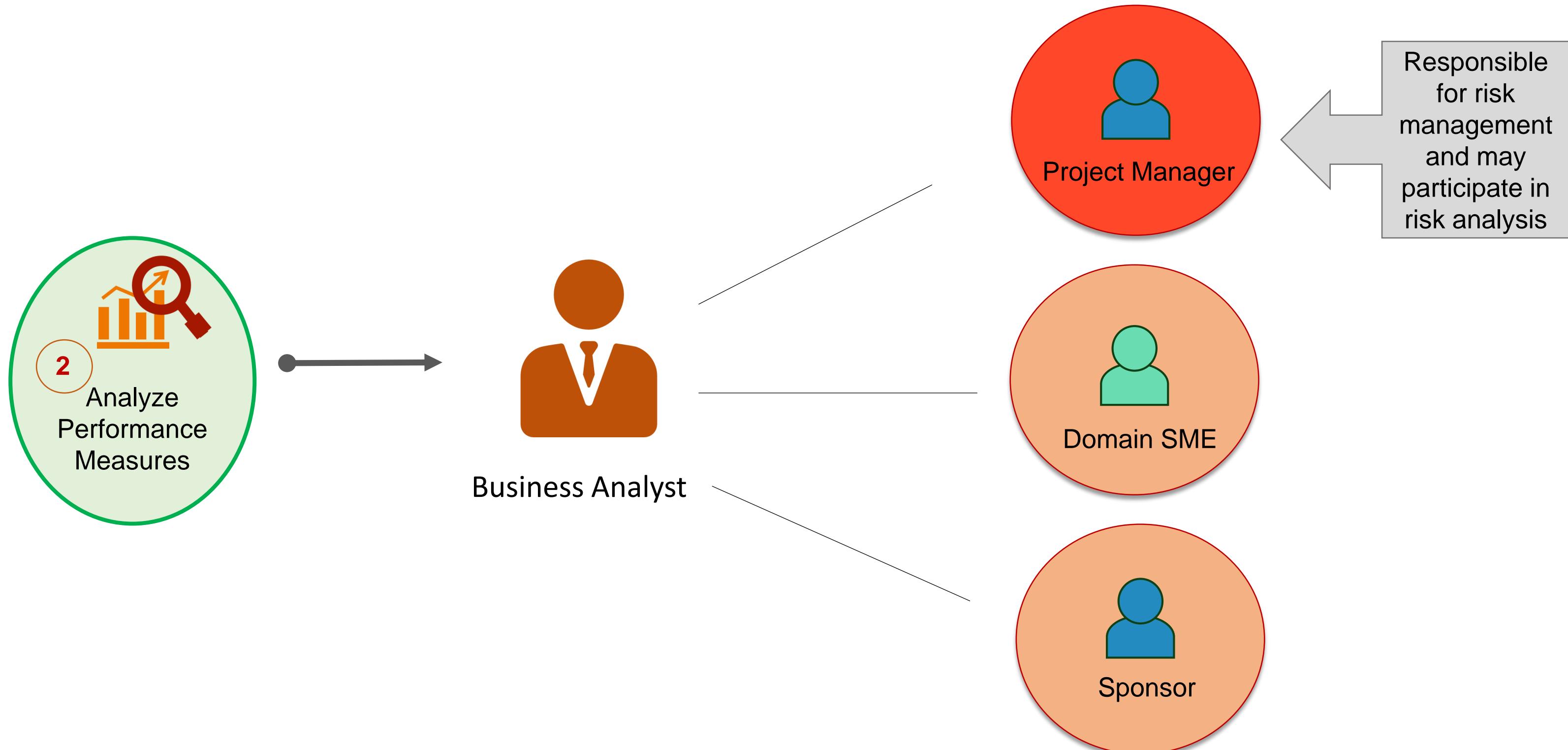
## ANALYZE PERFORMANCE MEASURES (contd.)

### STAKEHOLDERS



## ANALYZE PERFORMANCE MEASURES (contd.)

### STAKEHOLDERS



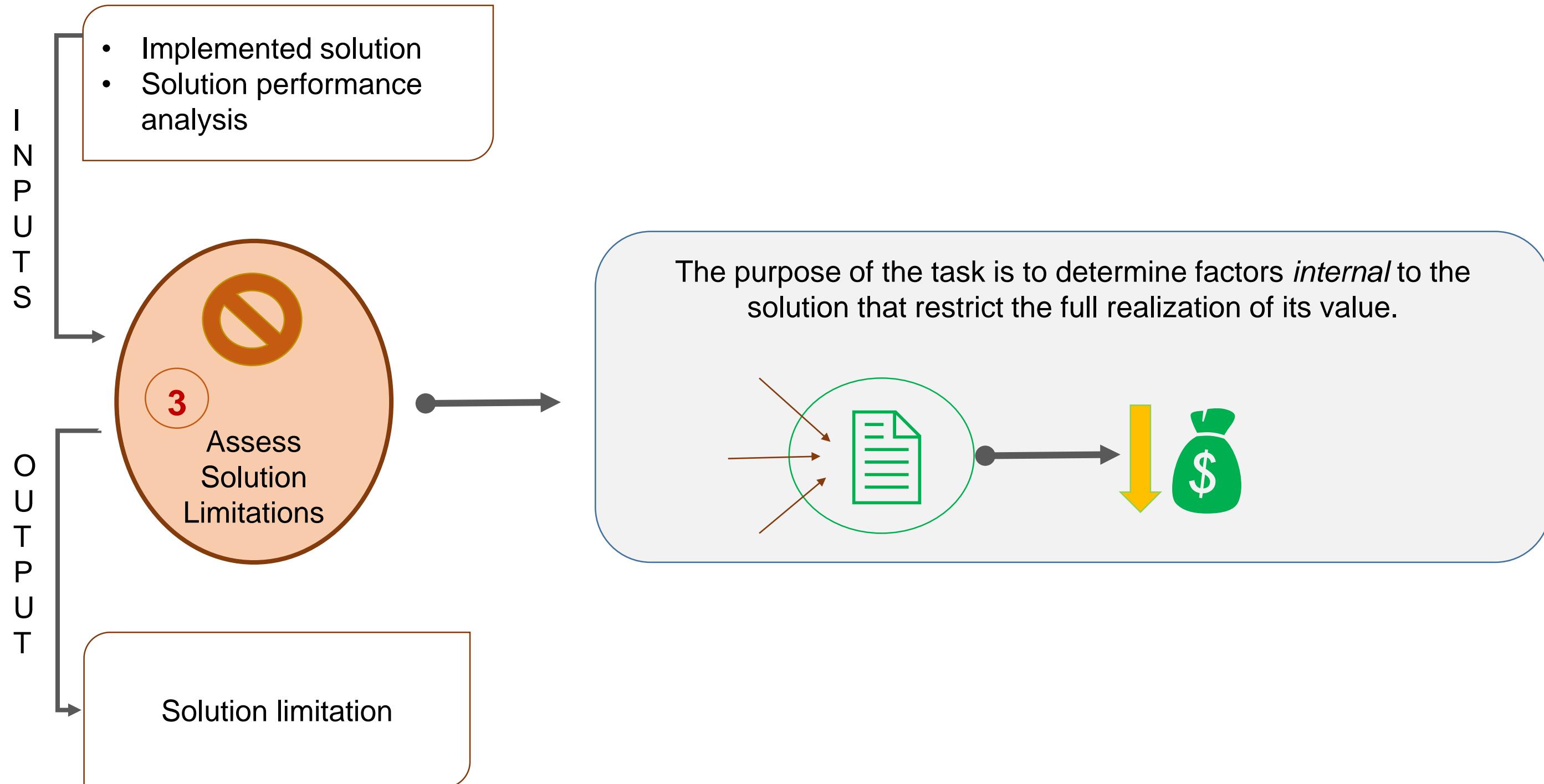
# Lesson 8: Solution Evaluation

## Topic 8.3: Assess Solution Limitations

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

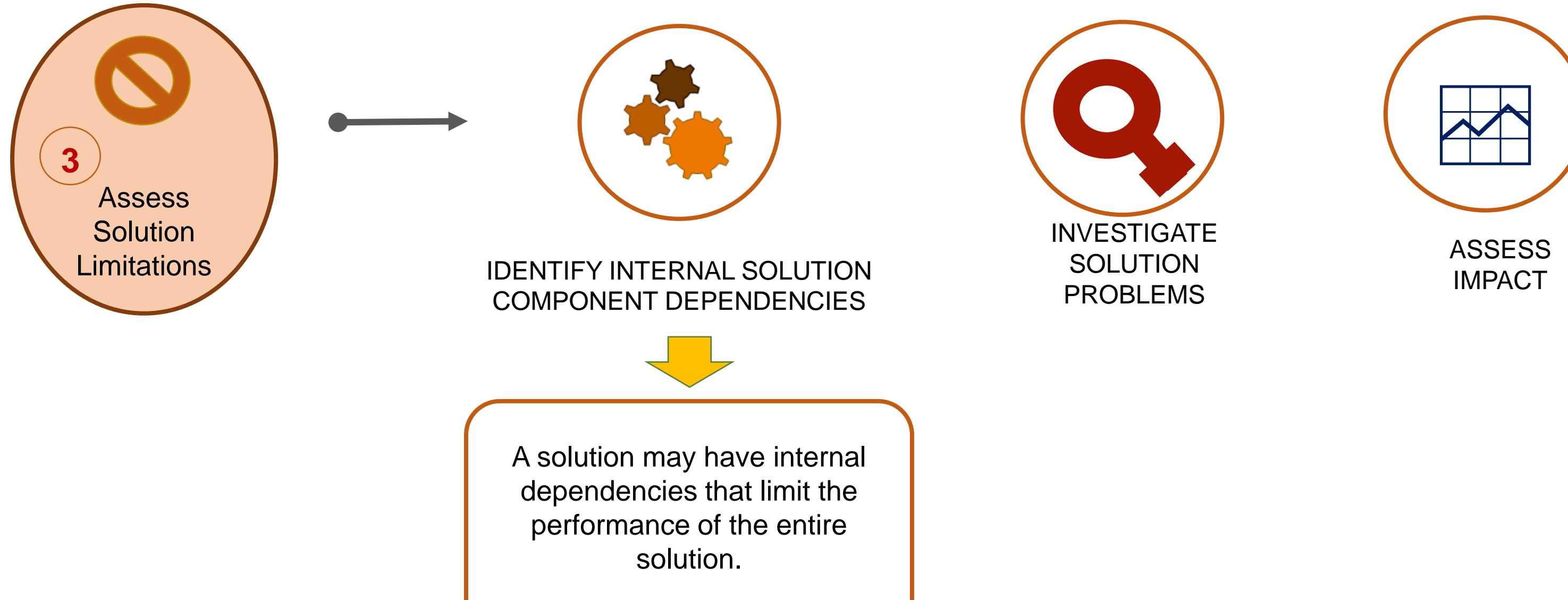
# ASSESS SOLUTION LIMITATIONS

## PURPOSE



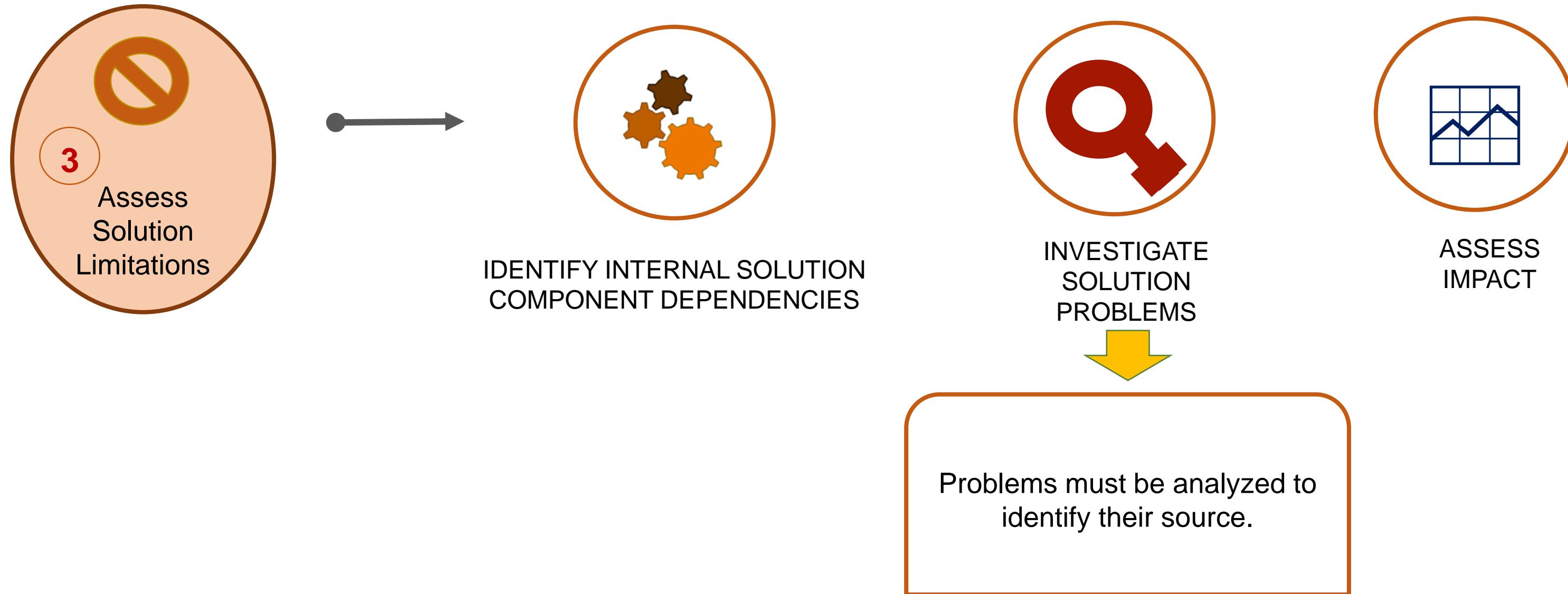
## ASSESS SOLUTION LIMITATIONS

### ELEMENTS



## ASSESS SOLUTION LIMITATIONS (contd.)

### ELEMENTS



## ASSESS SOLUTION LIMITATIONS (contd.)

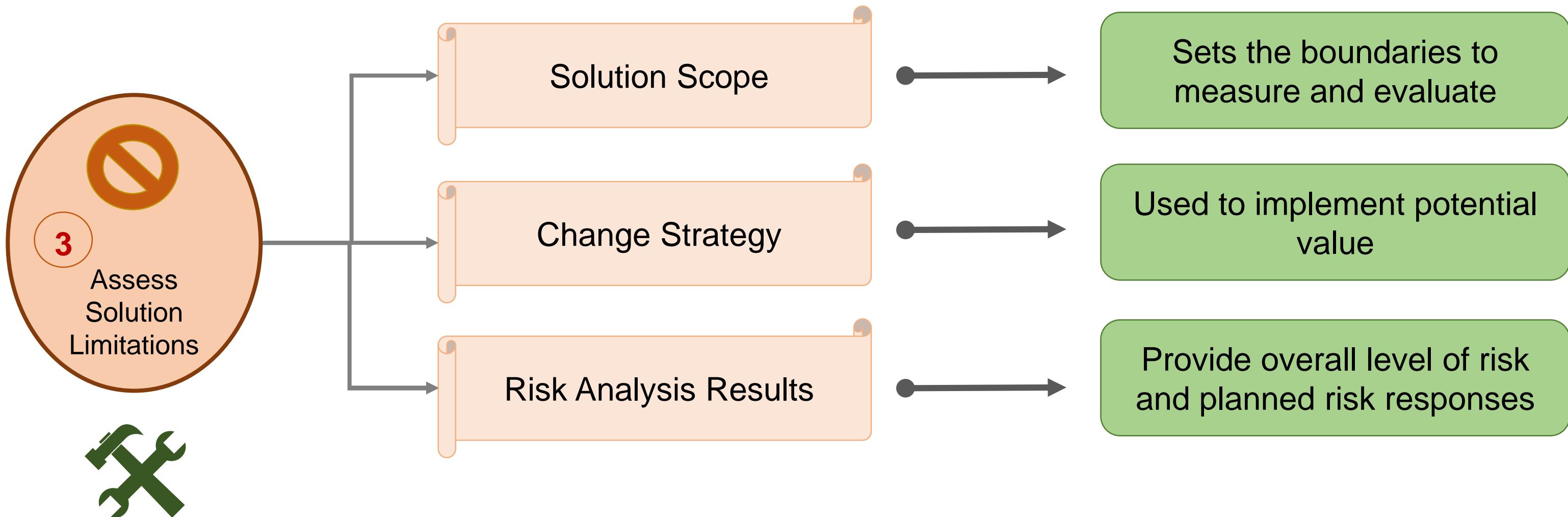
### ELEMENTS



## ASSESS SOLUTION LIMITATIONS

### GUIDELINES AND TOOLS

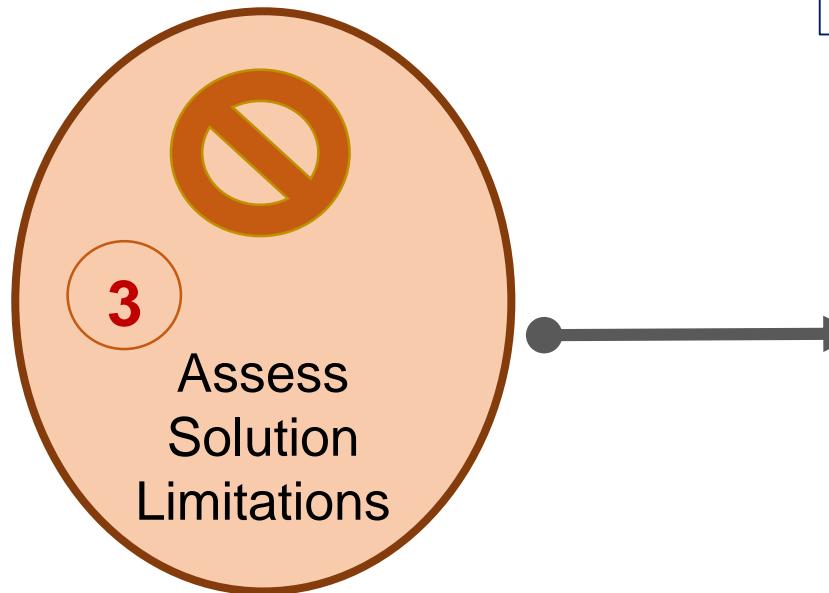
The business analyst may use the following guidelines and tools.



# ASSESS SOLUTION LIMITATIONS

## TECHNIQUES

There are 11 techniques for assessing solution limitations.



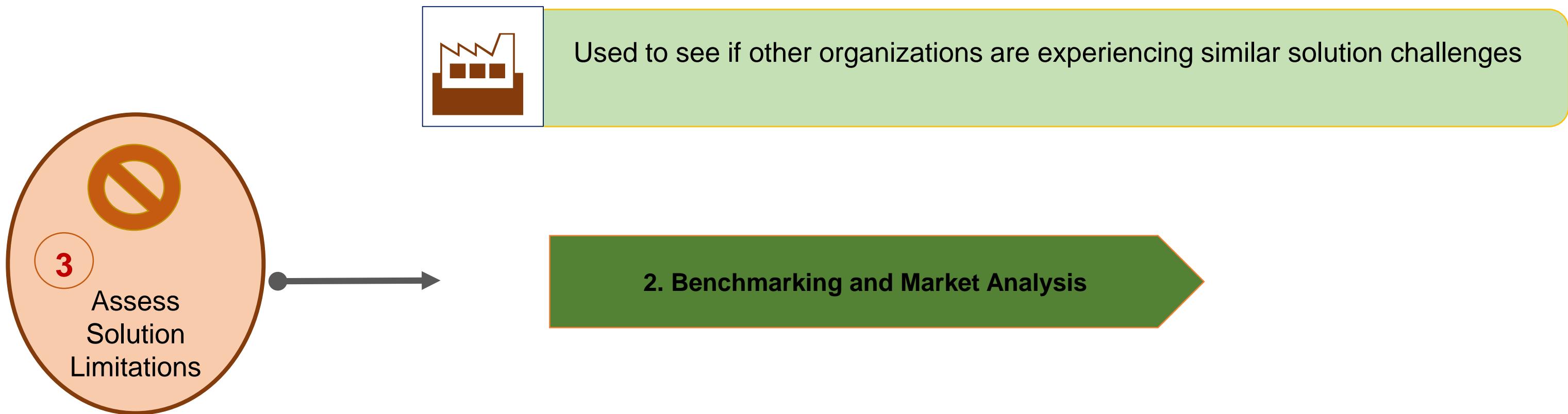
Used to see up to what level the solution meets the defined acceptance criteria

### 1. Acceptance and Evaluation Criteria

## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

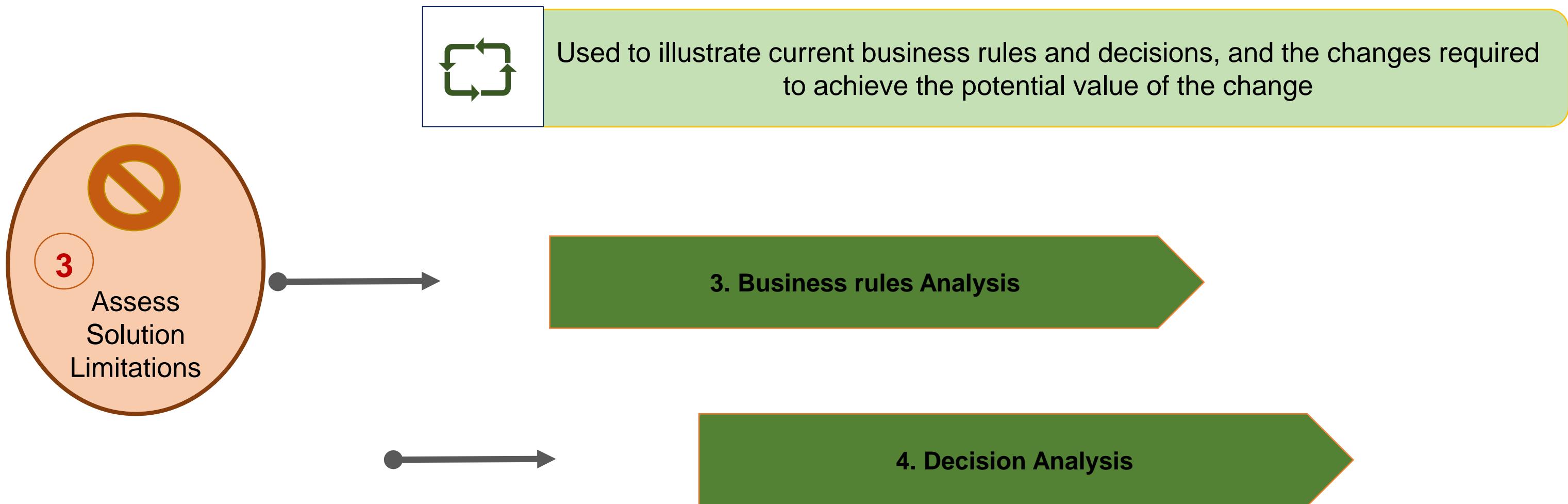
There are 11 techniques for assessing solution limitations.



# ASSESS SOLUTION LIMITATIONS (contd.)

## TECHNIQUES

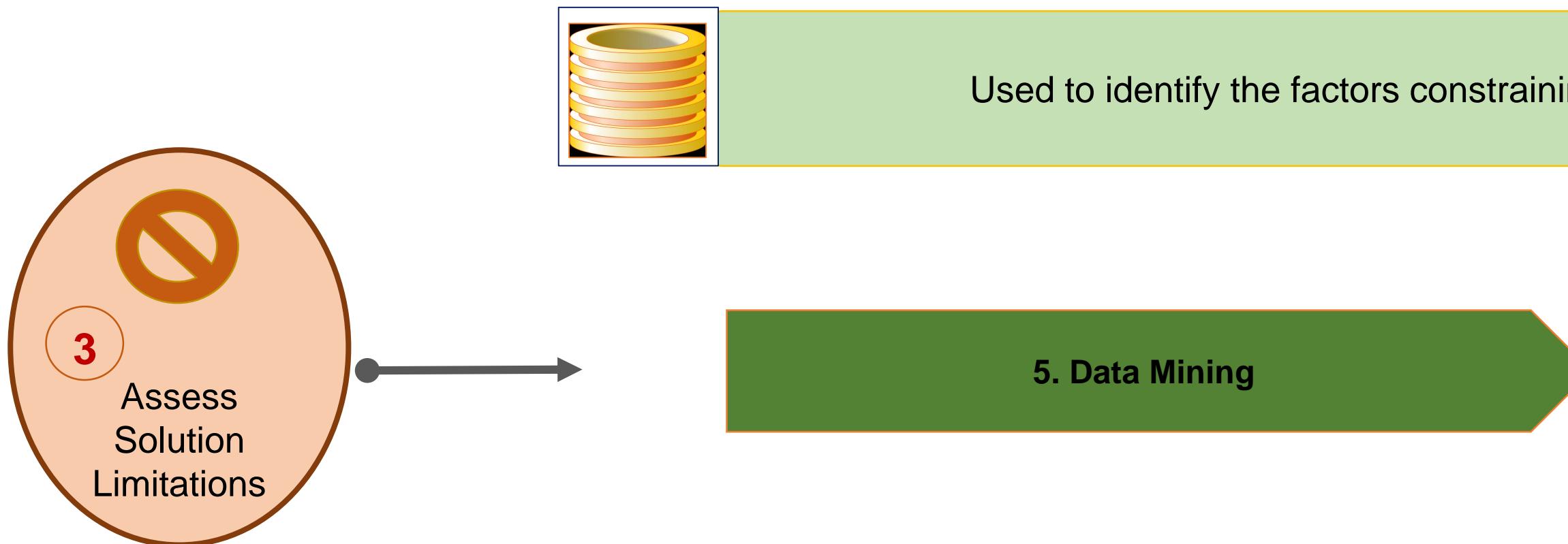
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

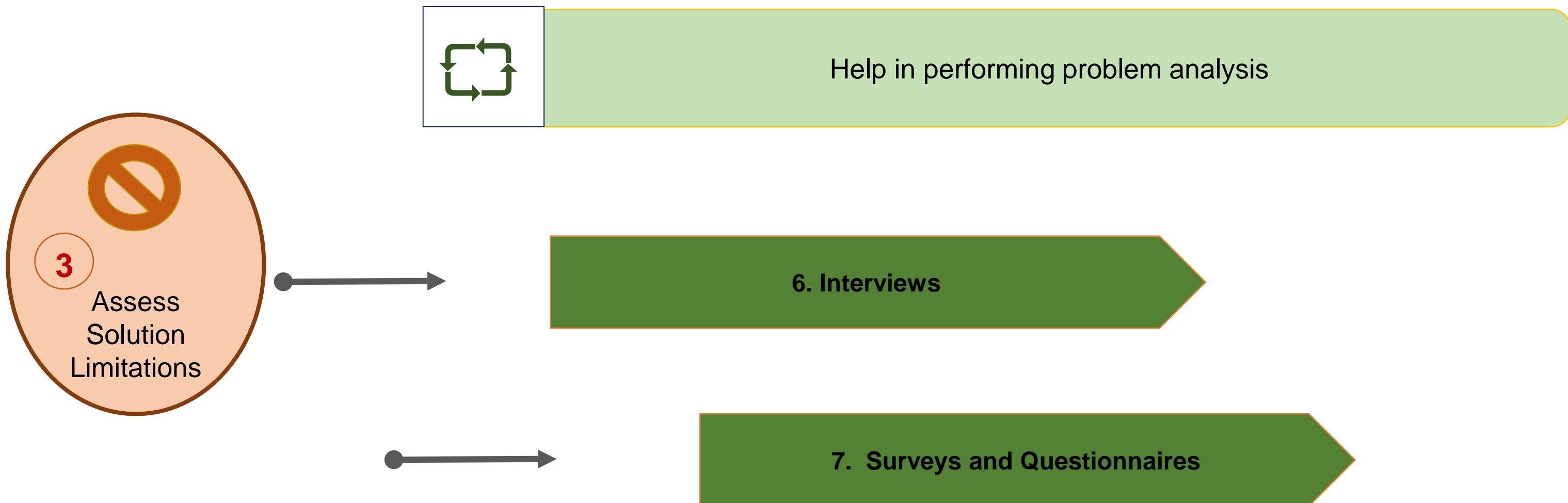
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

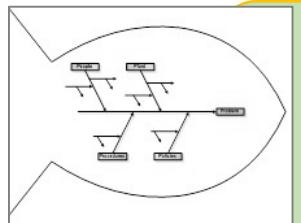
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

There are 11 techniques for assessing solution limitations.



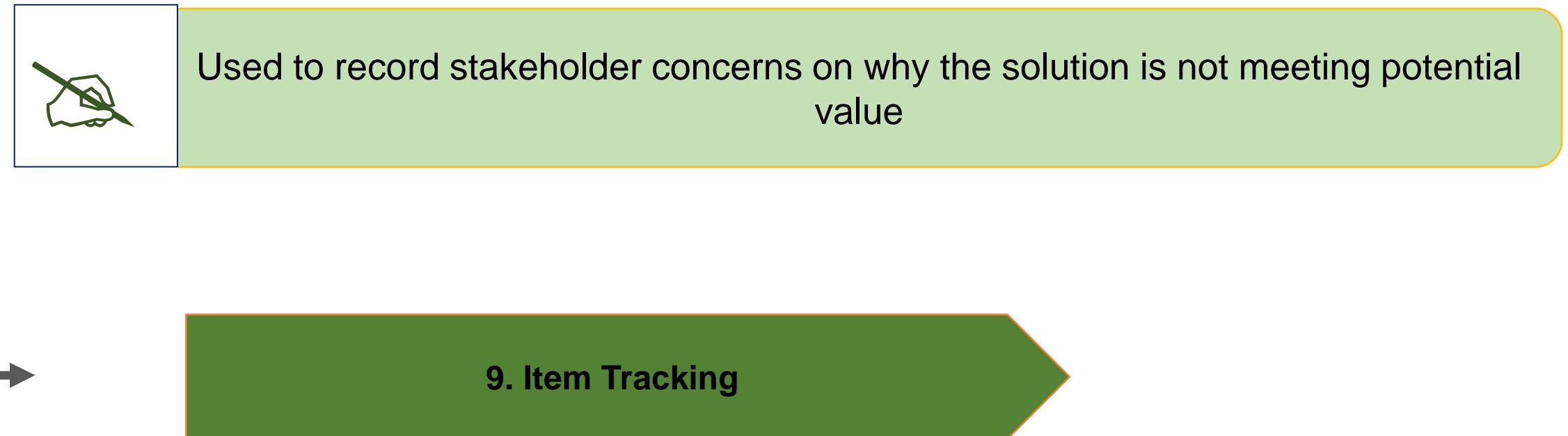
Used to identify underlying causes of the solution problems

#### 8. Root Cause Analysis

## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

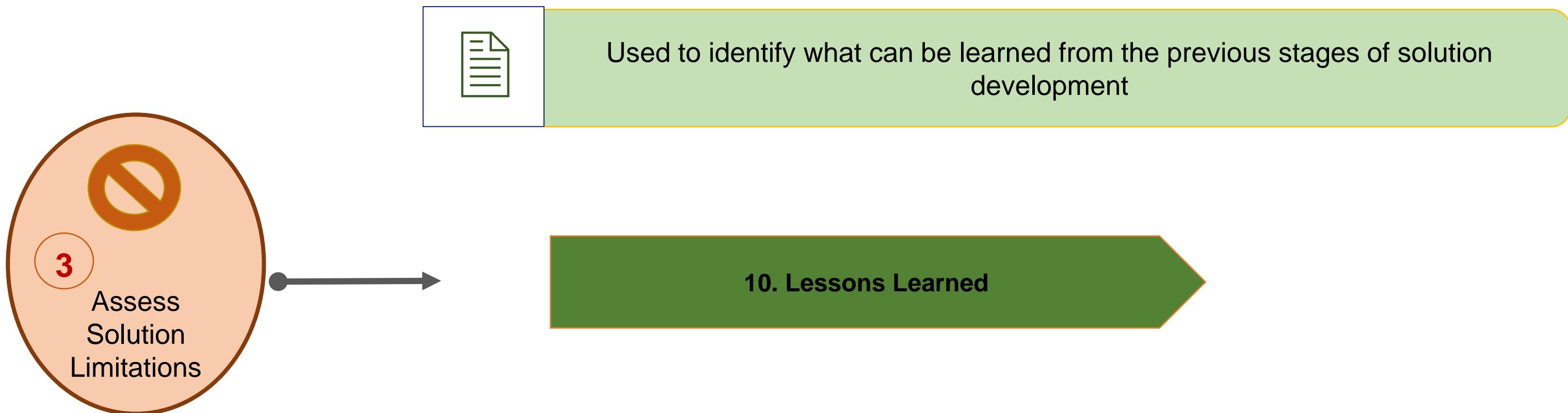
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

### TECHNIQUES

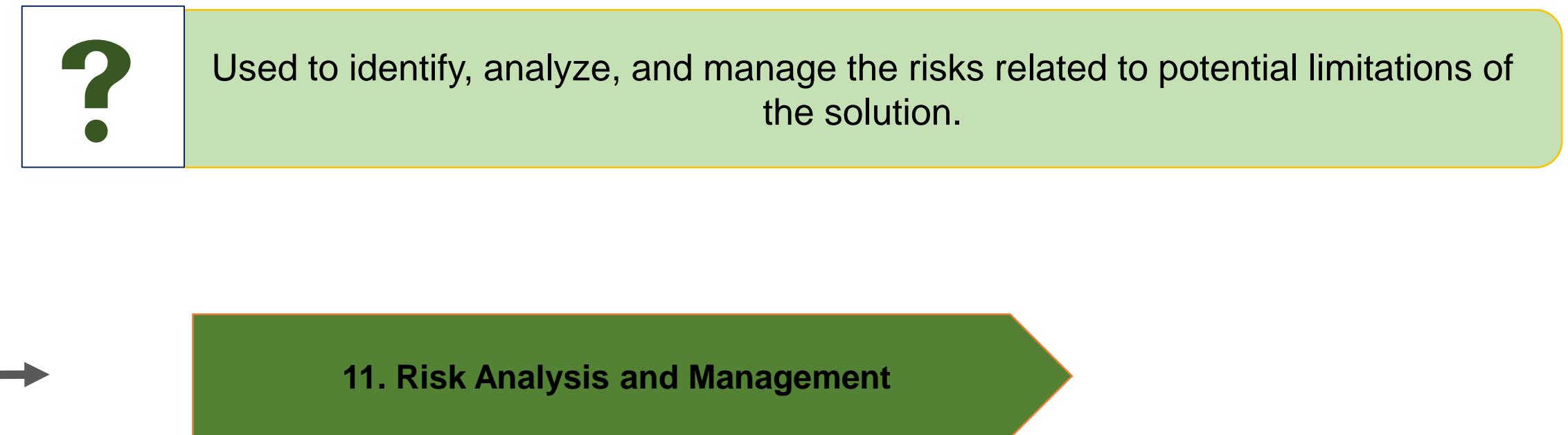
There are 11 techniques for assessing solution limitations.



## ASSESS SOLUTION LIMITATIONS (contd.)

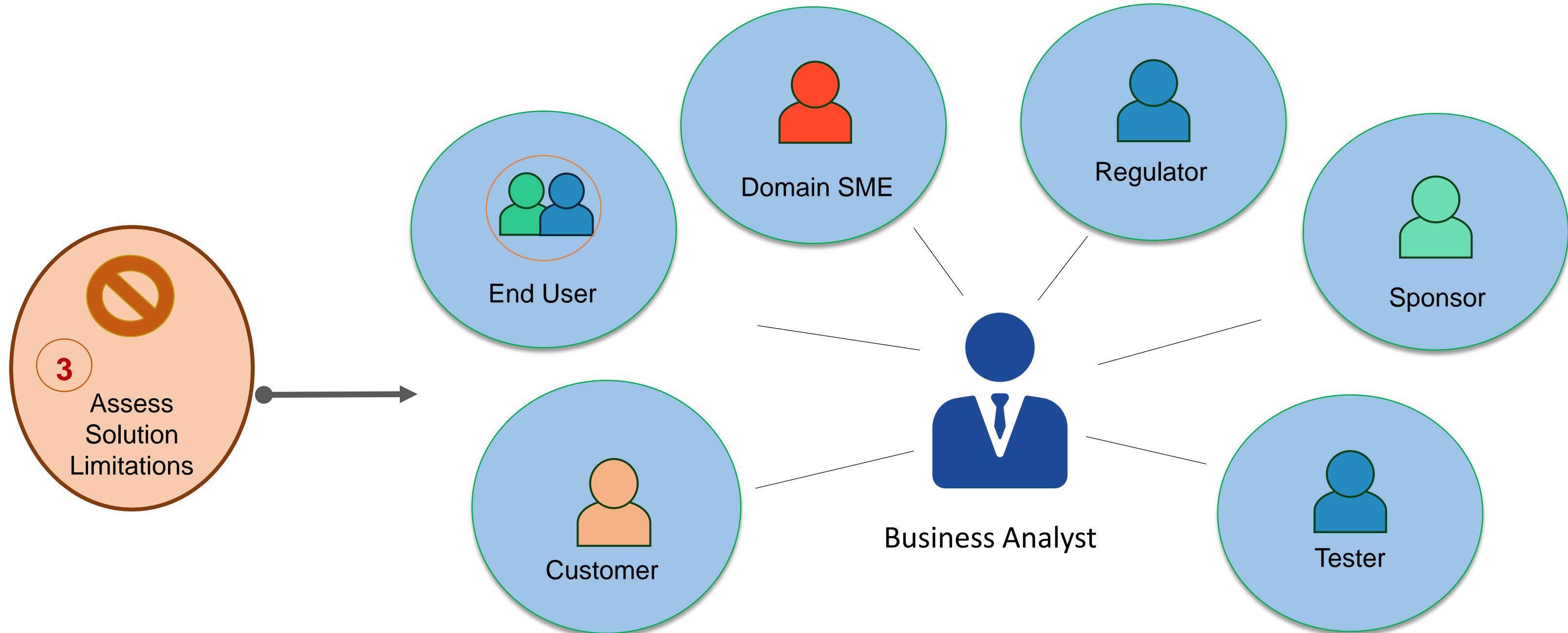
### TECHNIQUES

There are 11 techniques for assessing solution limitations.



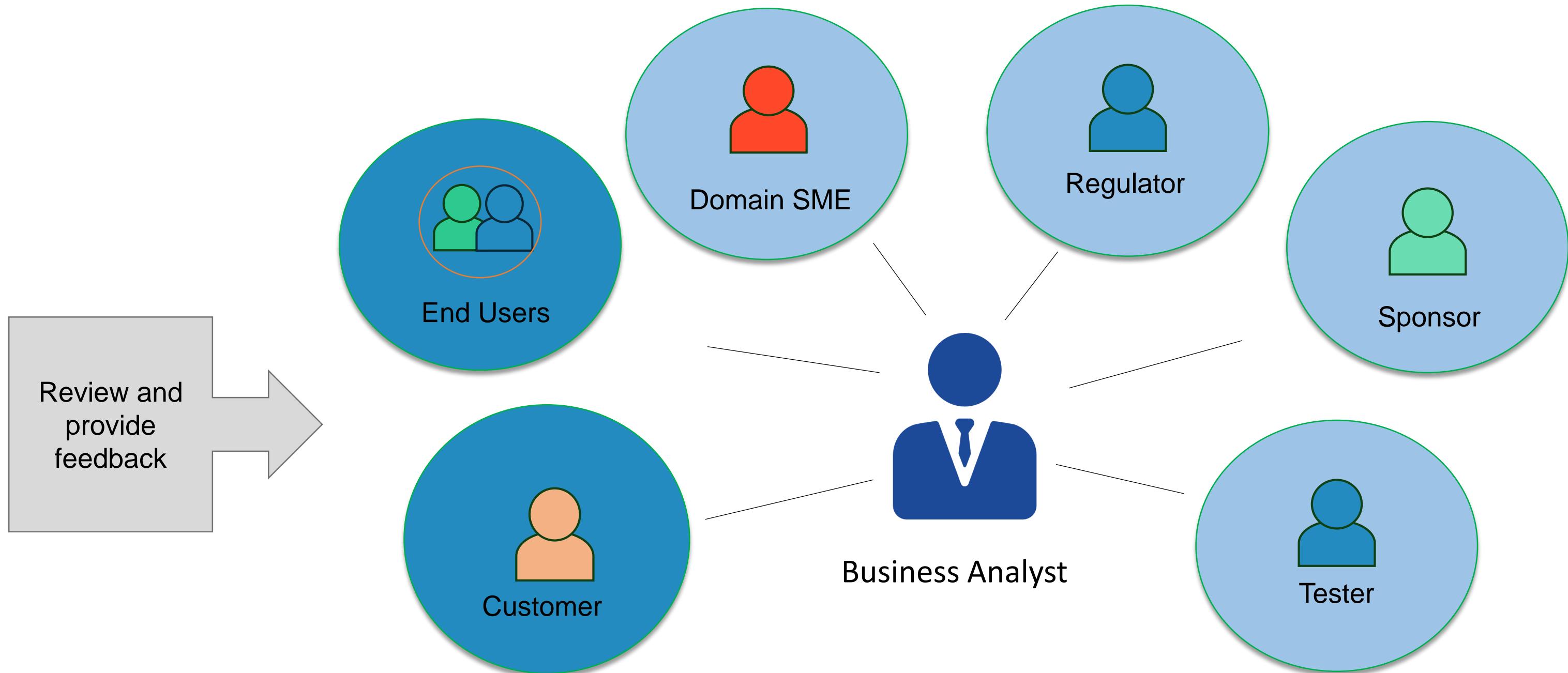
# ASSESS SOLUTION LIMITATIONS

## STAKEHOLDERS

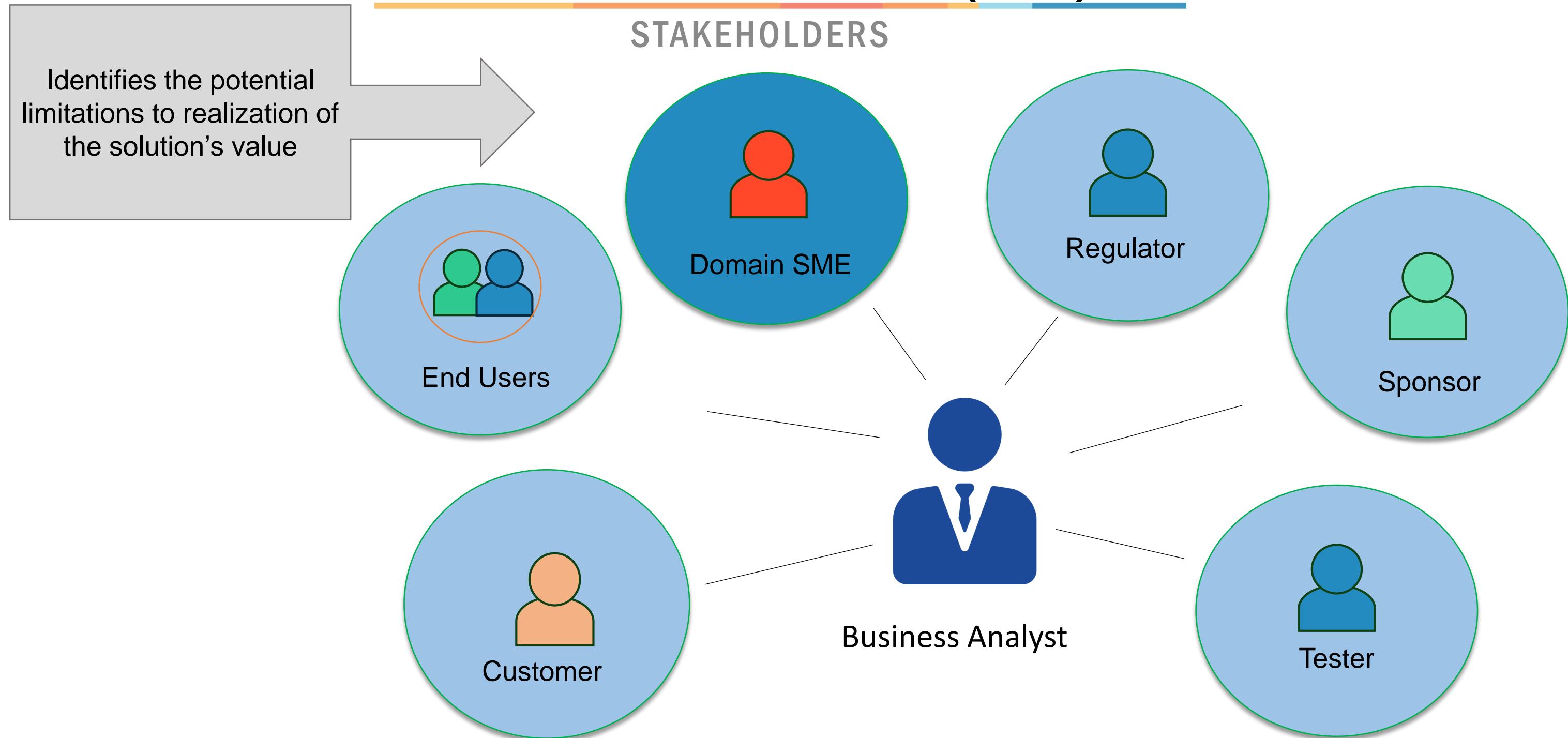


## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS

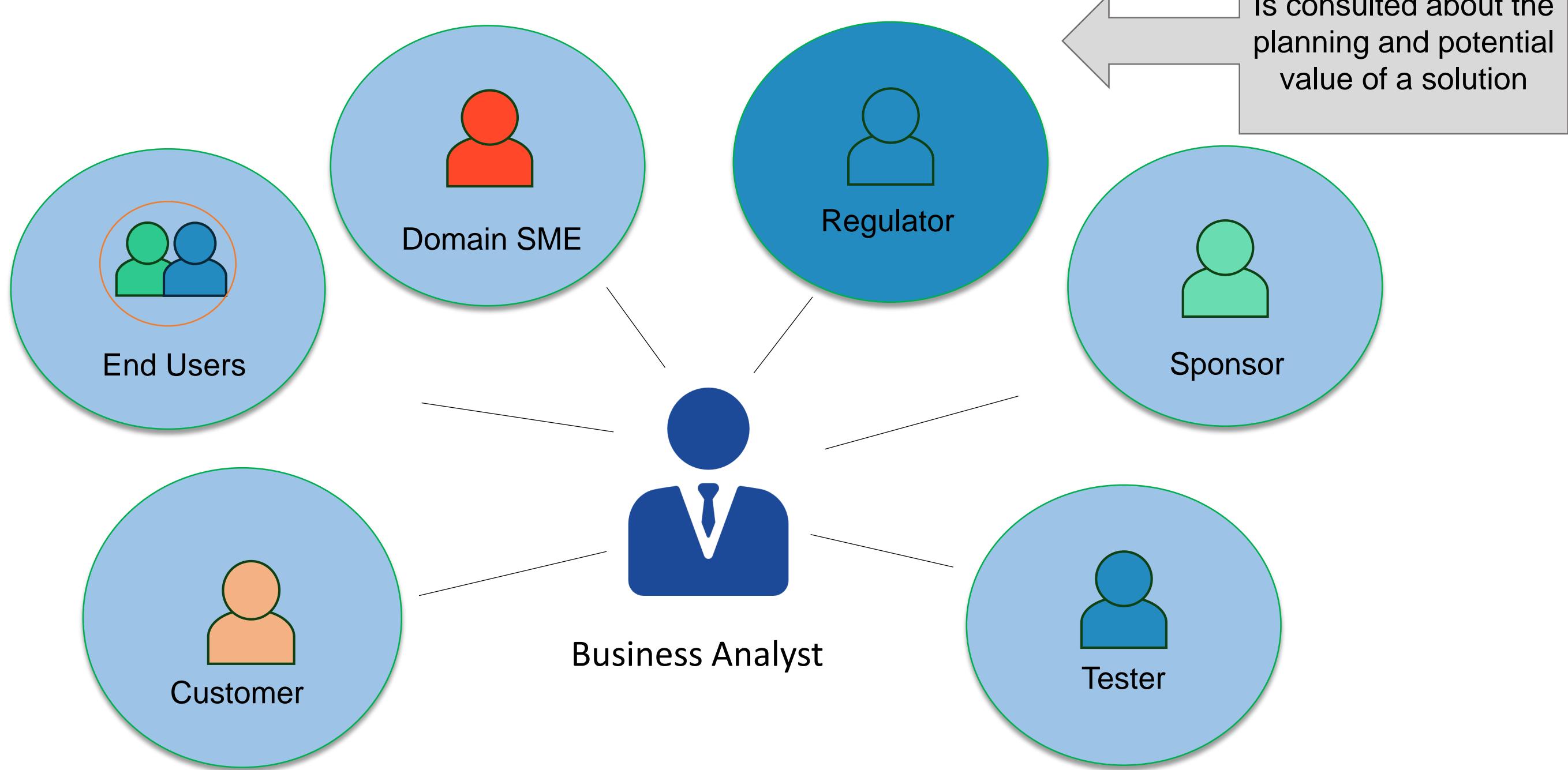


## ASSESS SOLUTION LIMITATIONS (contd.)



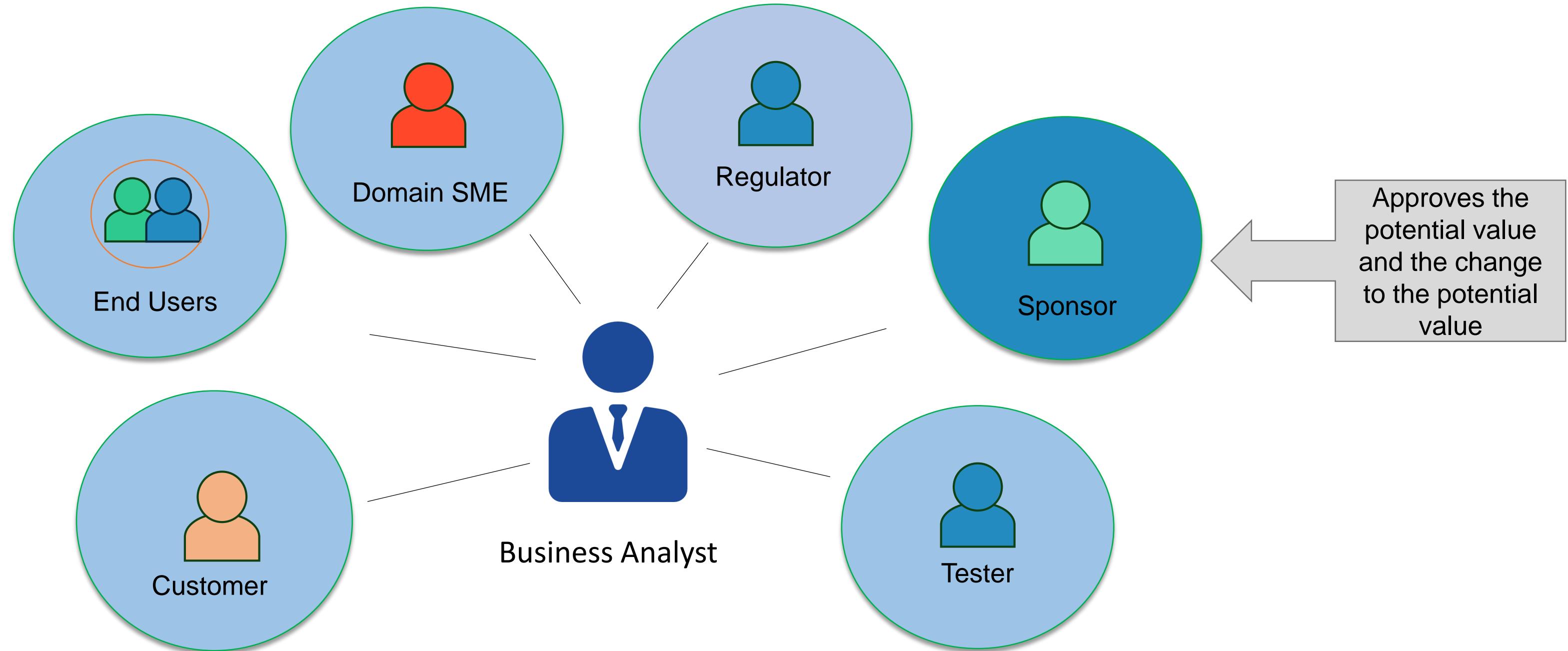
## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS



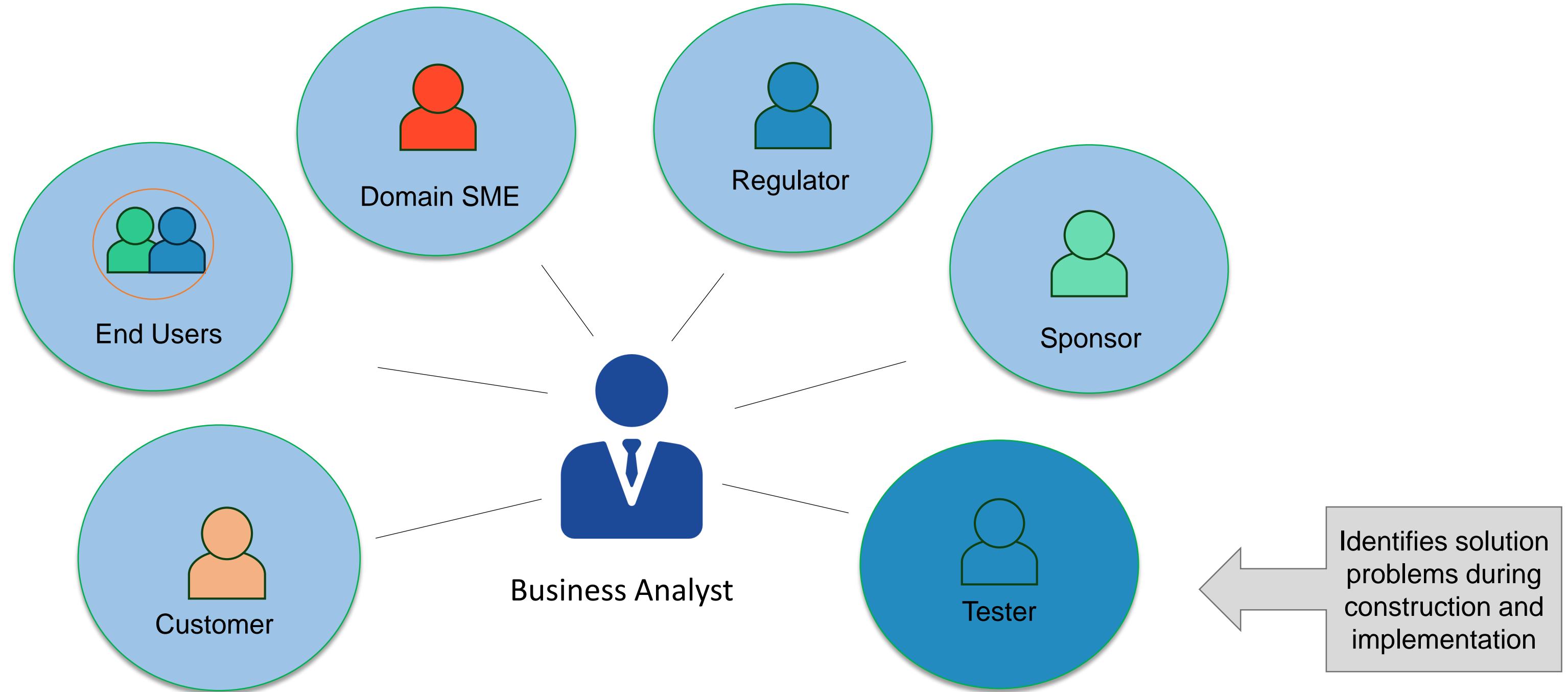
## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS



## ASSESS SOLUTION LIMITATIONS (contd.)

### STAKEHOLDERS



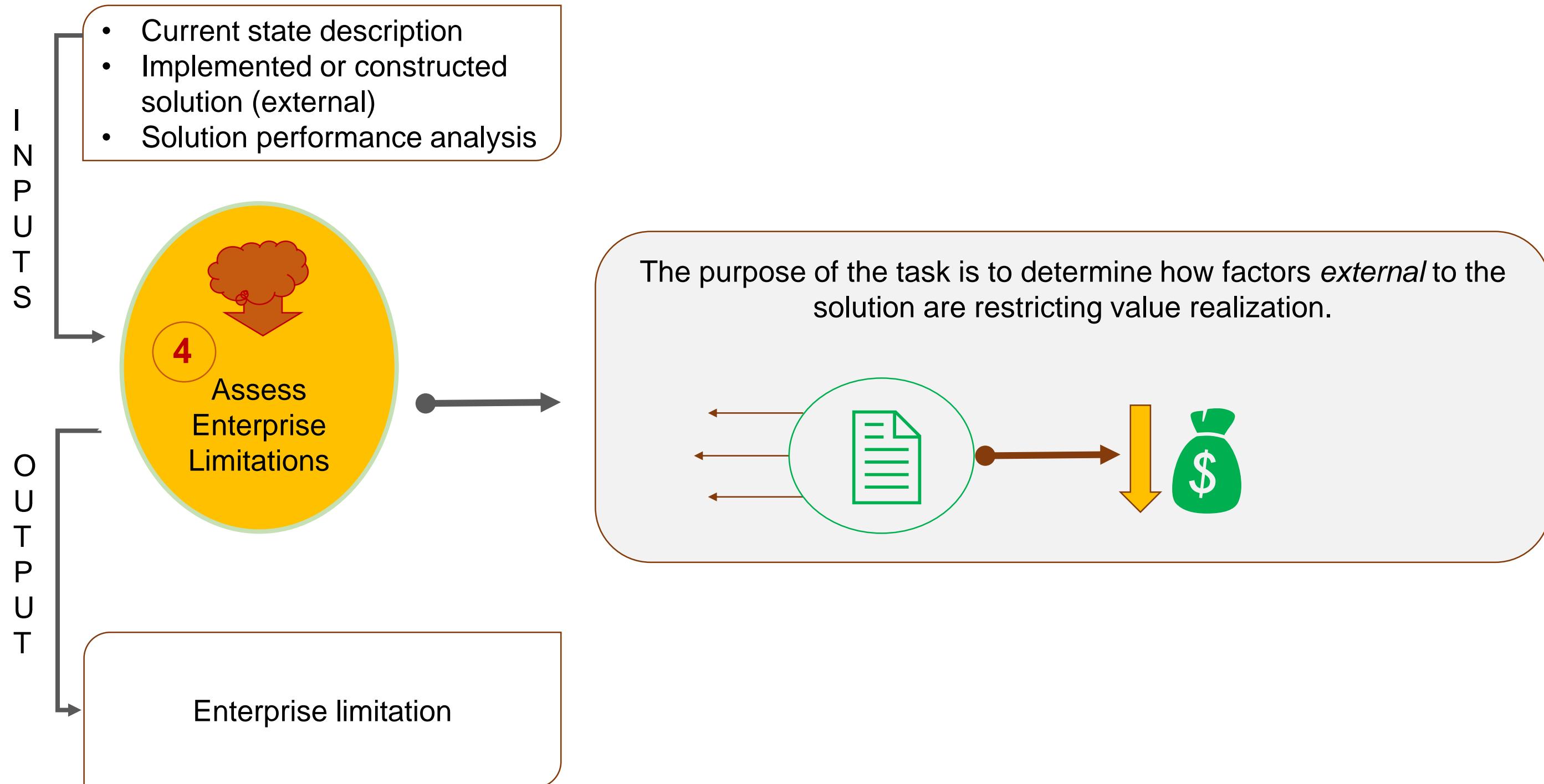
# Lesson 8: Solution Evaluation

## Topic 8.4: Assess Enterprise Limitations

- ✓ 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



This element helps a business analyst assess how the organization structure will be impacted by a solution.

## ASSESS ENTERPRISE LIMITATIONS (contd.)

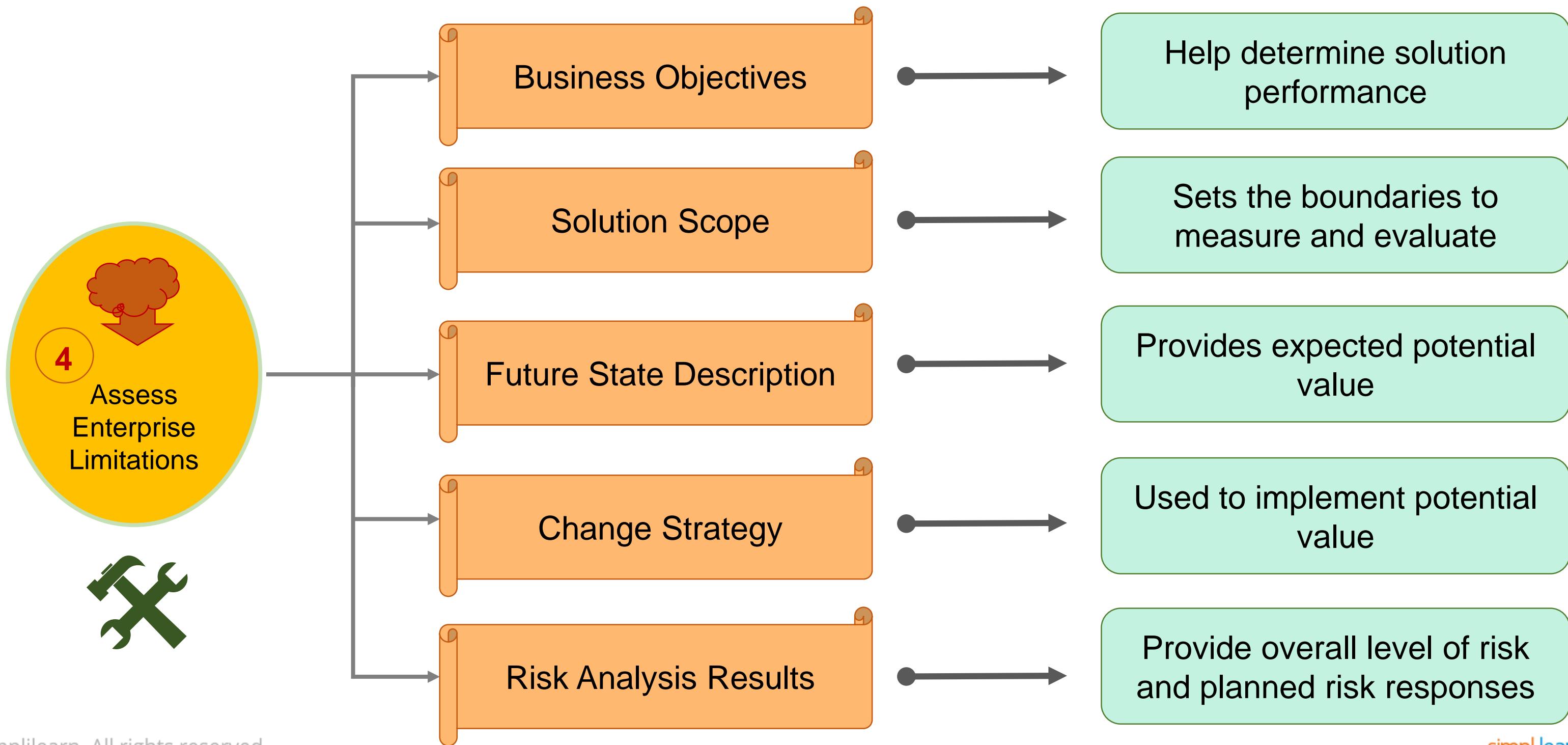
### ELEMENTS



## ASSESS ENTERPRISE LIMITATIONS

### GUIDELINES AND TOOLS

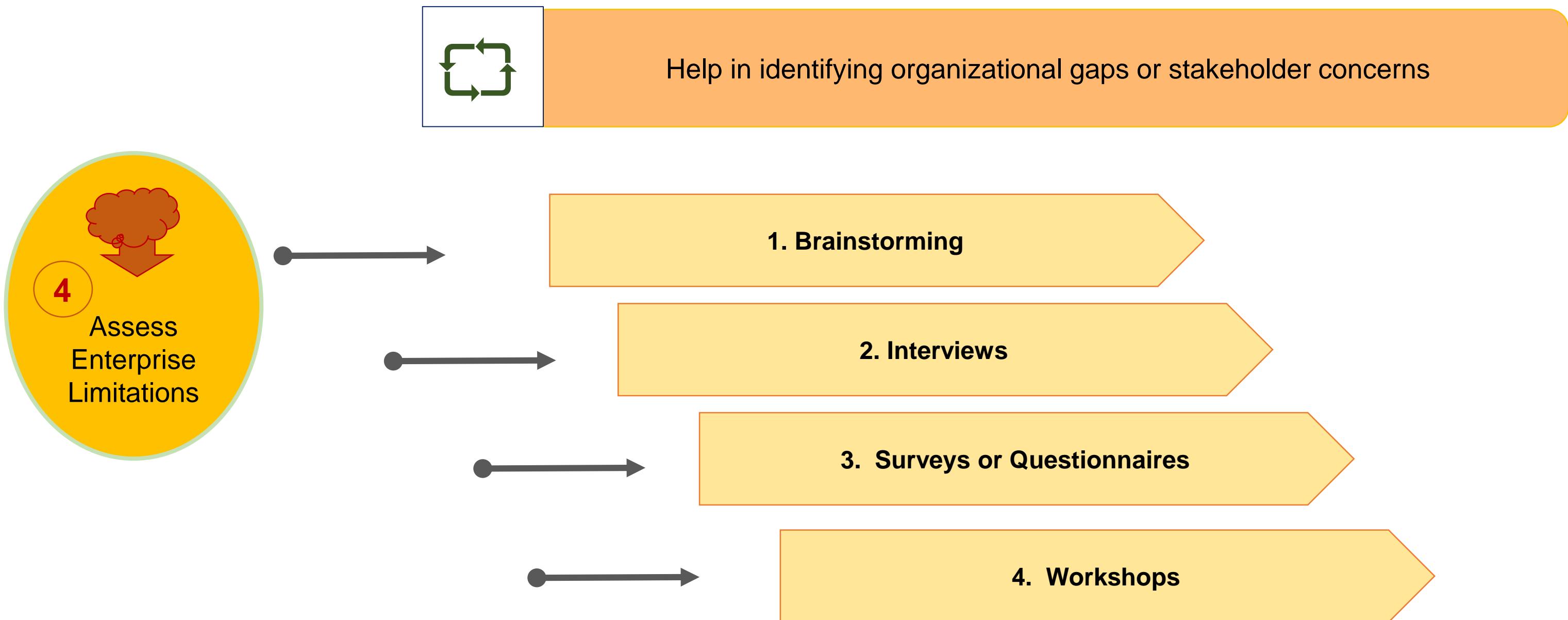
The business analyst may use the following guidelines and tools.



# ASSESS ENTERPRISE LIMITATIONS

## TECHNIQUES

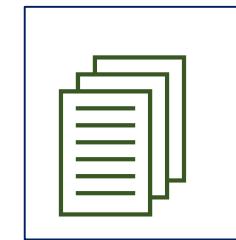
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



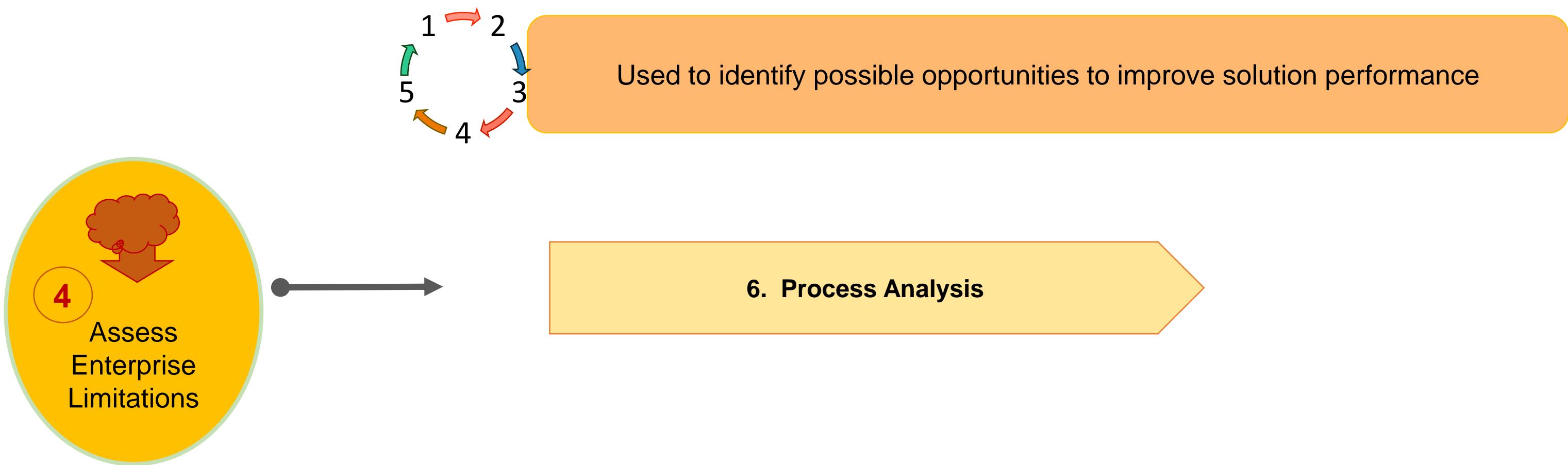
Used to understand the organization structure, its culture, and its operations

#### 5. Document Analysis

# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

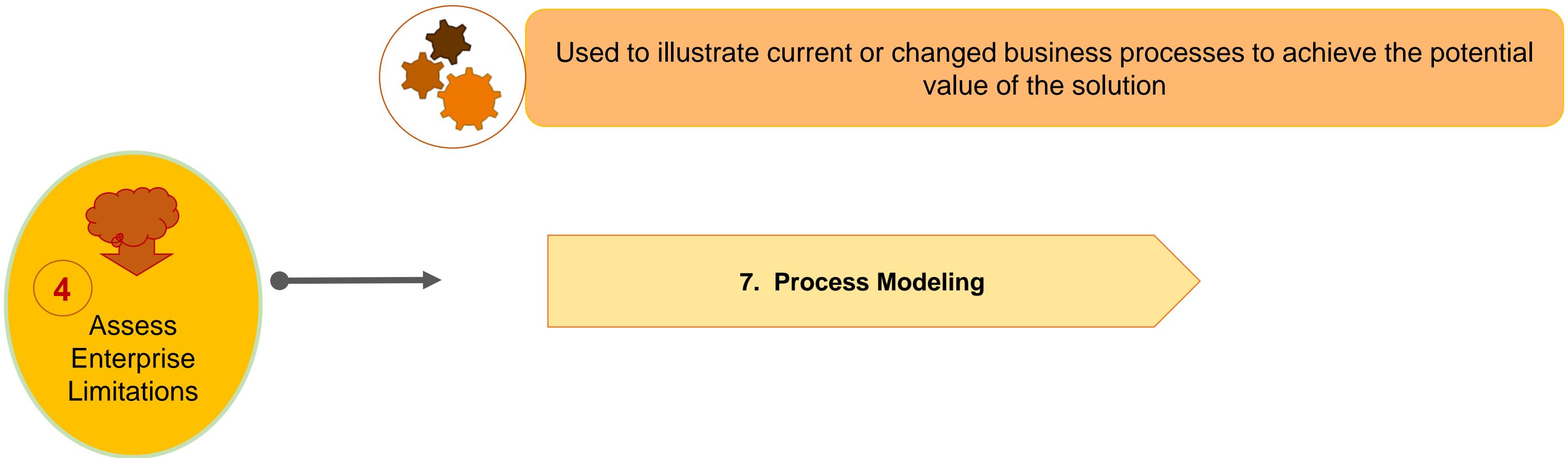
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

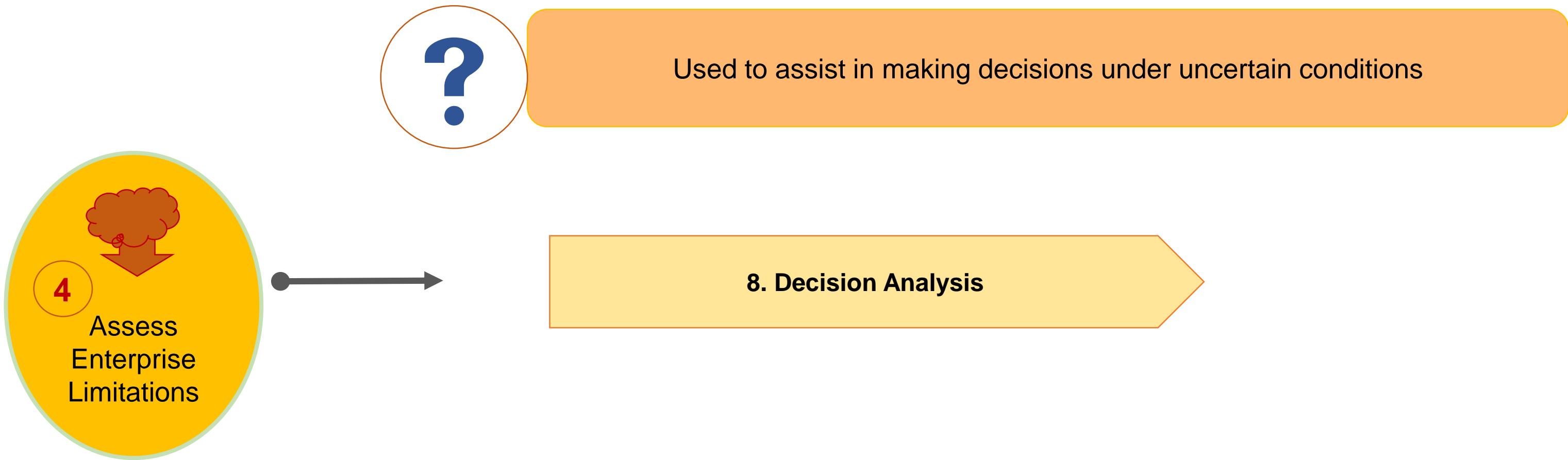
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

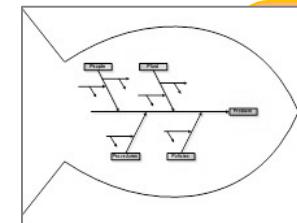
There are 18 techniques for assessing enterprise limitations.



## 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.



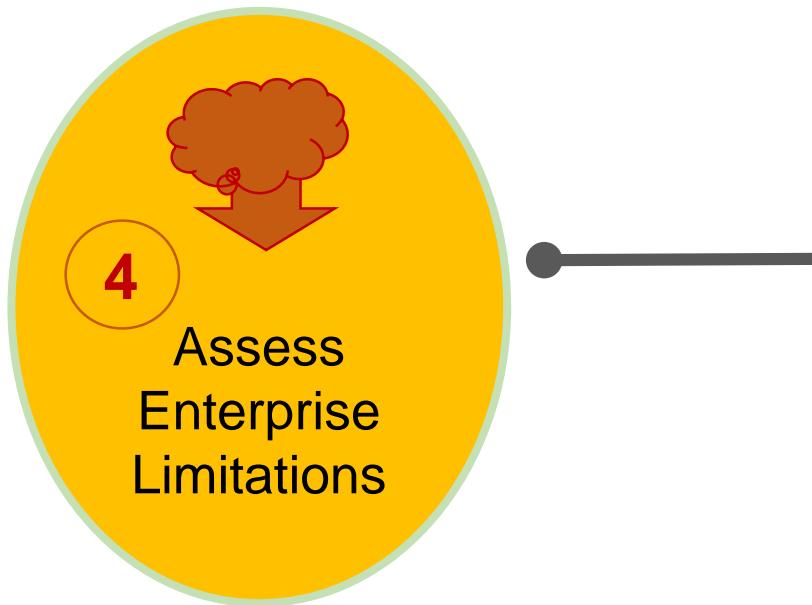
Used to ensure that issues identified during assessments are tracked and resolved

**10. Item Tracking**

## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



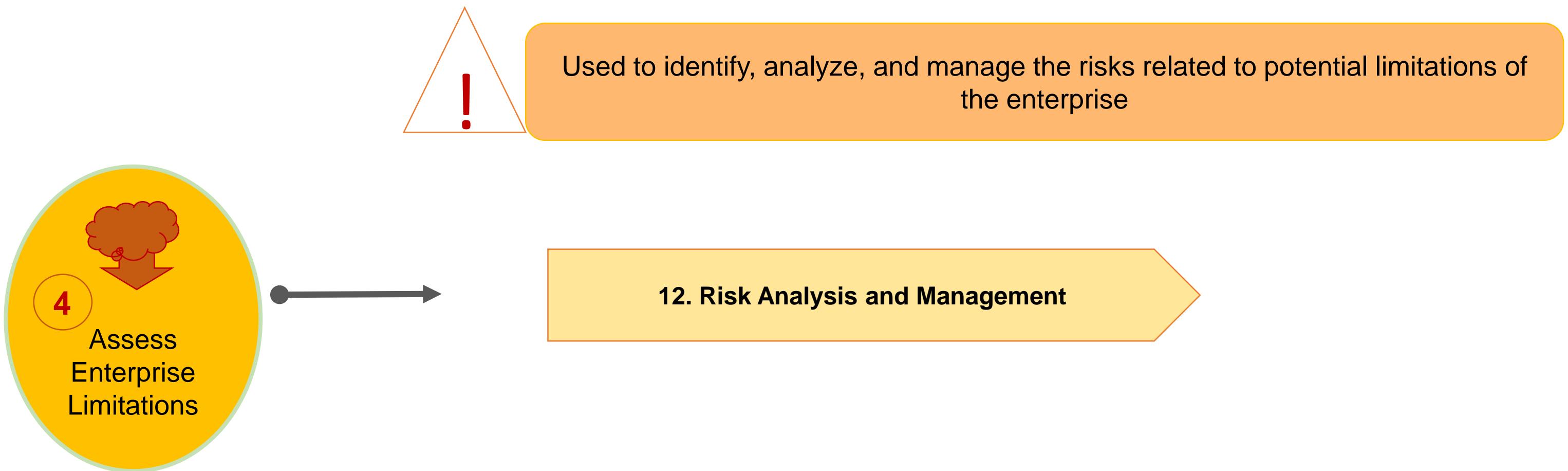
Used to identify previous initiatives and enterprise interactions with the solution

**11. Lessons Learned**

## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

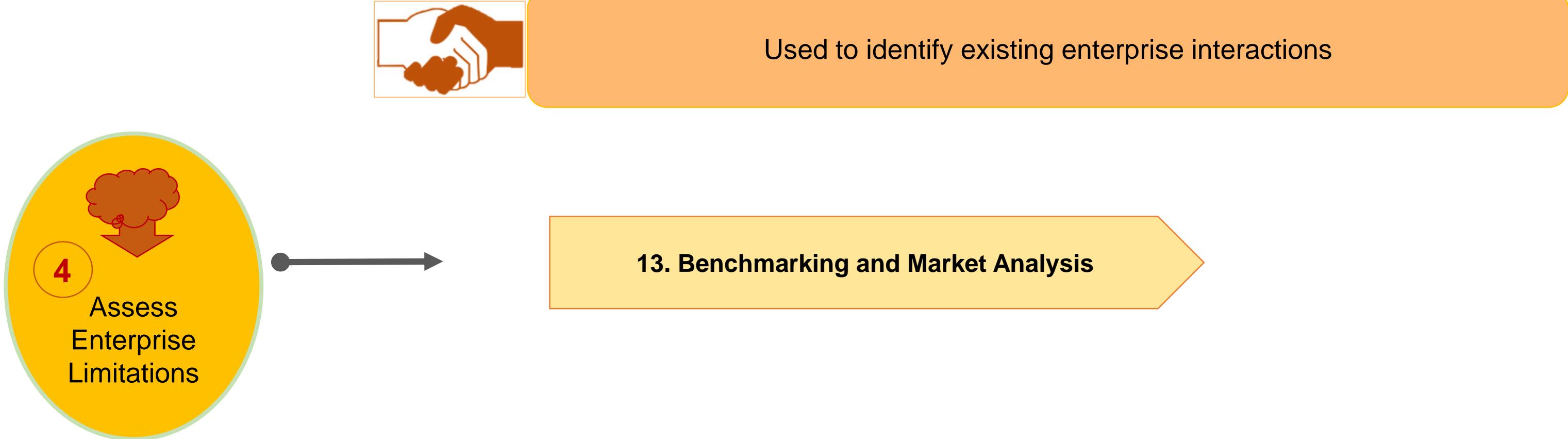
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

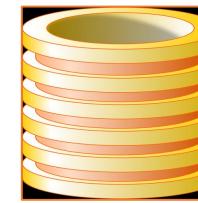
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



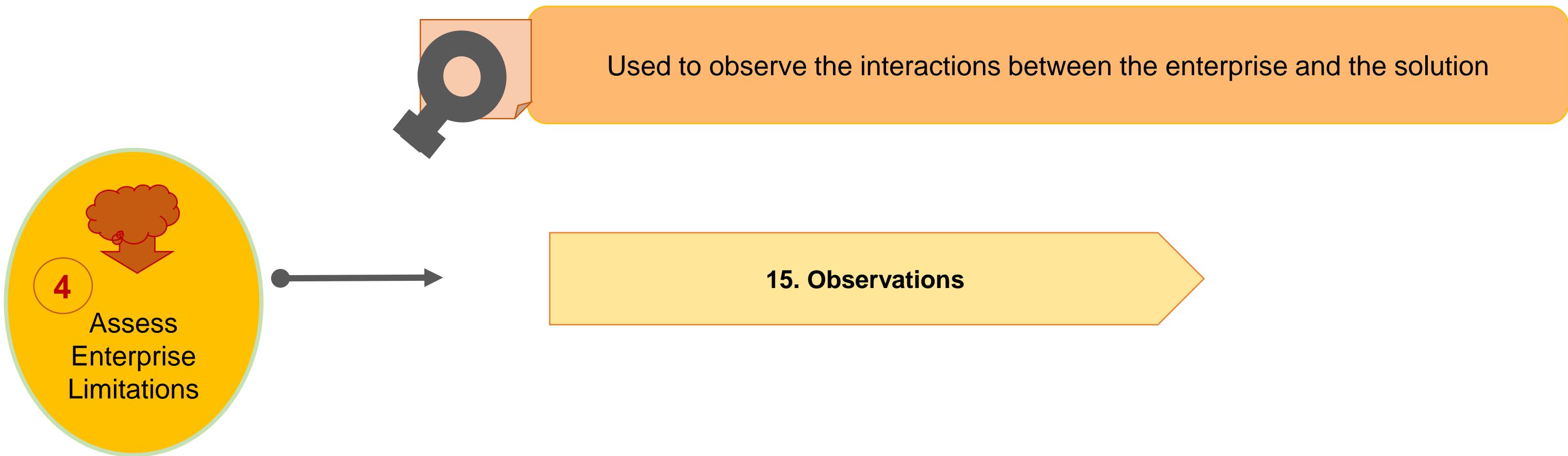
Used to identify the factors constraining the performance of the solution

**14. Data Mining**

## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

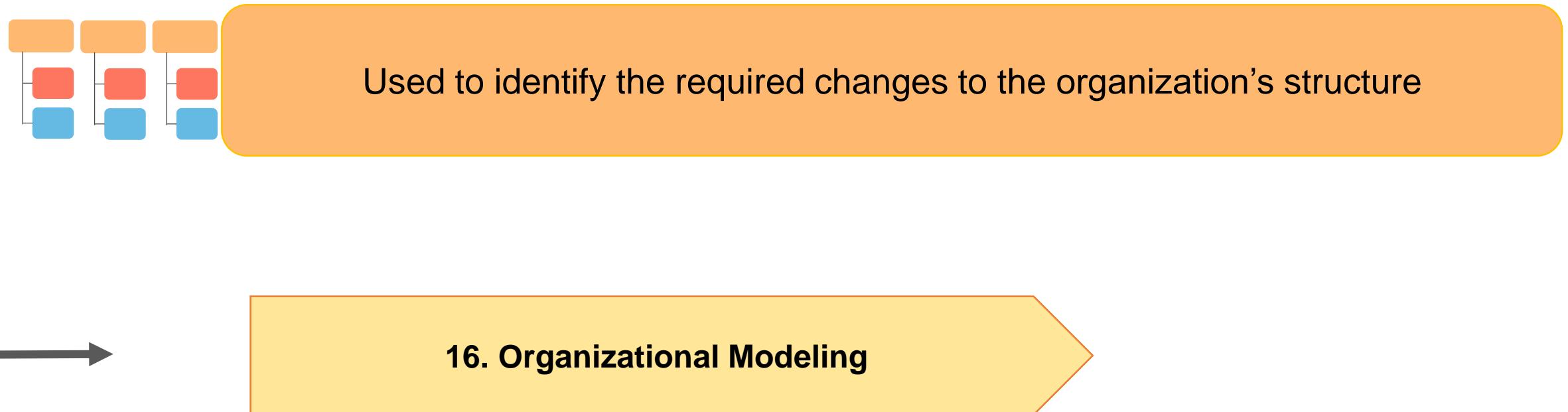
There are 18 techniques for assessing enterprise limitations.



## ASSESS ENTERPRISE LIMITATIONS (contd.)

### TECHNIQUES

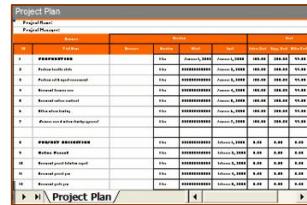
There are 18 techniques for assessing enterprise limitations.



# ASSESS ENTERPRISE LIMITATIONS (contd.)

## TECHNIQUES

There are 18 techniques for assessing enterprise limitations.



Used to 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

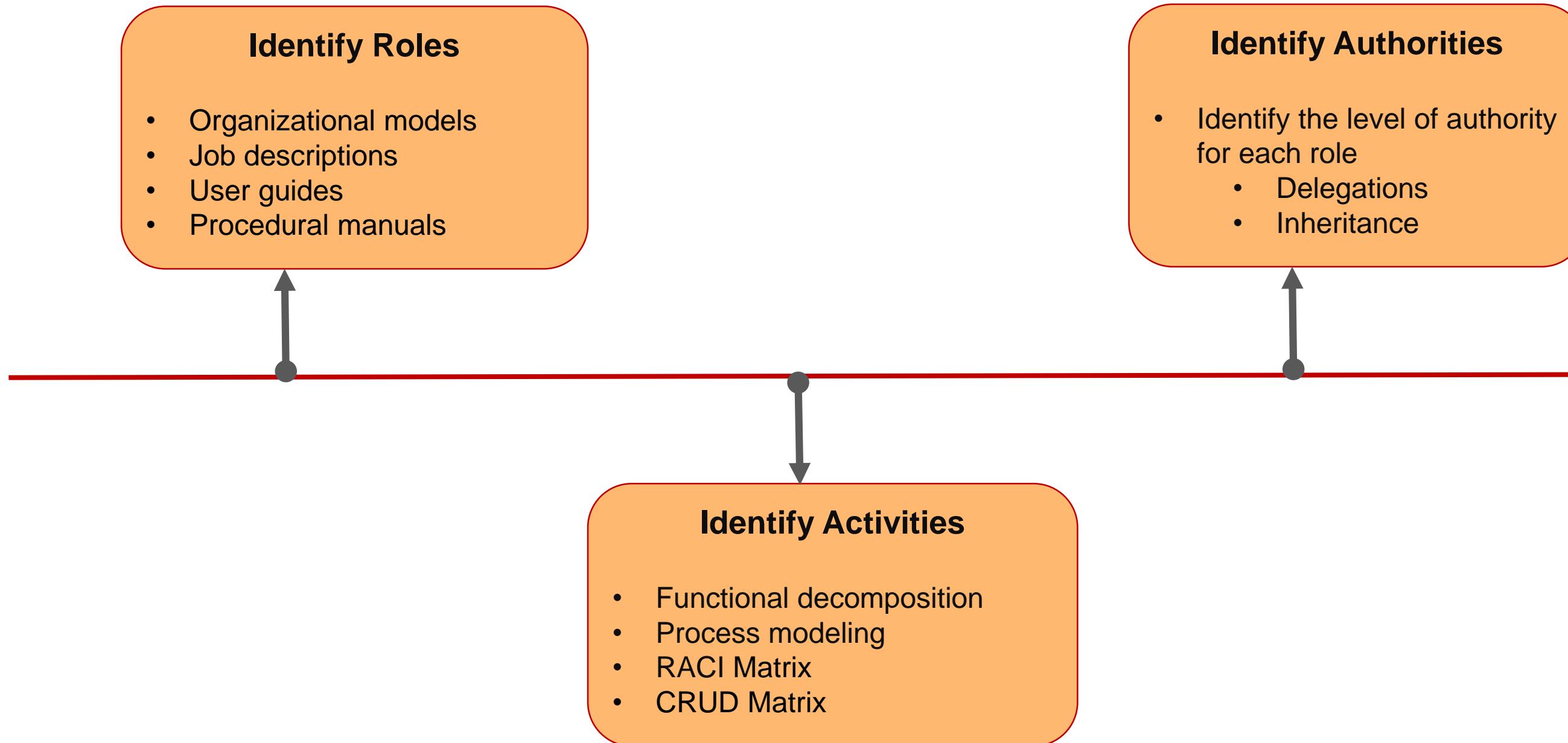
| Roles and Permissions Matrix | Purchase Manager | Purchase Officer | Accounts Manager | Accounts Officer | Stores Officer |
|------------------------------|------------------|------------------|------------------|------------------|----------------|
| Create Account               |                  |                  | 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

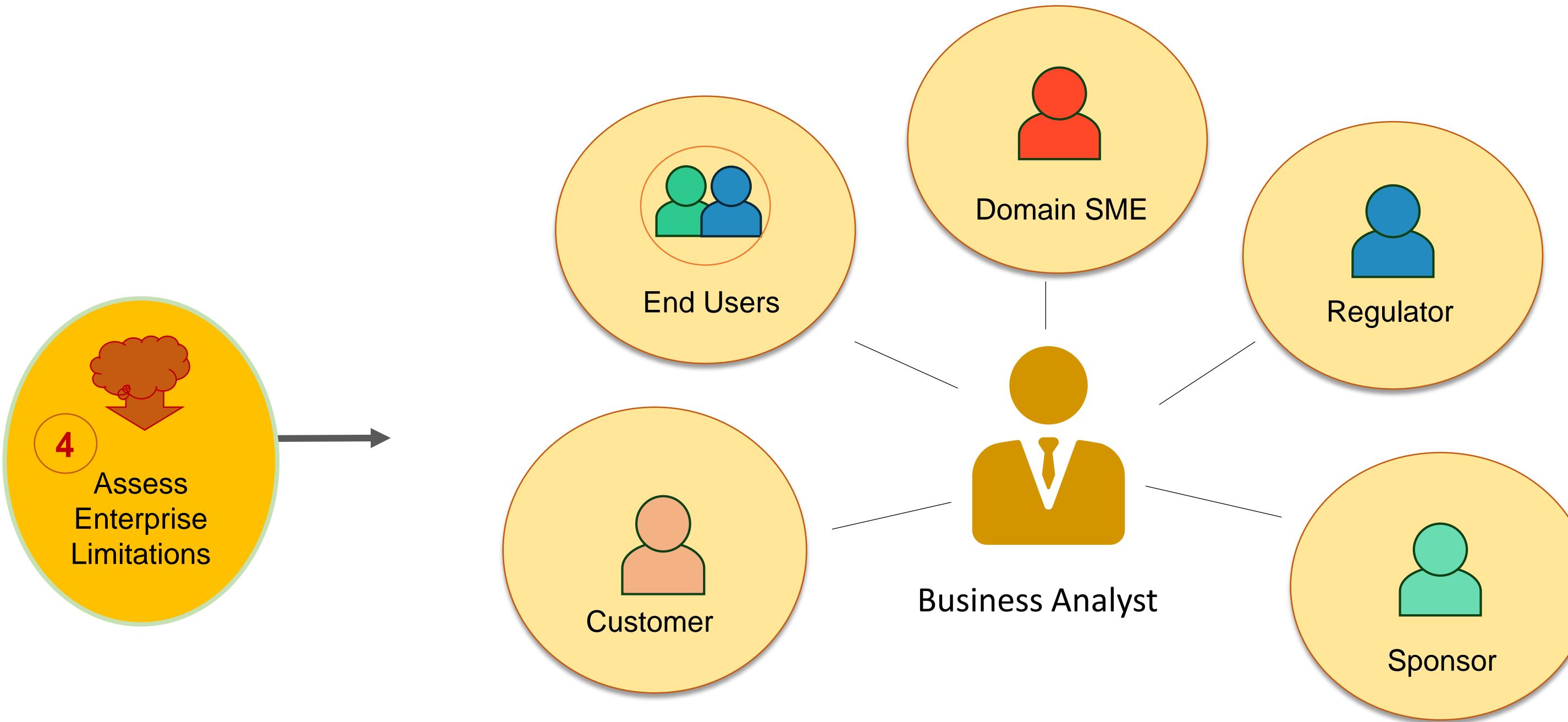
## ROLES AND PERMISSIONS MATRIX - ELEMENTS

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



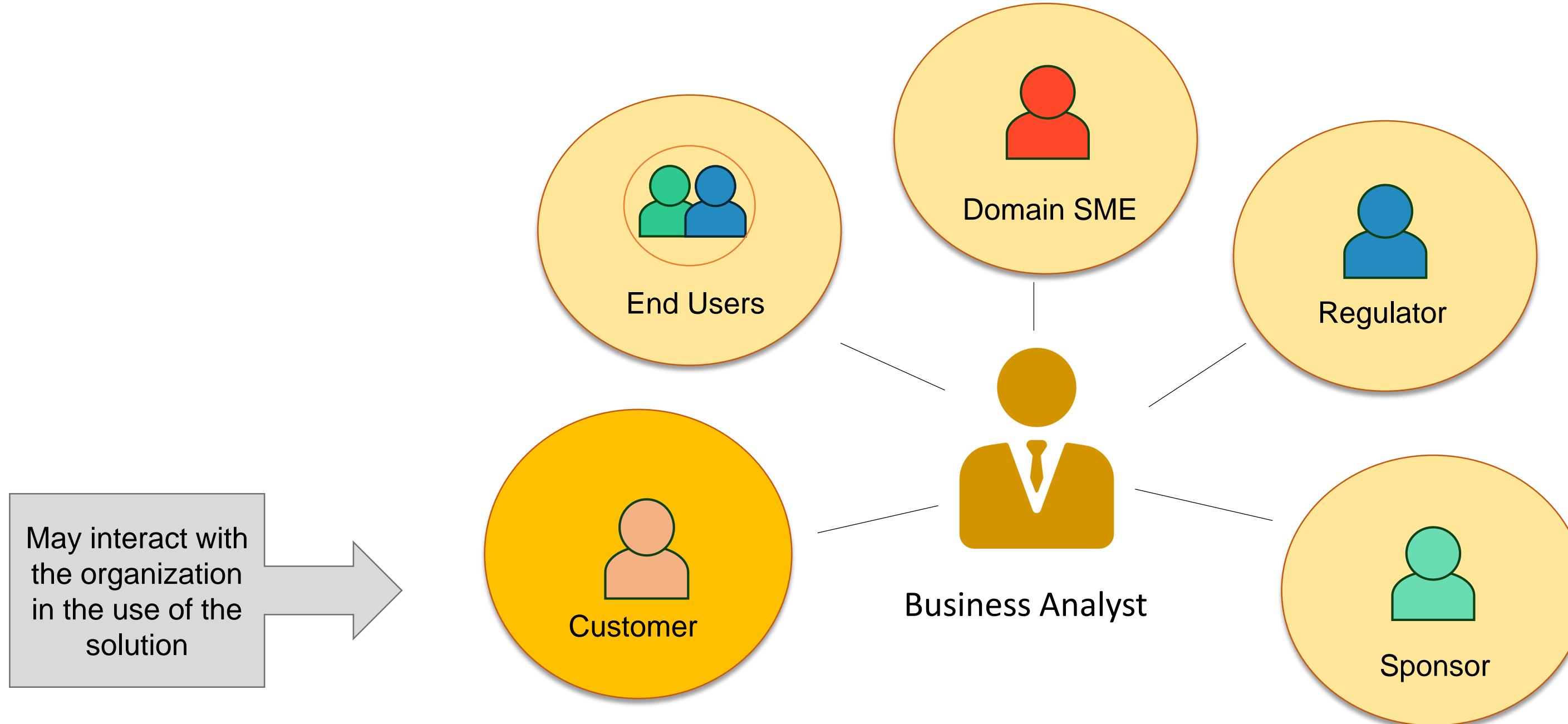
# ASSESS ENTERPRISE LIMITATIONS

## STAKEHOLDERS



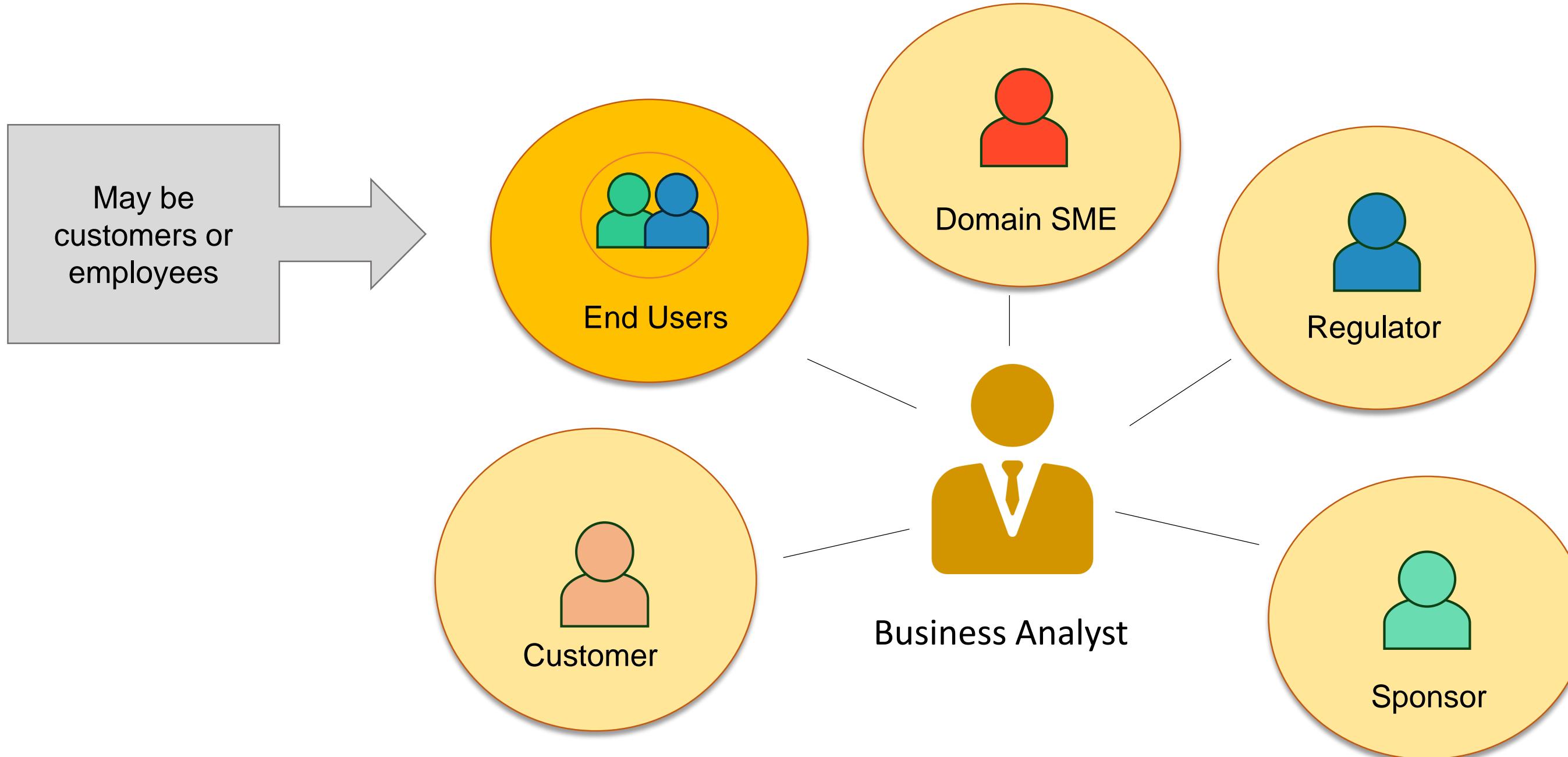
# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS



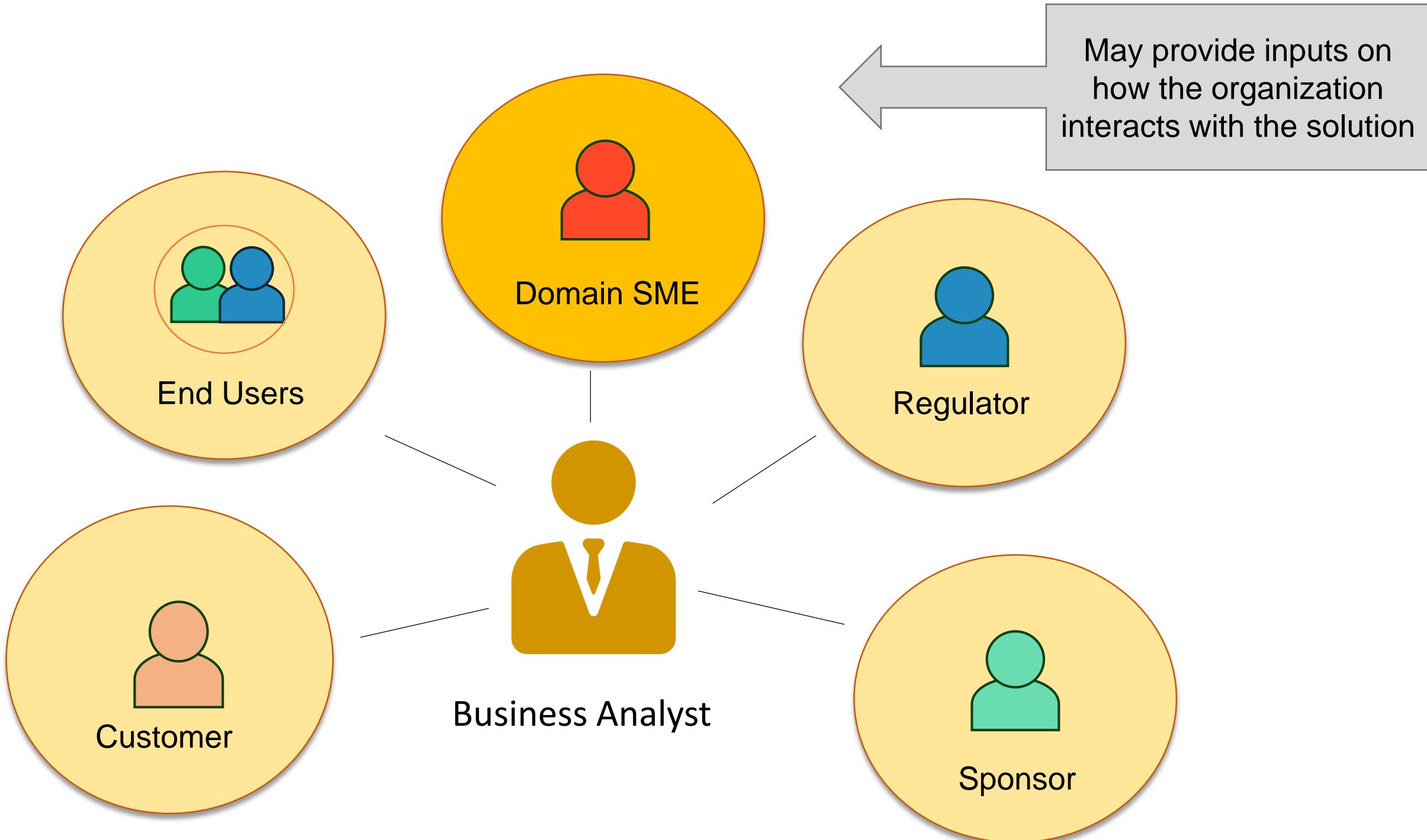
# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS



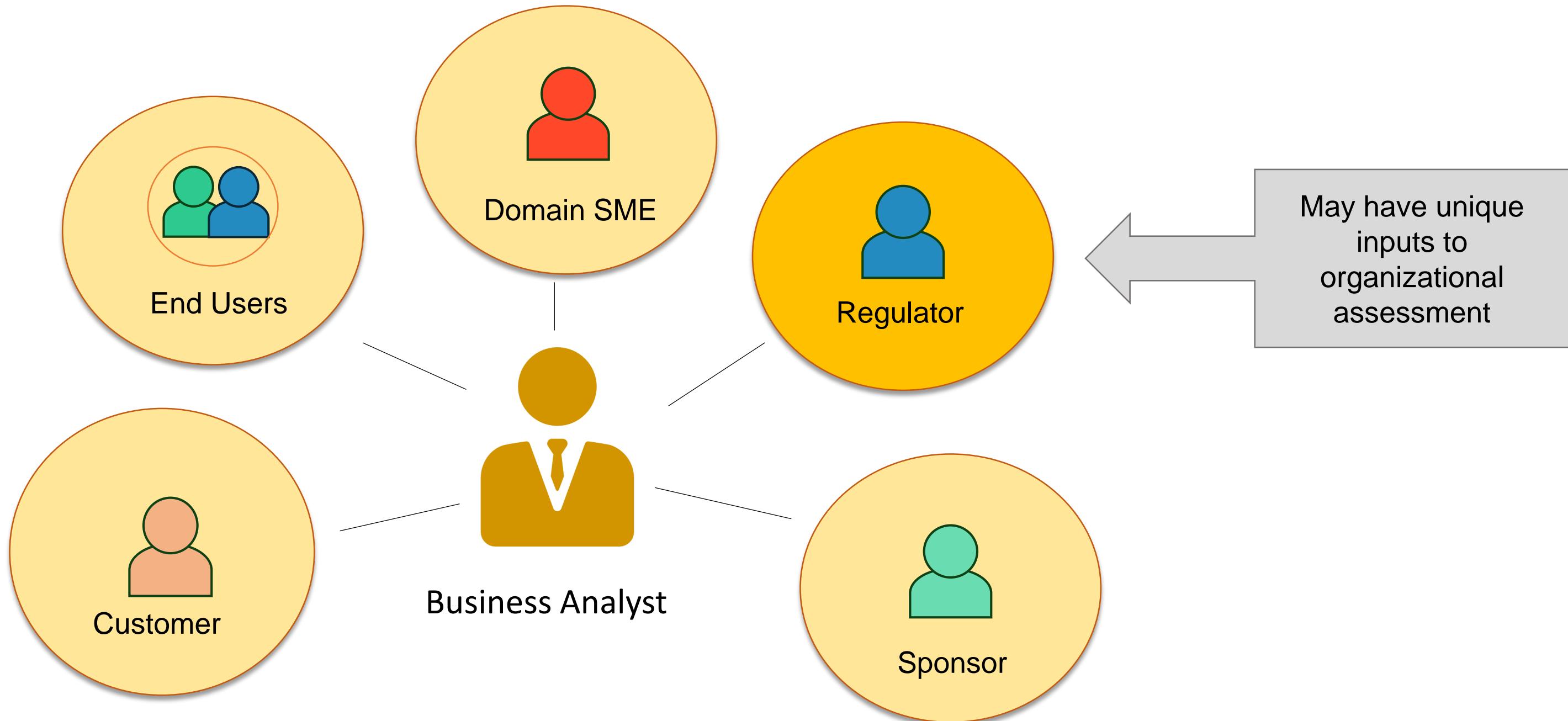
# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS



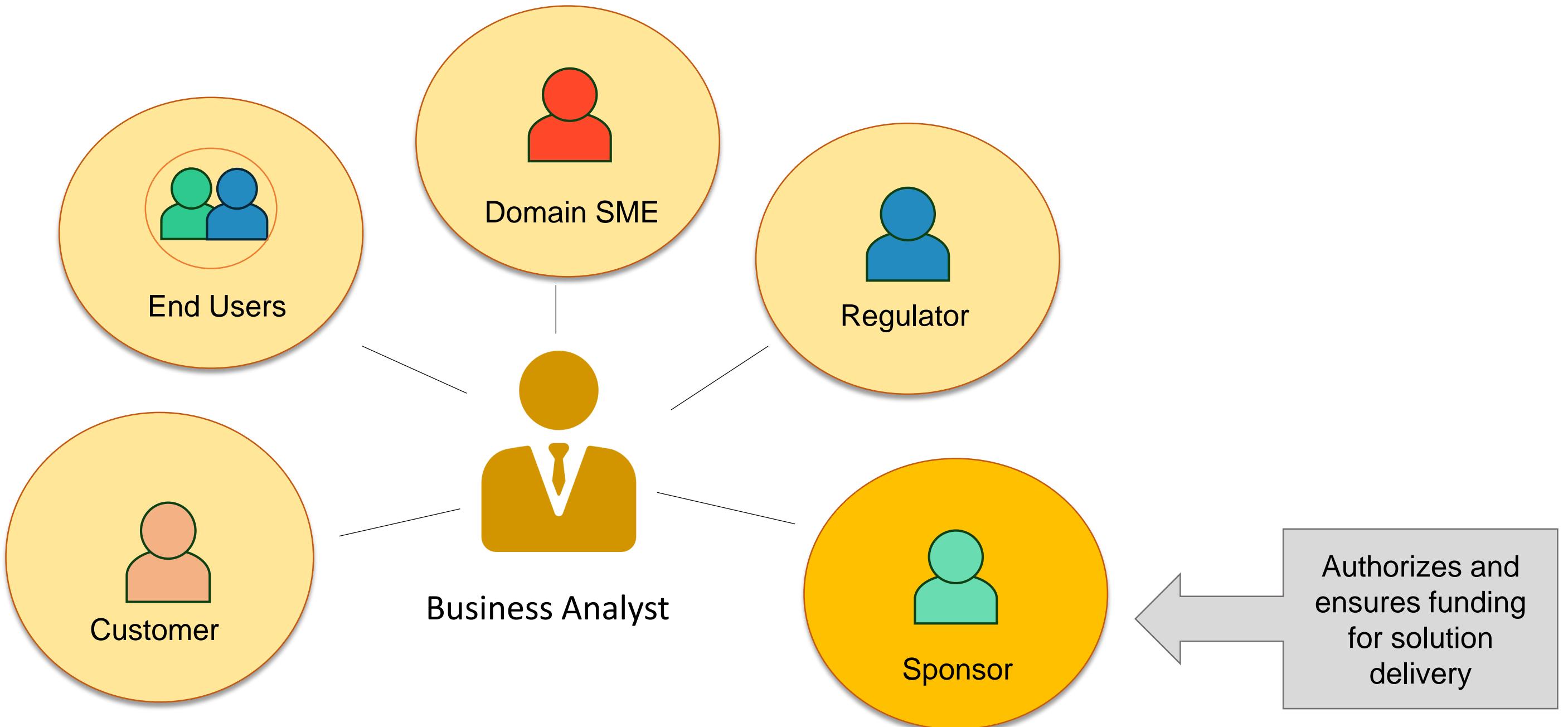
# ASSESS ENTERPRISE LIMITATIONS (contd.)

## STAKEHOLDERS



# ASSESS ENTERPRISE LIMITATIONS (contd.)

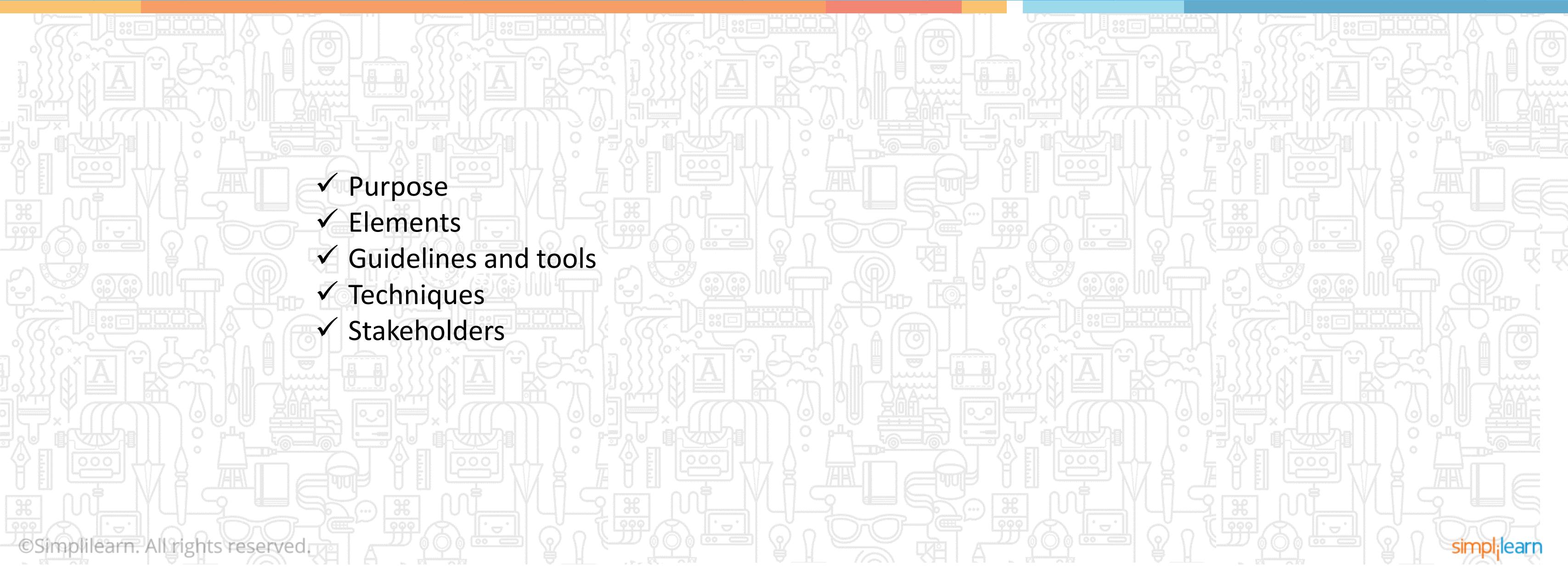
## STAKEHOLDERS



# Lesson 8: Solution Evaluation

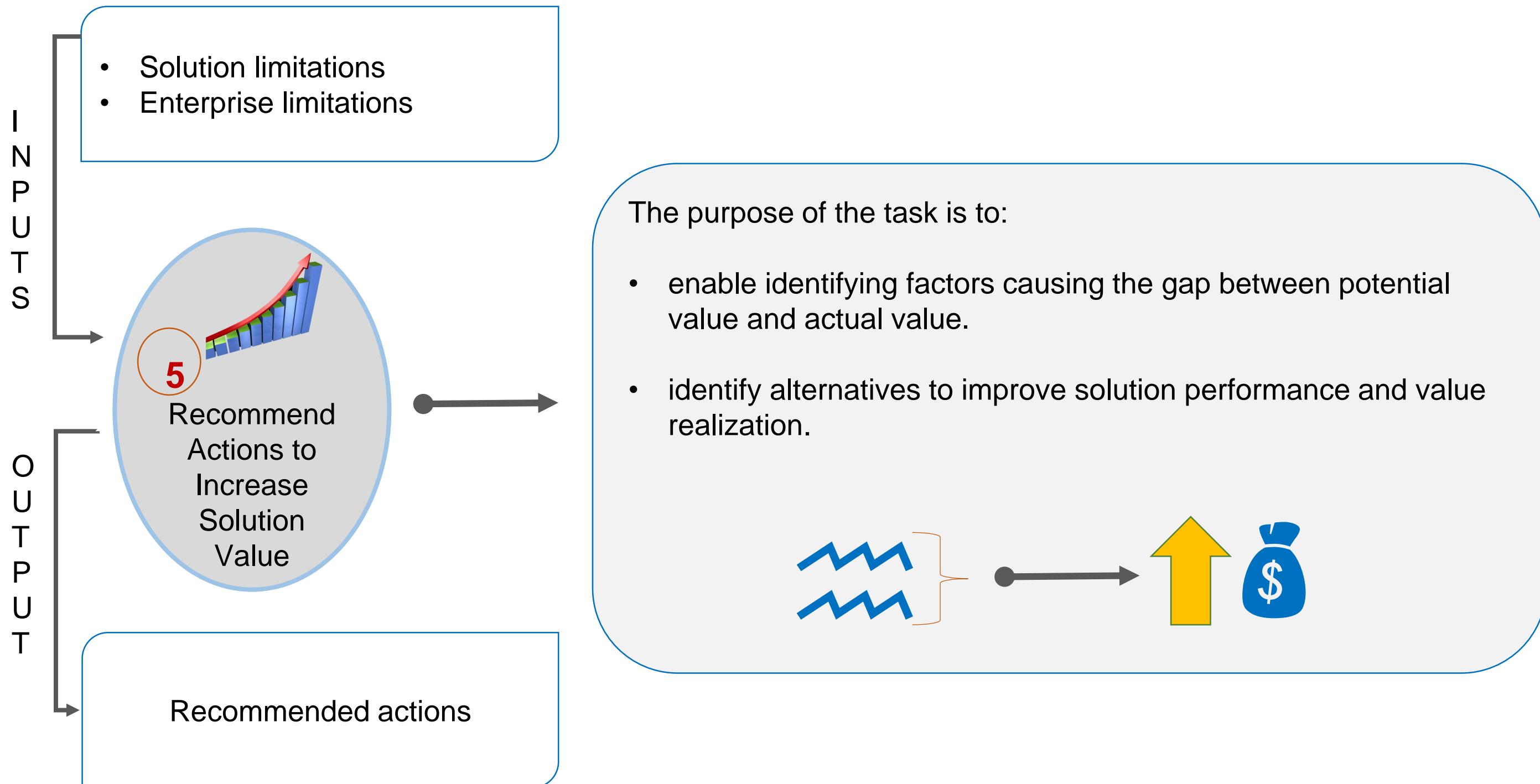
## Topic 8.5: Recommend Actions to increase Solution Value

- ✓ 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.)

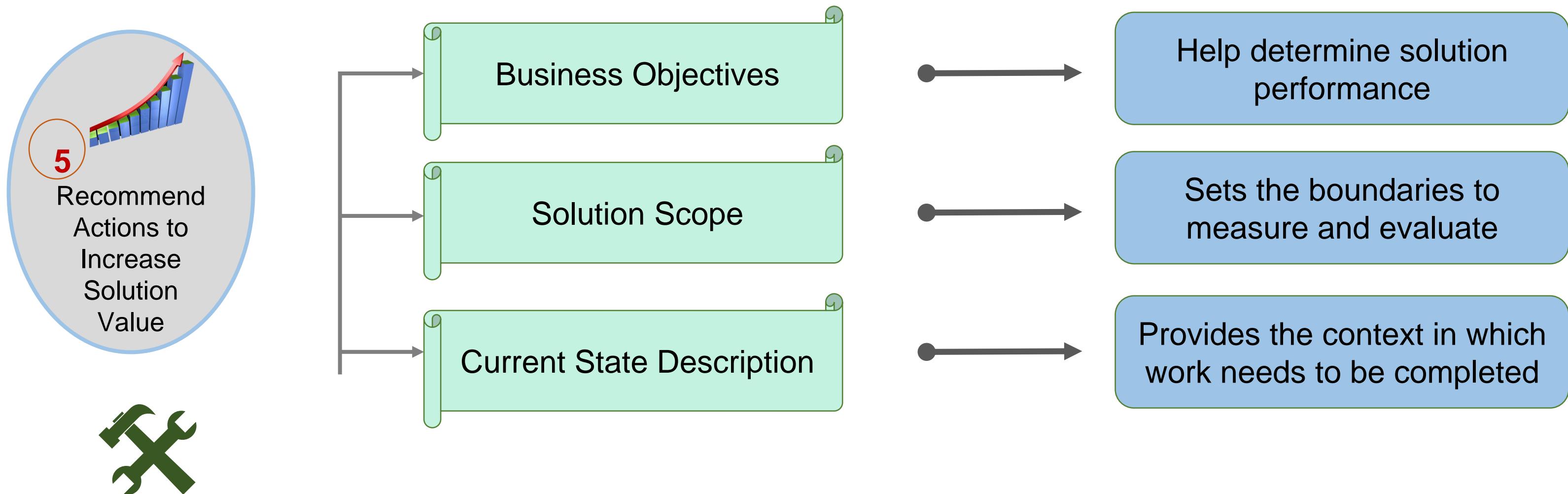
### ELEMENTS



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## GUIDELINES AND TOOLS

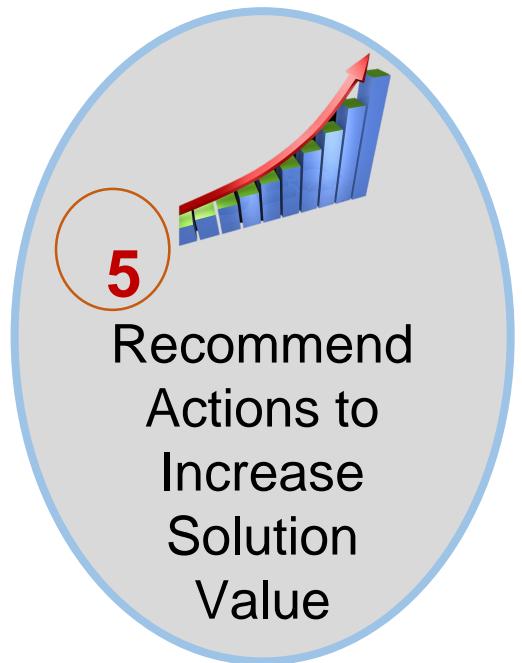
The business analyst may use the following guidelines and tools.



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## TECHNIQUES

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



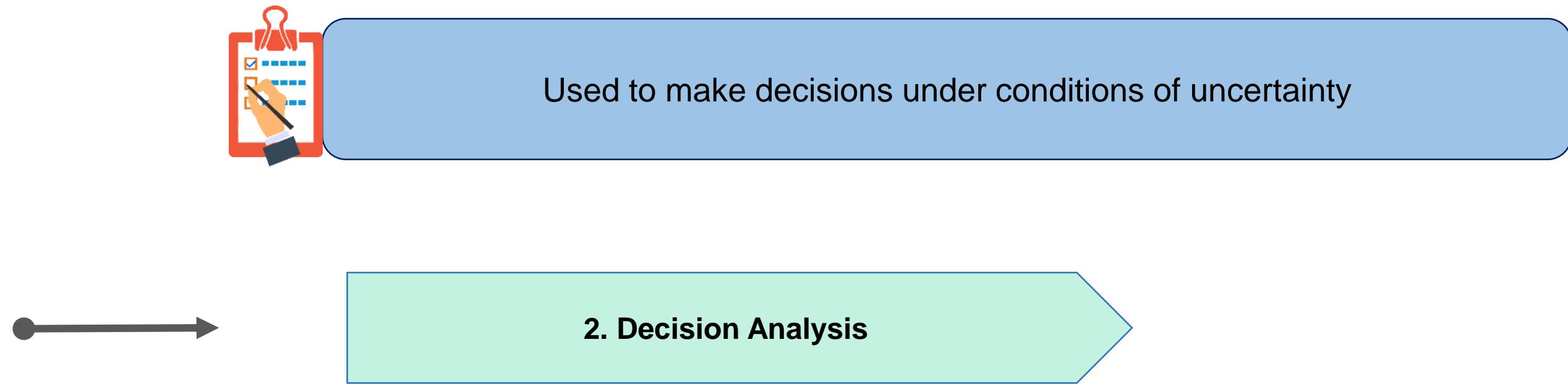
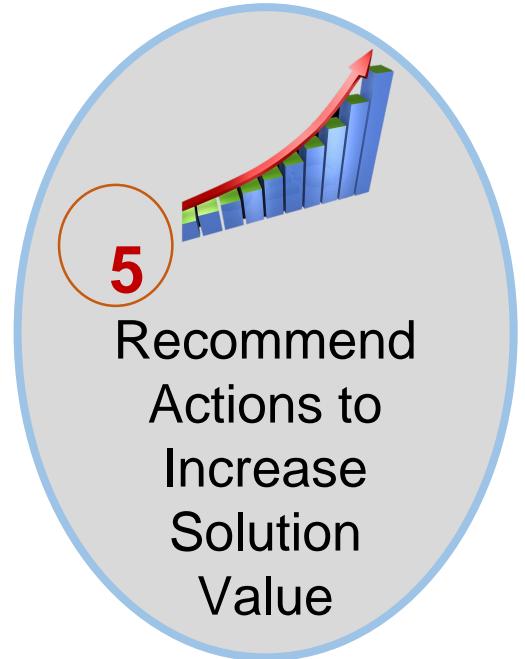
Used to identify the factors constraining the performance of the solution

1. Data Mining

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

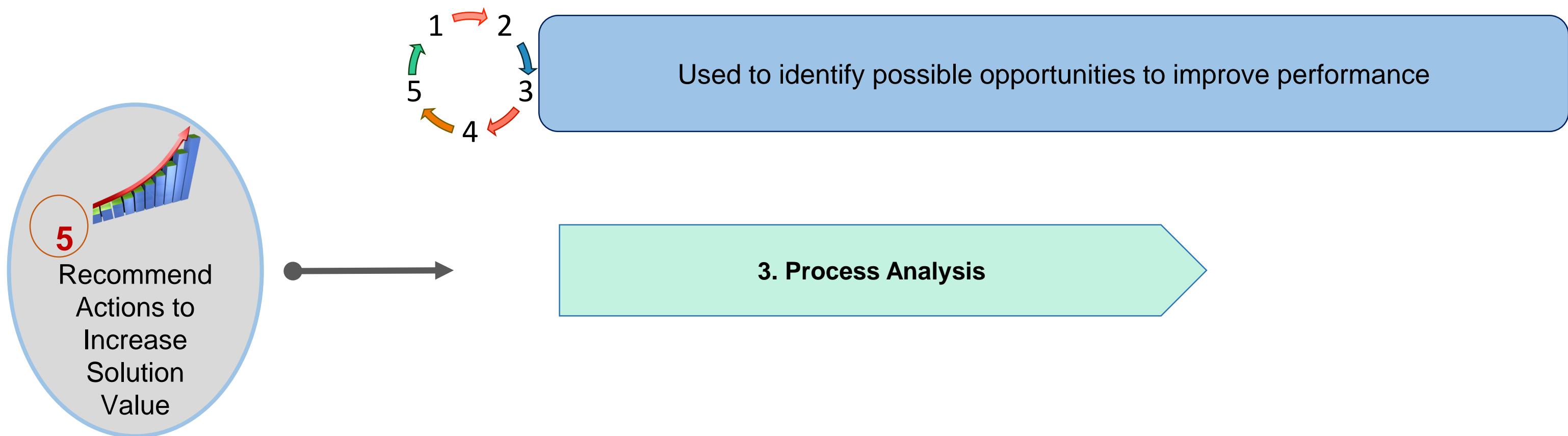
There are 9 techniques for recommending actions to increase solution value.



# 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

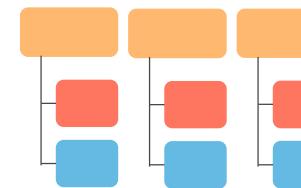
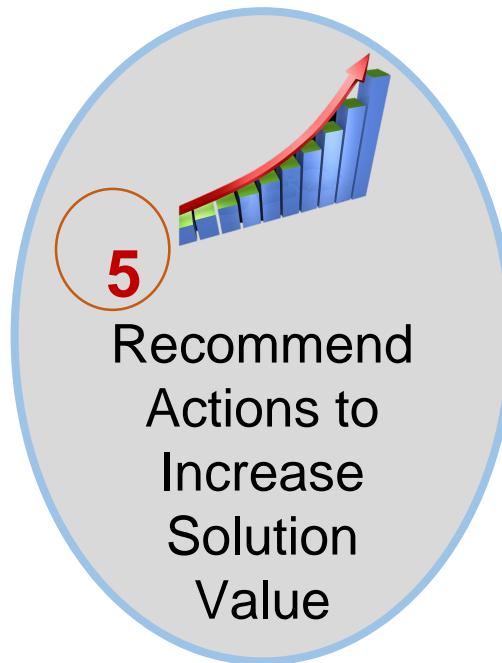


6. Surveys and Questionnaires

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

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



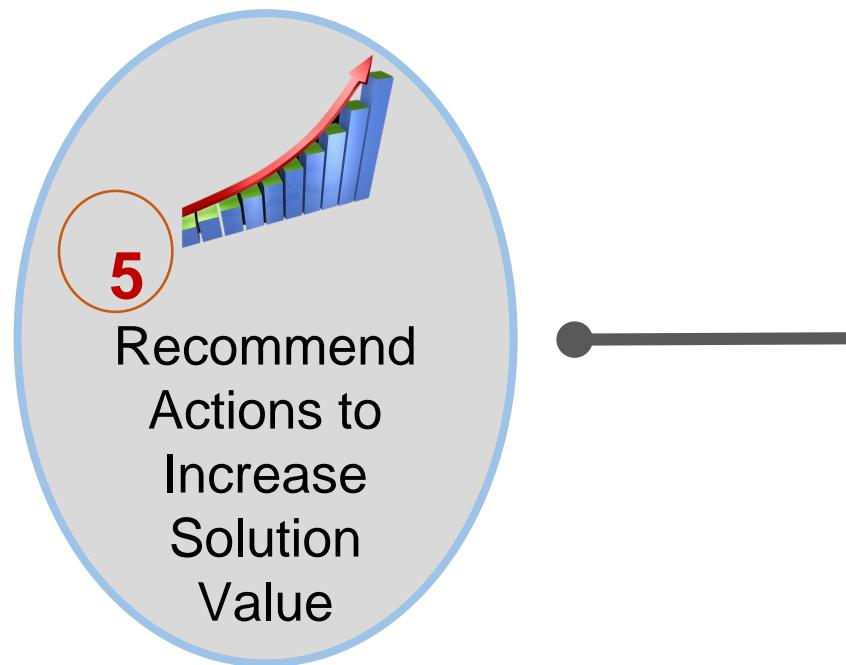
Used to ensure identification of the required changes to the organization structure

### 7. Organizational Modeling

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

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



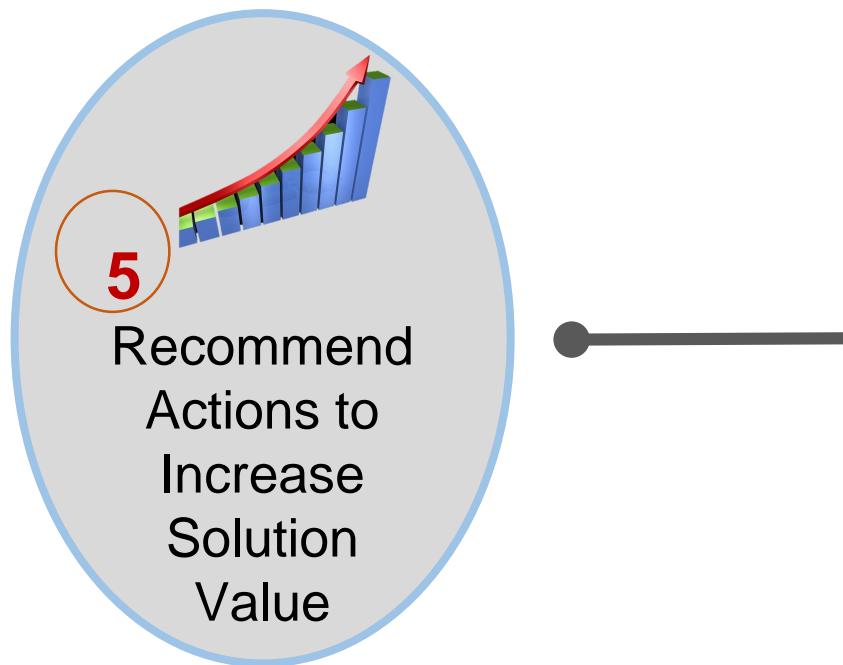
Used to identify the relative value of different actions to improve solution performance

**8. Prioritization**

# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## TECHNIQUES

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

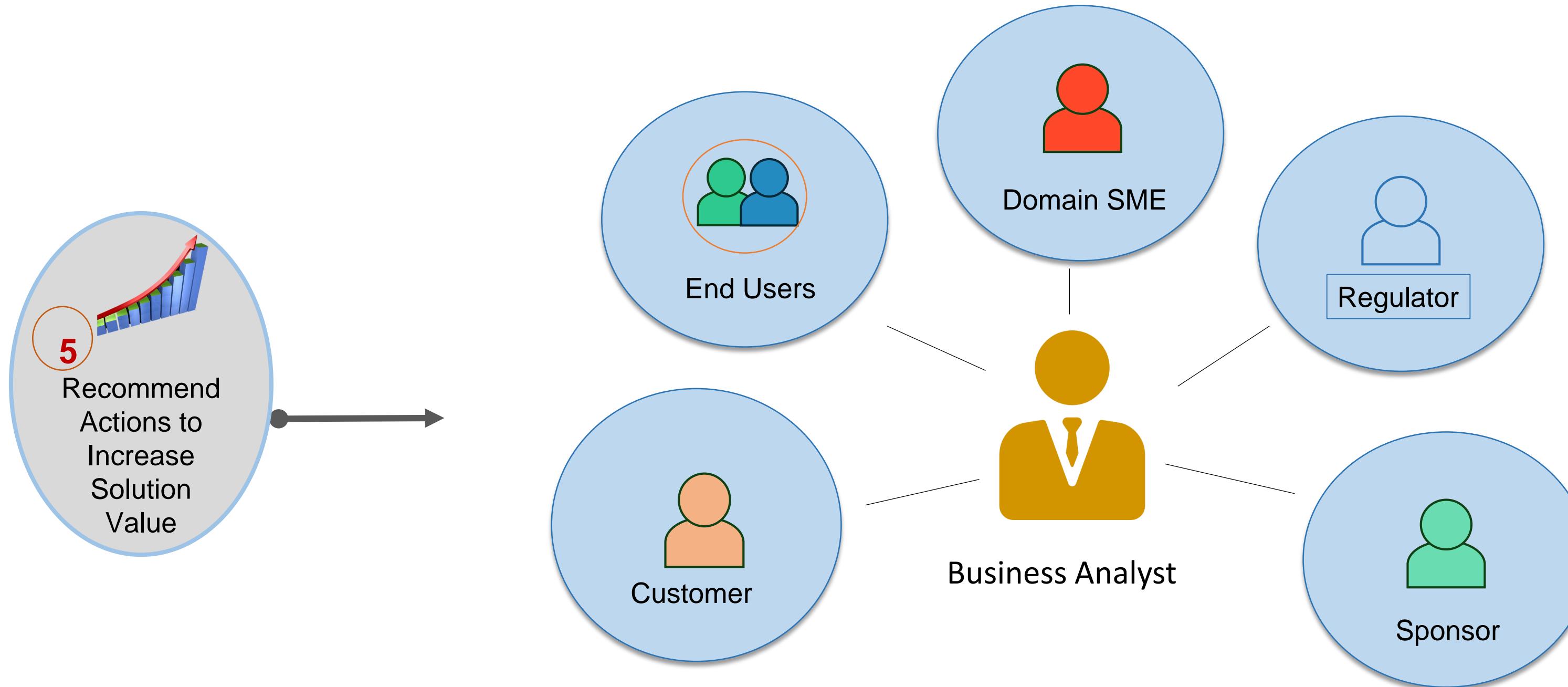


Used to identify, analyze, and manage the risks related to potential limitations of the solution

### 9. Risk Analysis and Management

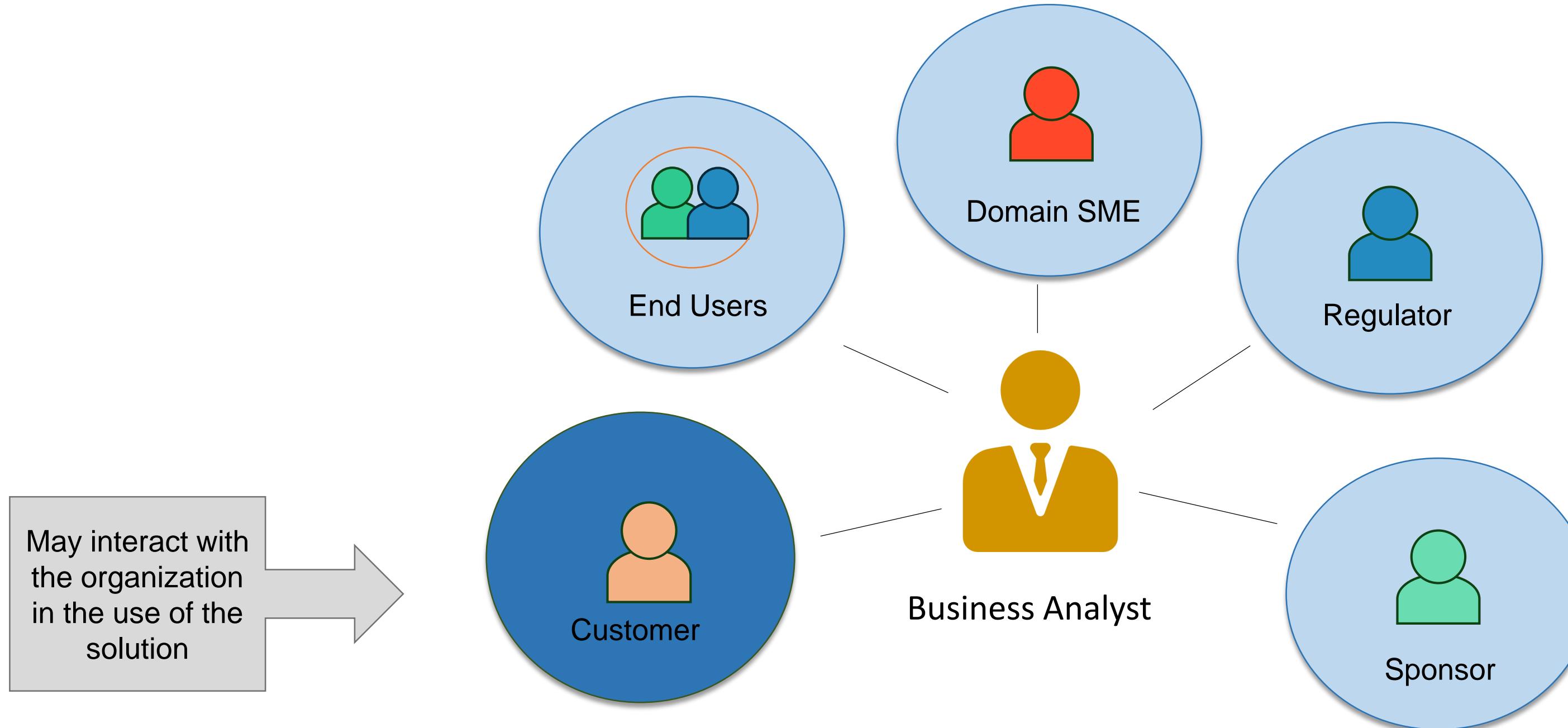
# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE

## STAKEHOLDERS



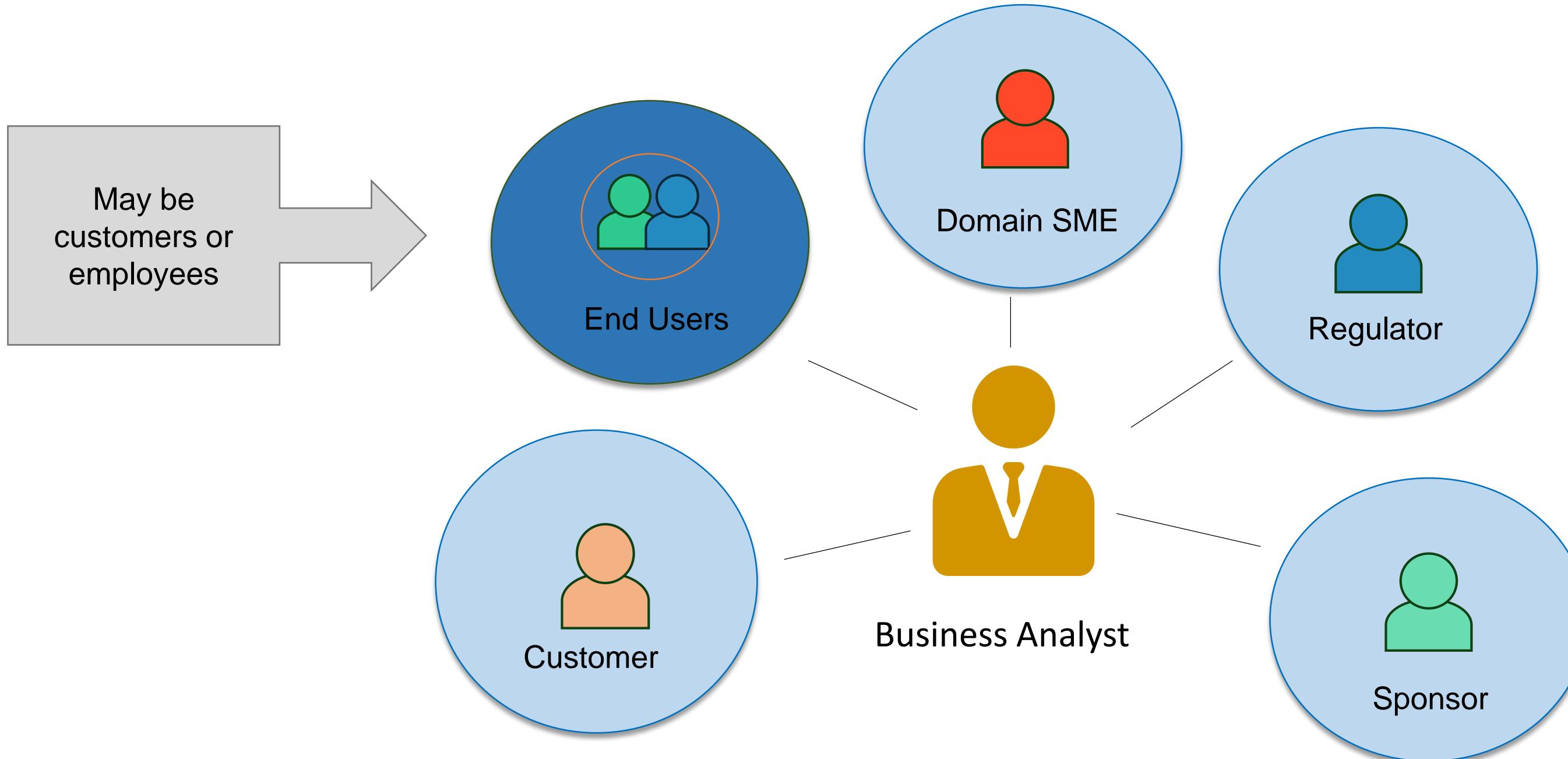
# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## STAKEHOLDERS



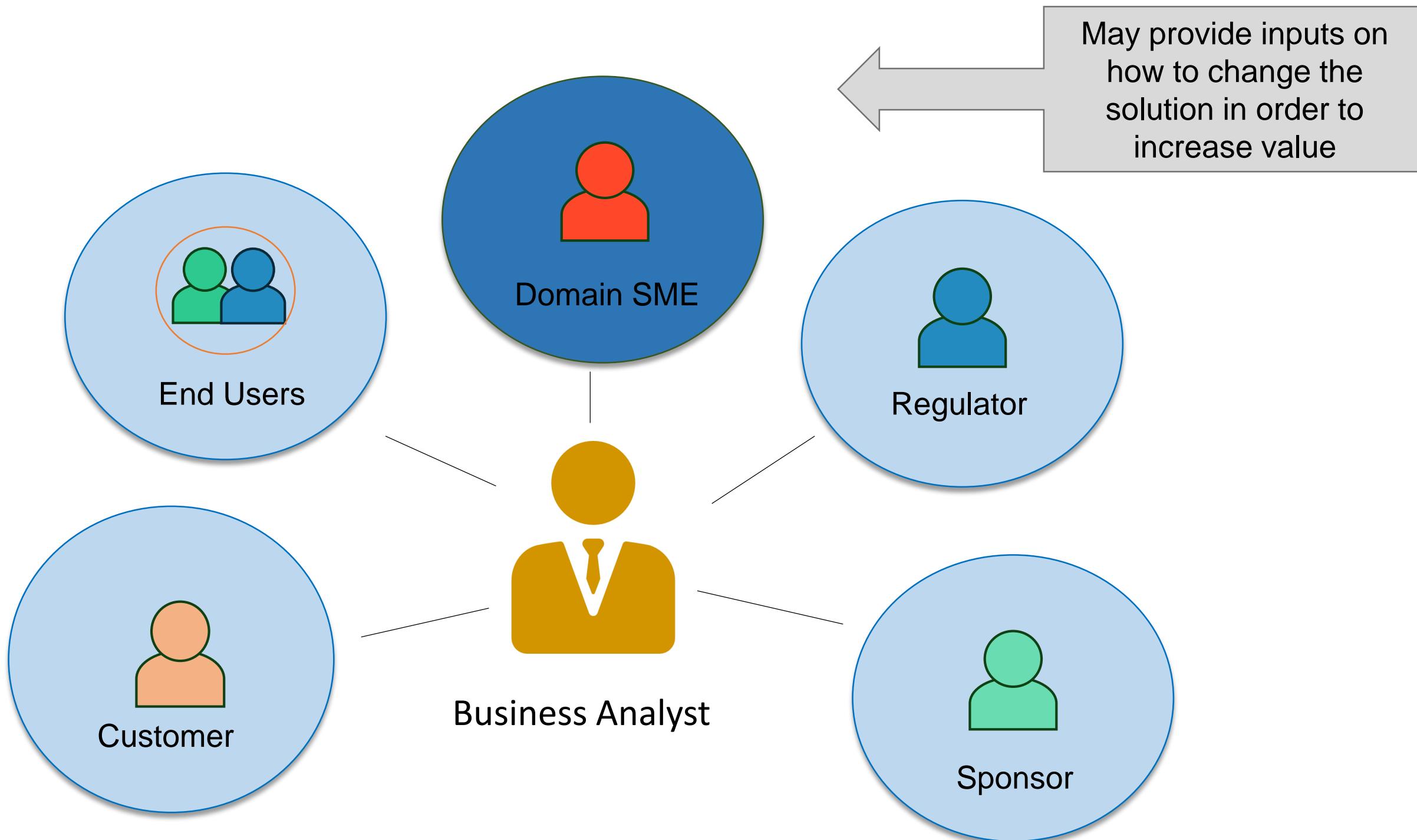
# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## STAKEHOLDERS



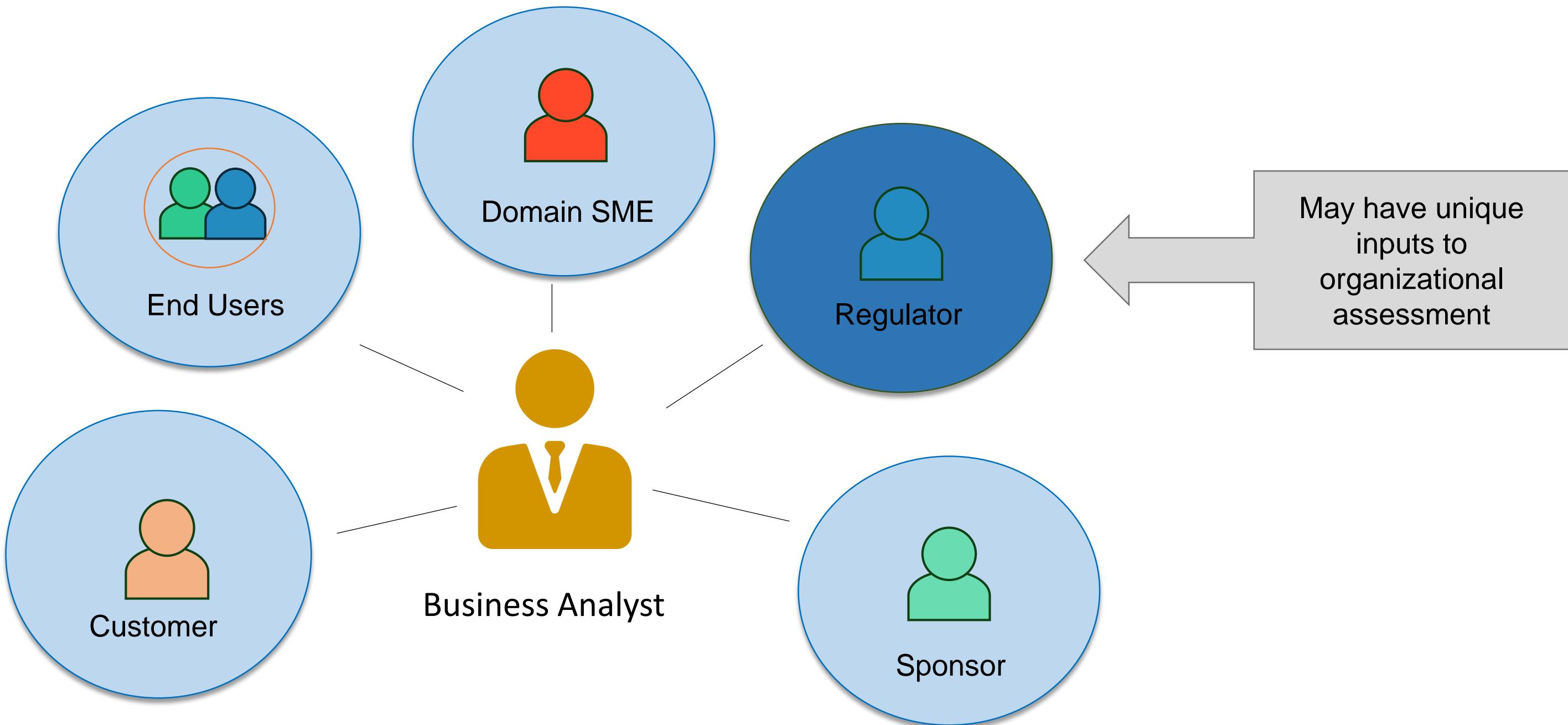
## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### STAKEHOLDERS



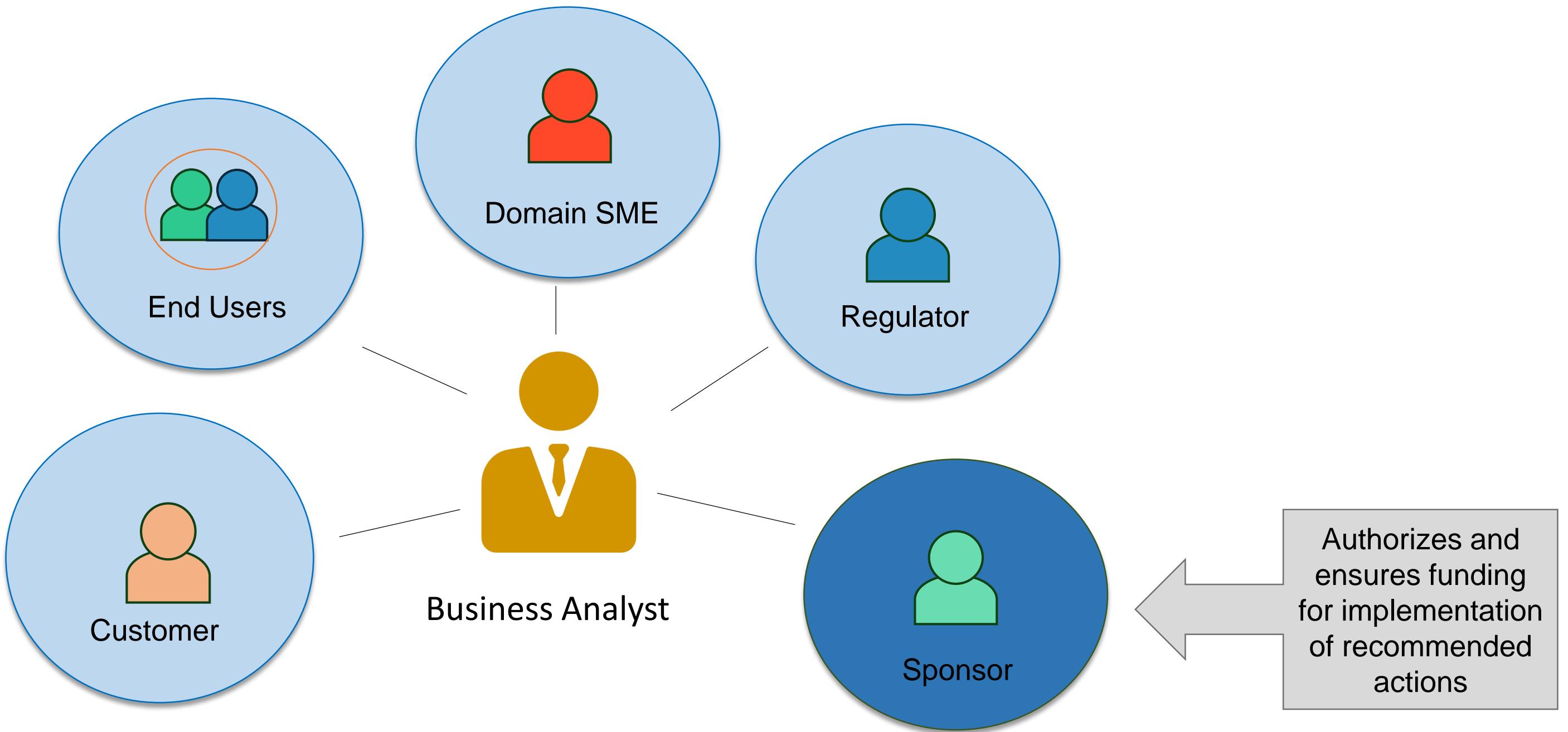
## RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

### STAKEHOLDERS



# RECOMMEND ACTIONS TO INCREASE SOLUTION VALUE (contd.)

## STAKEHOLDERS

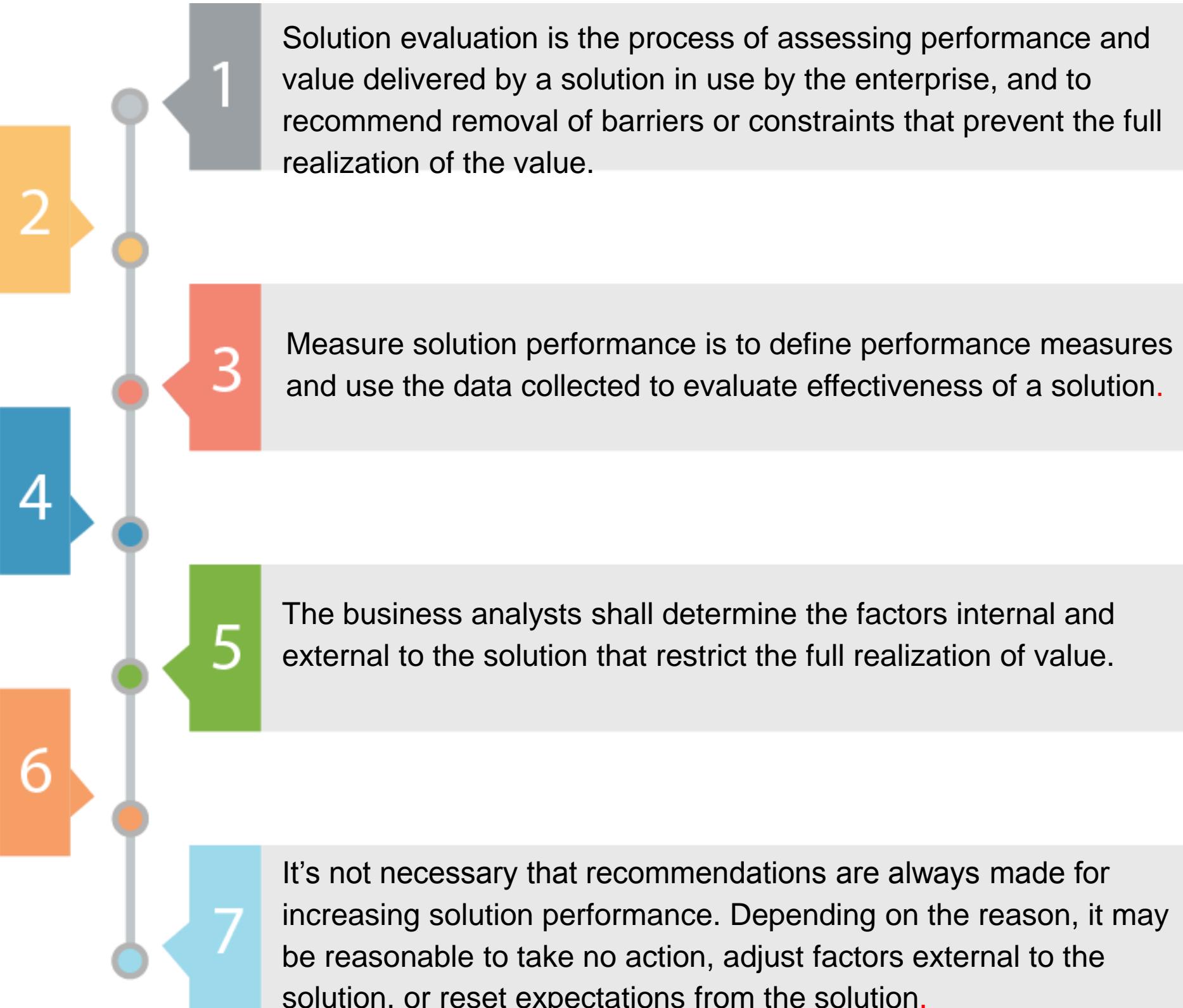


## KEY TAKEAWAYS

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

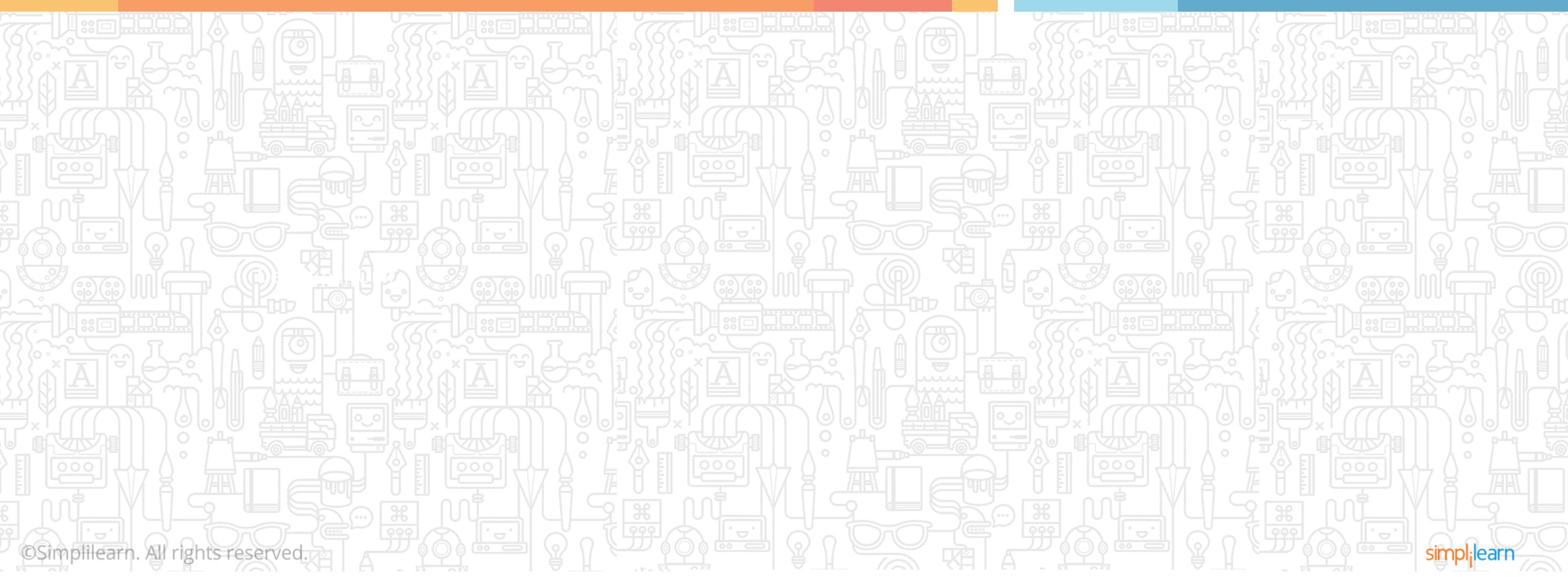
The collected measures are analyzed to derive meaning and actionable items.

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



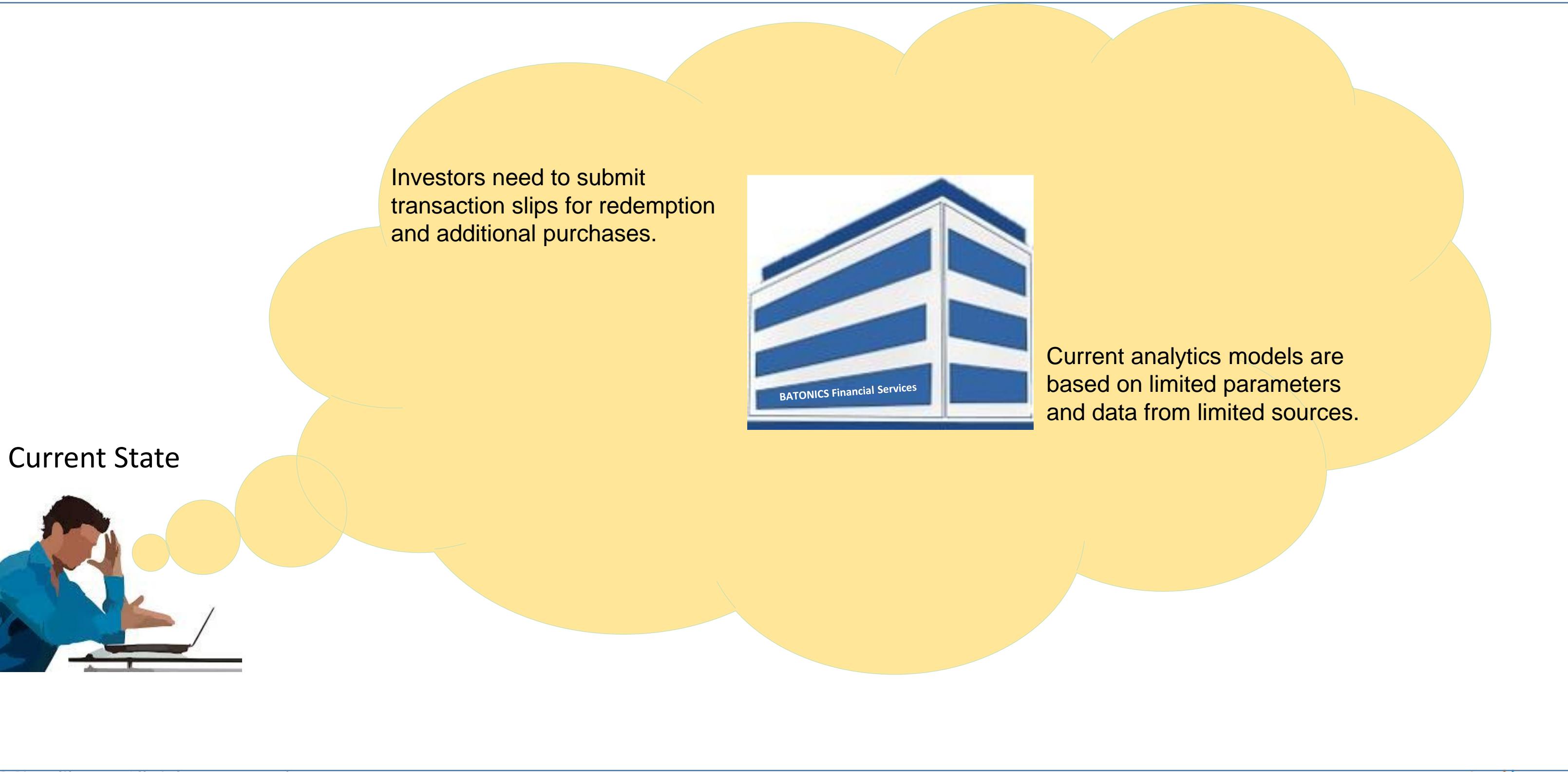
### Quick facts:

- ✓ 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.



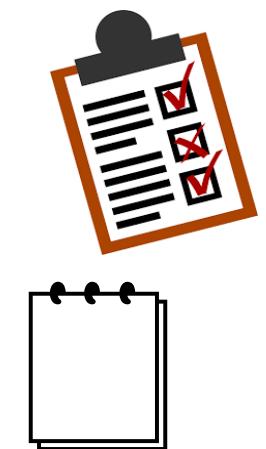
Implementation team is develops the solution incrementally to enhance investor and distributor services.



Vendors provide analytics solutions to the fund managers.



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



# CASE STUDY

---

## 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?**

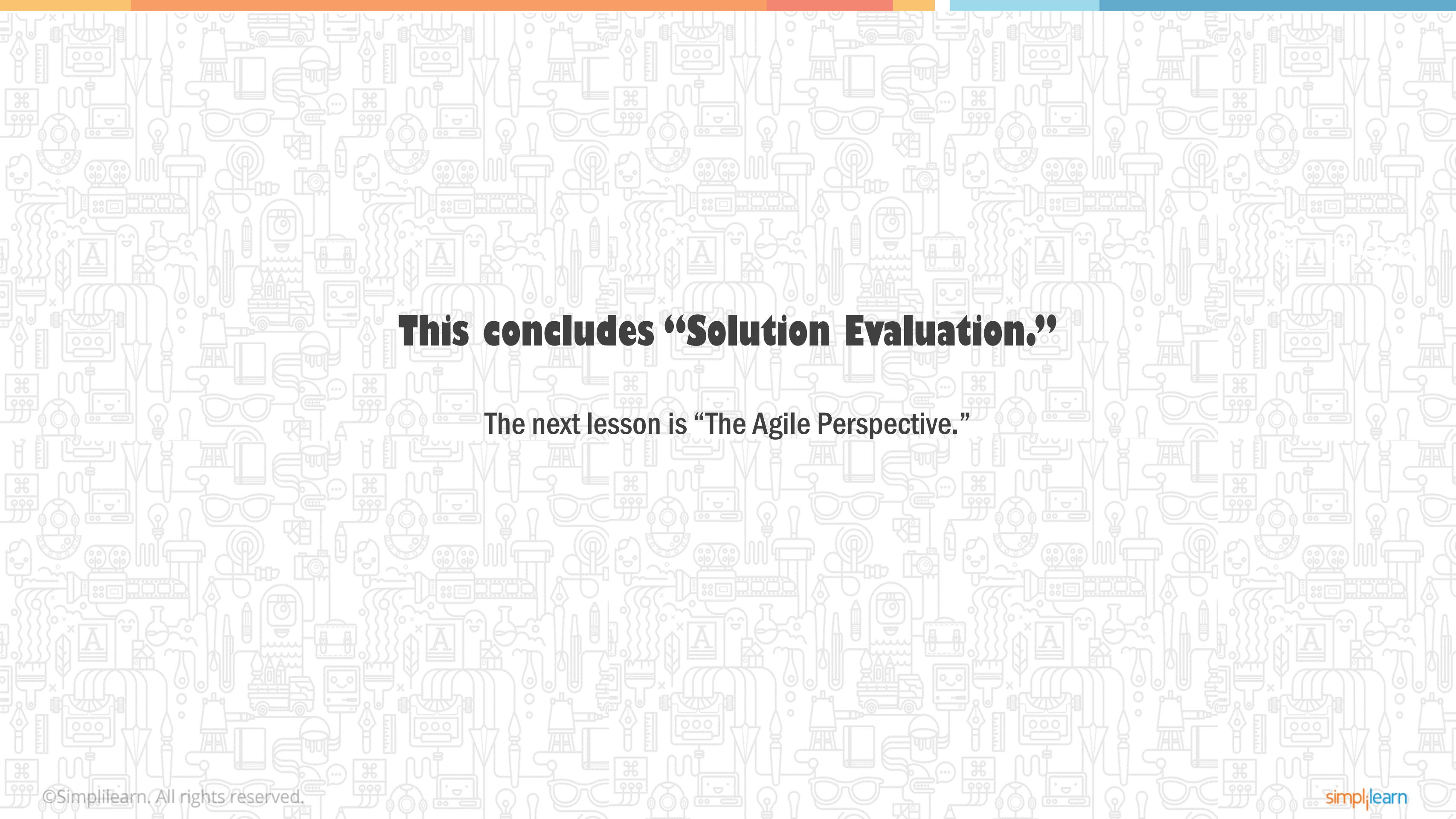
- a. Prescriptive
- b. Descriptive
- c. Predictive
- d. Diagnostic



The correct answer is

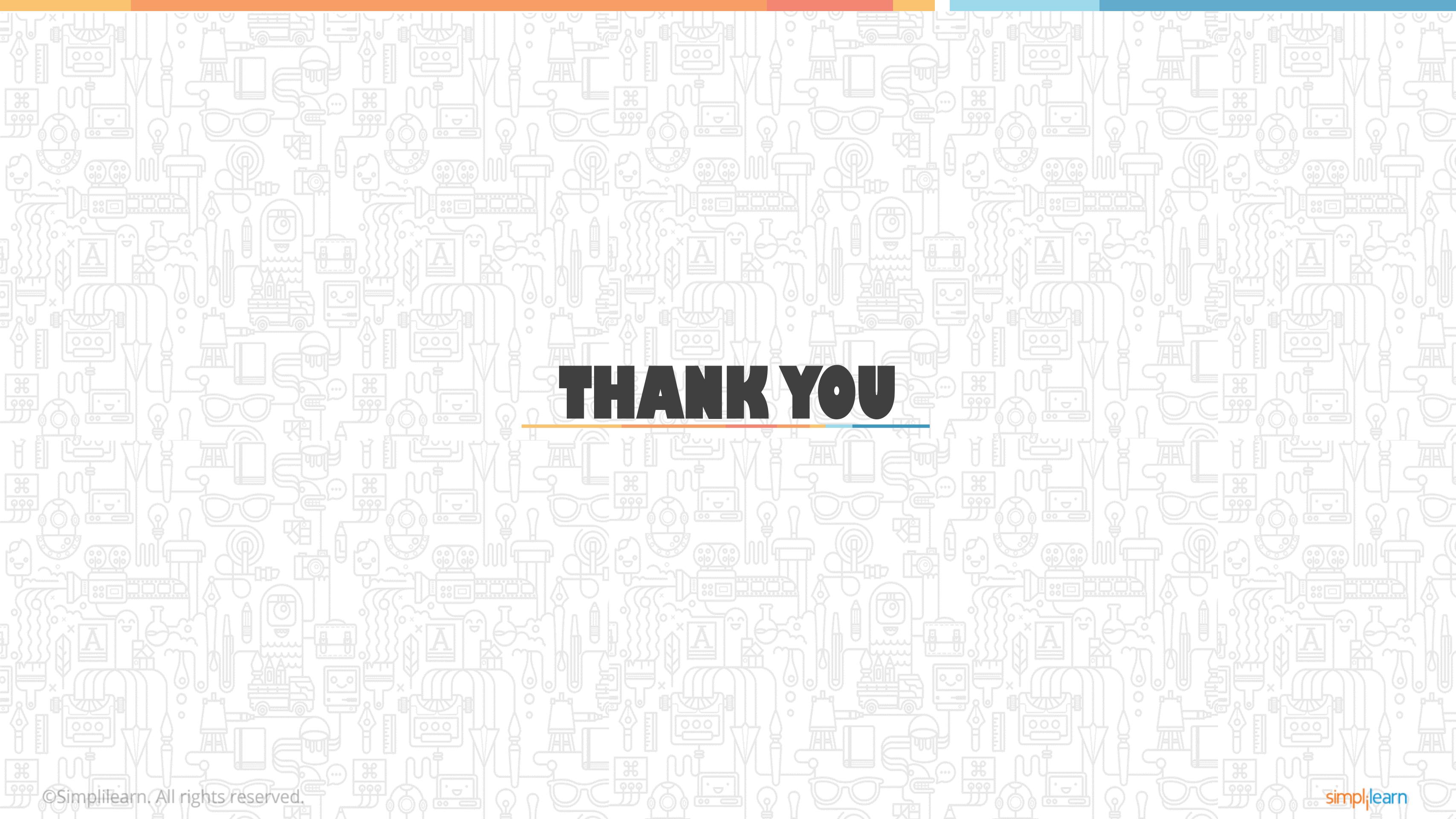
**a.**

**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

---

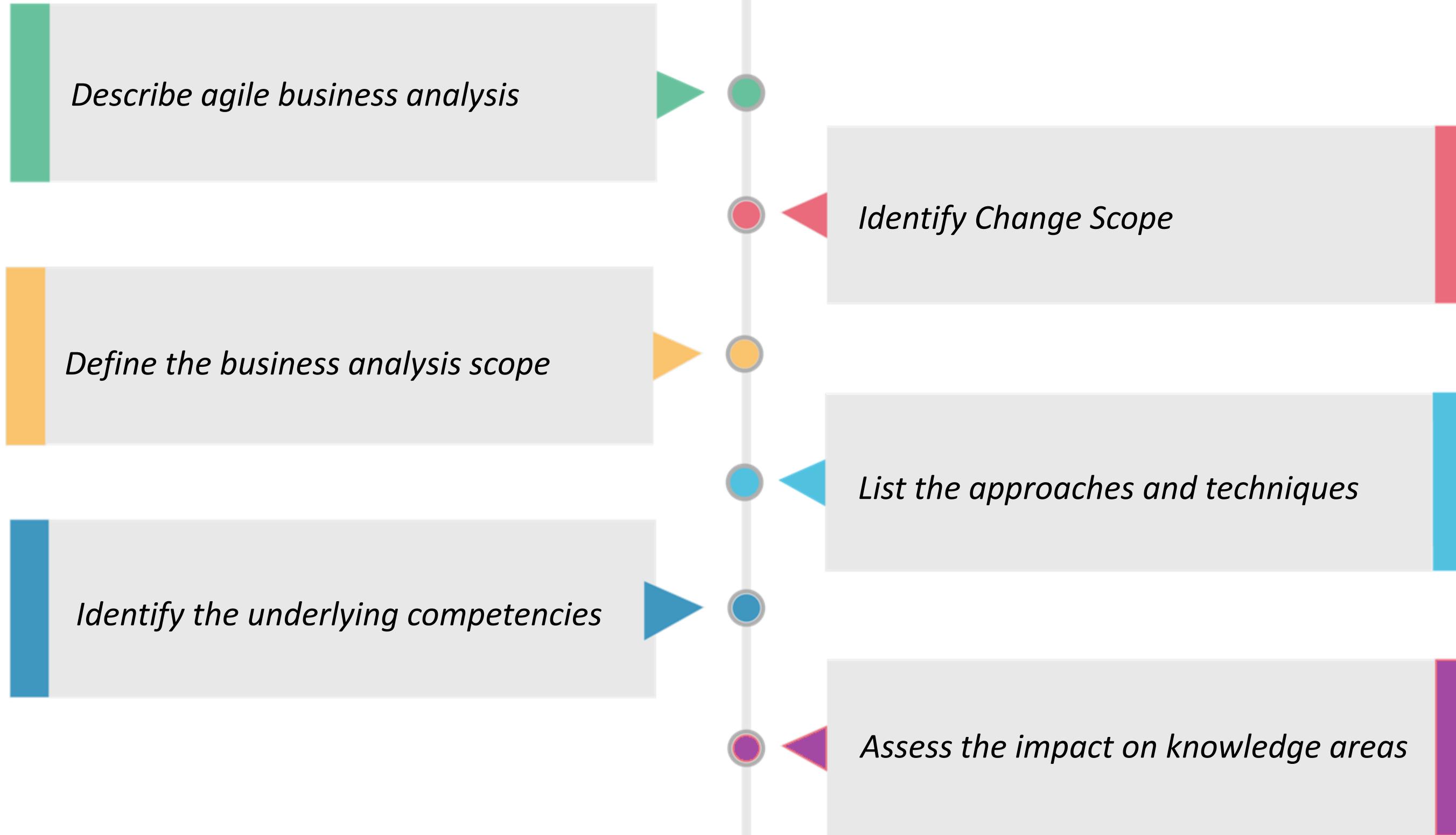
# CBAP® Exam Preparation Course

## Lesson 9 – Agile Perspective



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# WHAT'S IN IT FOR ME



# Lesson 9: The Agile Perspective

## Topic 9.1: Introduction

✓ What is agile?



# INTRODUCTION

Agile is a flexible mindset, which embodies agile values and exhibits complementary practices.



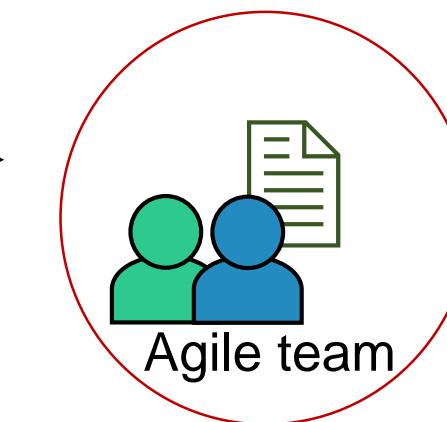
Business Analyst



Active member working:  
- as a proxy stakeholder  
- working with a sponsor

It is continuous work, relying on:

- communication
- facilitation
- coaching
- negotiation skills



Makes information available:  
- at the right level of detail  
- at the right time

# Lesson 9: The Agile Perspective

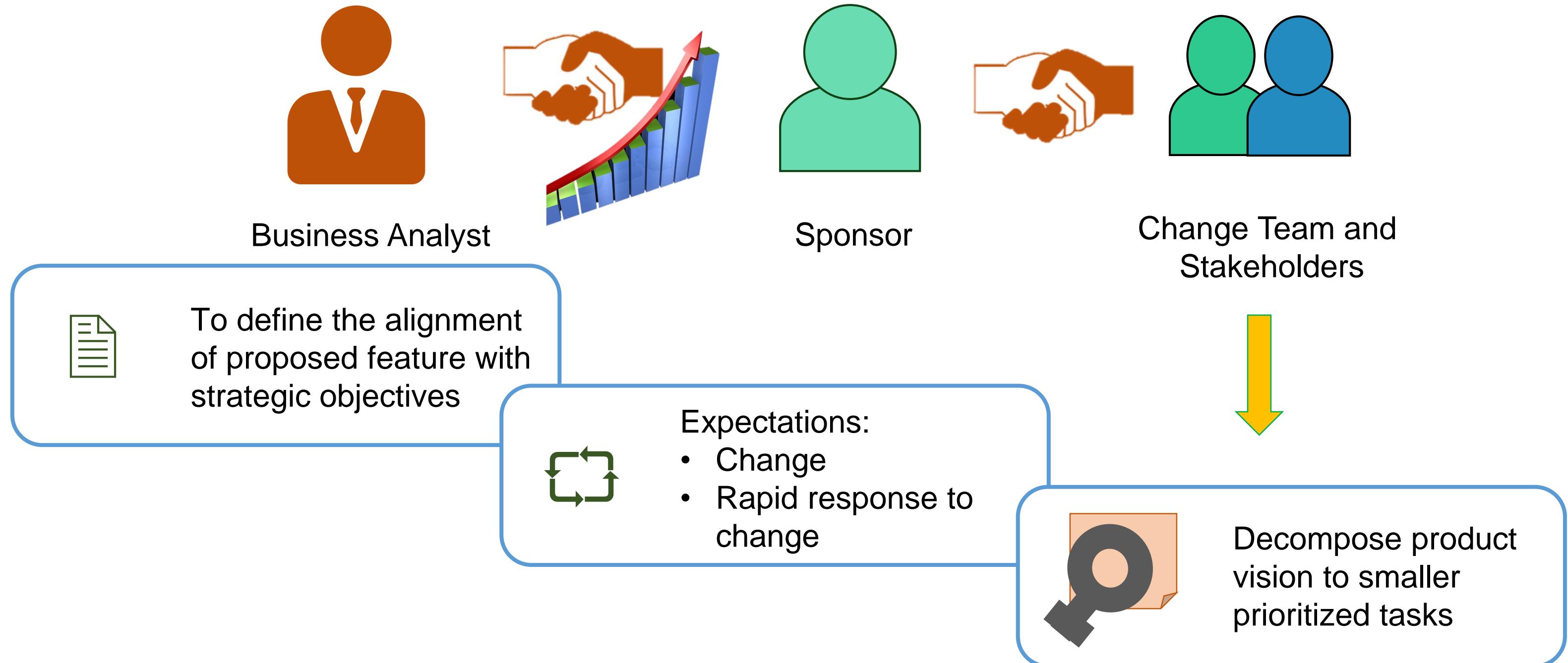
## Topic 9.1: Change Scope

- ✓ What is Change Scope?
- ✓ Impact of change on organizational objectives and operations



# CHANGE SCOPE

## WHAT IS CHANGE SCOPE



# CHANGE SCOPE

## WHAT IS CHANGE SCOPE



Constantly evolving scope



Continual exploration to develop requirements



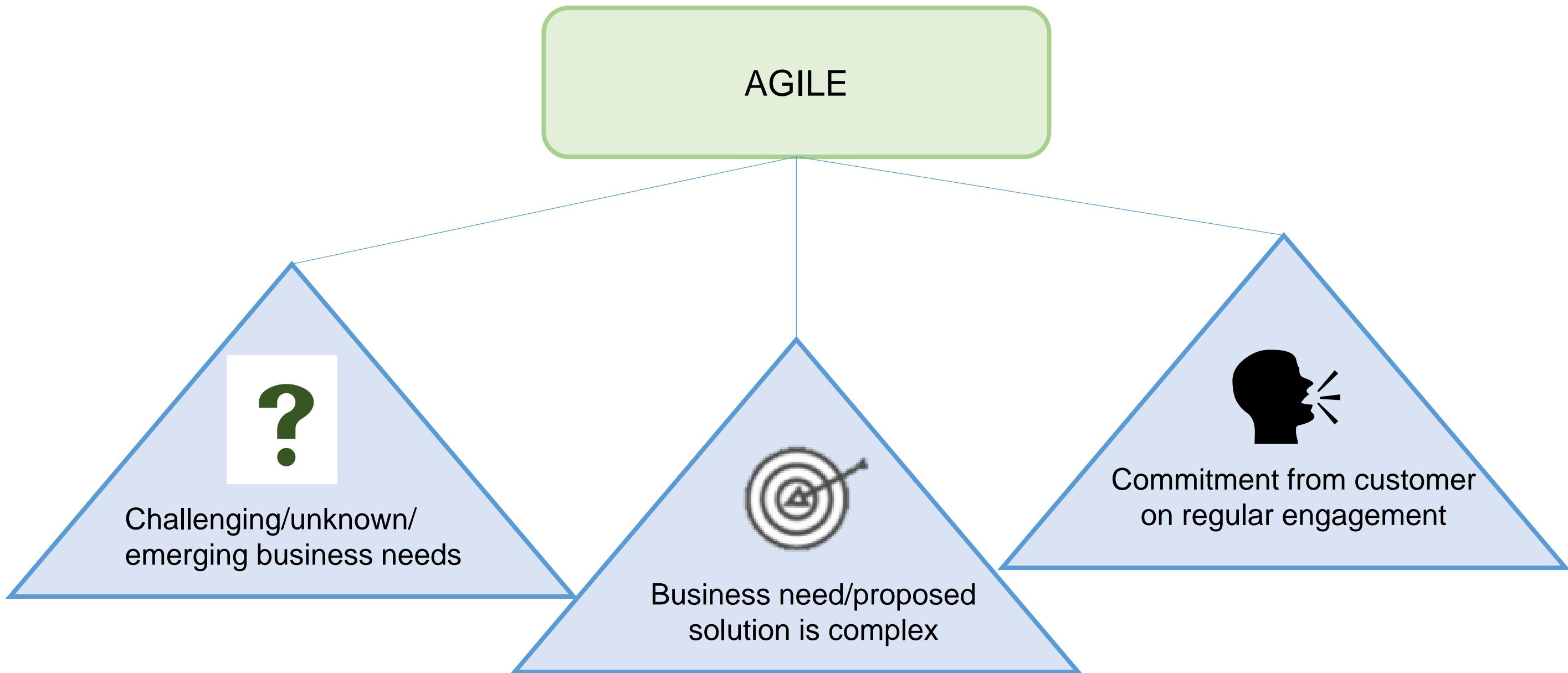
Delivery of incremental changes



Prioritized work commitment for one iteration only

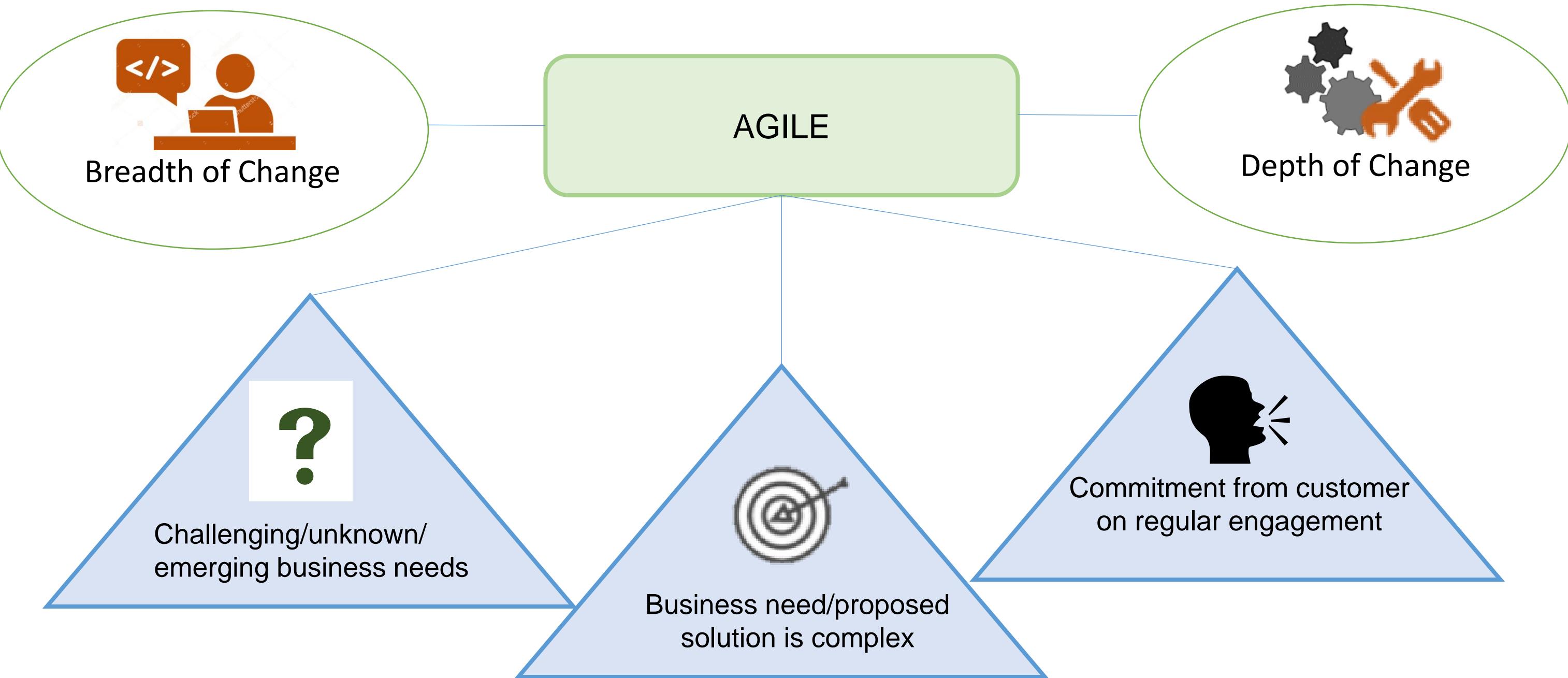
# CHANGE SCOPE

## WHERE ARE AGILE PRINCIPLES APPLIED



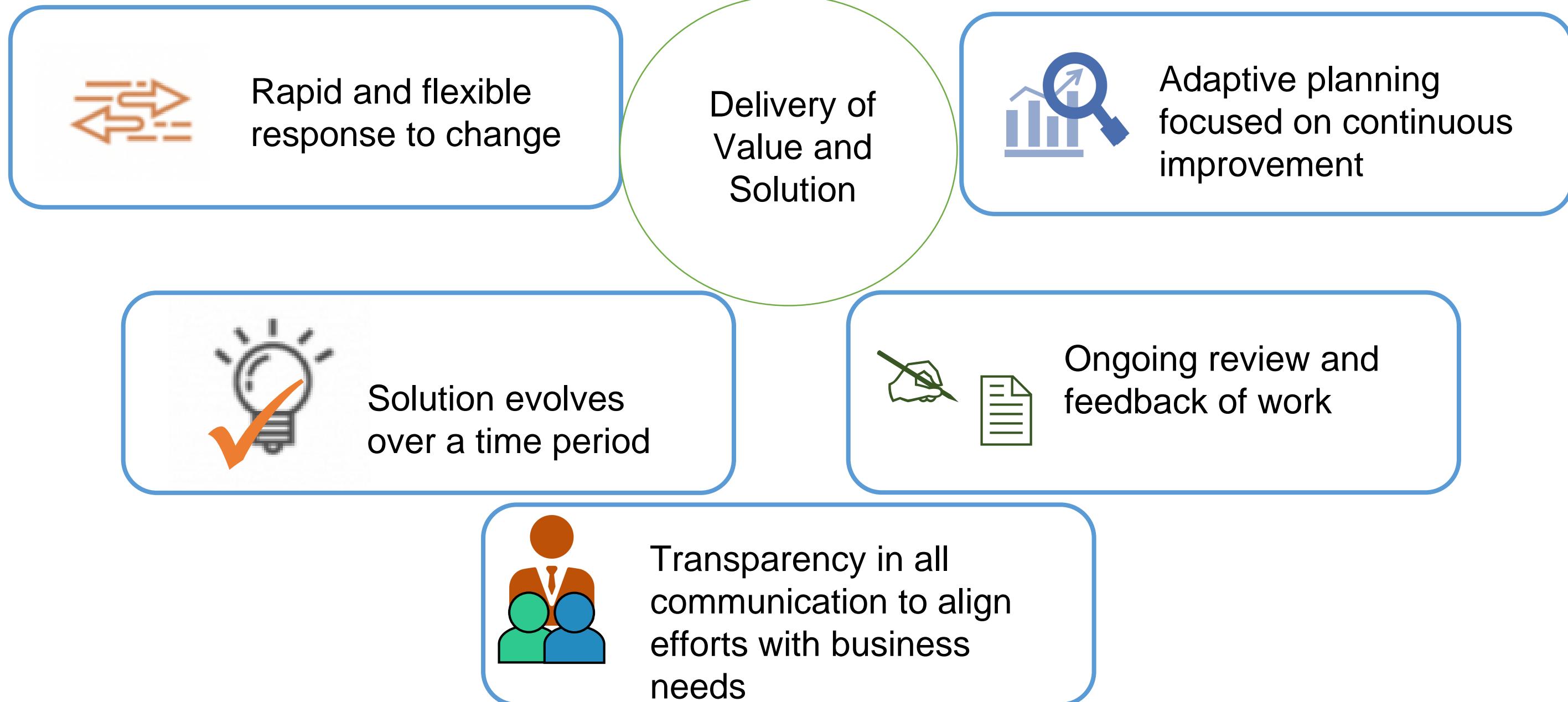
# CHANGE SCOPE

## USES OF AGILE PRACTICES



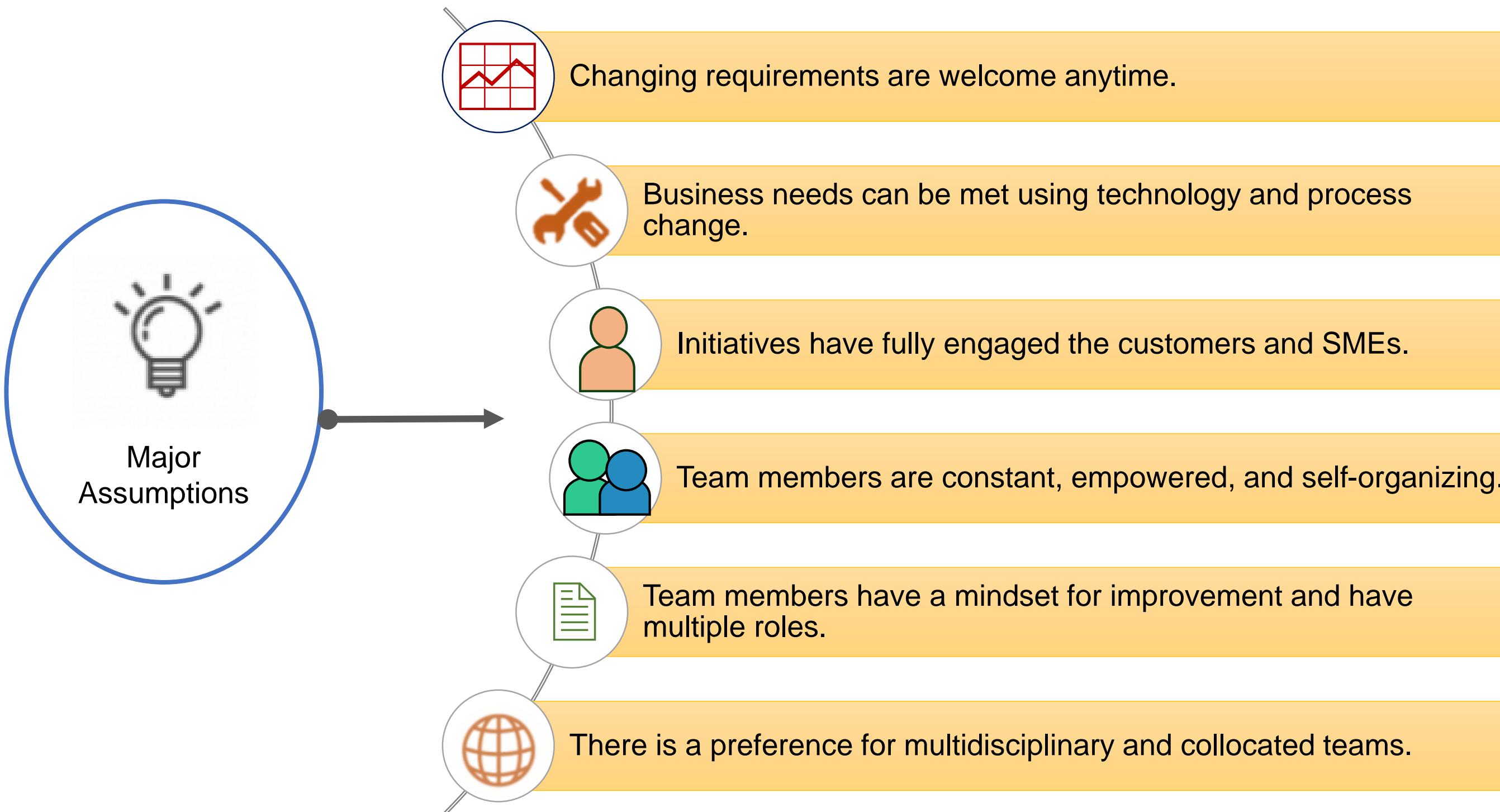
# CHANGE SCOPE

## VALUE AND SOLUTIONS



# CHANGE SCOPE

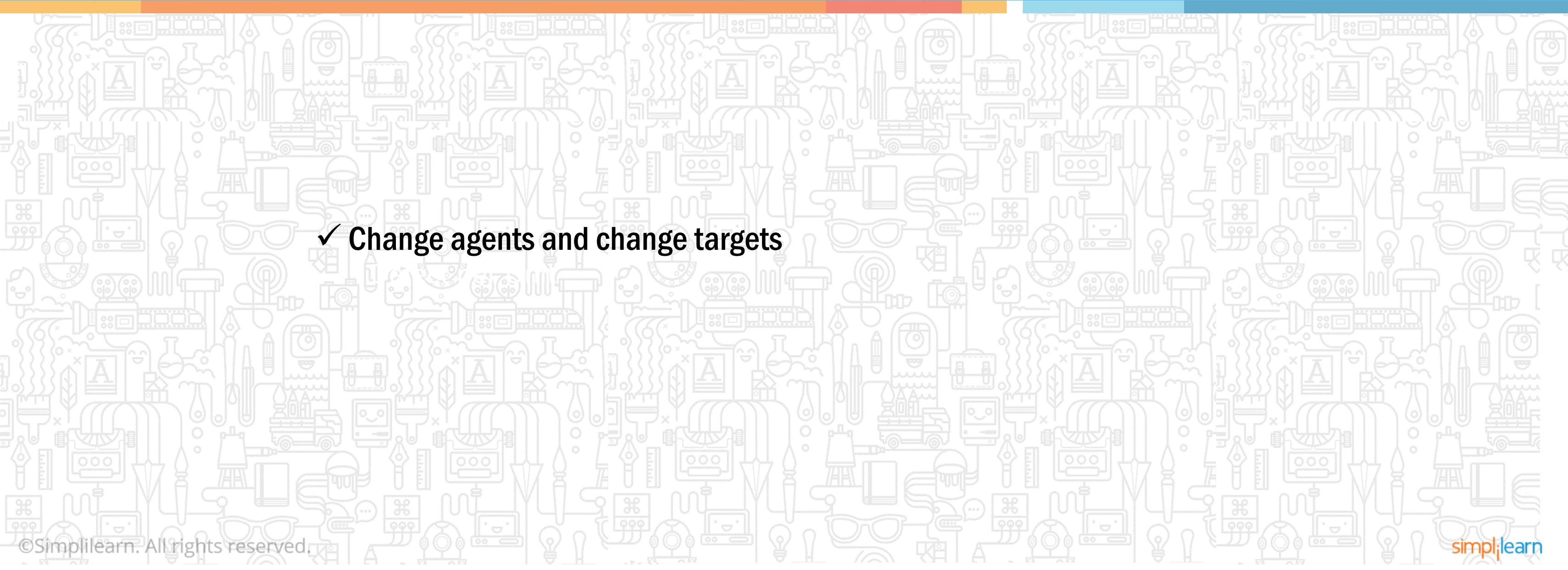
## ASSUMPTIONS FOR APPLYING AGILE



# Lesson 9: The Agile Perspective

## Topic 9.3: Business Analysis Scope

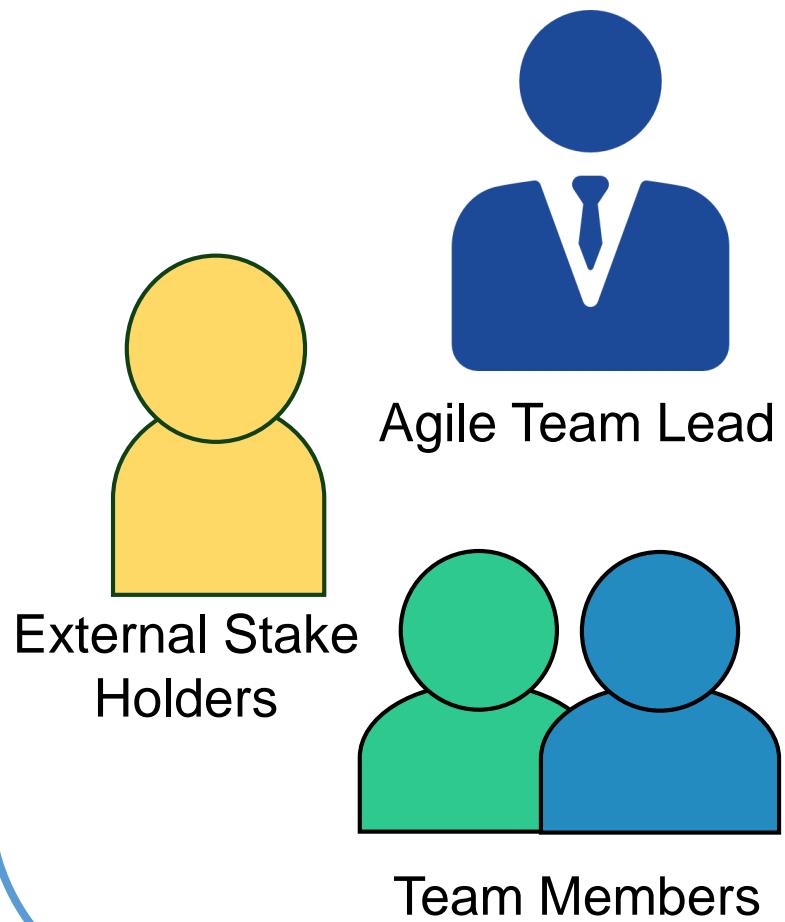
✓ Change agents and change targets



# BUSINESS ANALYSIS SCOPE

## CHANGE AGENTS AND CHANGE TARGETS

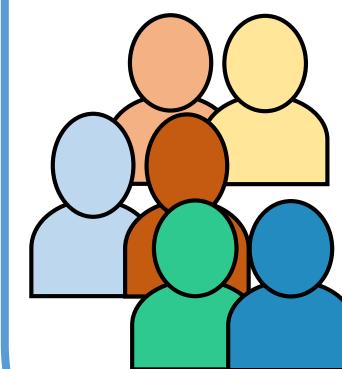
### Primary Change Agents



### Change Targets



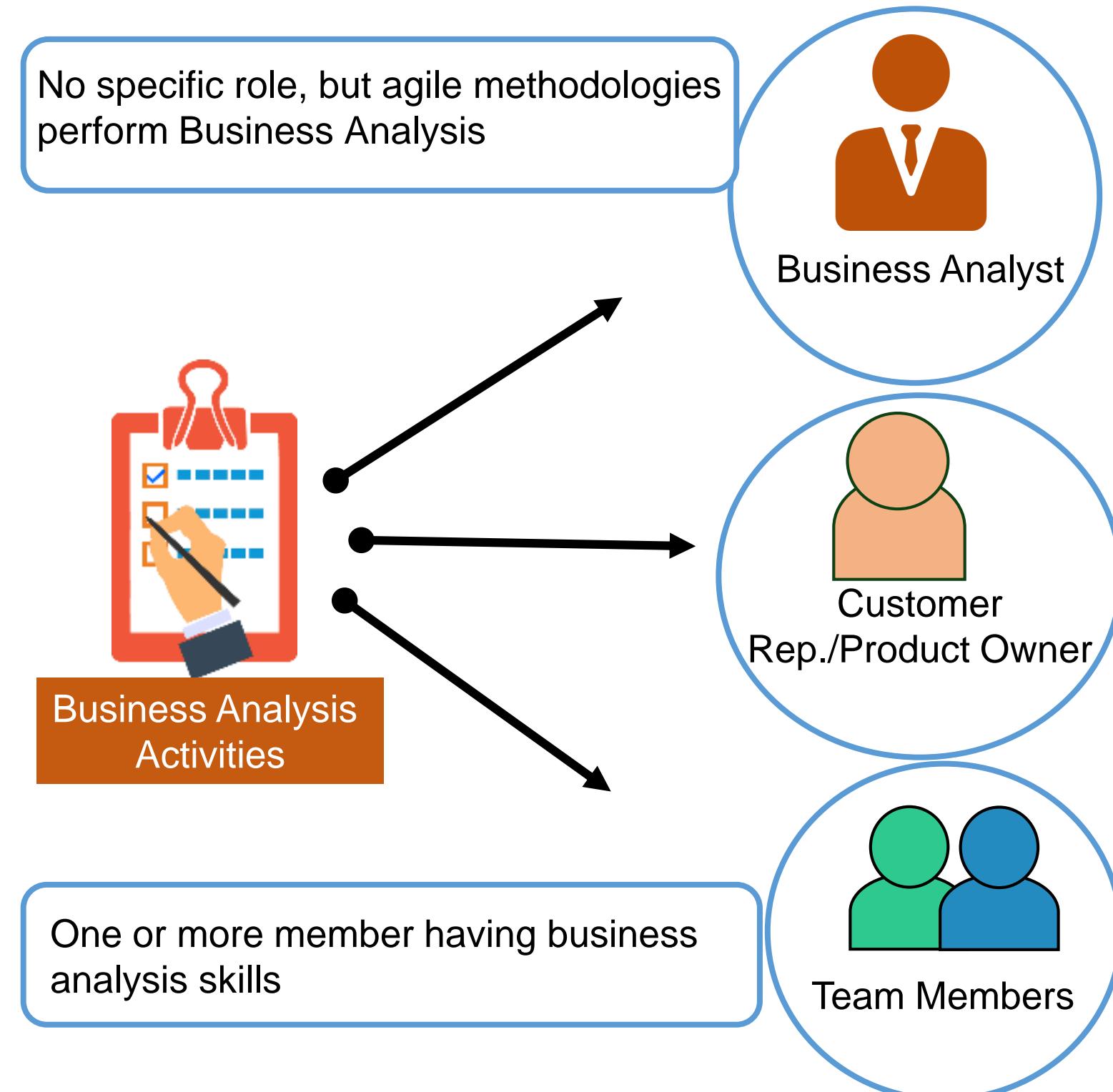
Agile mindset and atmosphere must be in place.



Agile projects are organized around smaller agile teams.

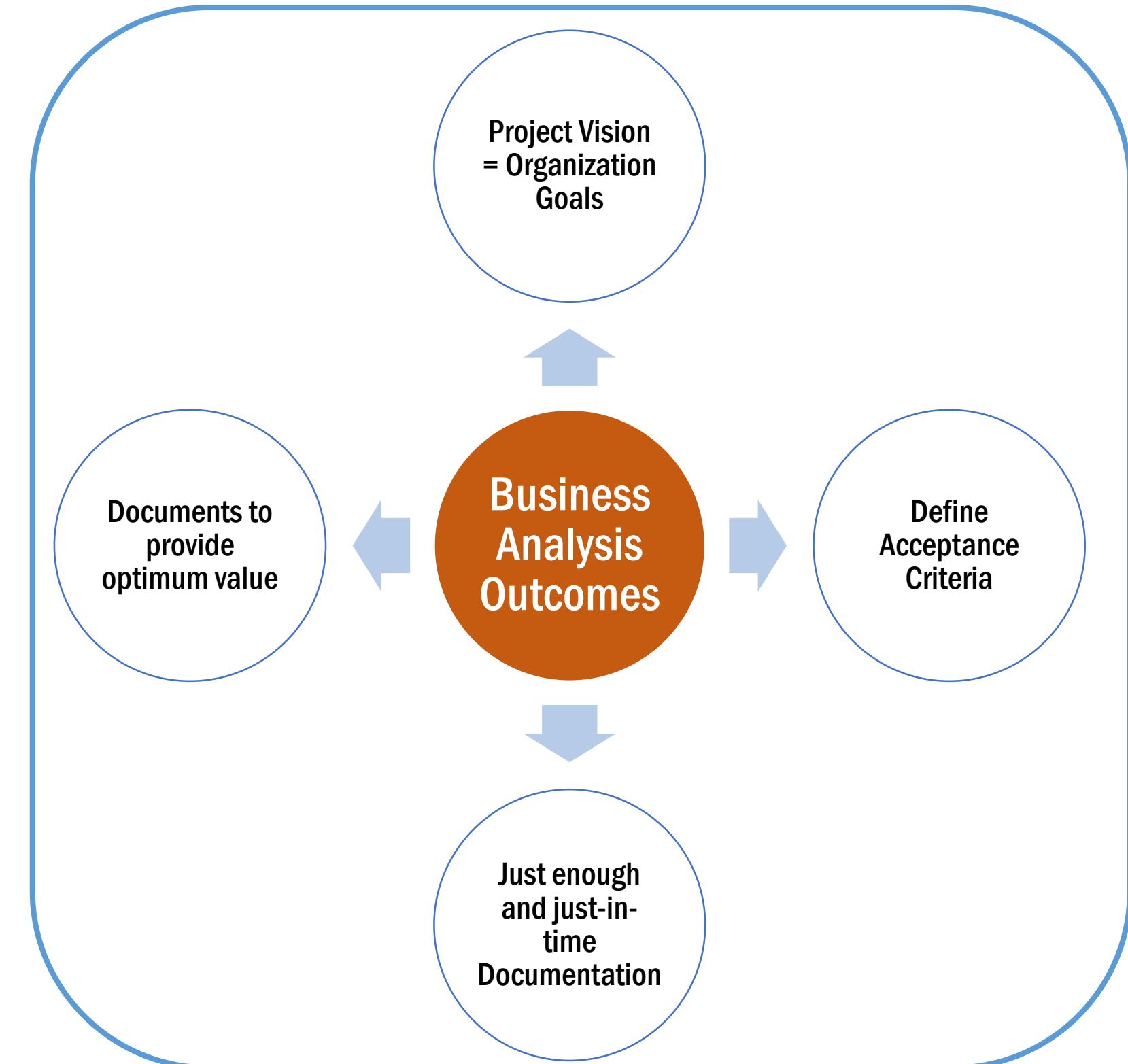
# BUSINESS ANALYSIS SCOPE

## POSITION OF A BUSINESS ANALYST



# BUSINESS ANALYSIS SCOPE

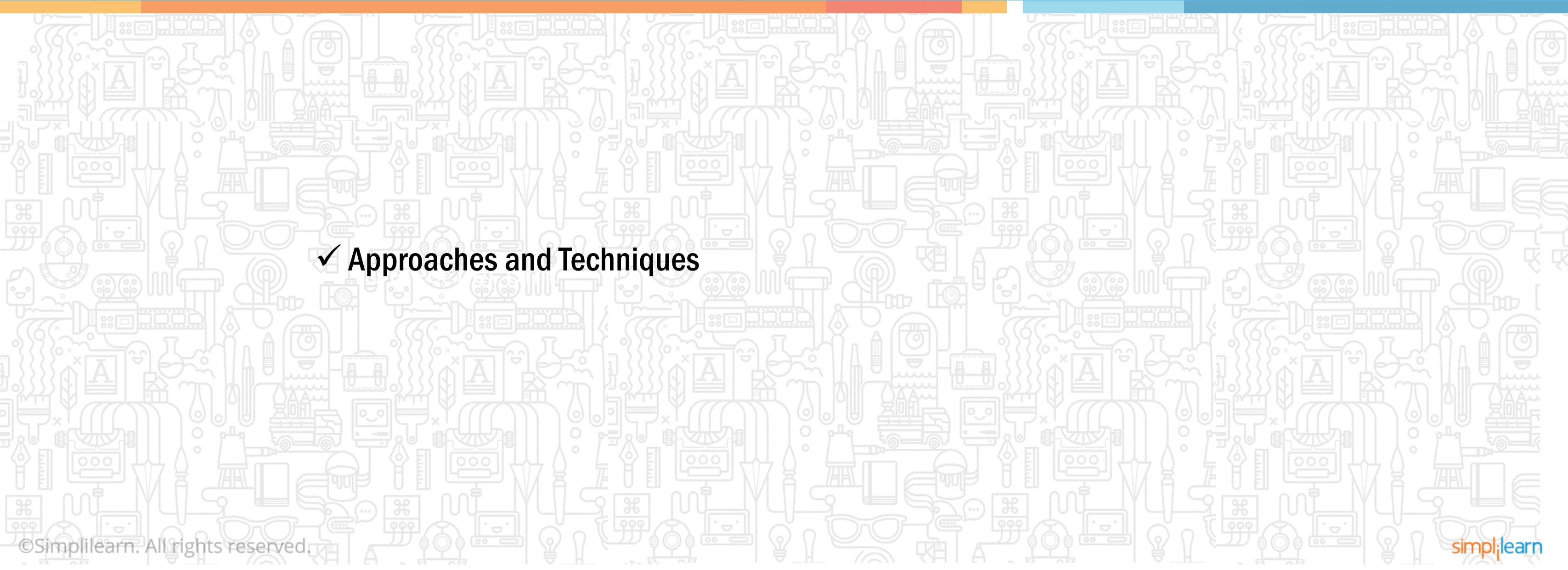
## BUSINESS ANALYSIS OUTCOMES



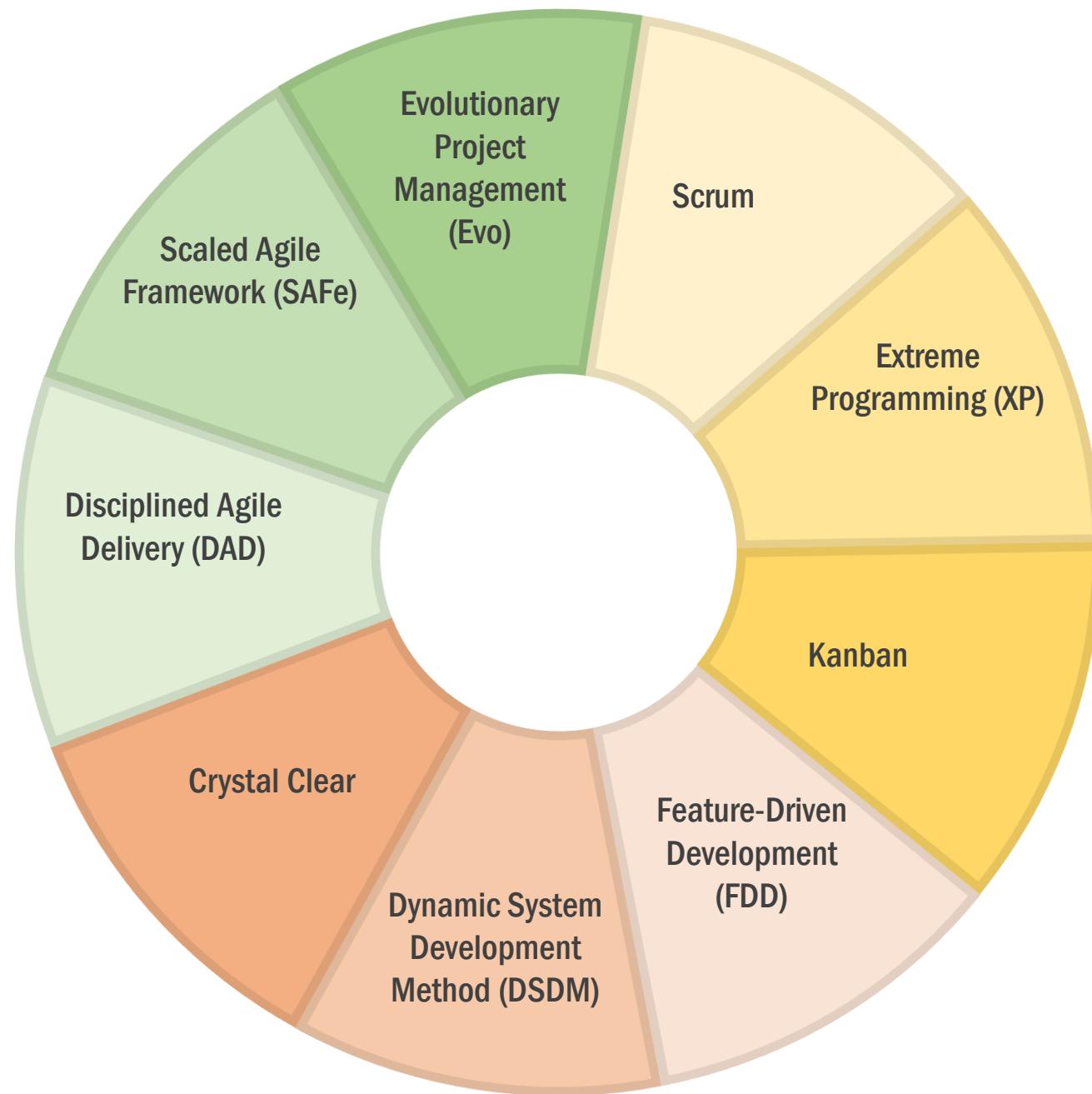
# Lesson 9: The Agile Perspective

## Topic 9.4: Approaches and Techniques

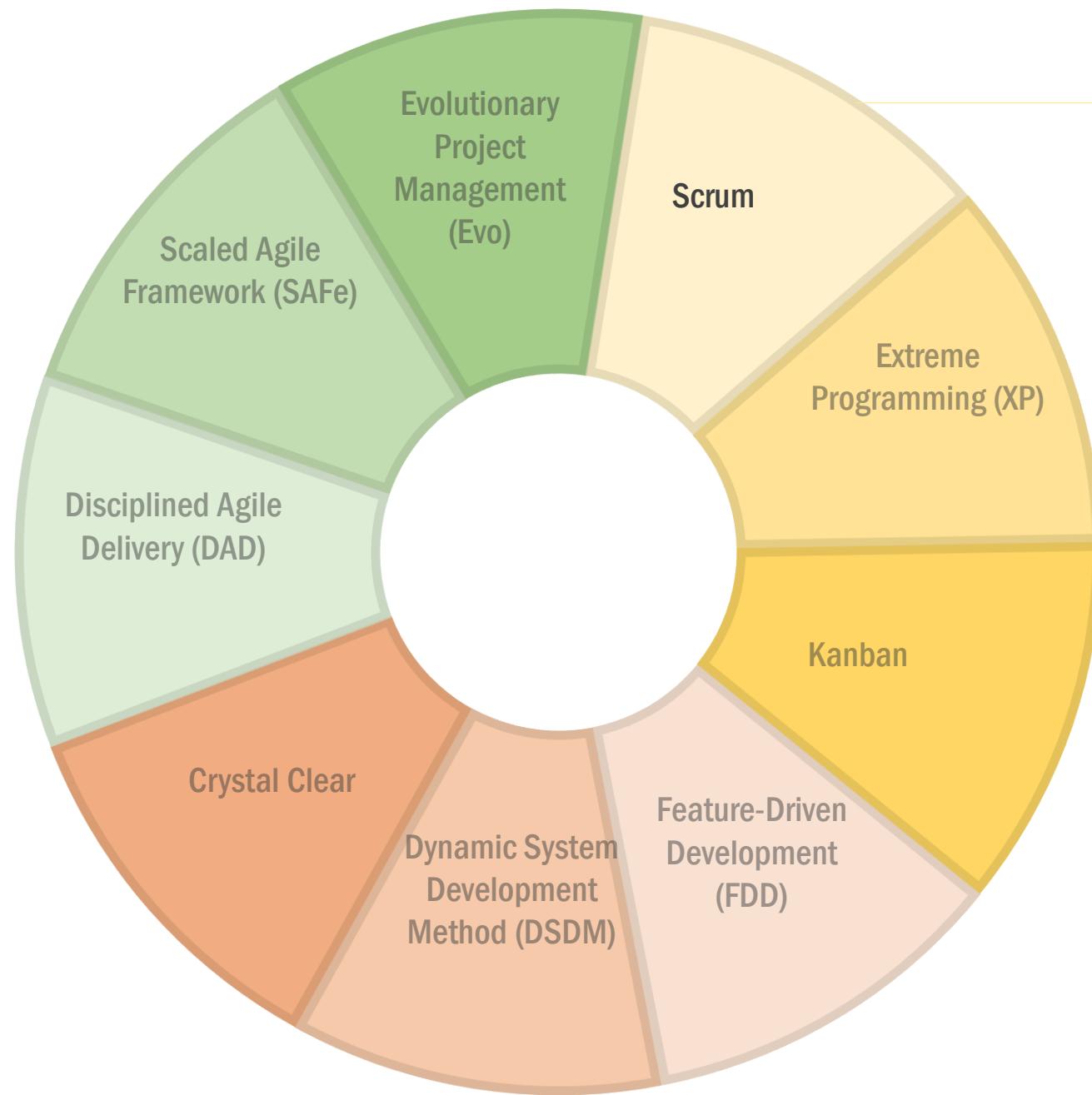
✓ **Approaches and Techniques**



# AGILE APPROACHES

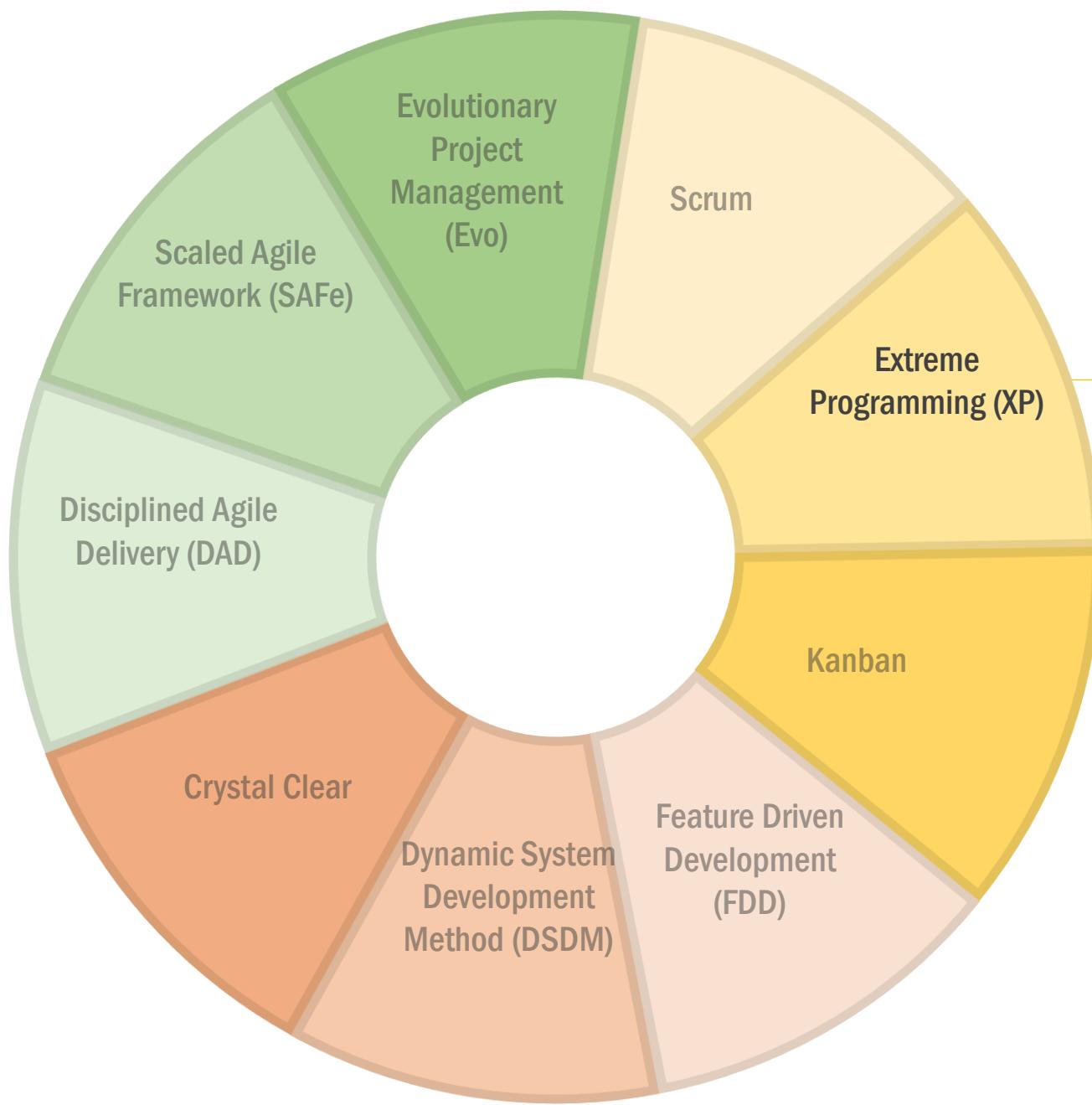


# AGILE APPROACHES



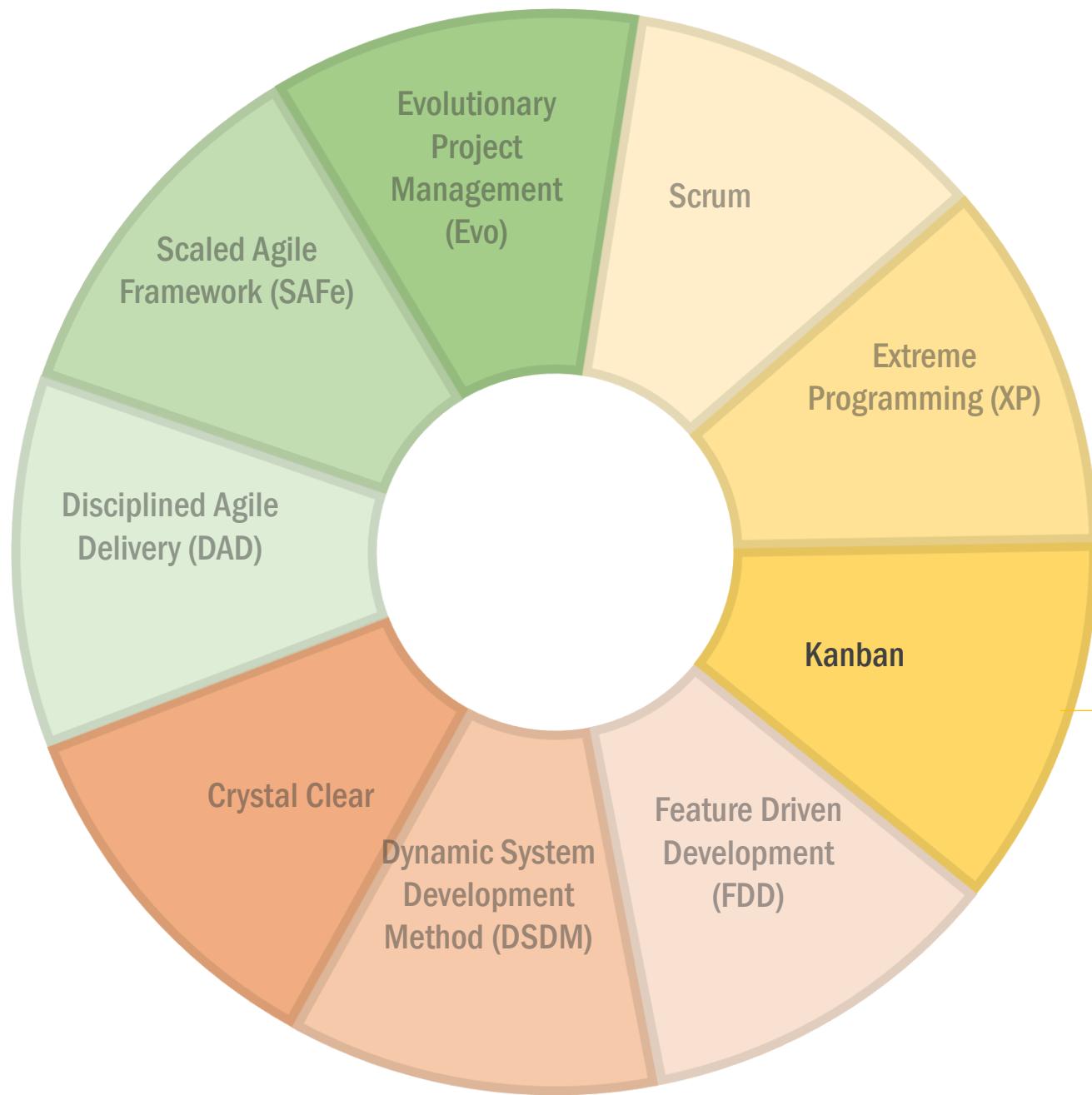
- For complex products, the framework has Scrum teams.
- Each element serves a specific purpose.
- Scrum employs an iterative, incremental approach.

# AGILE APPROACHES



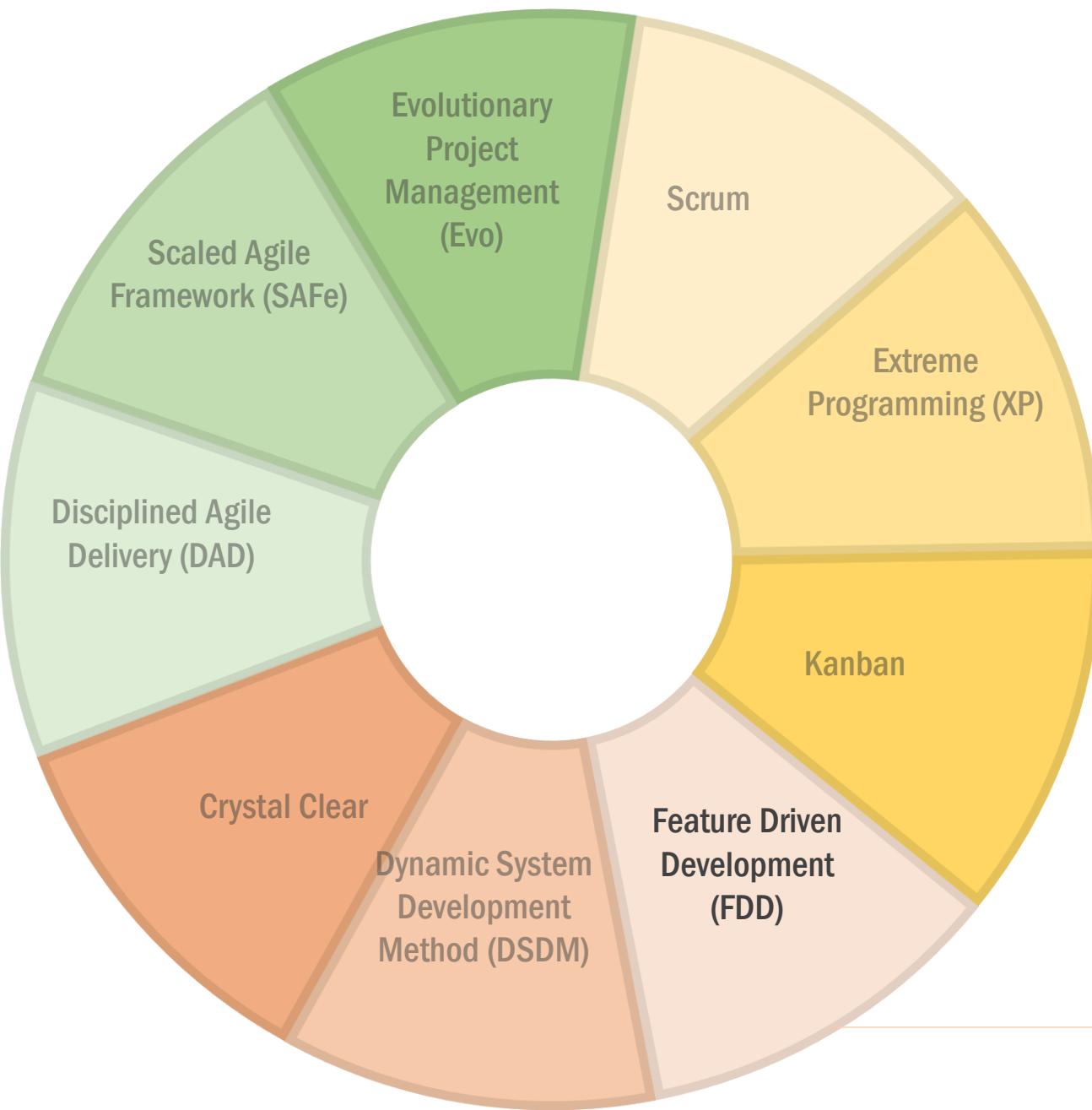
- Focus on technical development processes
- Often used in conjunction with one of the agile management frameworks
- Describes 12 practices grouped into four areas:
  - Fine-scale feedback
  - Continuous process
  - Shared understanding
  - Programmer welfare

# AGILE APPROACHES



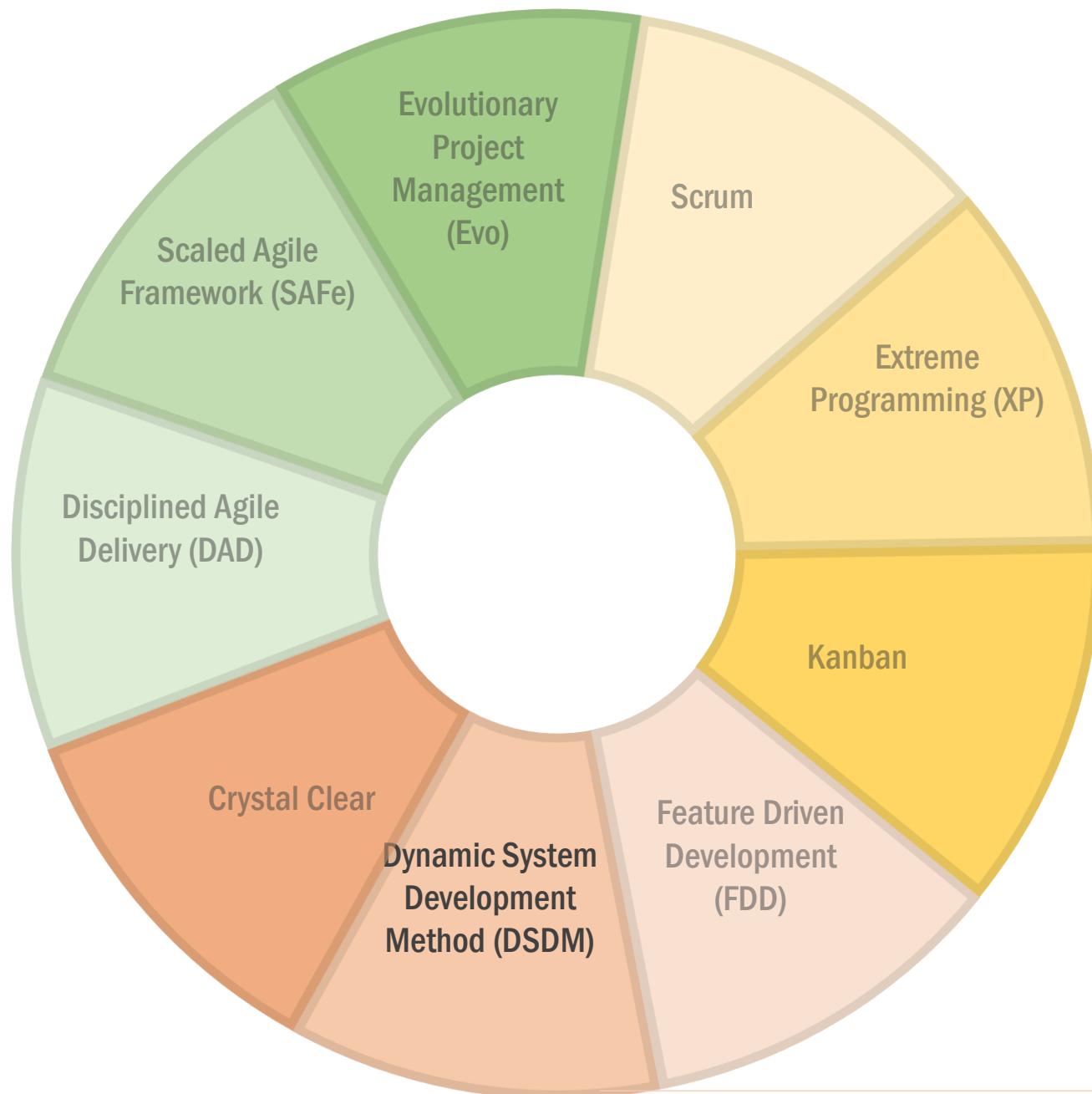
- Fixed iteration not needed
- Work moves through development process as a continuous flow of activity
- Limit “WIP”
- Based on “change management,” “service delivery” principles
- Defines general practices
  - Visualize, Limit WIP, manage flow, make explicit policies, implement feedback loops, improve collaboratively

# AGILE APPROACHES



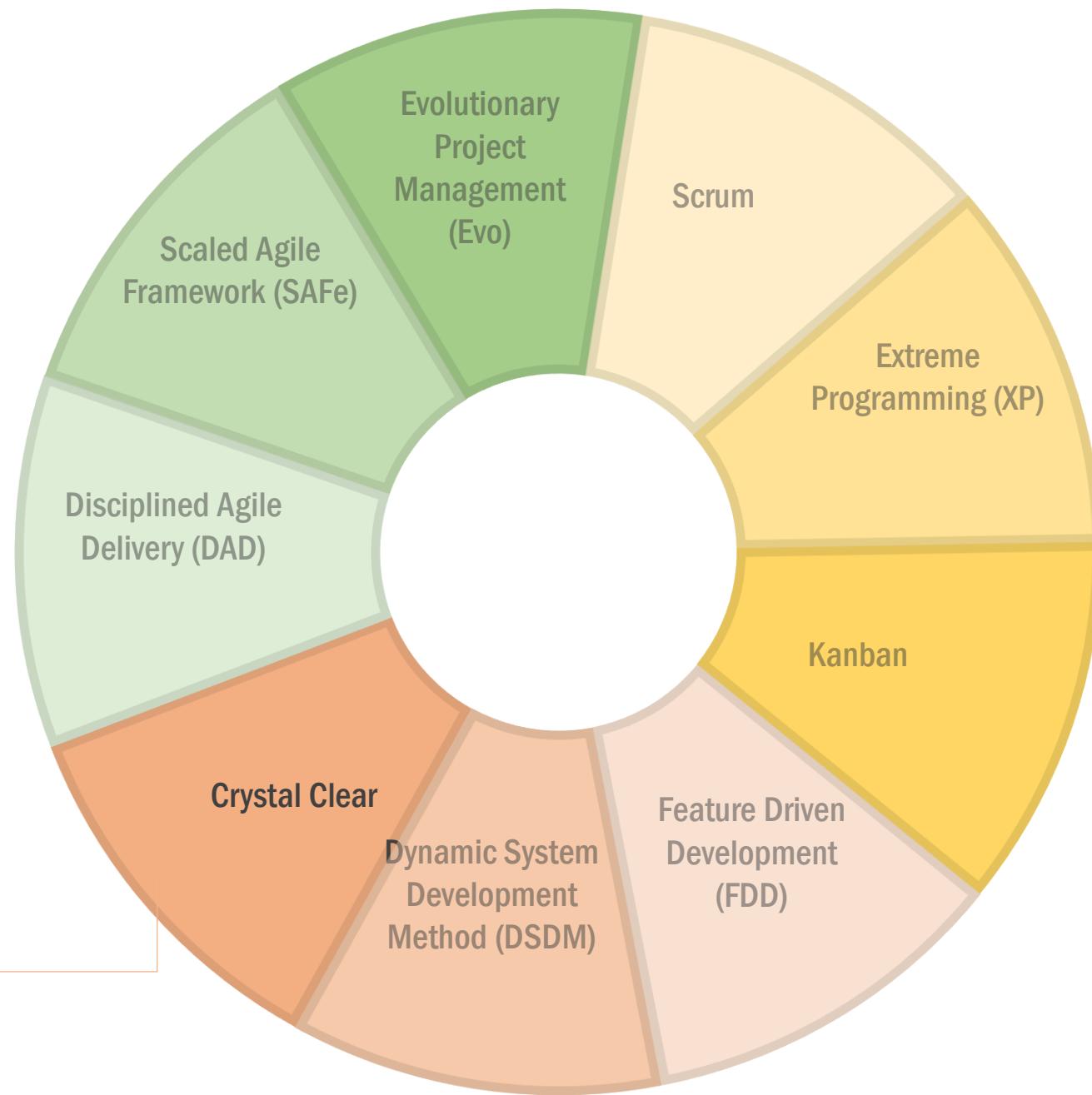
- Client-centric, architecture-centric, pragmatic software process
- 5 main activities are performed iteratively:
  - Develop an overall model
  - Build feature list
  - Plan by feature
  - Design by feature
  - Build by feature

# AGILE APPROACHES



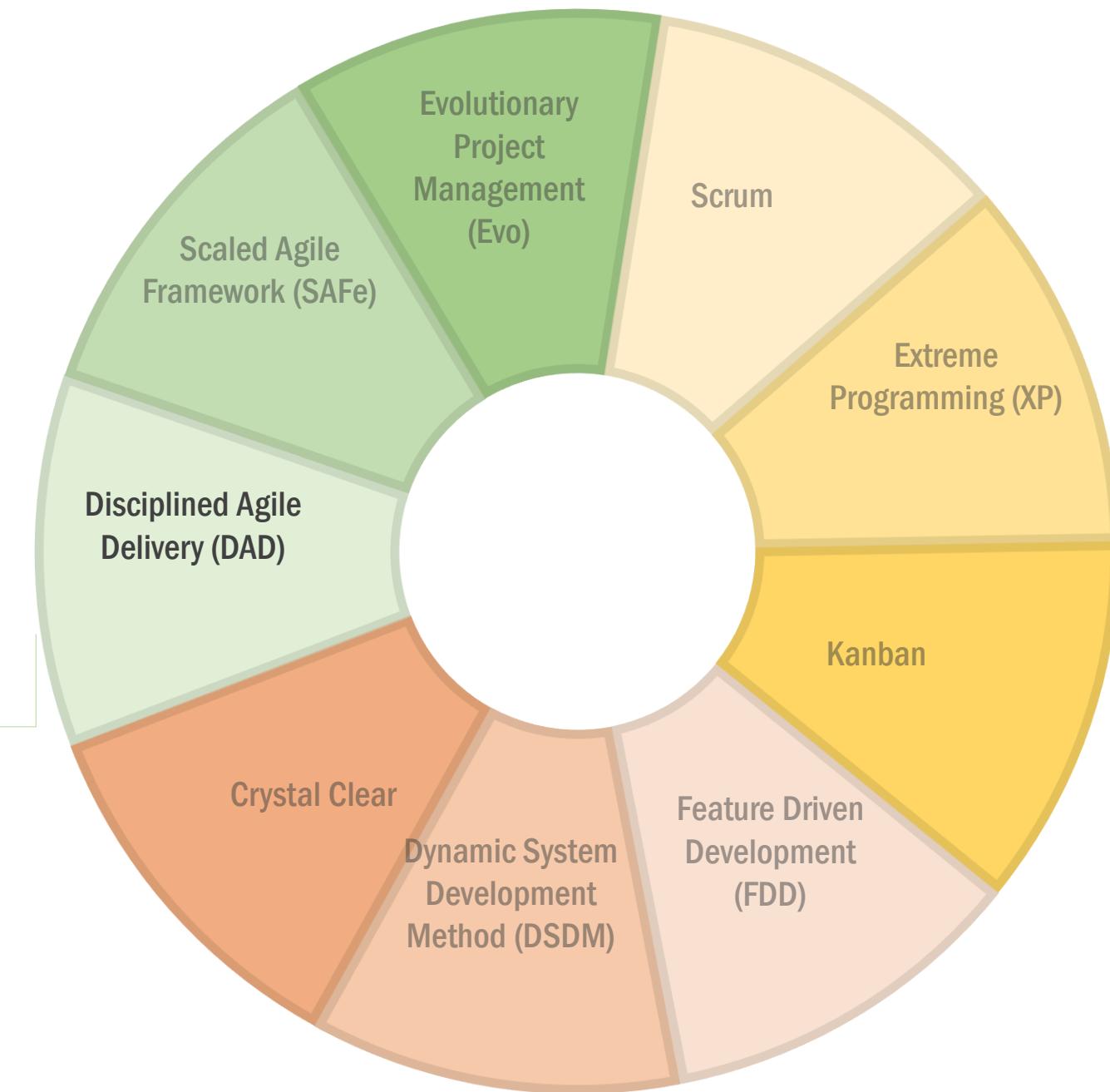
- Delivers the right solution at the right time
- Brings together the agility and flexibility
- Easily tailored and used with traditional methods to complement other agile approaches like Scrum

# AGILE APPROACHES



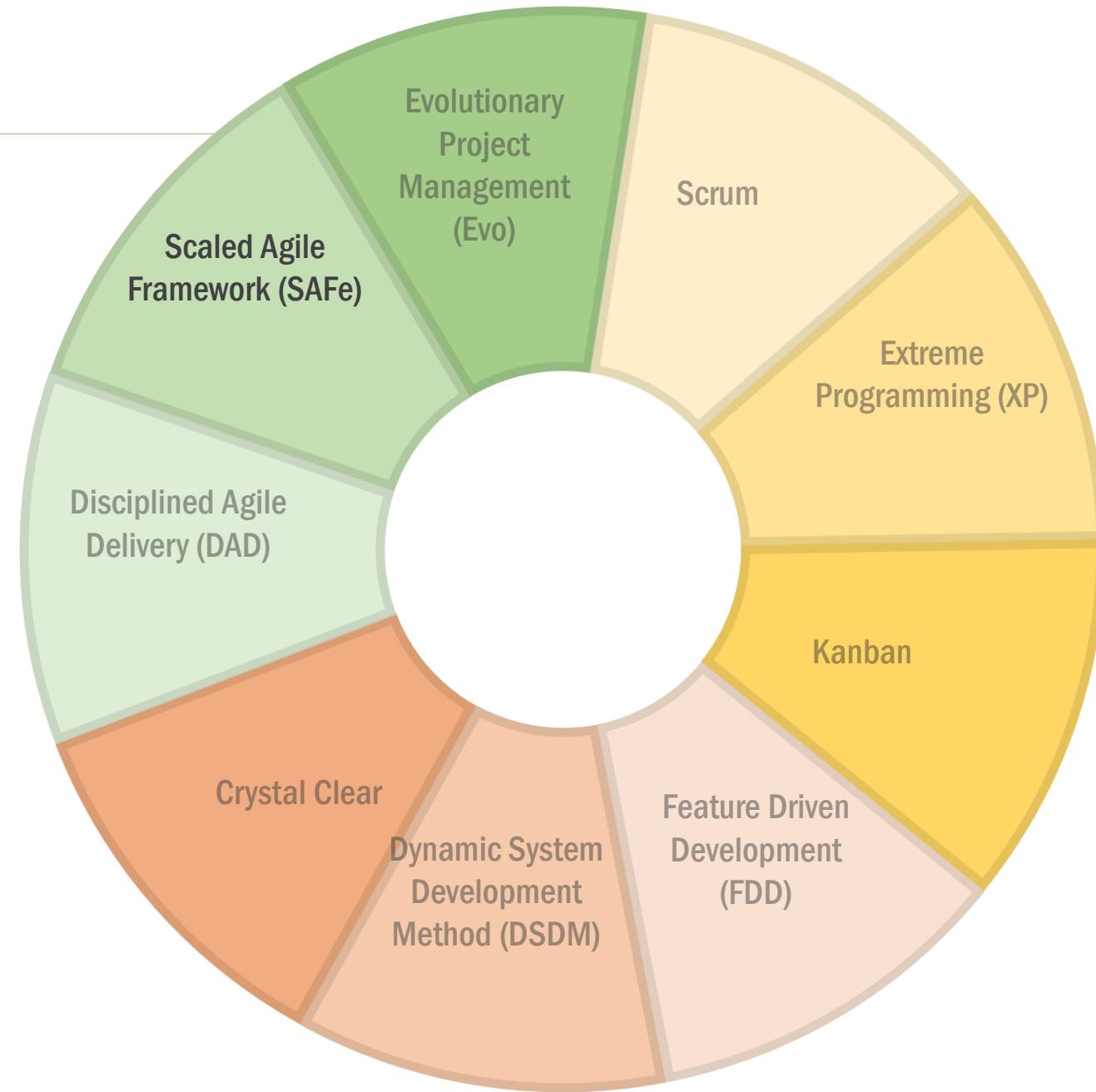
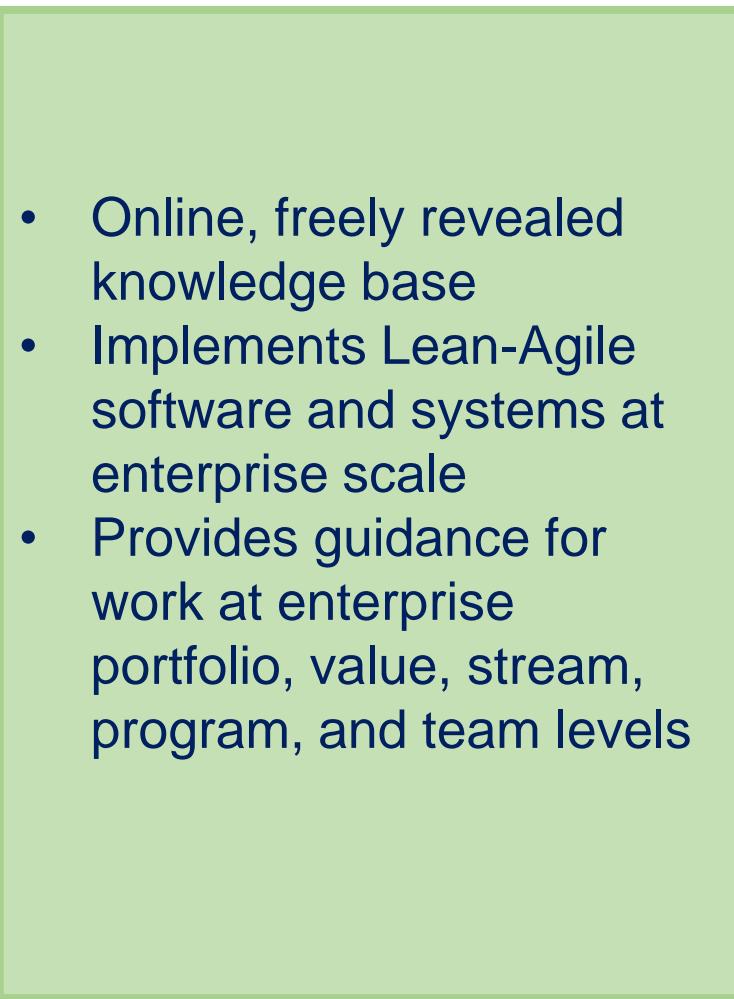
- Family of methodologies.
- Considered as “lightweight methodologies”
- Focus on people, interaction, community, skills, talents, and communications
- Small team of members (1 to 6)

# AGILE APPROACHES



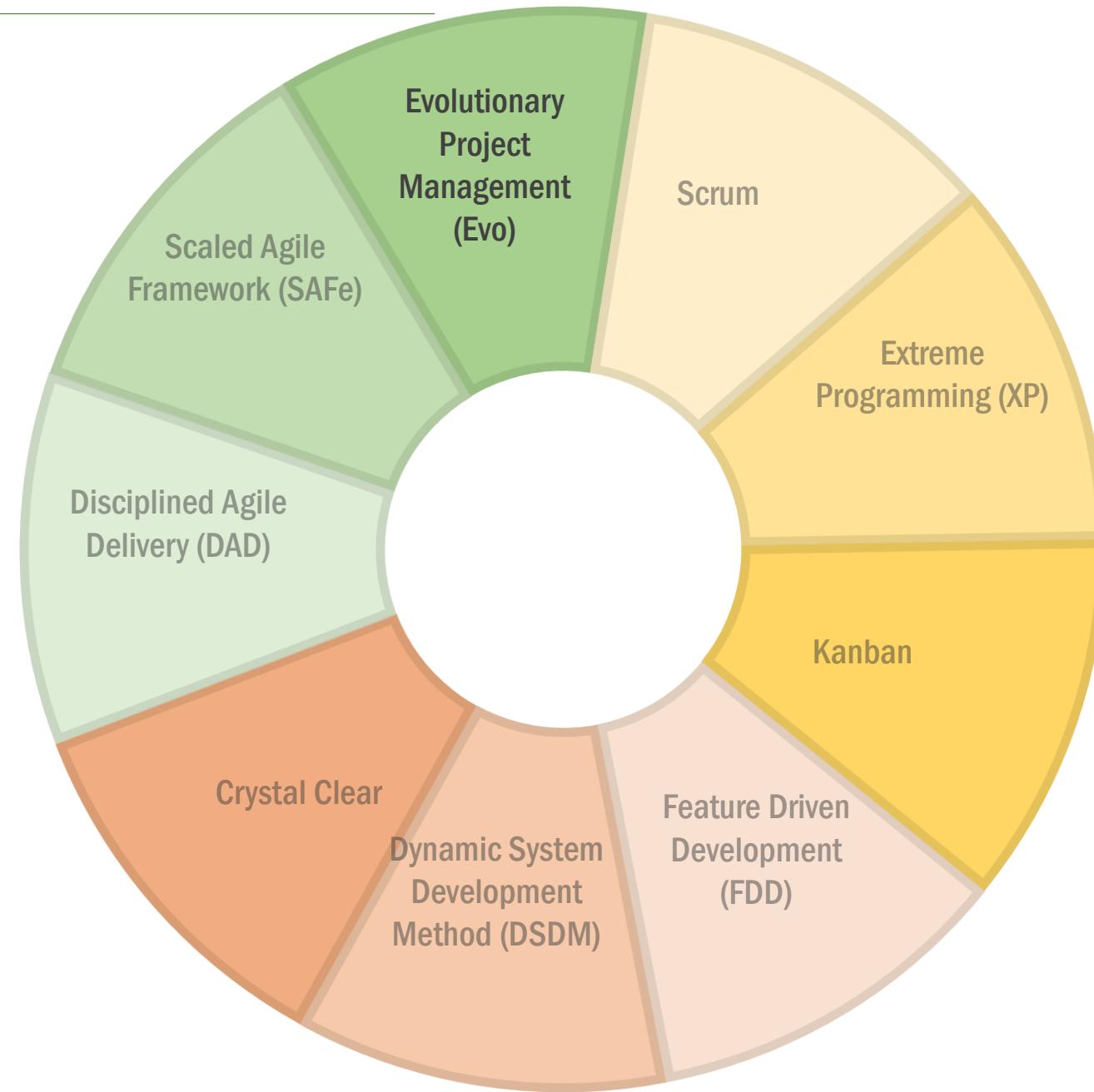
- A process decision framework for lean enterprises
- A “people-first, learning oriented hybrid agile/lean” approach
- Has a risk value delivery lifecycle, goal driven
- Tactically scalable at TAM level and strategically scalable across the enterprise

# AGILE APPROACHES

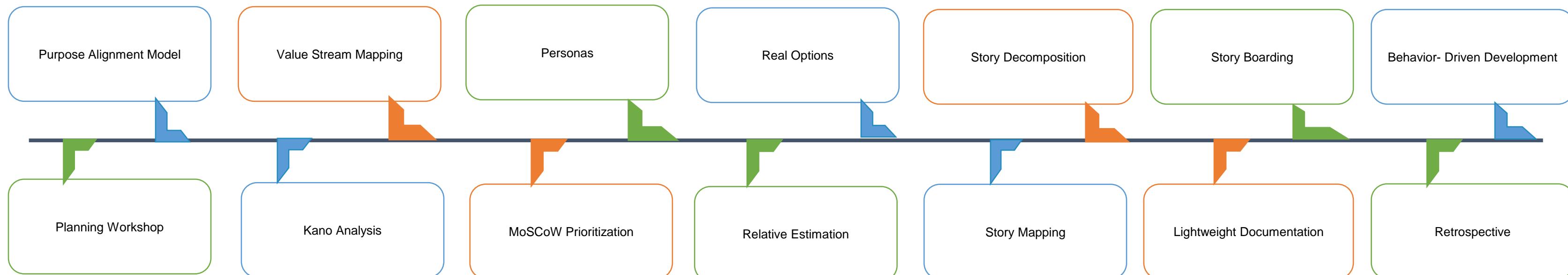


# AGILE APPROACHES

- Uses the PDSA cycle
- Good at dealing with large, complex, and innovative systems
- Uses impact estimation tables as a formal technique



# AGILE TECHNIQUES



Business Analysts use techniques to elicit, analyze, document, prioritize, estimate, and manage business analysis information in agile approaches.

# AGILE TECHNIQUES

It is a method for aligning business decisions, processes, and feature designs around purpose.

Purpose Alignment Model

Value Stream Mapping

Personas

Real Options

Story Decomposition

Story Boarding

Behavior Driven Development

Planning Workshop

Kano Analysis

MoSCoW  
Prioritization

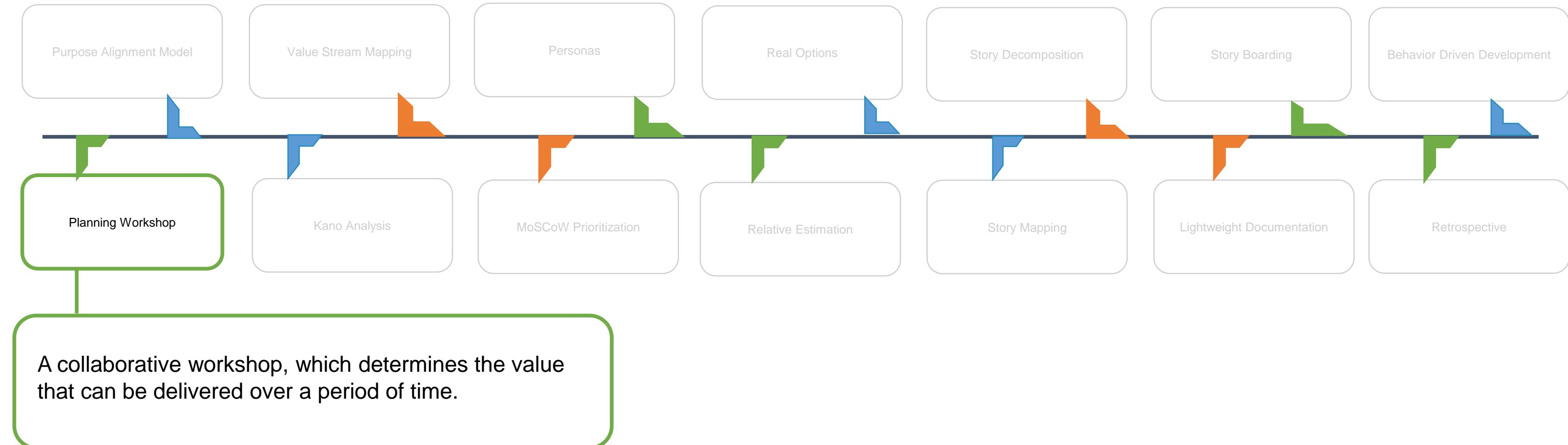
Relative Estimation

Story Mapping

Lightweight Documentation

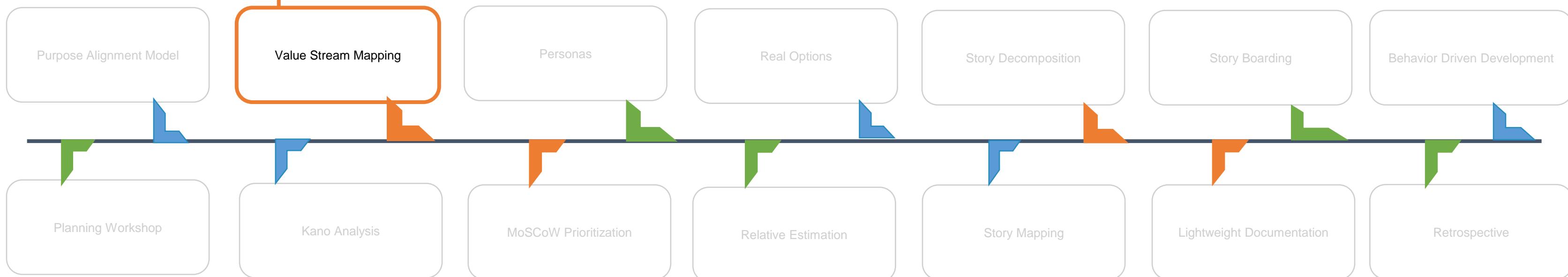
Retrospective

# AGILE TECHNIQUES

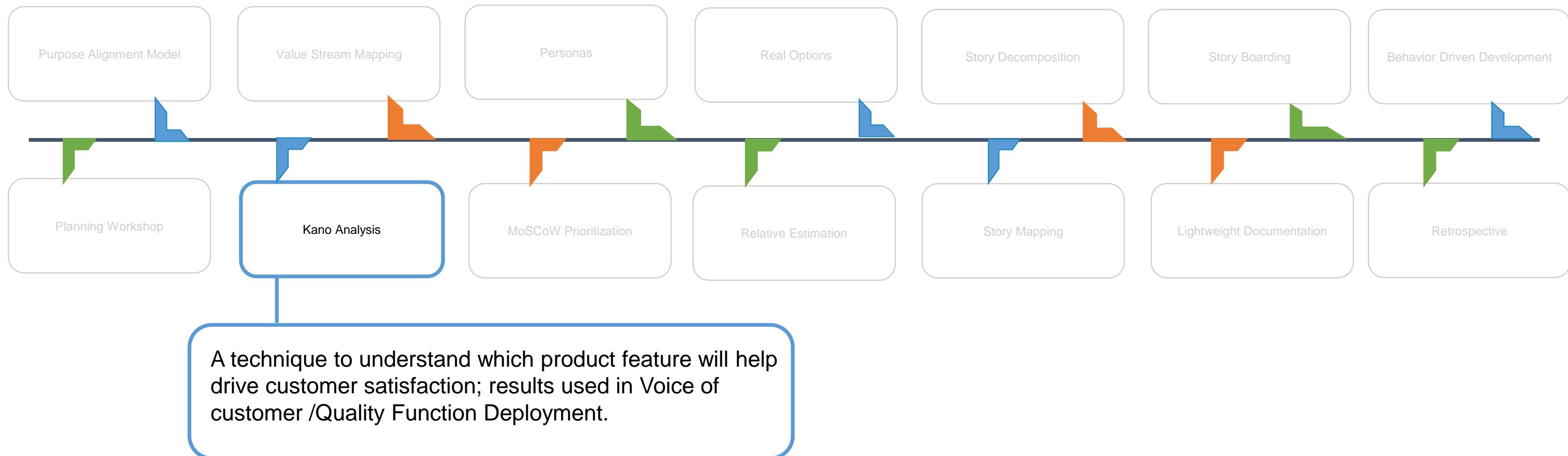


# AGILE TECHNIQUES

A lean-management method to analyze the current state and designing a future state.

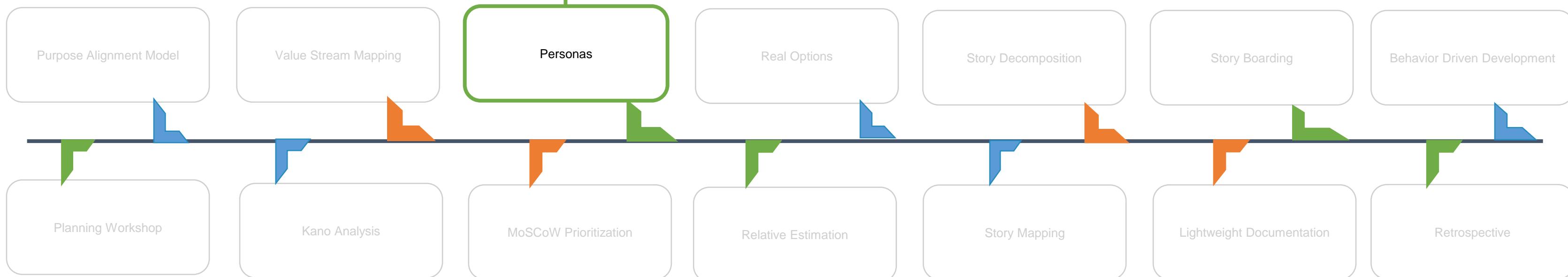


# AGILE TECHNIQUES

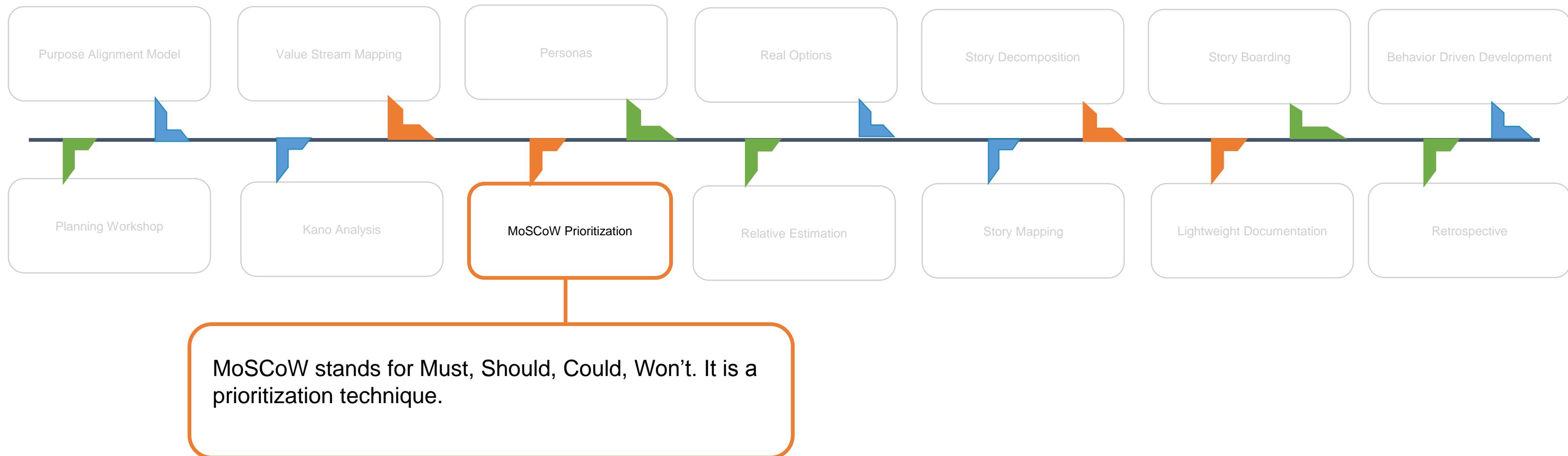


# AGILE TECHNIQUES

Fictional characters that exemplify the way typical users interact with the product.

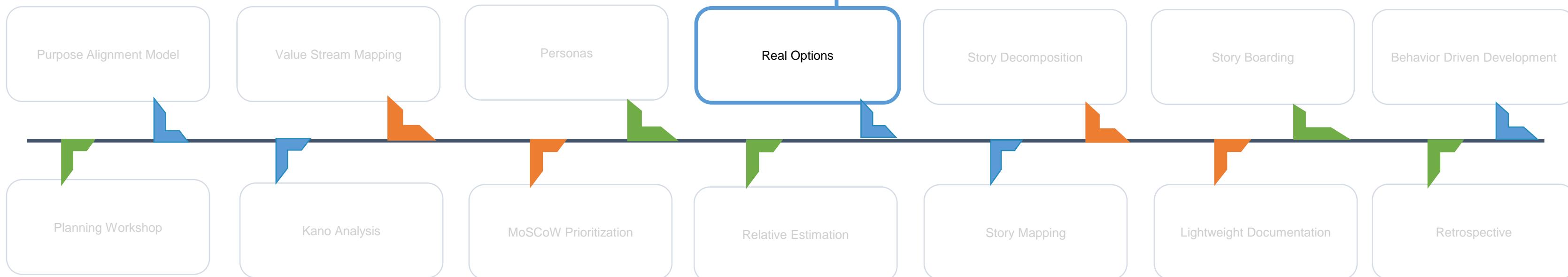


# AGILE TECHNIQUES

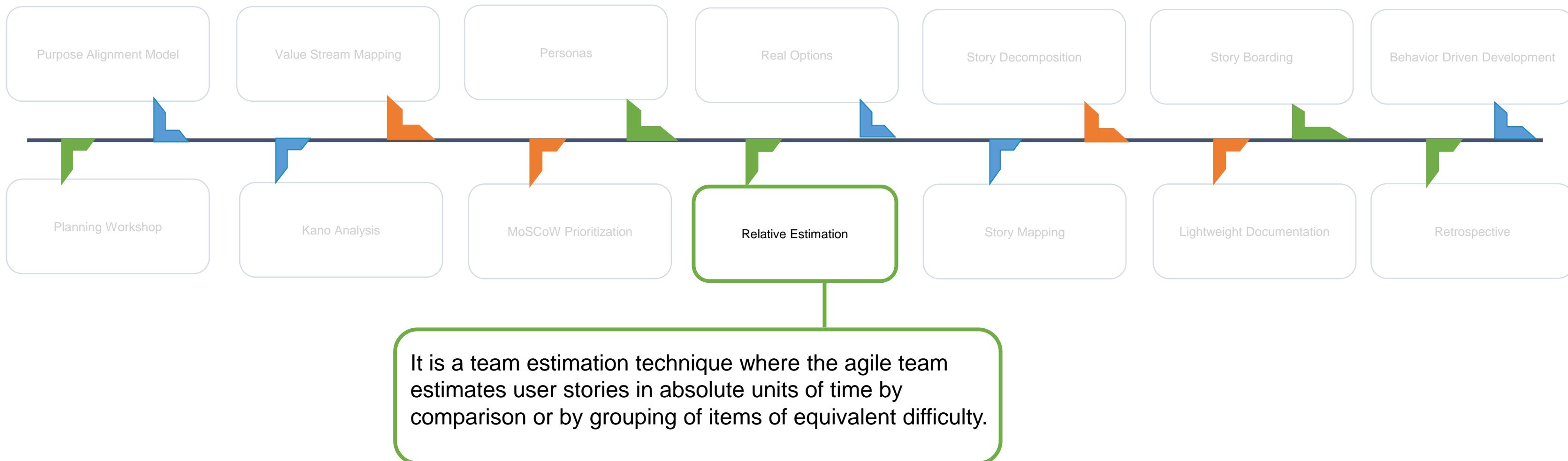


# AGILE TECHNIQUES

Real options is an approach to help people know when to make decisions rather than how.



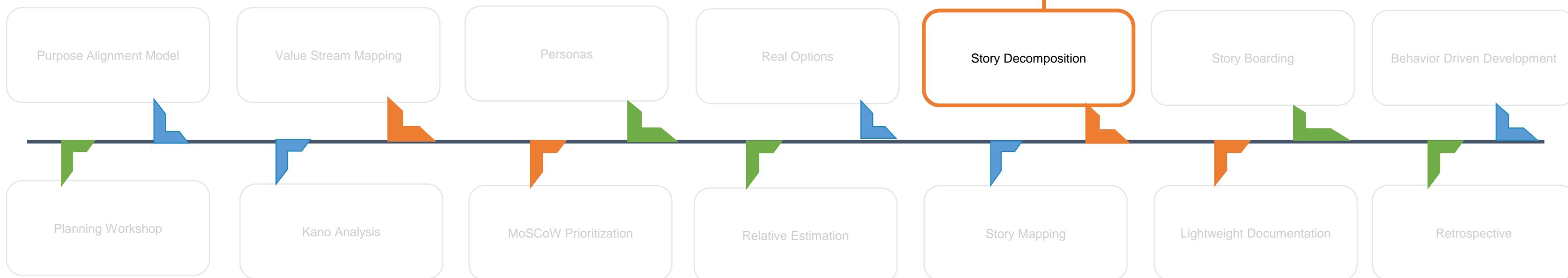
# AGILE TECHNIQUES



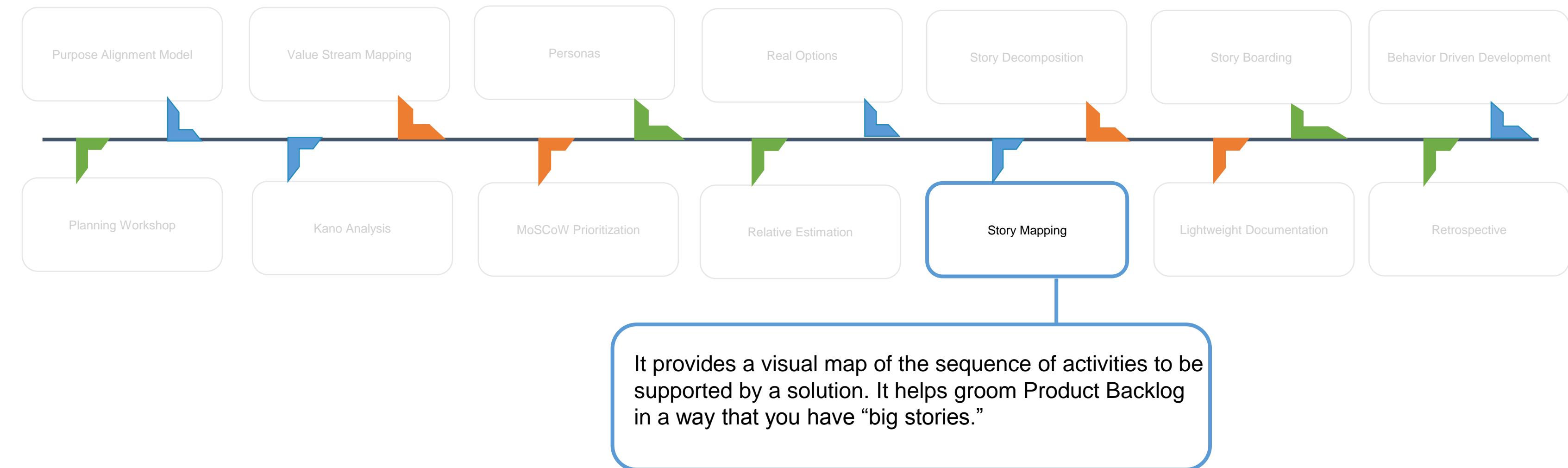
It is a team estimation technique where the agile team estimates user stories in absolute units of time by comparison or by grouping of items of equivalent difficulty.

# AGILE TECHNIQUES

It ensures that the requirements for a product are represented at the appropriate level of detail and are derived from valuable business objectives.

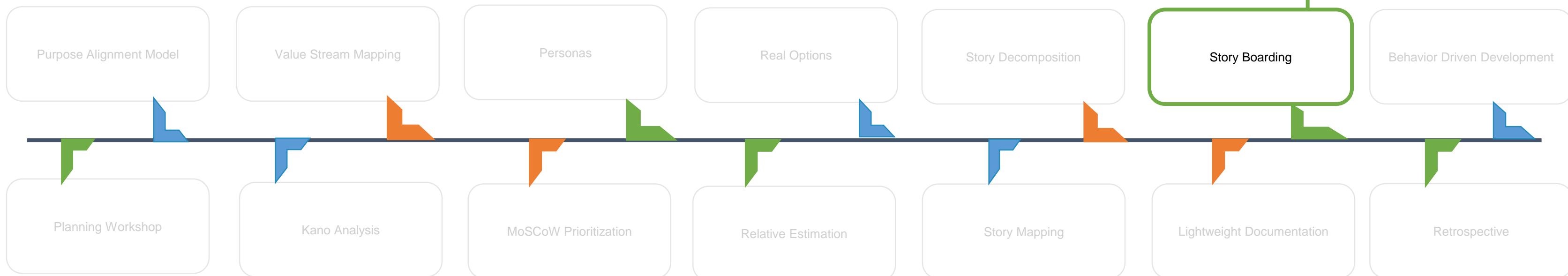


# AGILE TECHNIQUES

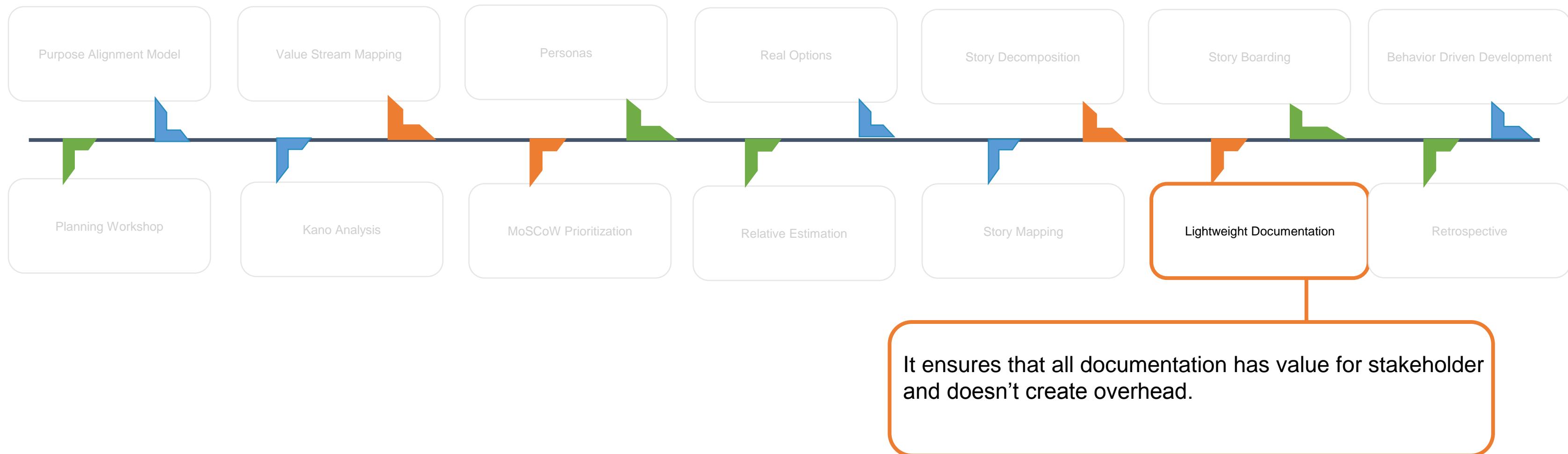


# AGILE TECHNIQUES

It is a visual and textual representation of sequence of activities that represent user interaction with a system or business. Storyboards are similar to scenarios.

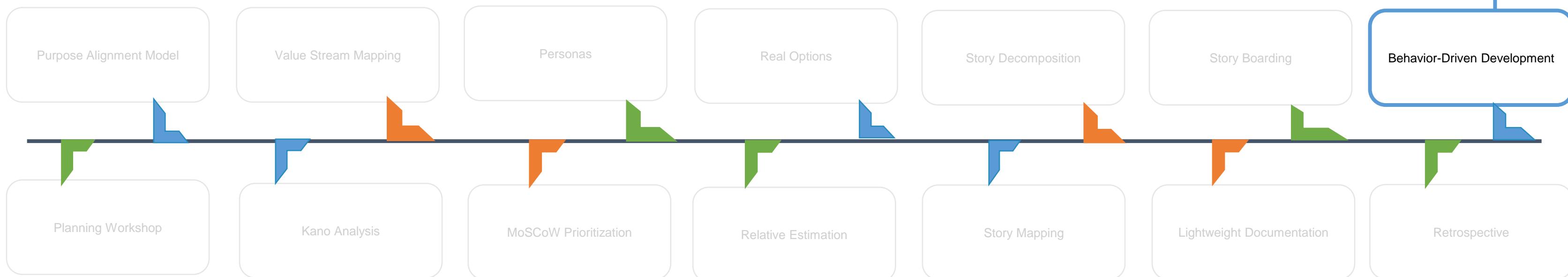


# AGILE TECHNIQUES



# AGILE TECHNIQUES

It enhances the communication between stakeholders and team members. It is a synthesis of practices stemming from TDD or ATDD.



# AGILE TECHNIQUES



# Lesson 9: The Agile Perspective

## Topic 9.5: Underlying competencies

✓ Underlying competencies for business analysts in agile



# UNDERLYING COMPETENCIES



Continuous Improvement



Ability to recognize business value



Ability to handle change

Business Analyst



Communication and Collaboration



Patience and Tolerance

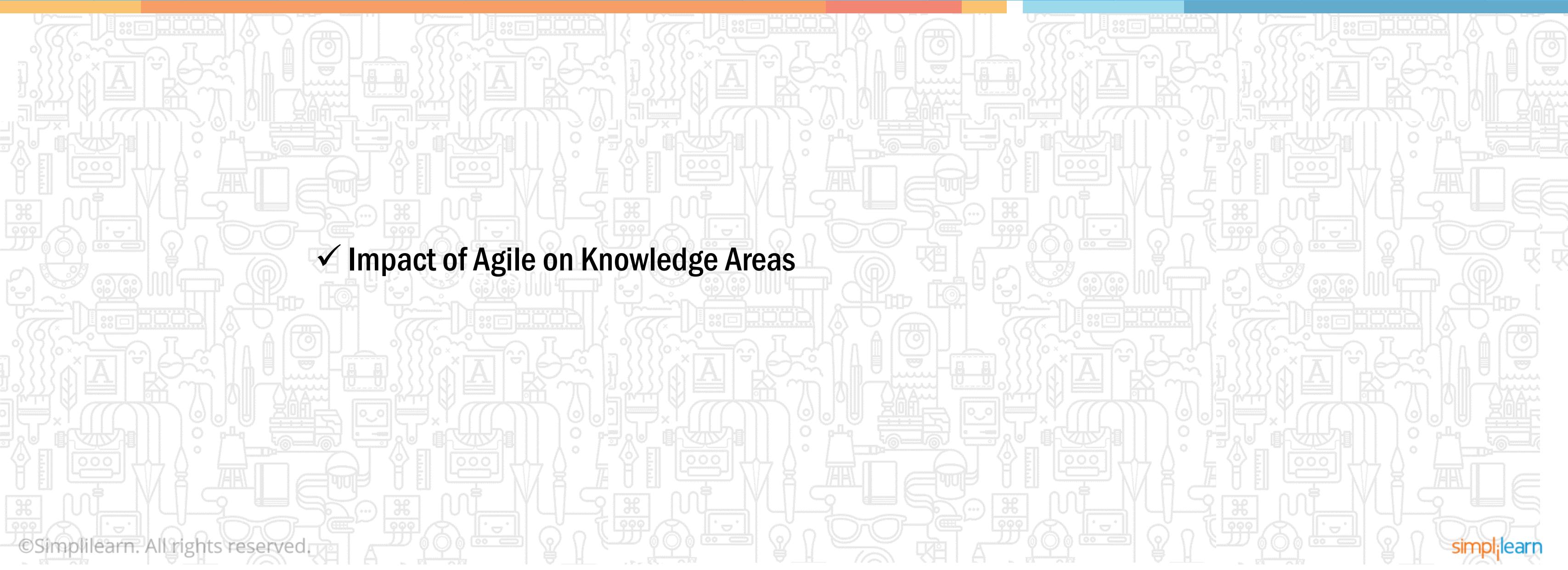


Flexibility and Adaptability

# Lesson 9: The Agile Perspective

## Topic 9.6: Impact on Knowledge Areas

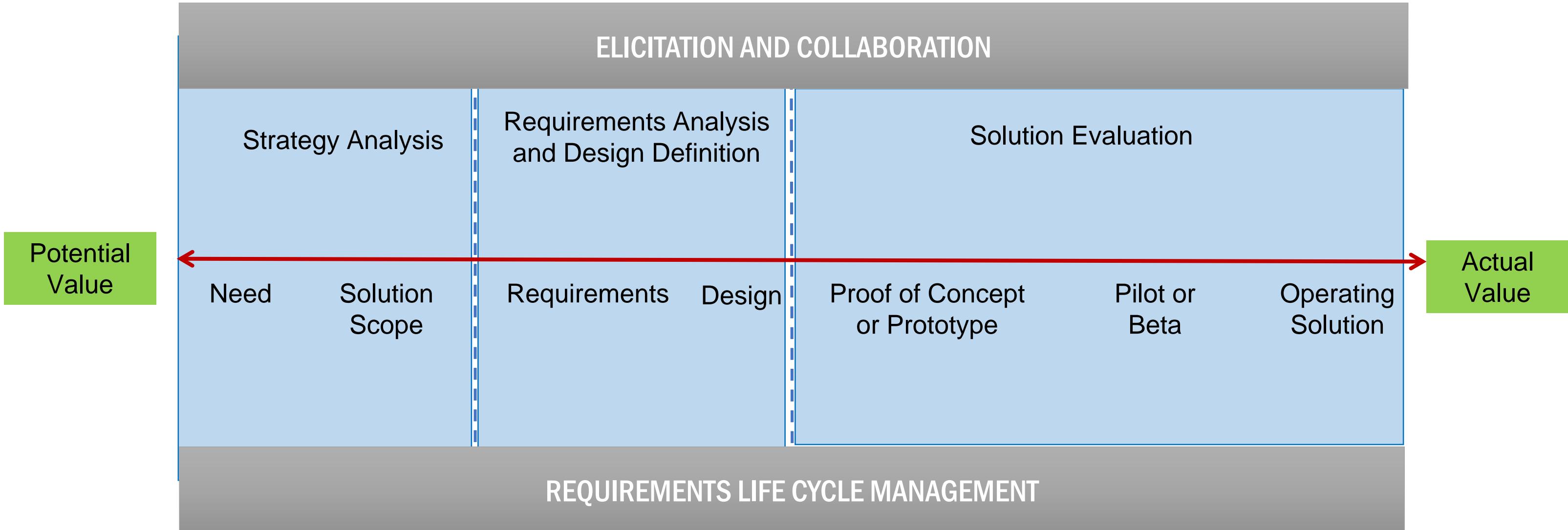
✓ Impact of Agile on Knowledge Areas



# IMPACT ON KNOWLEDGE AREAS

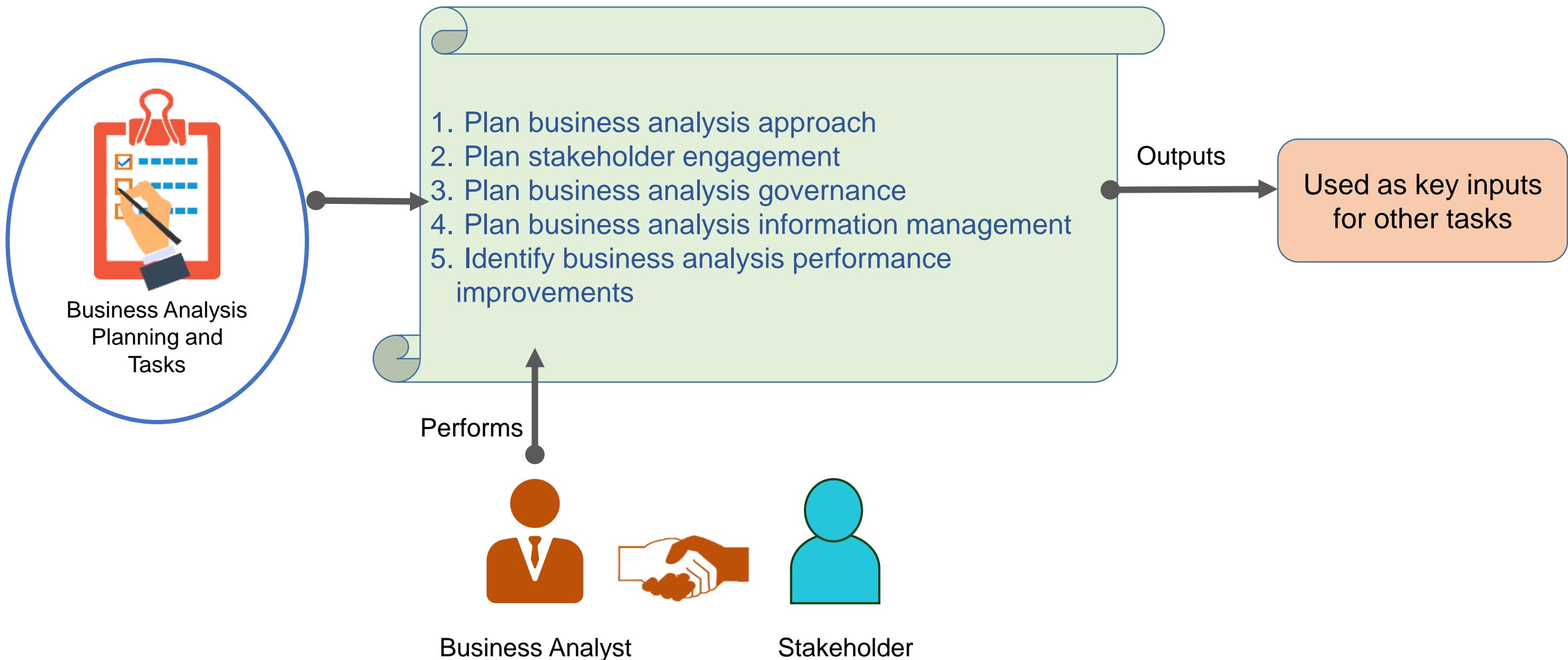
## BUSINESS ANALYSIS KNOWLEDGE AREAS

### BUSINESS ANALYSIS PLANNING AND MONITORING



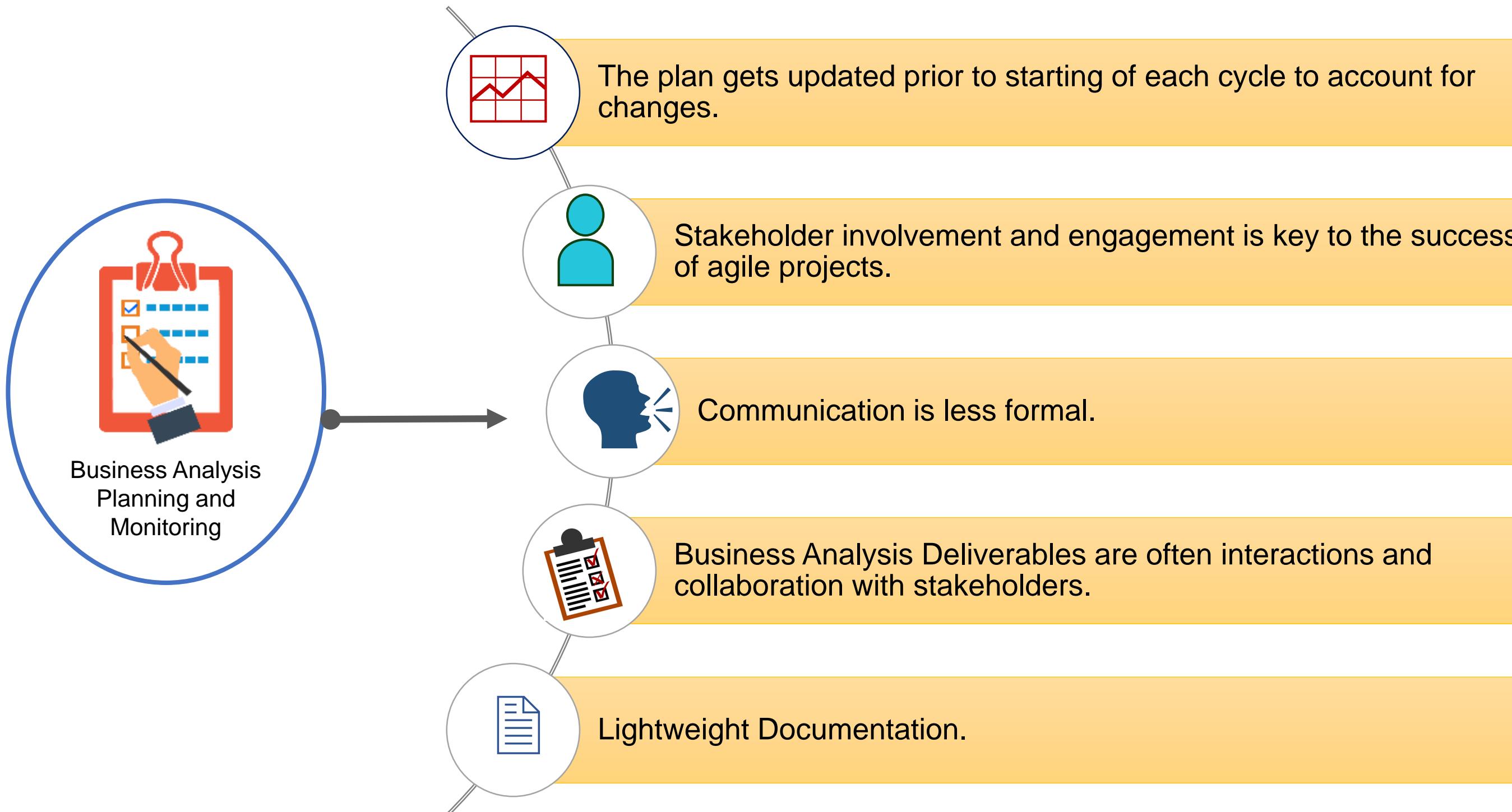
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING



# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING



# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING

### BABOK® Techniques

1. Stakeholder List, Map, or Persons
2. Metrics and Key Performance Indicators
3. Scope Modeling
4. Collaborative Games
5. Backlog Management
6. User Stories
7. Estimation
8. Prioritization
9. Workshop
10. Mind Mapping



# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING

### BABOK® Techniques

1. Stakeholder List, Map, or Persons
2. Metrics and Key Performance Indicators
3. Scope Modeling
4. Collaborative Games
5. Backlog Management
6. User Stories
7. Estimation
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10. Mind Mapping



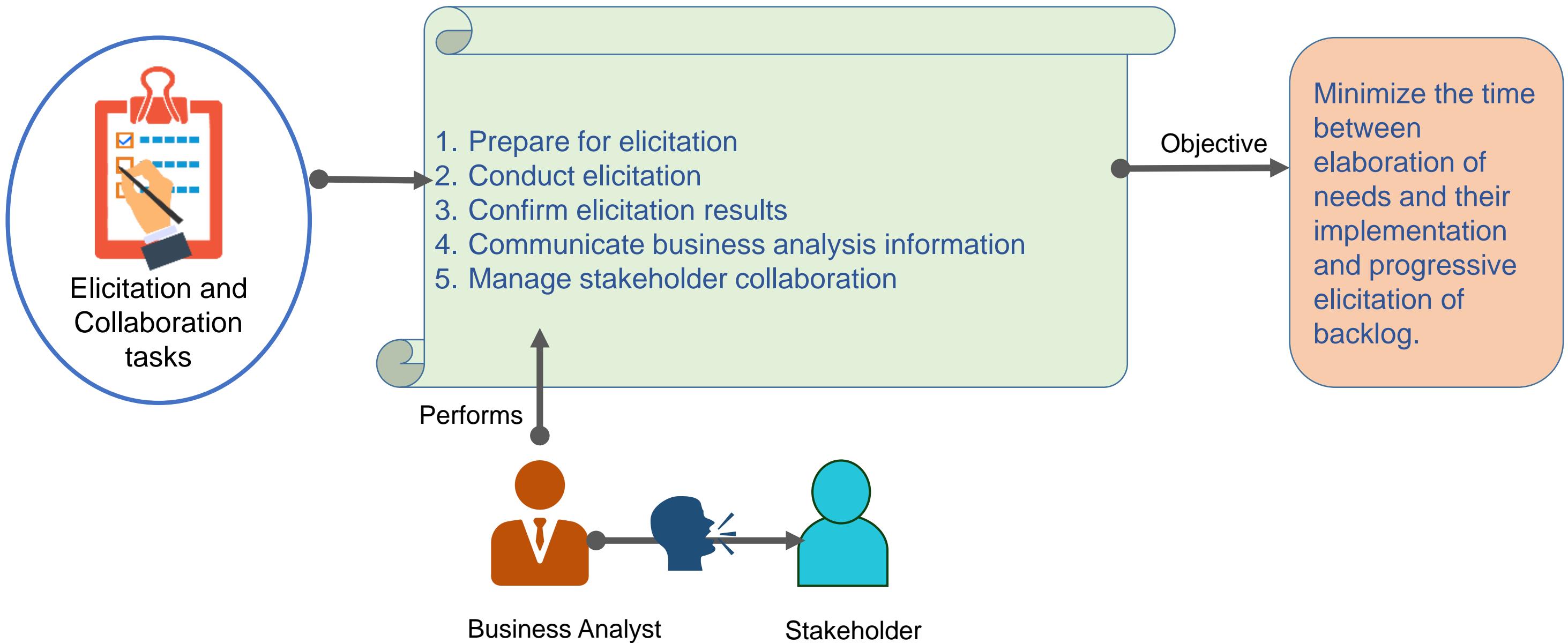
### Agile Techniques

1. Lightweight Documentation
2. Personas
3. Relative Estimation
4. MoSCoW Prioritization
5. Retrospective



## IMPACT ON KNOWLEDGE AREAS

### ELICITATION AND COLLABORATION



## IMPACT ON KNOWLEDGE AREAS

### BUSINESS ANALYSIS PLANNING AND MONITORING



# IMPACT ON KNOWLEDGE AREAS

## ELICITATION AND COLLABORATION

### BABOK® Techniques

1. Brainstorming
2. Workshop
3. Prototyping
4. Interface Analysis
5. Non functional requirement analysis
6. Acceptance and evaluation criteria
7. Use cases and scenarios
8. User Stories
9. Collaborative Games
10. Backlog Management
11. Concept Modeling
12. Process Modeling
13. Scope Modeling
14. Mind Mapping
15. Reviews
16. Stakeholder List, Map, or Personas



# IMPACT ON KNOWLEDGE AREAS

## ELICITATION AND COLLABORATION

### BABOK® Techniques

1. Brainstorming
2. Workshop
3. Prototyping
4. Interface Analysis
5. Non functional requirement analysis
6. Acceptance and evaluation criteria
7. Use cases and scenarios
8. User Stories
9. Collaborative Games
10. Backlog Management
11. Concept Modeling
12. Process Modeling
13. Scope Modeling
14. Mind Mapping
15. Reviews
16. Stakeholder List, Map, or Personas



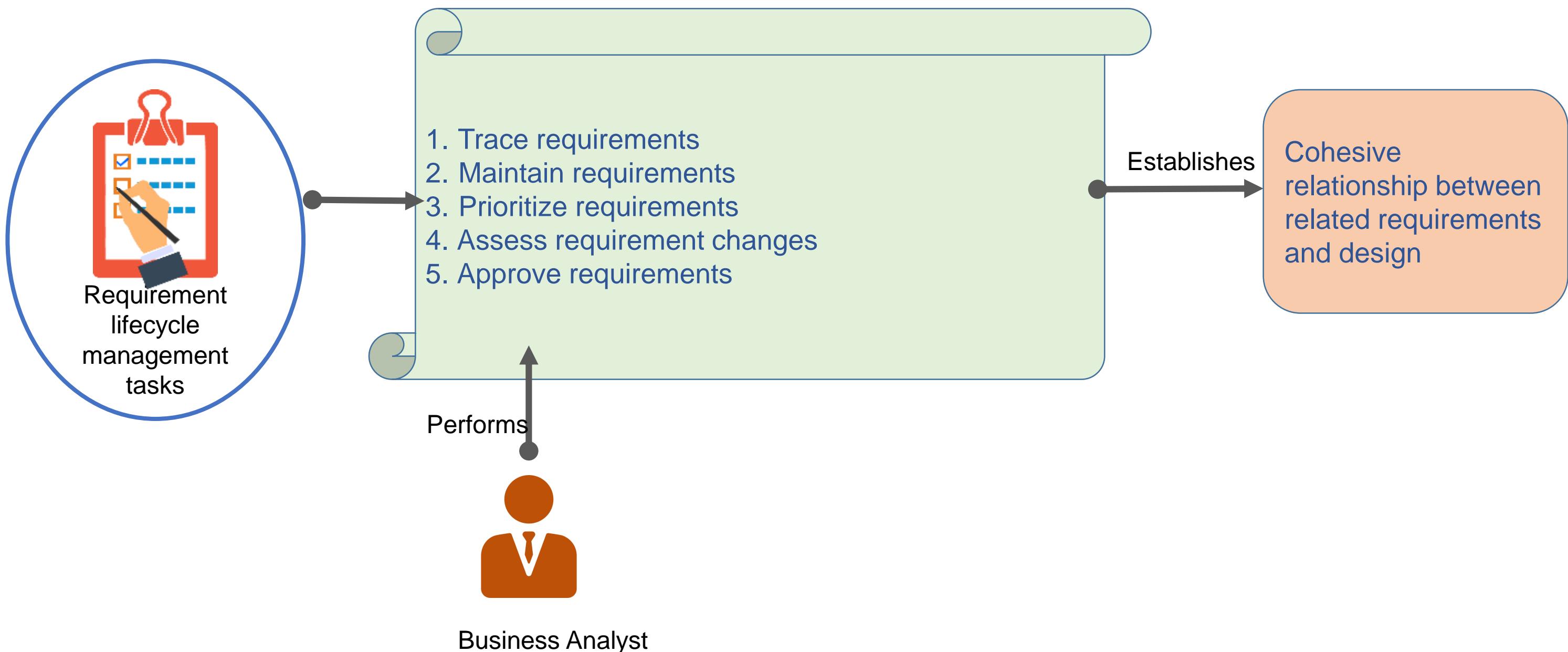
### Agile Techniques

1. Lightweight Documentation
2. Personas
3. Story boarding
4. Story mapping
5. Behavior Driven Development (BDD)



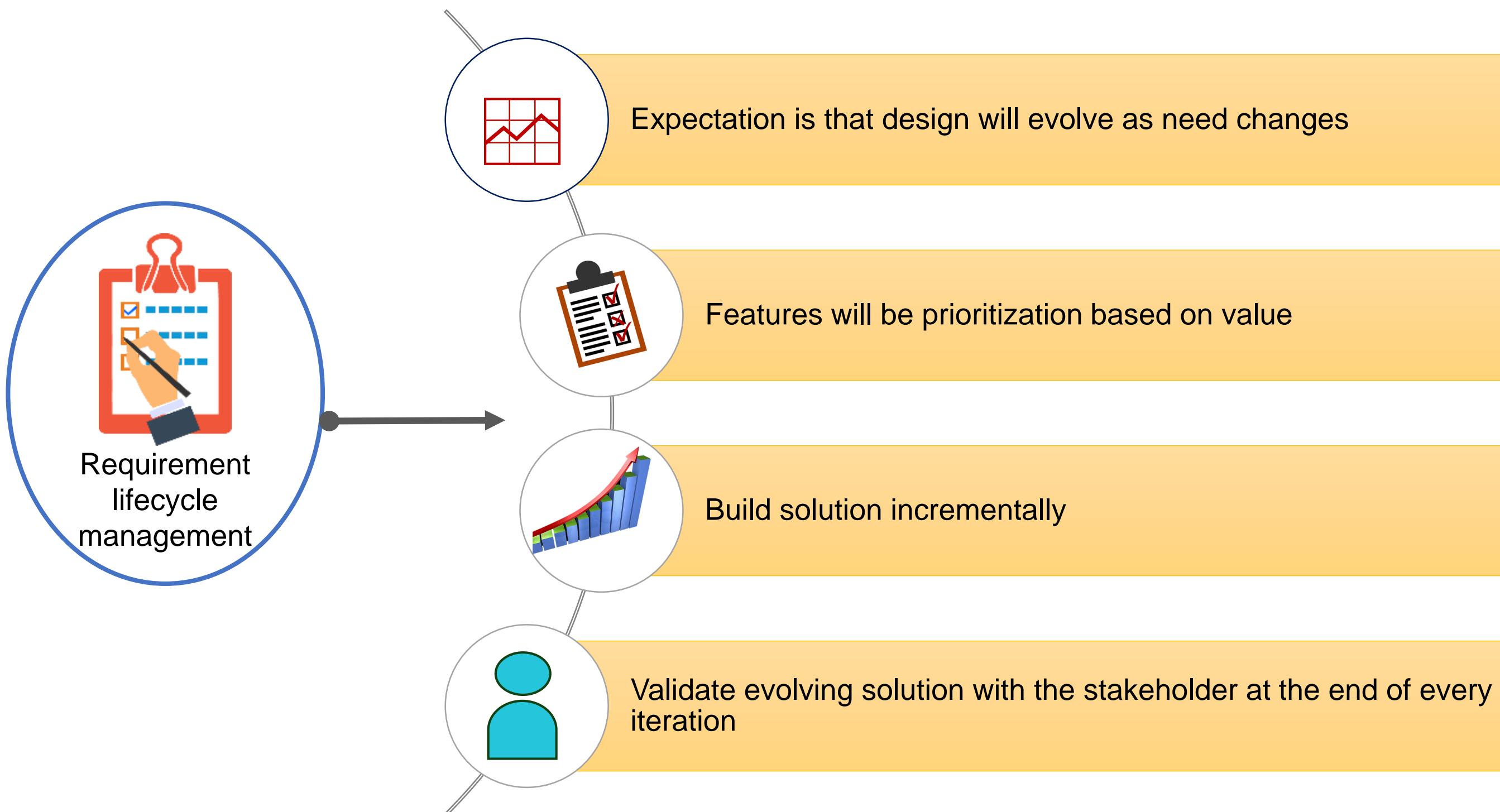
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT

### BABOK® Techniques

1. Acceptance and evaluation criteria
2. Collaborative games
3. Backlog Management
4. Prioritization
5. Review
6. Workshop



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT

### BABOK® Techniques

1. Acceptance and evaluation criteria
2. Collaborative games
3. Backlog Management
4. Prioritization
5. Review
6. Workshop



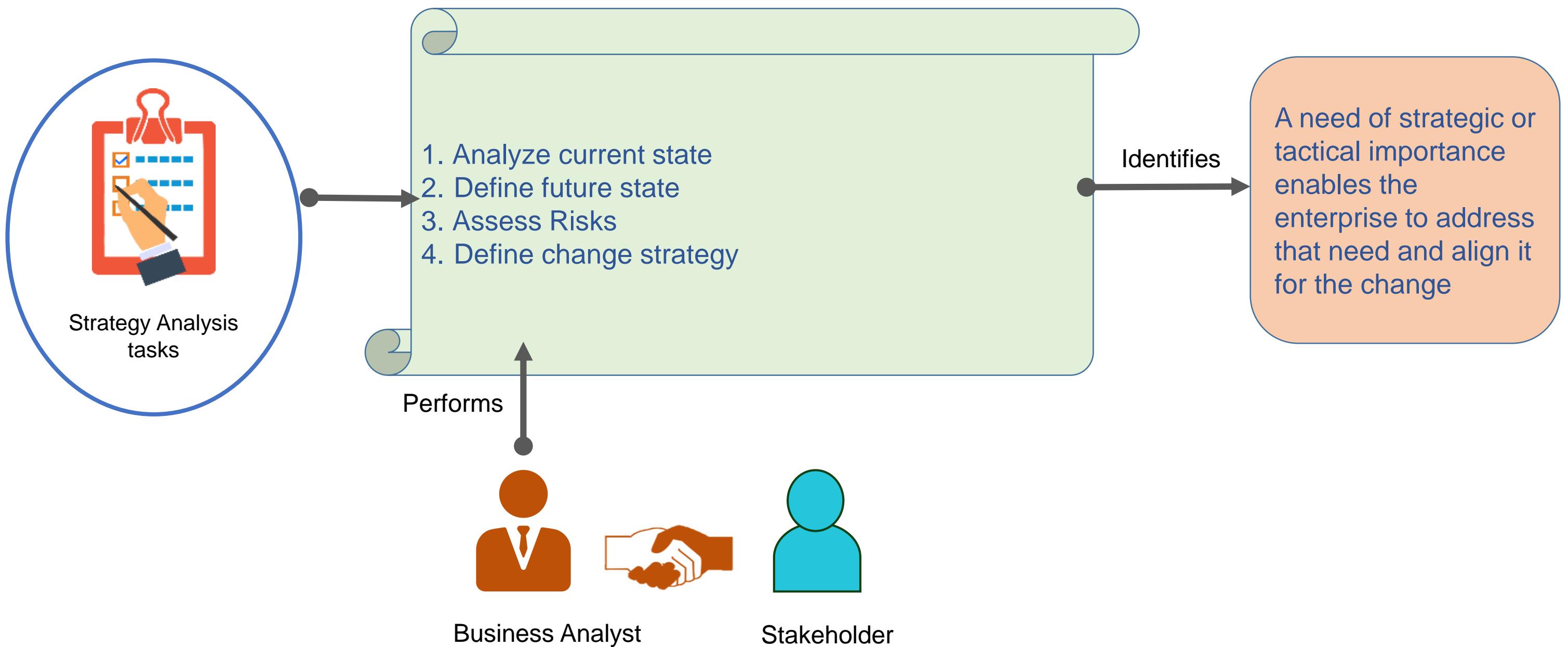
### Agile Techniques

1. Kano Analysis
2. MoSCoW Prioritization
3. Story Decomposition
4. Story Mapping



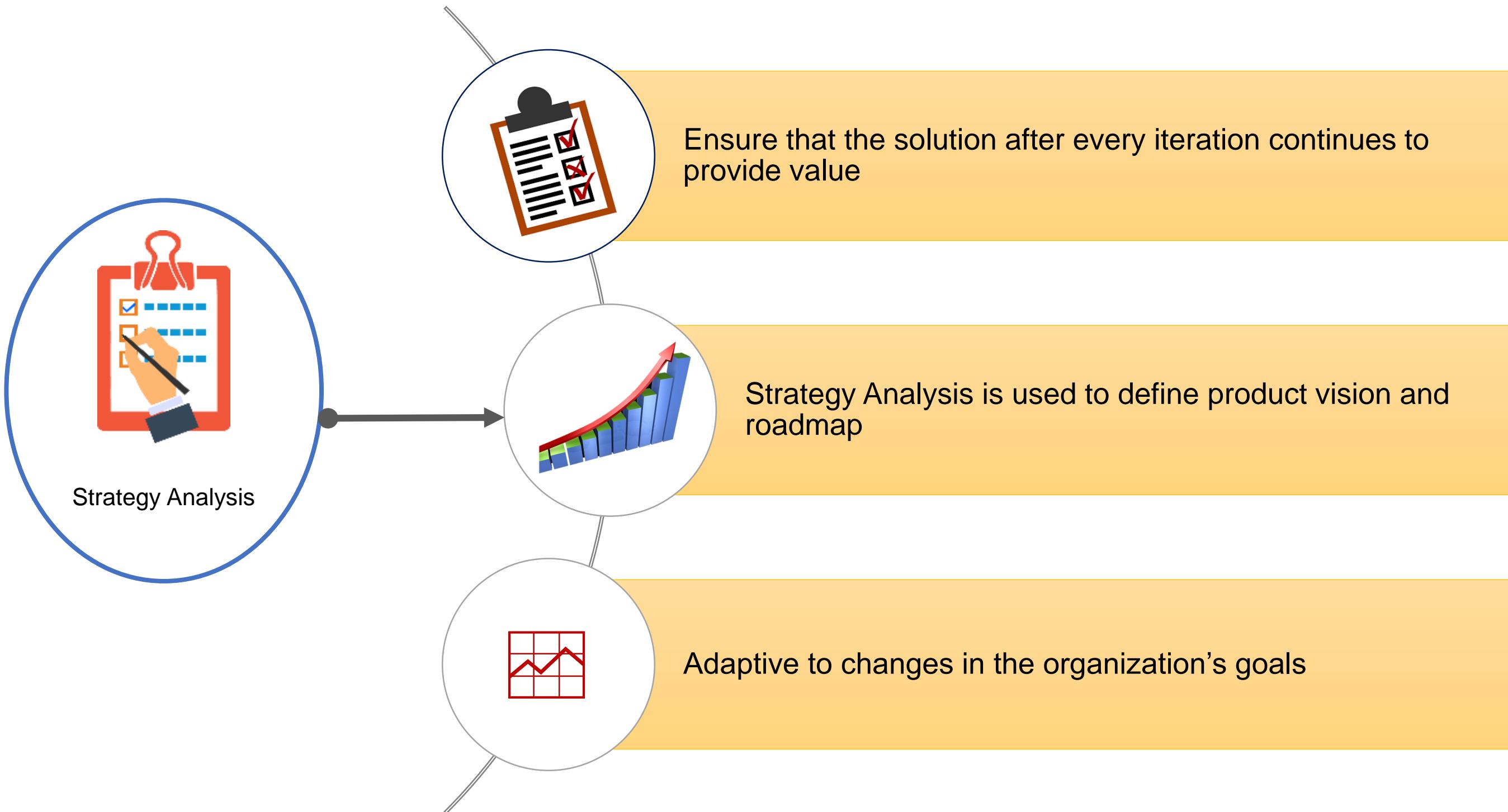
# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS

### BABOK® Techniques

1. Collaborative Games
2. Backlog Management
3. Business Capability Analysis
4. Concept Modeling
5. Scope Modeling
6. Metrics and Key Performance Indicators (KPIs)
7. Brainstorming
8. Workshop



# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS

### BABOK® Techniques

1. Collaborative Games
2. Backlog Management
3. Business Capability Analysis
4. Concept Modeling
5. Scope Modeling
6. Metrics and Key Performance Indicators (KPIs)
7. Brainstorming
8. Workshop



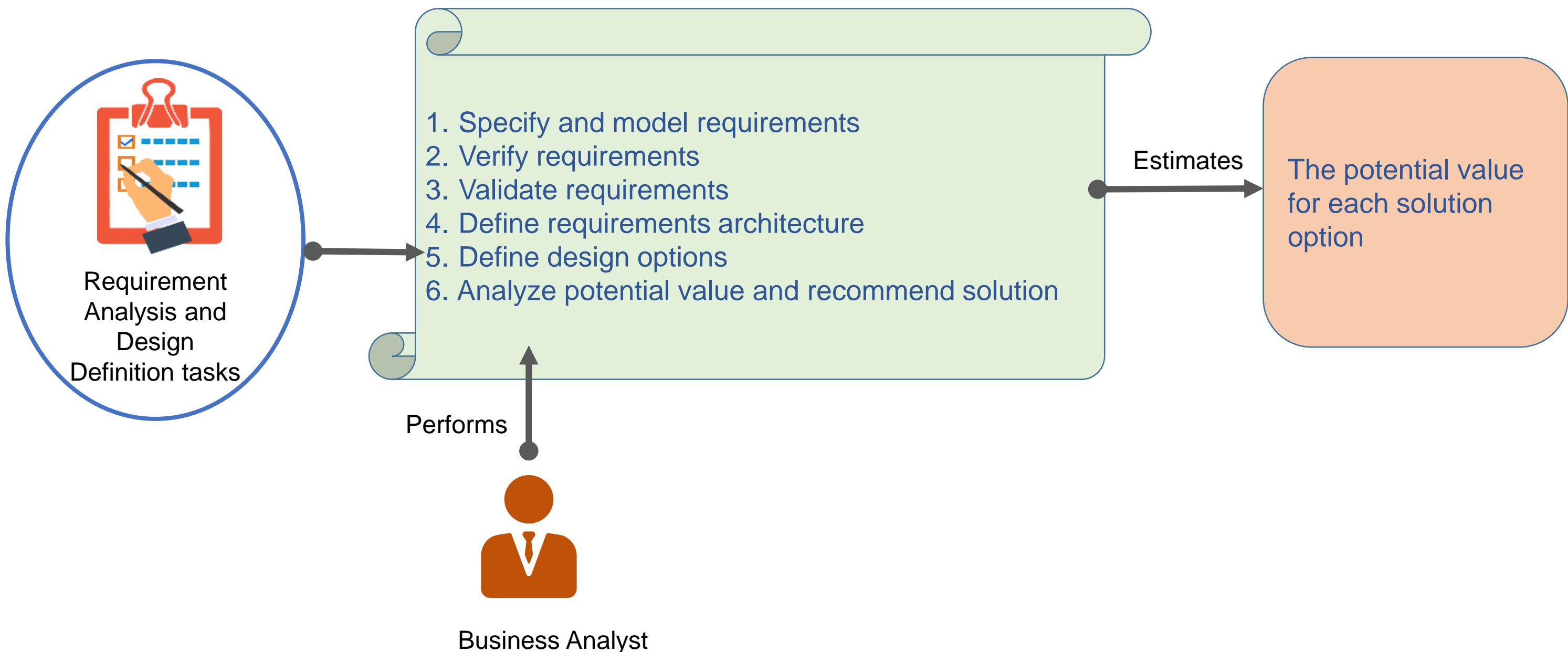
### Agile Techniques

1. Kano Analysis
2. Personas
3. Purpose Alignment Model
4. Real Options
5. Value Stream Analysis



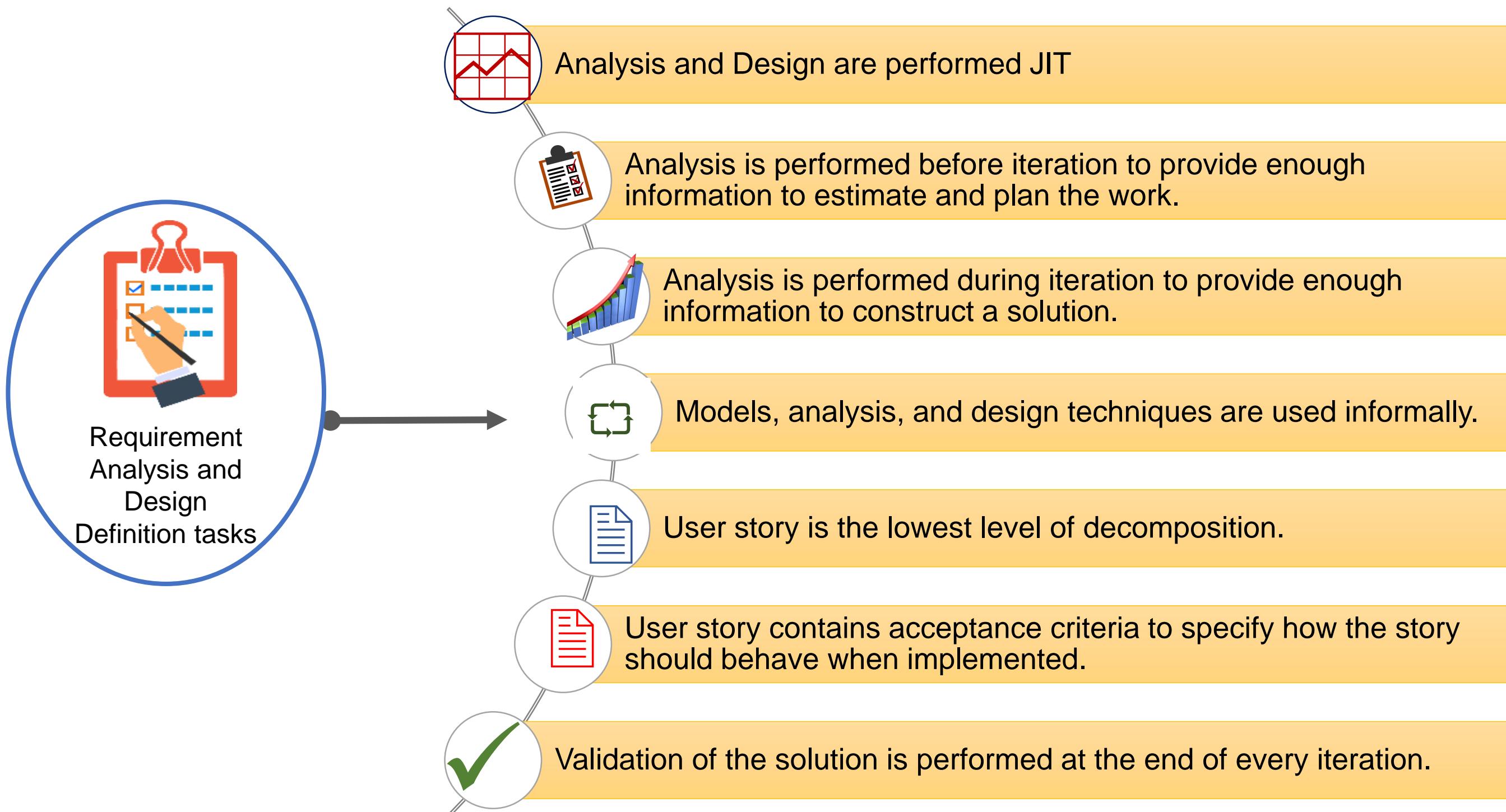
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION

### BABOK® Techniques

1. Acceptance and evaluation criteria
2. Collaborative Games
3. Business Capability Analysis
4. Business Rules Analysis
5. Interface Analysis
6. Process Analysis
7. Non Functional Requirements Analysis
8. Concept Modeling
9. Scope Modeling
10. Process Modeling
11. Prioritization
12. Workshop
13. Use Cases and Scenarios or Personas
14. User Stories

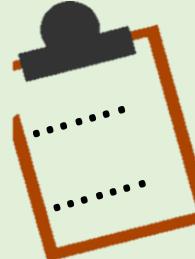


# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION

### BABOK® Techniques

1. Acceptance and evaluation criteria
2. Collaborative Games
3. Business Capability Analysis
4. Business Rules Analysis
5. Interface Analysis
6. Process Analysis
7. Non Functional Requirements Analysis
8. Concept Modeling
9. Scope Modeling
10. Process Modeling
11. Prioritization
12. Workshop
13. Use Cases and Scenarios or Personas
14. User Stories



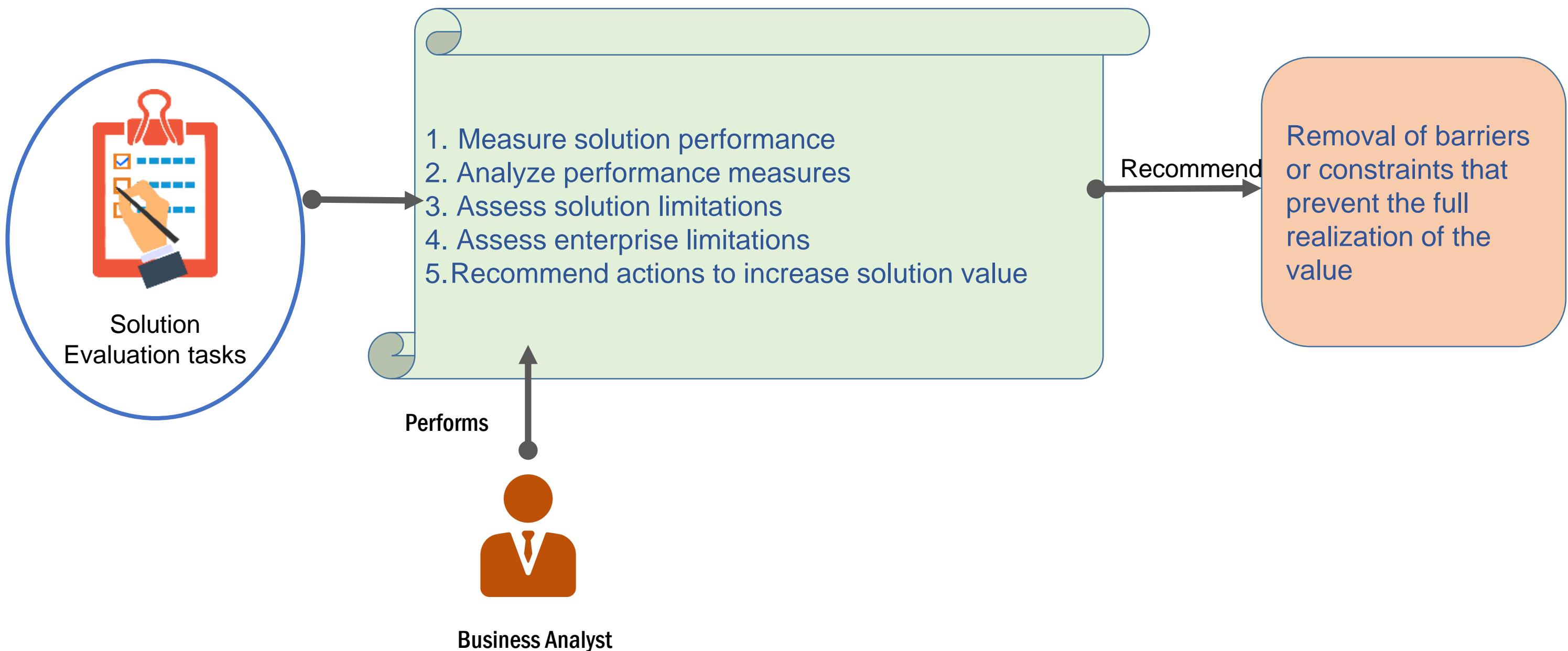
### Agile Techniques

1. Kano Analysis
2. Purpose Alignment Model
3. Real Options
4. Story Decomposition
5. Story Elaboration
6. Story Mapping
7. Story Boarding
8. Value Stream Analysis
9. Behavior-Driven Development
10. Lightweight Documentation
11. MoSCoW Prioritization



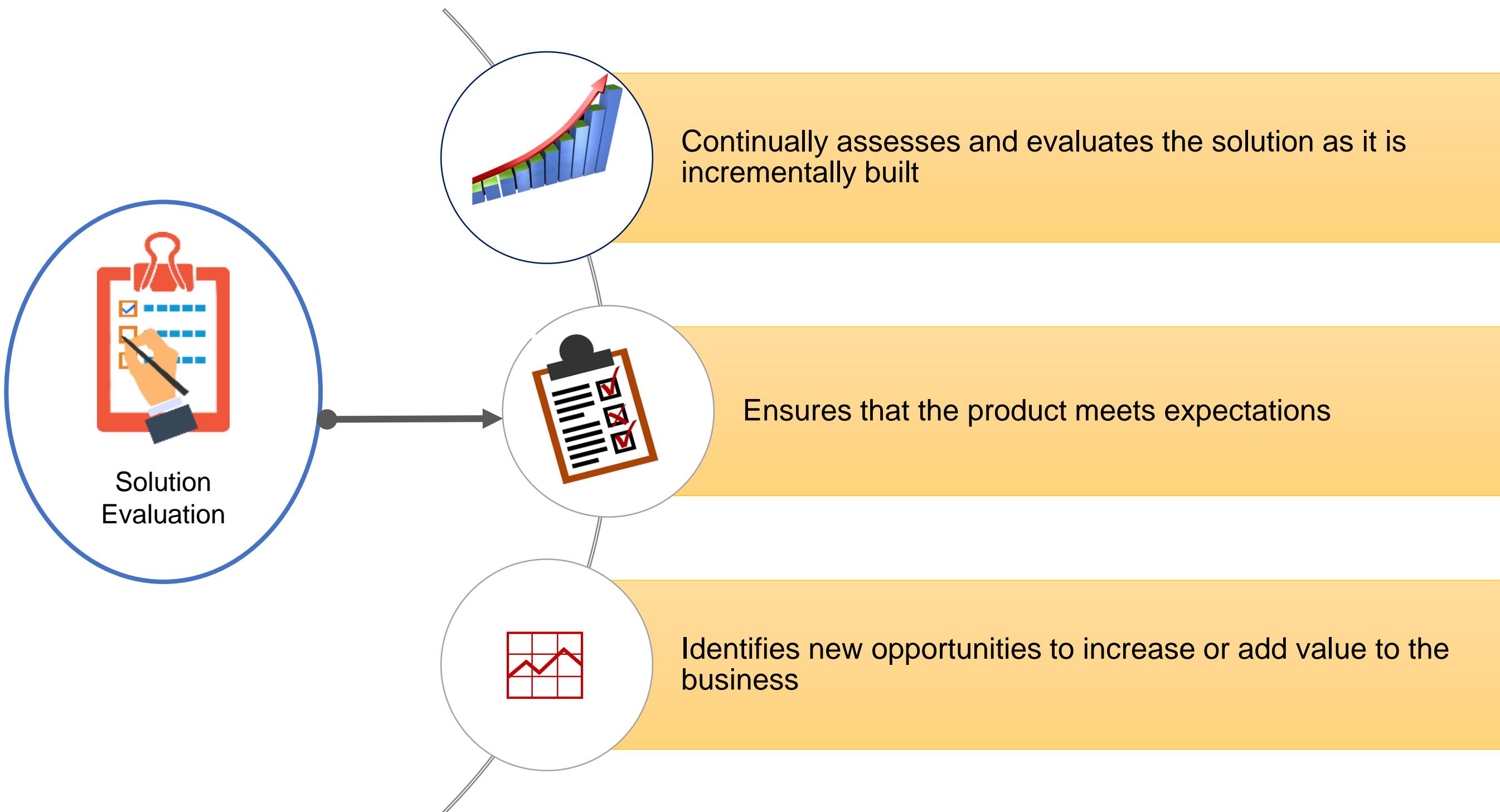
# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION



## IMPACT ON KNOWLEDGE AREAS

### SOLUTION EVALUATION



# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION

### BABOK® Techniques

1. Acceptance and evaluation criteria
2. Business Capability Analysis
3. Process Analysis
4. Metrics and Key Performance Indicators
5. Non Functional Requirements Analysis
6. Prototyping
7. Reviews
8. Workshop
9. Stakeholder List, Map, or Personas
10. Use Cases and Scenarios
11. User Stories



# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION

### BABOK® Techniques

1. Acceptance and evaluation criteria
2. Business Capability Analysis
3. Process Analysis
4. Metrics and Key Performance Indicators
5. Non Functional Requirements Analysis
6. Prototyping
7. Reviews
8. Workshop
9. Stakeholder List, Map, or Personas
10. Use Cases and Scenarios
11. User Stories



### Agile Techniques

1. Personas
2. Value Stream Analysis

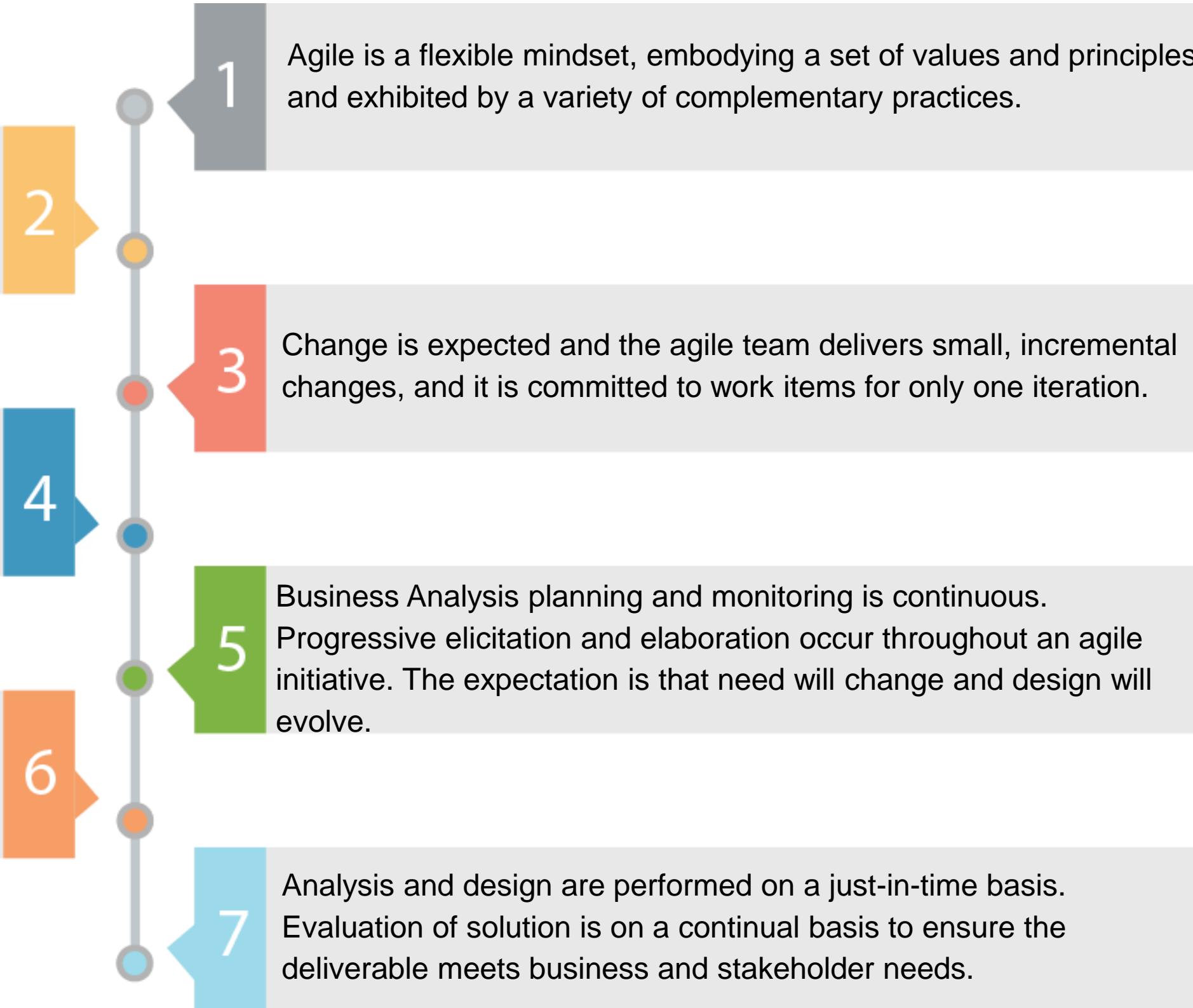


## KEY TAKEAWAYS

The business analysts continually reassess, adapt, and adjust their efforts and tactics. Business analysis work is performed continuously throughout an agile initiative.

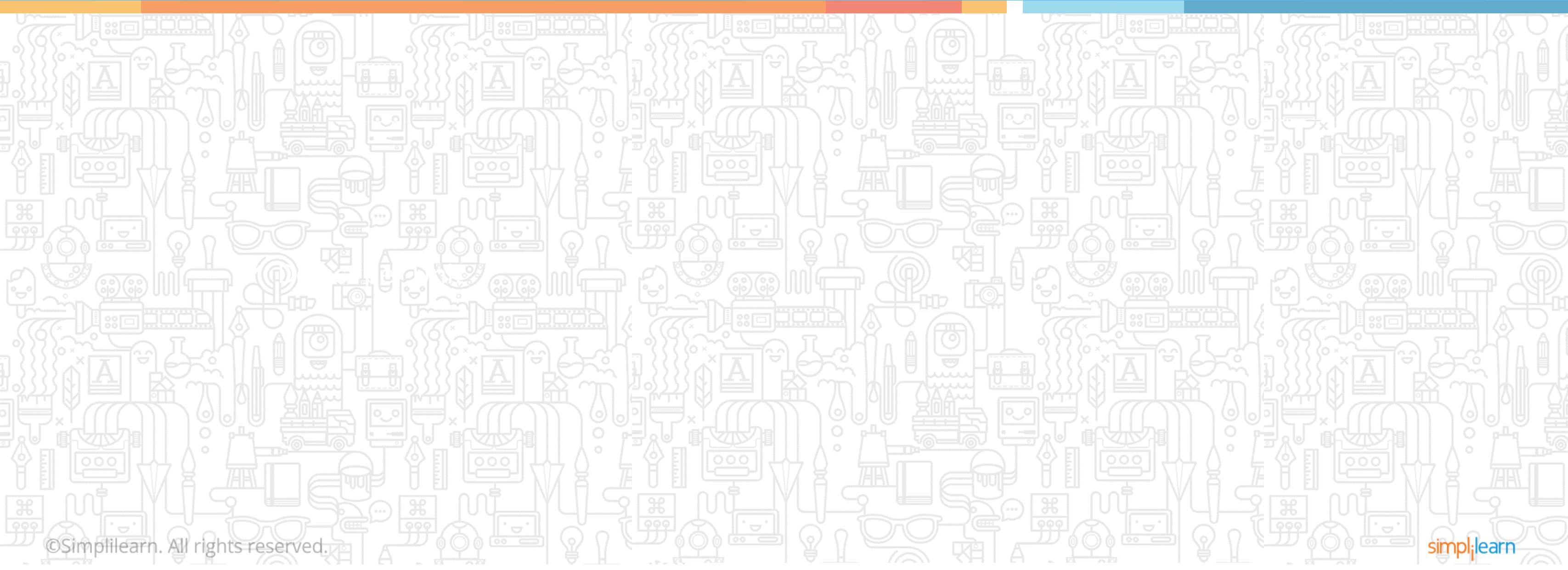
Agile approaches focus on people interaction, transparent communication, and ongoing delivery of valuable change to the stakeholders.

Validation of solution occurs at the end of every iteration in place of a formal requirements approval process. Agile approaches are often used when there is uncertainty about the needs.



# Lesson 9: The Agile Perspective

## CASE STUDY



# CASE STUDY

## OVERVIEW – BUSINESS NEED

John is a business analyst assigned to a business initiative to develop a new blogging system for employees to blog within the enterprise.

This system would enable employees to share their knowledge and experience, which would be helpful for others. It would also help to create a knowledge base over a period of time.



# CASE STUDY

## BUSINESS ANALYSIS ACTIVITIES

Change strategy for the system is to develop incrementally and iteratively based on the priority of features and feedback from the user group.

50 users, who would be participating during the pilot are identified from various business units. It is a diversified, heterogeneous group of bloggers.

8 bloggers from various business units are identified as domain subject matter expert. Around 20,000 employees are expected to use the blog over a period of 6 months once it's deployed. A couple of users shall have administrative privileges.



# CASE STUDY

## BUSINESS ANALYSIS ACTIVITIES

The business analyst uses various elicitation techniques to determine attitudes, opinions, and preferences of the users and features required of the blogging system. A set of minimum features required are further decomposed into user stories. Backlog items are refined on a just-in-time basis with the team members.

The team agreed upon a 2-week iteration cycle. On the last day of an iteration, the complete user stories with the key users would be reviewed for feedback.

The business analyst, domain subject matter experts, and the Agile team are also refining user stories in the backlog, based on priority, while the implementation of a couple of user stories taken up for the iteration is in progress.



# CASE STUDY

## BUSINESS ANALYSIS ACTIVITIES

After 3 iterations, a cloud-based blogging system with minimum features has been deployed into the production system for pilot run in a specific business unit. At periodic intervals, more features were deployed. By the end of 8 iterations, the blogging system is ready for roll-out throughout the enterprise.

Deployed Solution has been planned to be evaluated periodically to improve performance and usability. In summary, business analysis work was carried out throughout the initiative in collaboration with the team. Requirements elicitation and analysis and design were performed on a just-in-time basis. The solution is evaluated on a continual basis to ensure deliverables meet business and stakeholder needs.



# CASE STUDY

## QUESTIONS

| Questions                                                                                                            | Response                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Which Agile methodology or framework has been used for developing the blogging system?                             | <input type="radio"/> Disciplined Agile Delivery<br><input type="radio"/> Scaled Agile Framework<br><input type="radio"/> Scrum<br><input type="radio"/> Extreme Programming      |
| 2 Which of the following is used to manage requirements to ensure that progressive elaboration is based on priority? | <input type="radio"/> Iterative Planning<br><input type="radio"/> Backlog Management<br><input type="radio"/> Information Management<br><input type="radio"/> Feedback Management |
| 3 Which technique is used by the Agile team to determine what value can be delivered over a period of time?          | <input type="radio"/> Sprint<br><input type="radio"/> Collaborative Game<br><input type="radio"/> Planning Workshop<br><input type="radio"/> Agile Team Meetings                  |

## CASE STUDY

### QUESTIONS

|   | <b>Questions</b>                                                                | <b>Response</b>                                                                                                                                                                                                                                                                            |
|---|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | Which of the following techniques might have been used in the case study?       | <input type="radio"/> Story Decomposition<br><input type="radio"/> Story Mapping<br><input type="radio"/> Story Elaboration<br><input type="radio"/> All of the above                                                                                                                      |
| 5 | Which of the following statements best describes how the solution is evaluated? | <input type="radio"/> Solution is evaluated after 3 iterations and 8 iterations<br><input type="radio"/> Solution is evaluated on a continual basis<br><input type="radio"/> Solution is evaluated after every iteration<br><input type="radio"/> Solution is evaluated after 8 iterations |

## CASE STUDY

### ANSWERS

| Questions                                                                                                            | Answers                                                  |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 1 Which Agile methodology or framework has been used for developing the blogging system?                             | Scrum                                                    |
| 2 Which of the following is used to manage requirements to ensure that progressive elaboration is based on priority? | Backlog Management                                       |
| 3 Which technique is used by the Agile team to determine what value can be delivered over a period of time?          | Planning Workshop                                        |
| 4 Which of the following techniques might have been used in the case study?                                          | Story Decomposition, Story Mapping and Story Elaboration |
| 5 Which of the following statements best describes how the solution is evaluated?                                    | Solution is evaluated on a continual basis               |



**QUIZ**

1

**In the context of agile techniques, product needs are expressed as concrete examples in:**

- a. Real Options
- b. Behavior-Driven Development (BDD)
- c. Storyboarding
- d. Planning workshop



**QUIZ**

1

**In the context of agile techniques, product needs are expressed as concrete examples in:**

- a. Real Options
- b. Behavior-Driven Development (BDD)
- c. Storyboarding
- d. Planning workshop



The correct answer is **b.**

**Explanation:** Behavior-Driven Development (BDD) is an approach that enhances the communication between stakeholders and team members by expressing product needs as concrete examples.

**QUIZ****2****Which of the following is true about agile approaches?**

- a. In agile approaches, pre-defined models for documentation are established.
- b. In agile approaches, formal documentations are created before every iteration.
- c. In agile approaches, documents are created with just enough information and just-in-time.
- d. In agile approaches, documents are not created.



**QUIZ****2****Which of the following is true about agile approaches?**

- a. In agile approaches, pre-defined models for documentation are established.
- b. In agile approaches, formal documentations are created before every iteration.
- c. In agile approaches, documents are created with just enough information and just-in-time.
- d. In agile approaches, documents are not created.



The correct answer is

**c.**

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

**QUIZ**  
**3**

**Which of the following agile approaches is a lightweight process management framework based on empirical process control?**

- a. Empirical Process Management
- b. Evolutionary Project Management
- c. Disciplined Agile Delivery
- d. Scrum



**QUIZ**  
**3**

**Which of the following agile approaches is a lightweight process management framework based on empirical process control?**

- a. Empirical Process Management
- b. Evolutionary Project Management
- c. Disciplined Agile Delivery
- d. Scrum



The correct answer is **d.**

**Explanation:** Scrum is a lightweight process management framework based on empirical process control.

**QUIZ****4****Which of the following is true about business analysis work ?**

- a. It is performed is to ensure that complete information is available to the agile team.
- b. It is performed only when it is requested by the team.
- c. It is performed during inception and retirement.
- d. It is performed continuously throughout an initiative.



**QUIZ****4****Which of the following is true about business analysis work ?**

- a. It is performed is to ensure that complete information is available to the agile team.
- b. It is performed only when it is requested by the team.
- c. It is performed during inception and retirement.
- d. It is performed continuously throughout an initiative.



The correct answer is **d.**

**Explanation:** Business analysis work is performed continuously throughout an initiative.

**QUIZ****5**

**Results from which technique may be used in Quality Function Deployment (QFD)?**

- a. Kano Analysis
- b. Value stream analysis
- c. Purpose alignment model
- d. Functional Analysis



**QUIZ****5**

**Results from which technique may be used in Quality Function Deployment (QFD)?**

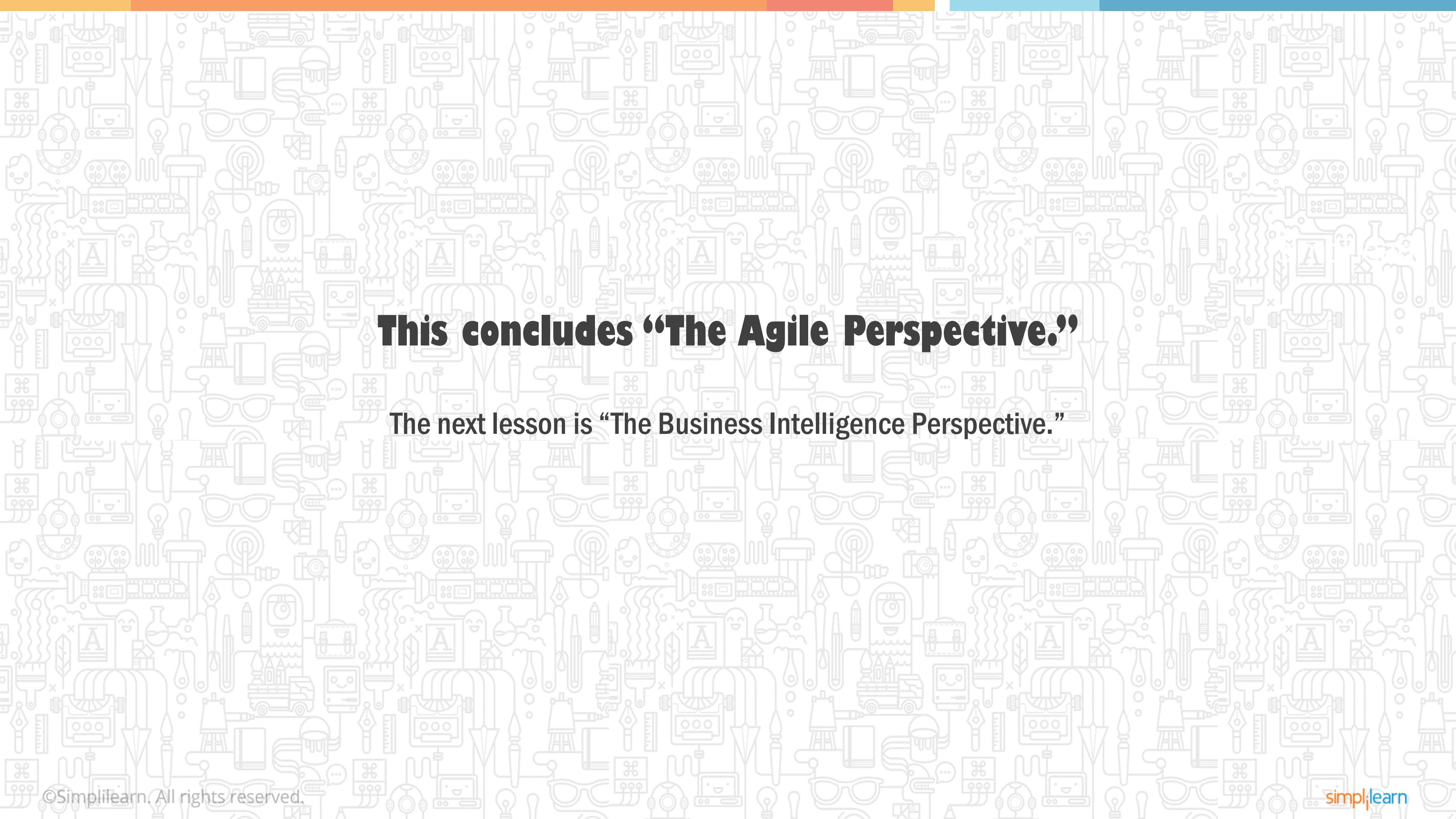
- a. Kano Analysis
- b. Value stream analysis
- c. Purpose alignment model
- d. Functional Analysis



The correct answer is

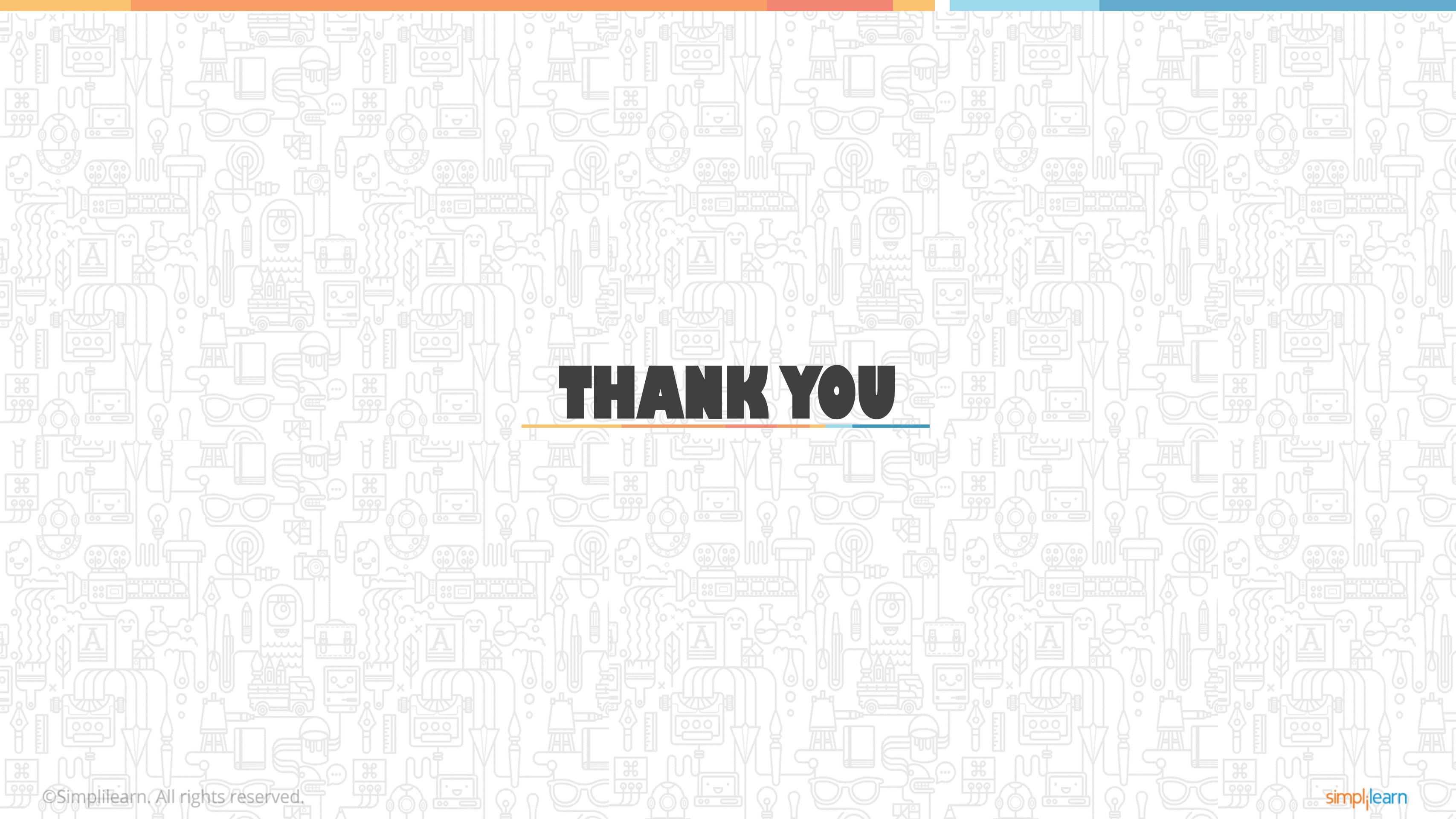
**a.**

**Explanation:** Results from Kano analysis are used in Voice of Customer / Quality Function Deployment (QFD).



**This concludes “The Agile Perspective.”**

**The next lesson is “The Business Intelligence Perspective.”**



# THANK YOU

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# **CBAP® Exam Preparation Course**

## **Lesson 10 - Business Intelligence Perspective**



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## WHAT'S IN IT FOR ME



*What is Business Intelligence?*



*What is the Business Analysis Scope?*



*The Underlying Competencies*



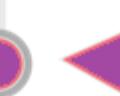
*Change Scope*



*The Methodologies and Approaches*



*The Impact on Knowledge Areas*

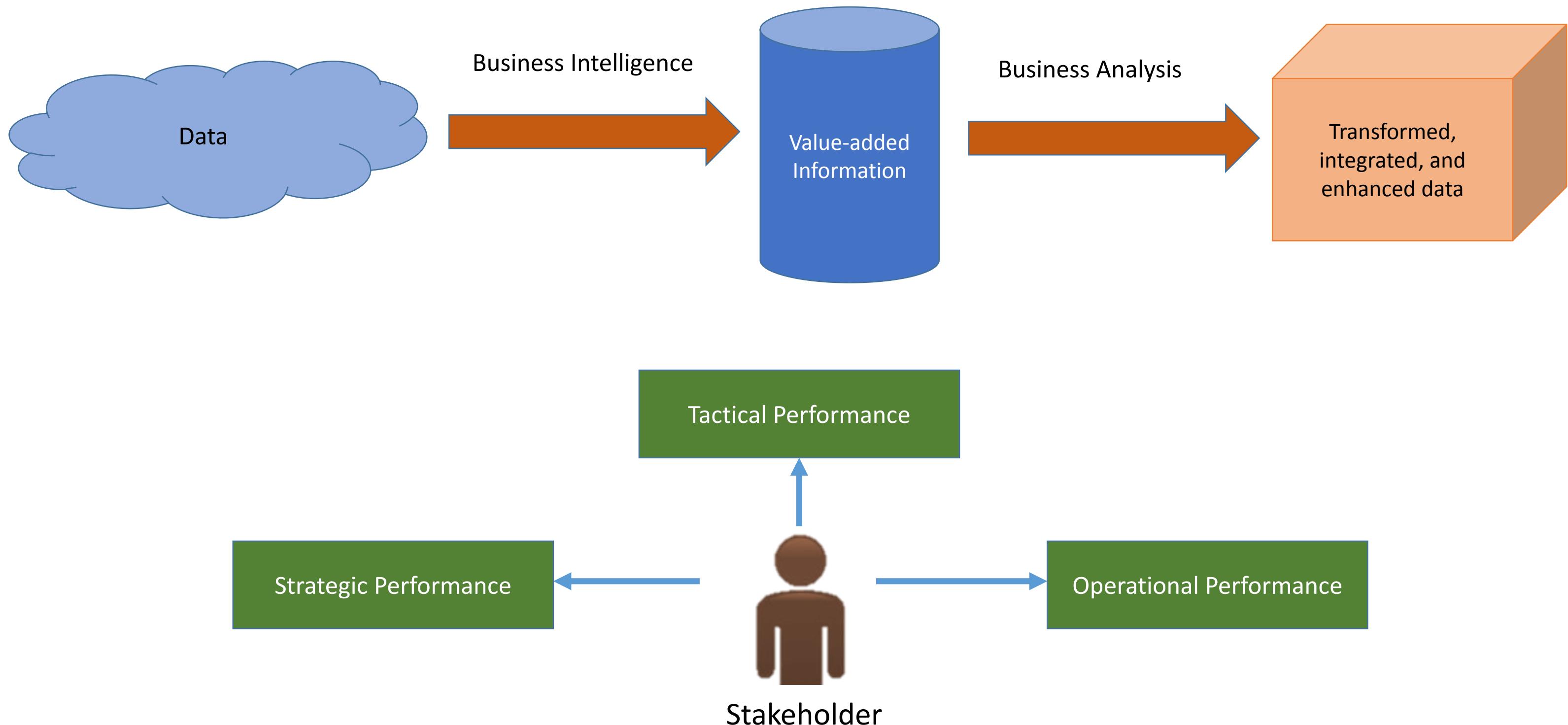


# INTRODUCTION

## According to Gartner:

*“Business Intelligence (BI) is an umbrella term that includes the applications, infrastructure and tools, and best practices that enable access to and analysis of information to improve and optimize decisions and performance.”*

# INTRODUCTION



# Lesson 10: Business Intelligence Perspective

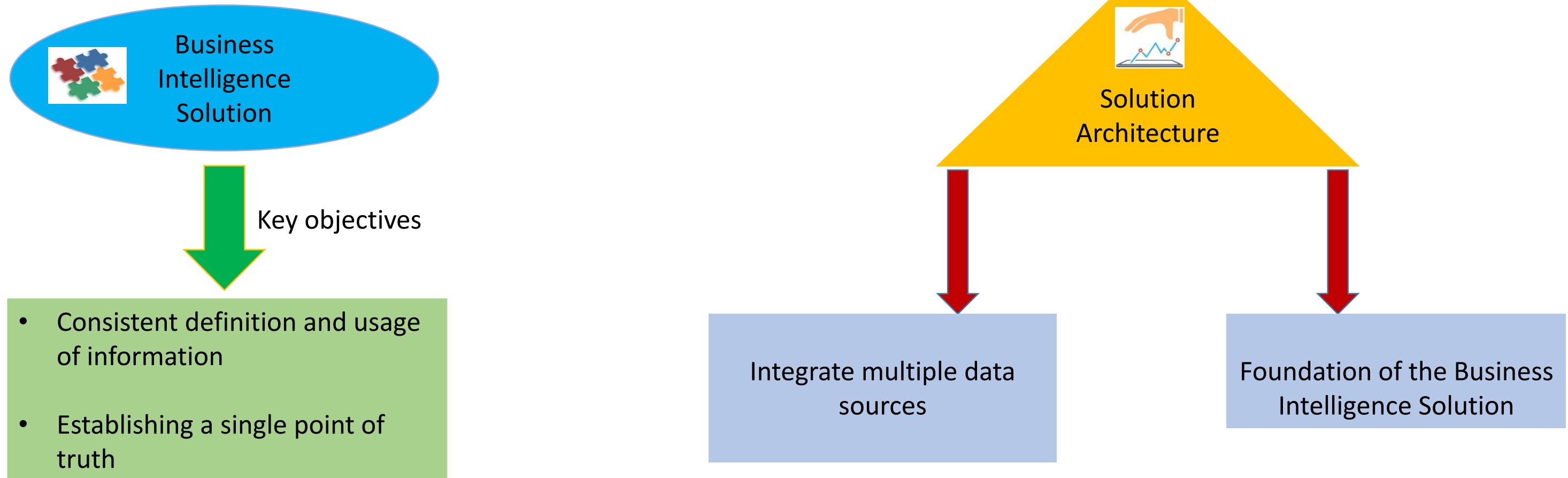
## Topic 10.1: Change Scope

- ✓ Breadth of Change
- ✓ Depth of Change
- ✓ Value and Solutions Delivered
- ✓ Delivery Approach
- ✓ Major Assumptions

## CHANGE SCOPE

---

## BREADTH OF CHANGE



Business Analysis may involve other infrastructure services.

## CHANGE SCOPE

---

## DEPTH OF CHANGE



Focus on the information needed to support decision making at different levels within the organization

Business Needs

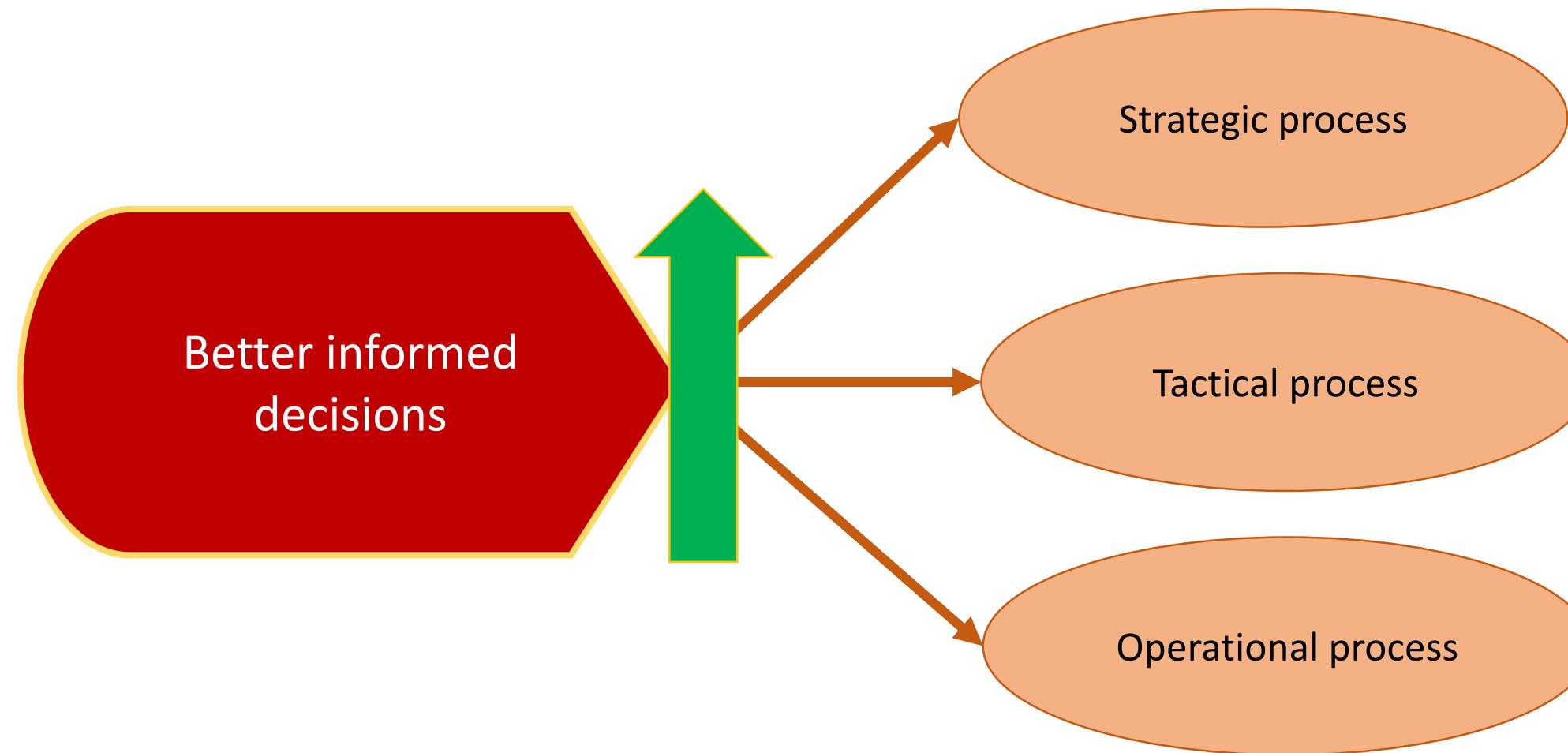
- Requirements for new or replacement of existing report
- Data integration requirements
- Information requirements

## CHANGE SCOPE

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### VALUE AND SOLUTIONS DELIVERED

The value **of change** is in its ability to provide timely, accurate, high-value, and actionable information.



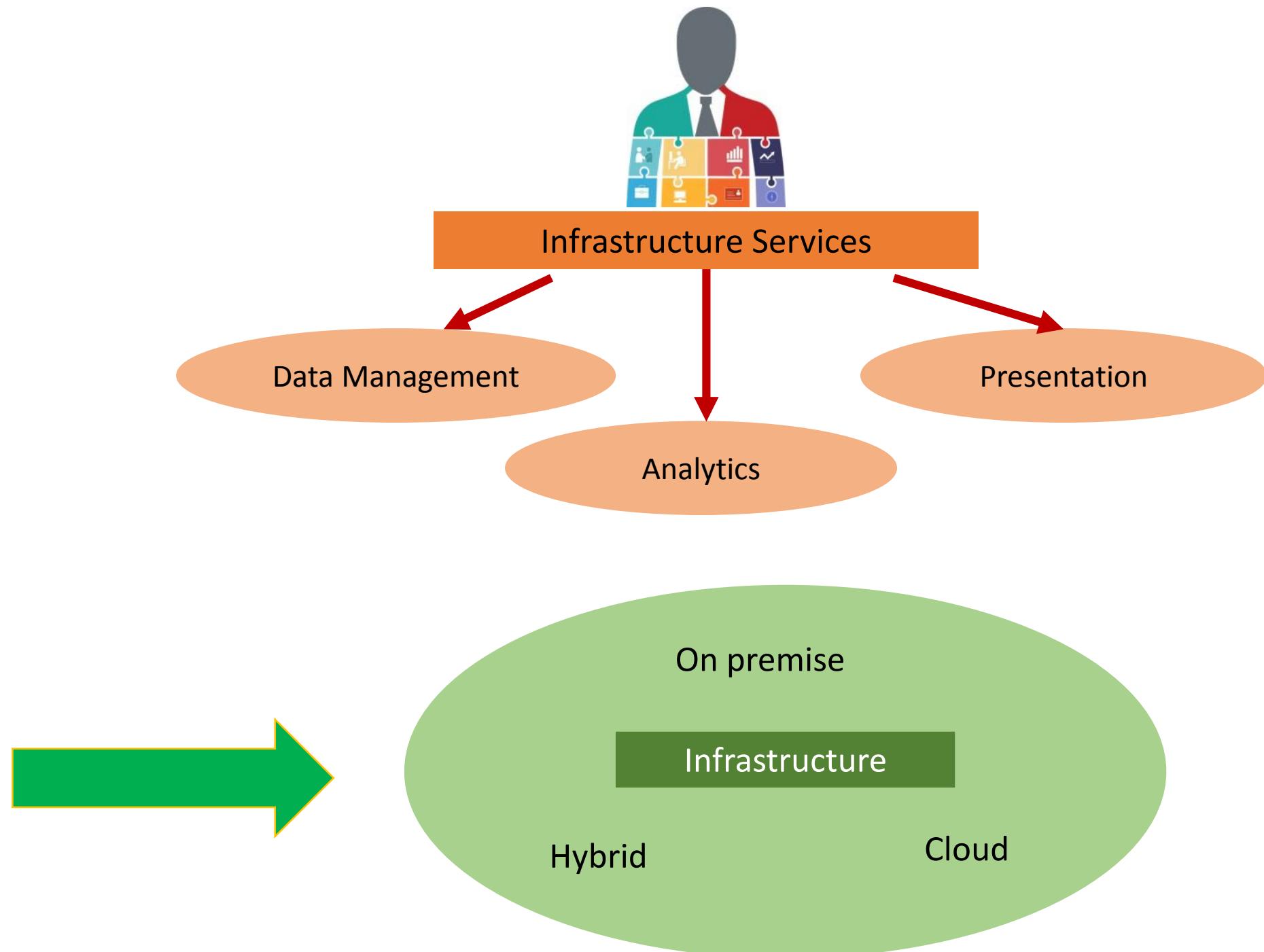
## CHANGE SCOPE DELIVERY APPROACH



Extensible and Scalable  
Solution Architecture



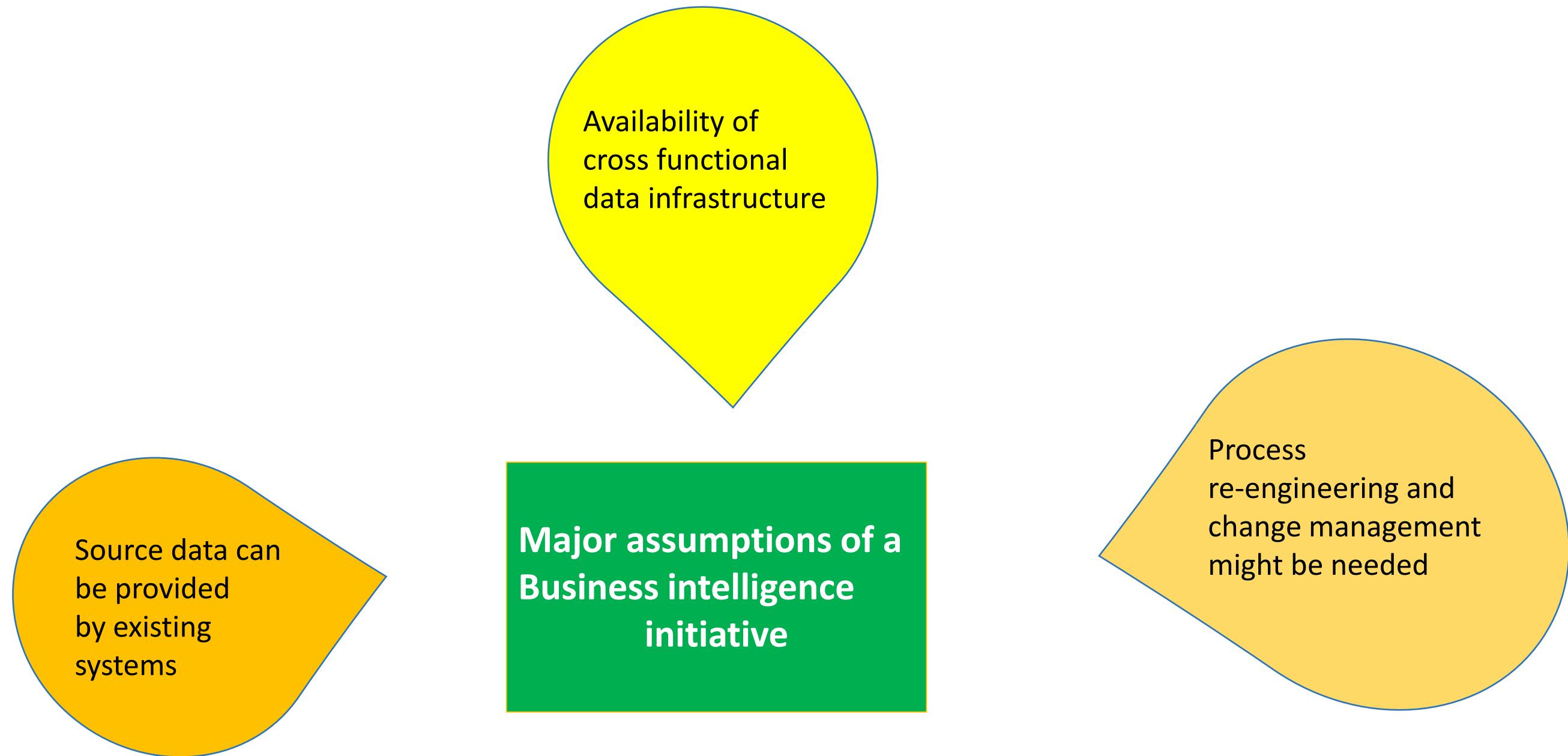
Big Data



## CHANGE SCOPE

---

## MAJOR ASSUMPTIONS



# Lesson 10: Business Intelligence Perspective

## Topic 10.2: Business Analysis Scope

- ✓ Key Stakeholders
- ✓ Business Analysis outcomes

# BUSINESS ANALYSIS SCOPE

## KEY STAKEHOLDERS



### CHANGE SPONSORS

The top management

Cross-functional stakeholders

Shared business intelligence solutions

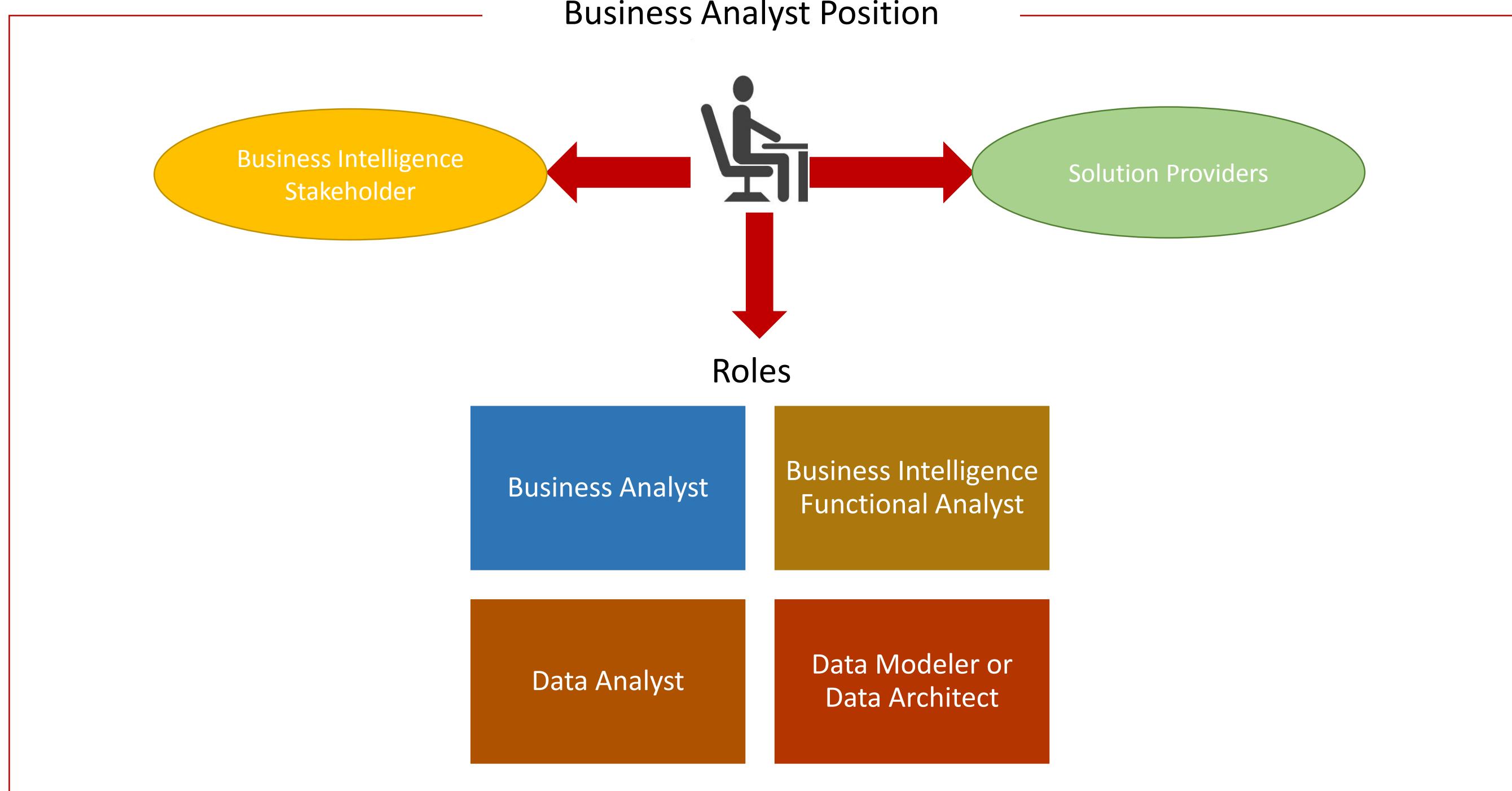
### CHANGE TARGETS



Multiple levels in the organization

# BUSINESS ANALYSIS SCOPE

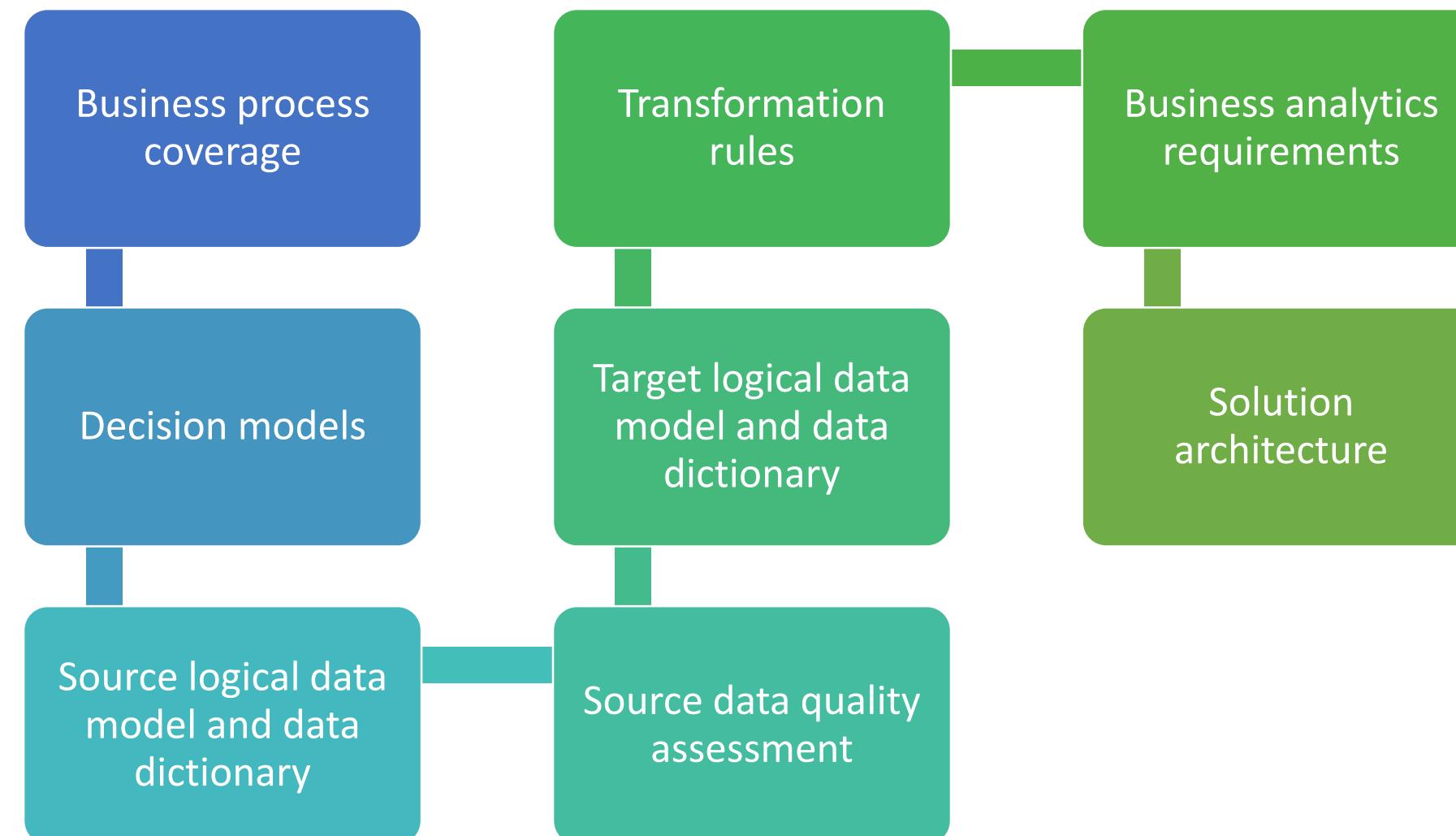
## KEY STAKEHOLDERS



## BUSINESS ANALYSIS SCOPE

## BUSINESS ANALYSIS OUTCOME

The work of a Business analyst is focused on the major components of solution architecture.



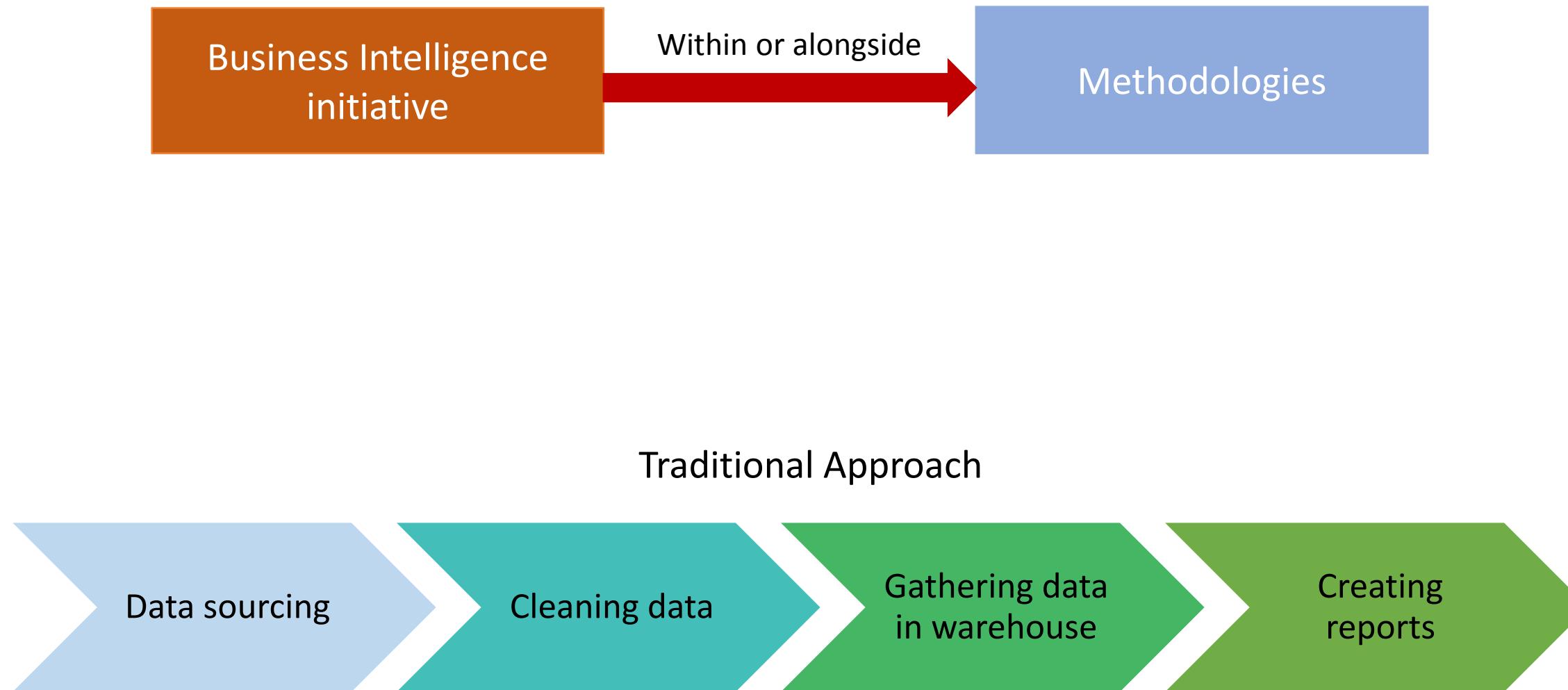
# Lesson 10: Business Intelligence Perspective

## Topic 10.3: Methodologies and Approaches

- ✓ Define methodologies
- ✓ Describe approaches

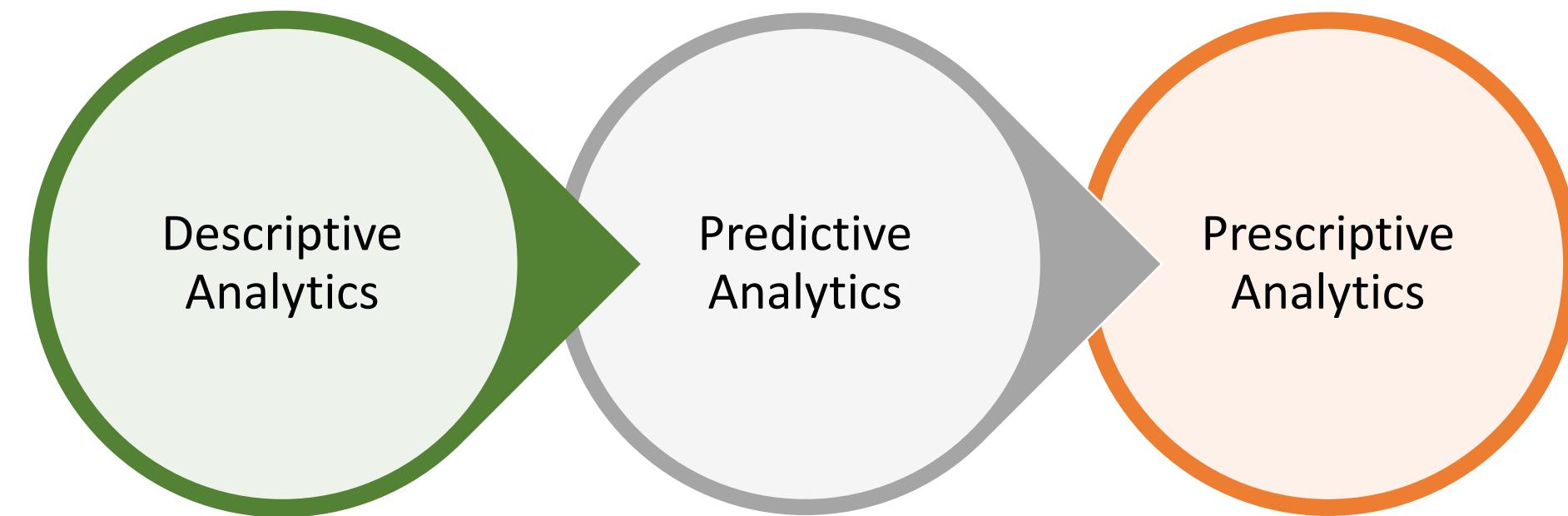
# METHODOLOGIES AND APPROACHES

## INTRODUCTION



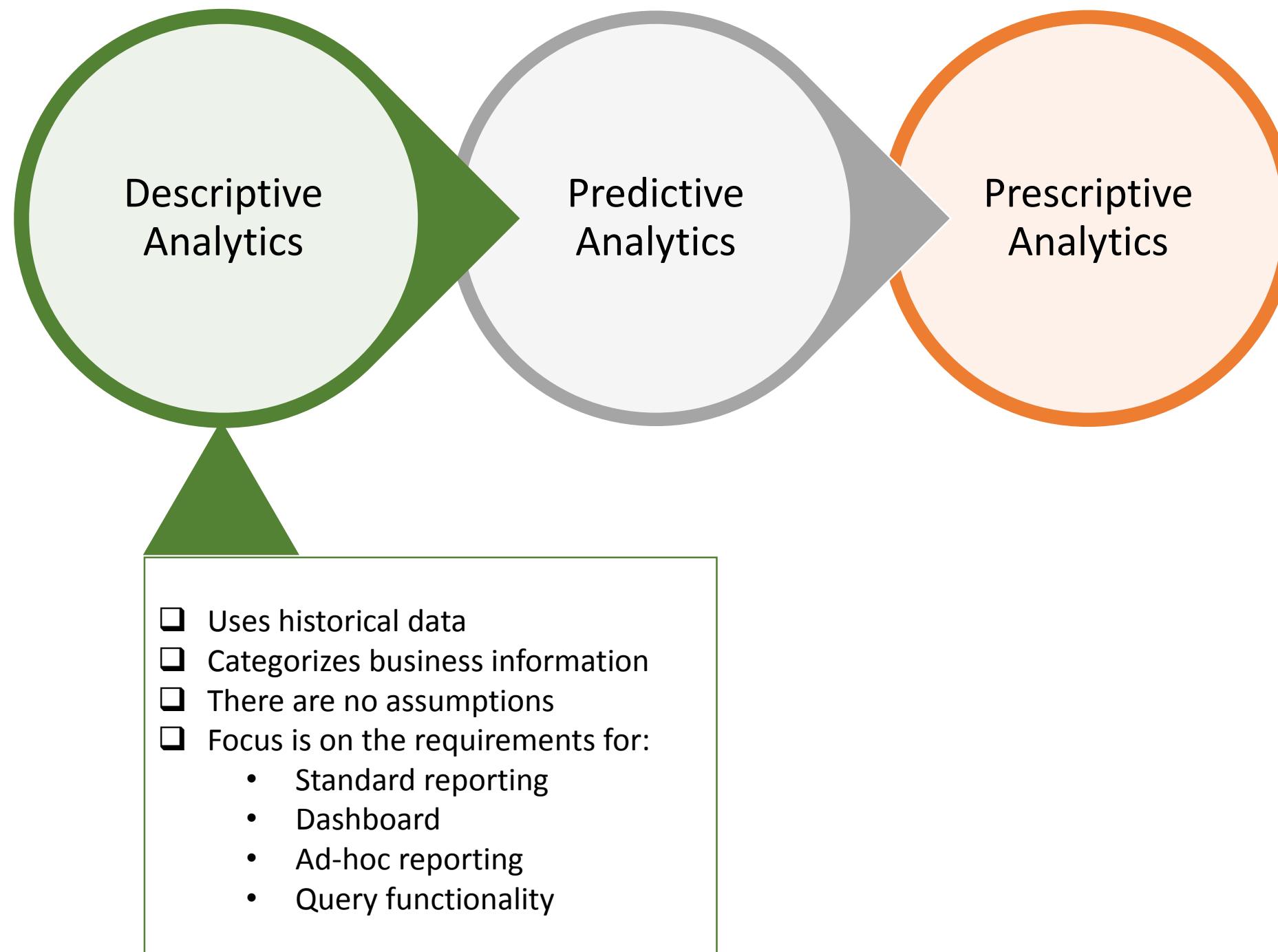
## METHODOLOGIES AND APPROACHES

### TYPES OF DATA ANALYTICS



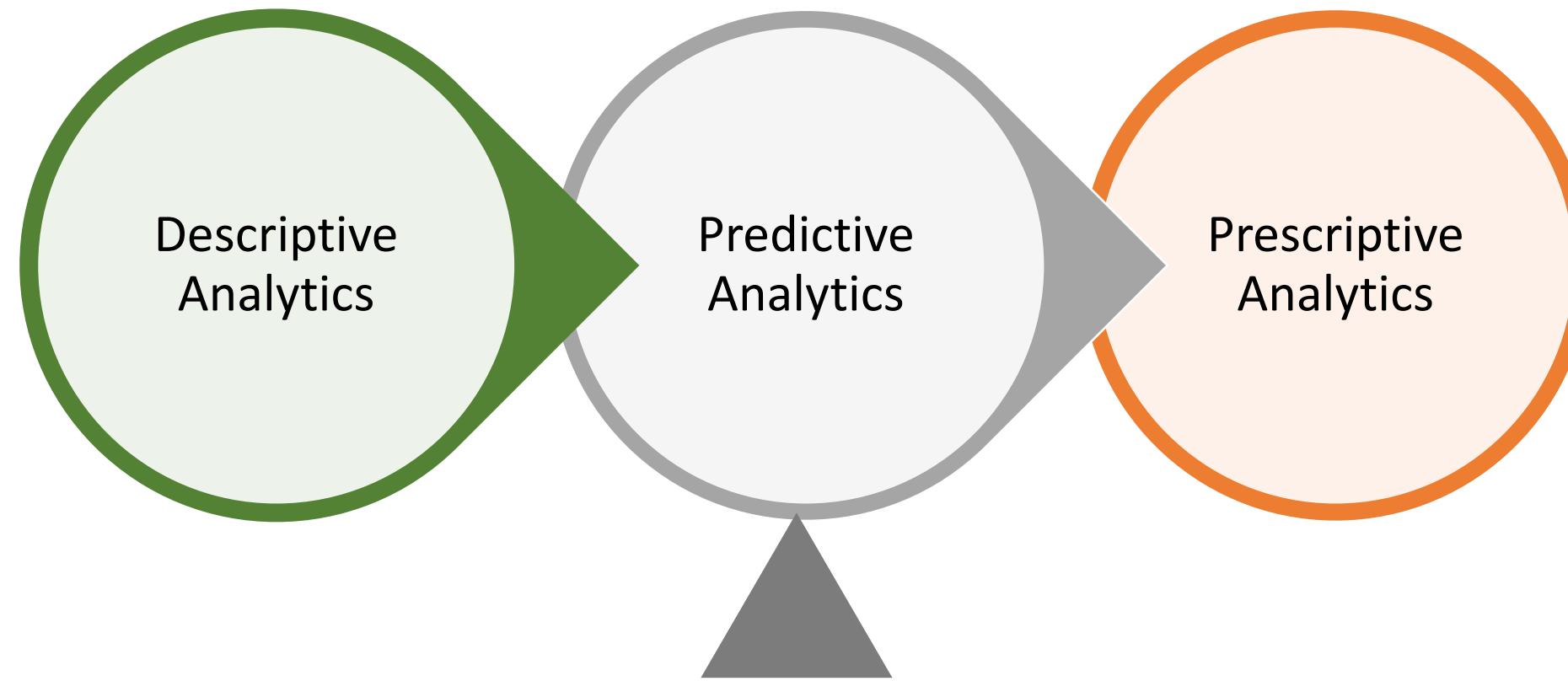
## METHODOLOGIES AND APPROACHES (contd.)

### TYPES OF DATA ANALYTICS



## METHODOLOGIES AND APPROACHES (contd.)

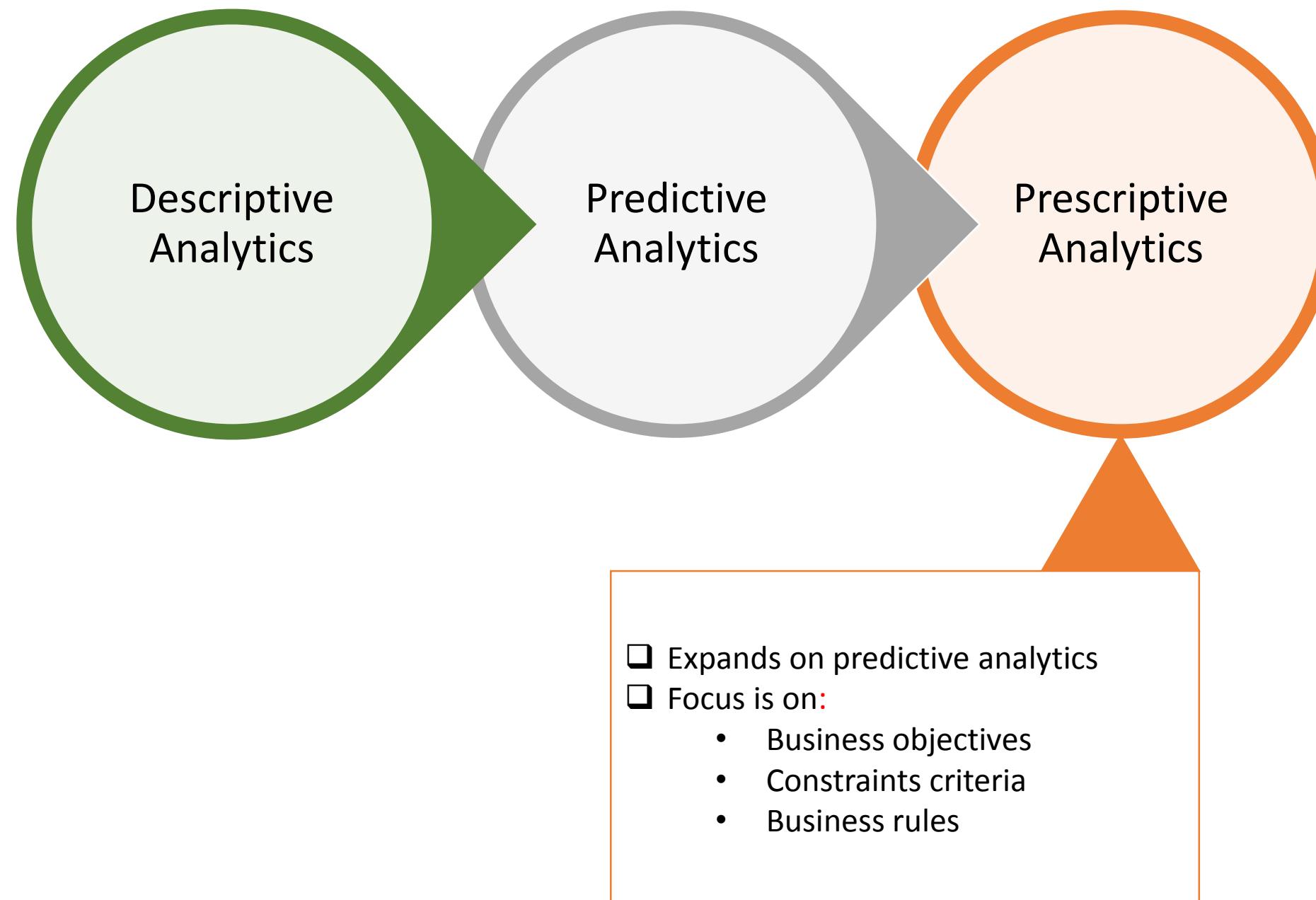
### TYPES OF DATA ANALYTICS



- Applies statistical analysis methods to historical data
- Focus is on the requirements for:
  - Pattern recognition
  - Predictive modeling
  - Forecasting
  - Condition driven alerts

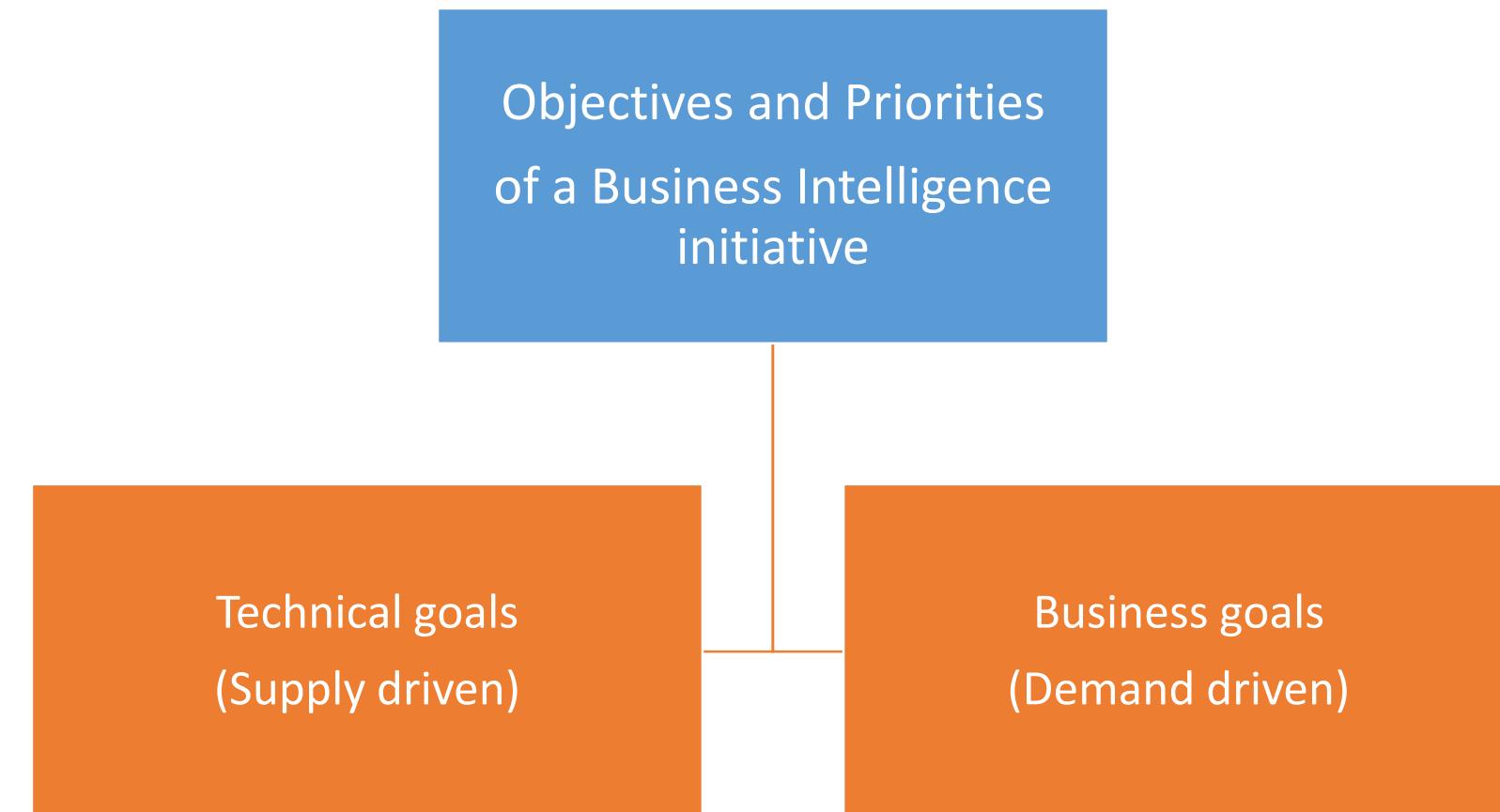
## METHODOLOGIES AND APPROACHES (contd.)

### TYPES OF DATA ANALYTICS



# METHODOLOGIES AND APPROACHES

## SUPPLY AND DEMAND DRIVEN OBJECTIVES



# METHODOLOGIES AND APPROACHES

## STRUCTURED AND UNSTRUCTURED DATA

### Structured Data

- Numerical and categories
- Used in traditional data warehouse solutions
- Focus of business analysis is on:
  - Data model
  - Data dictionaries
  - Business rules

### Unstructured Data

- Text, images, audio, and video
- Used in business intelligence solutions
- Focus of business analysis is on:
  - Metadata definition
  - Data matching algorithms

# Lesson 10: Business Intelligence Perspective

## Topic 10.4: Underlying Competencies

- ✓ List the Business analyst's underlying competencies

# UNDERLYING COMPETENCIES

## BUSINESS ANALYST'S SPECIFIC COMPETENCIES

- Understand business data and functional usage

- Understand business processes

- Ability to analyze complex data structure

- Decision modeling

- Data analysis techniques including statistics, data profiling, and pivoting

- Data Warehouse and Business Intelligence concepts, and architecture

- Logical and Physical data models

- ETL (Extract, Transform, Load) best practices

- Business Intelligence reporting tools

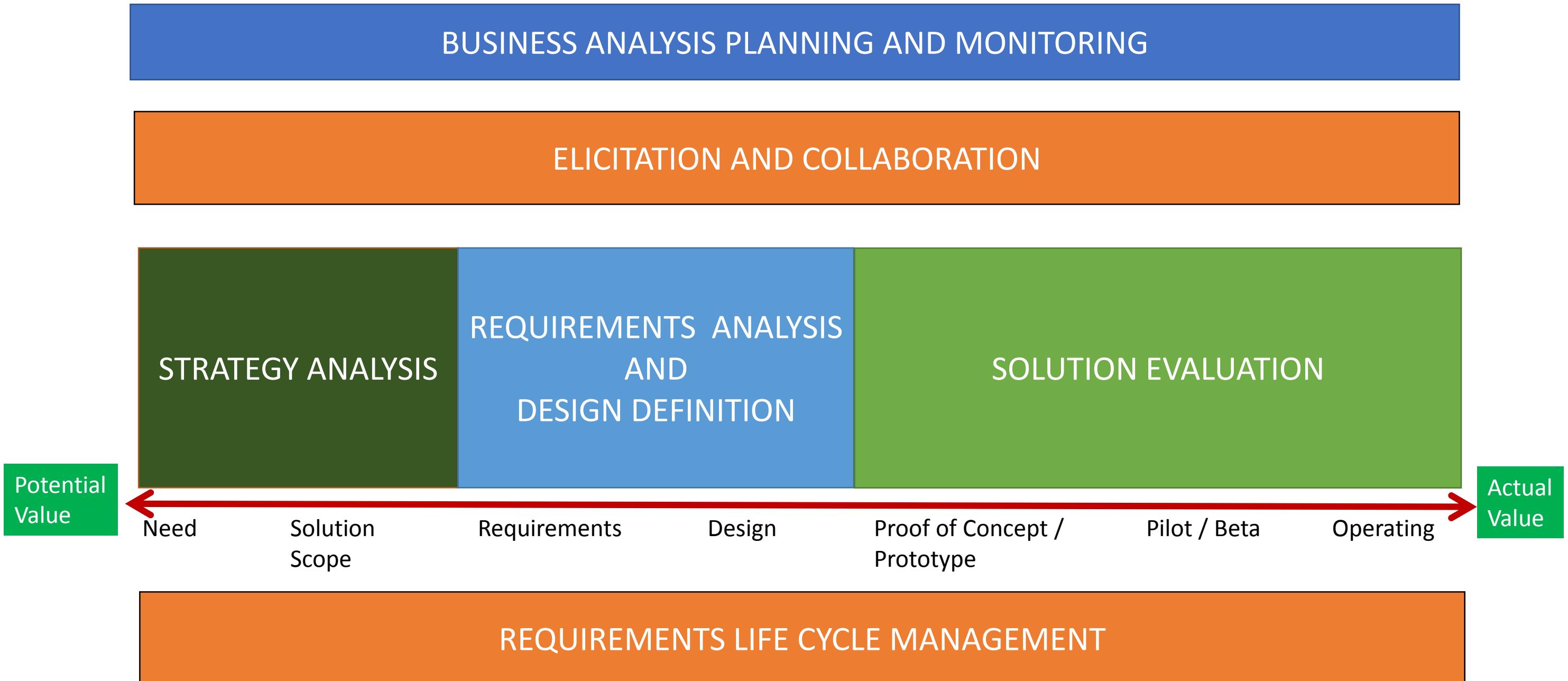
# Lesson 10: Business Intelligence Perspective

## Topic 10.5: Impact on Knowledge Areas

✓ Impact of business intelligence on knowledge areas

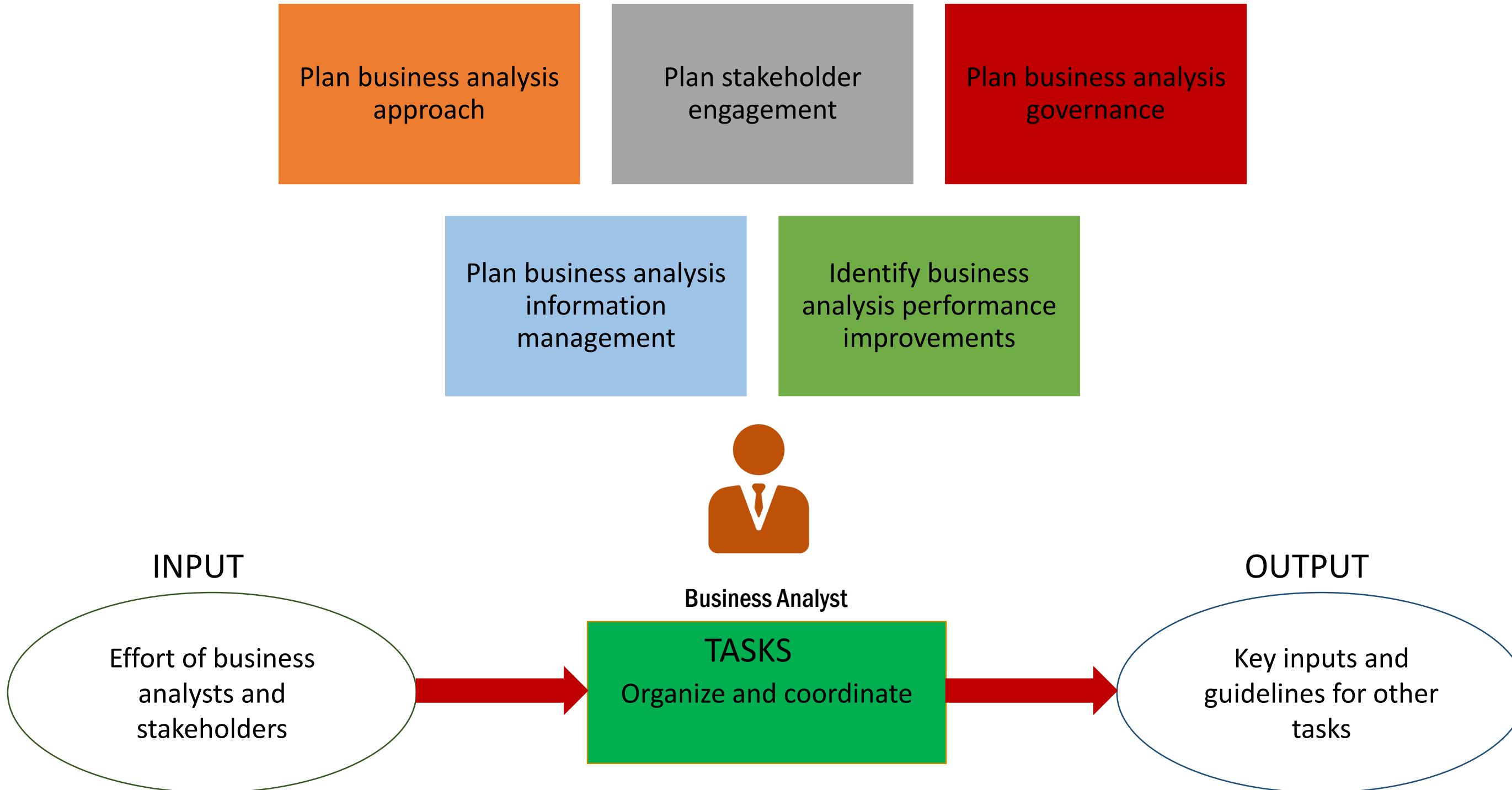
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS KNOWLEDGE AREAS



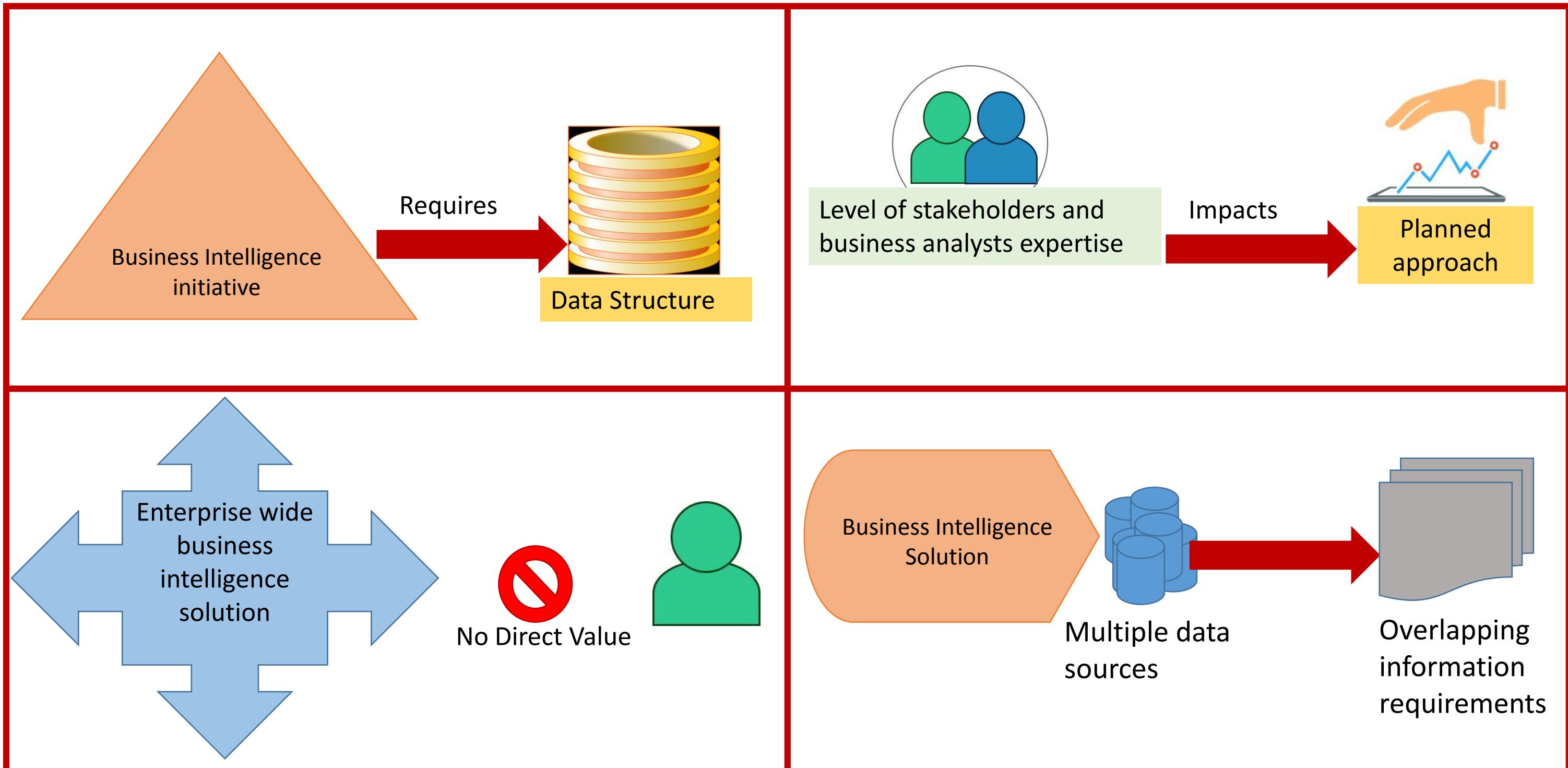
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING



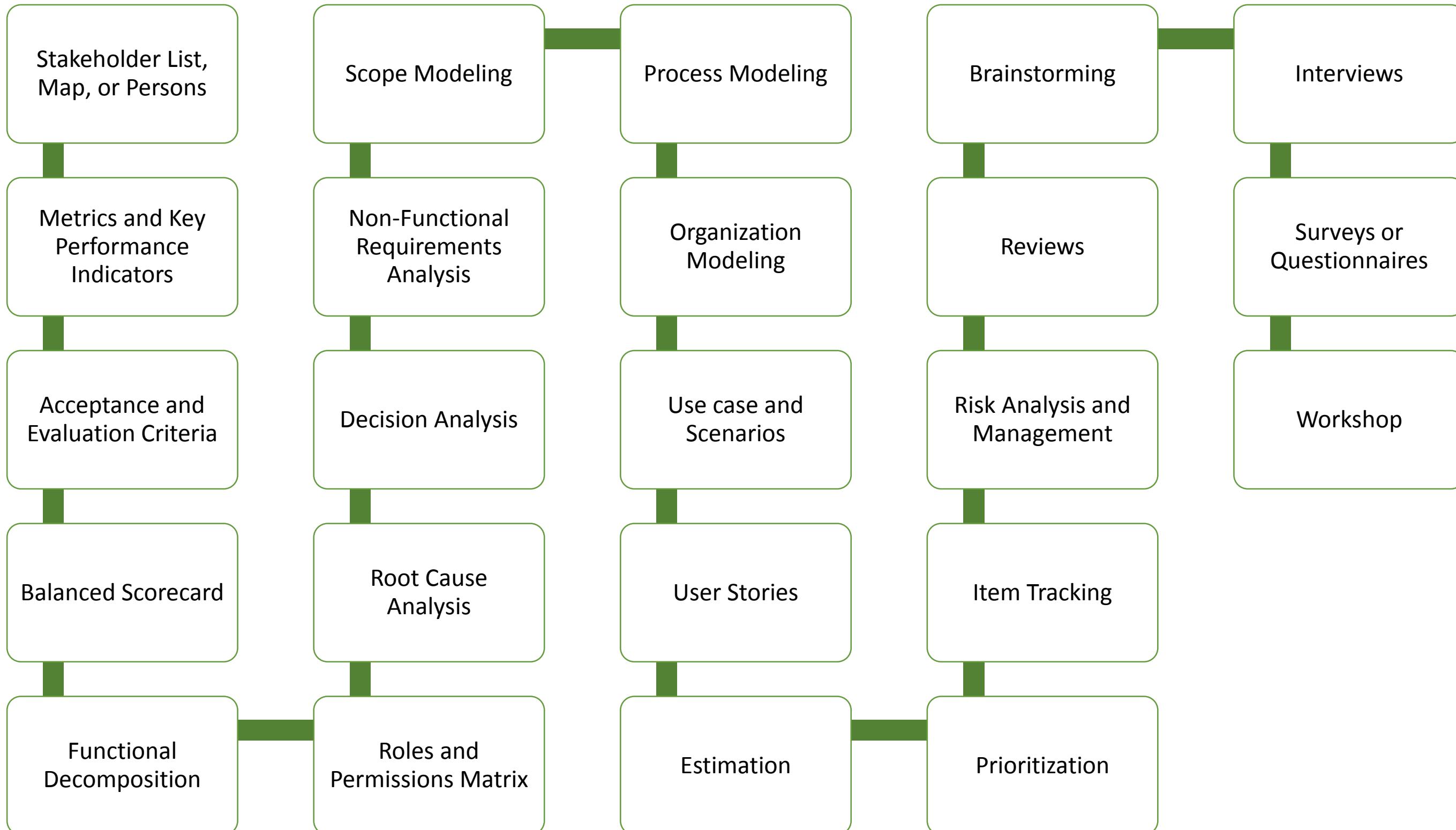
## IMPACT ON KNOWLEDGE AREAS (contd.)

### BUSINESS ANALYSIS PLANNING AND MONITORING



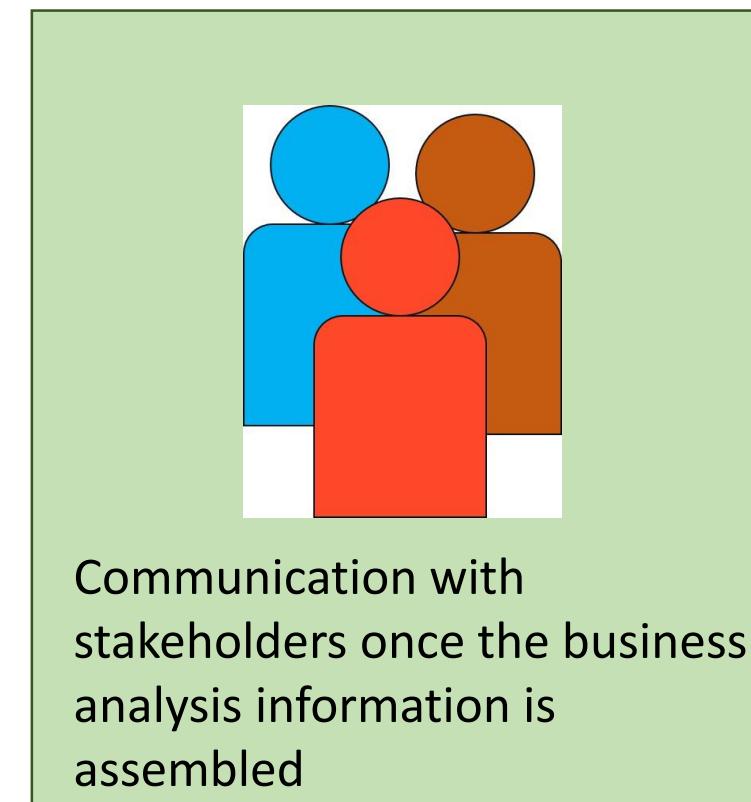
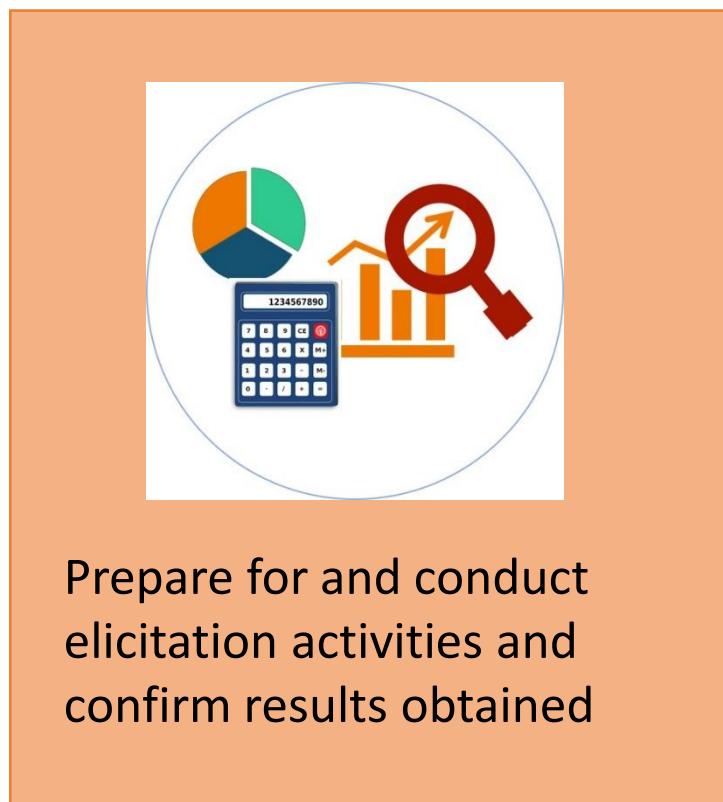
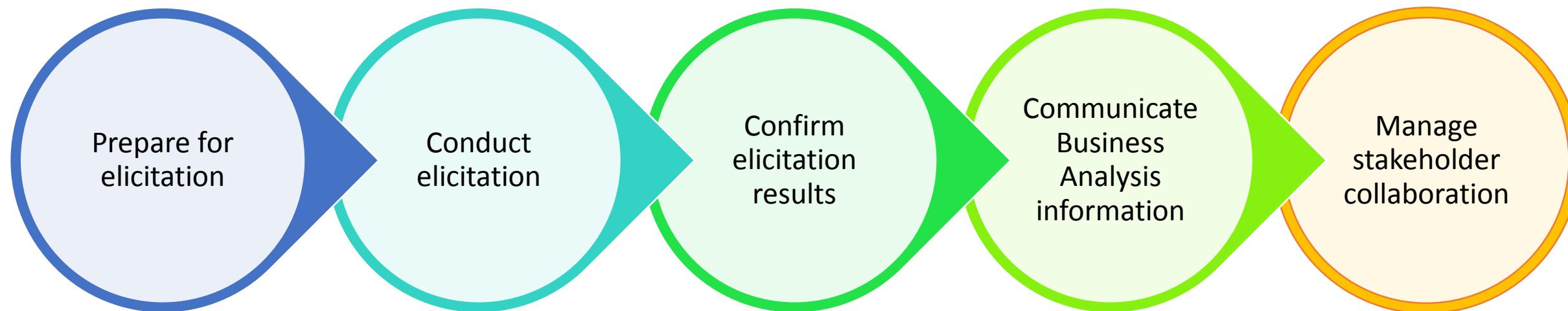
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING - TECHNIQUES



# IMPACT ON KNOWLEDGE AREAS

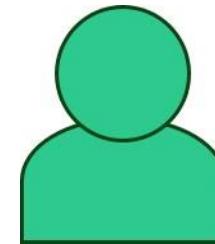
## ELICITATION AND COLLABORATION



## IMPACT ON KNOWLEDGE AREAS (contd.)

### ELICITATION AND COLLABORATION

Individual Stakeholder



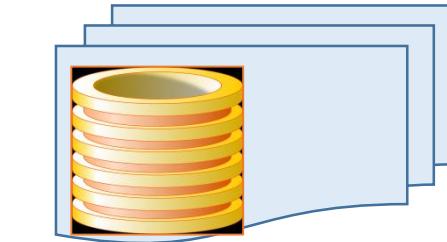
May have partial knowledge  
and expertise

Cross functional Stakeholders

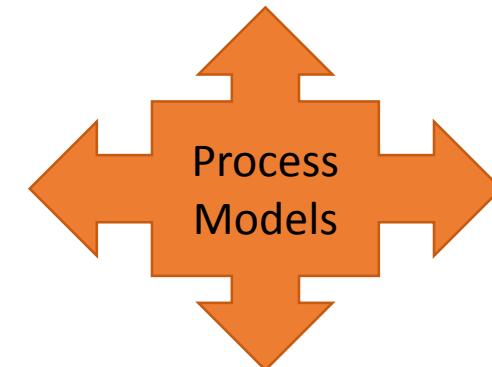


Discover overlapping and  
common information

Data Models and Data Dictionaries



Provide data structure and  
business rules

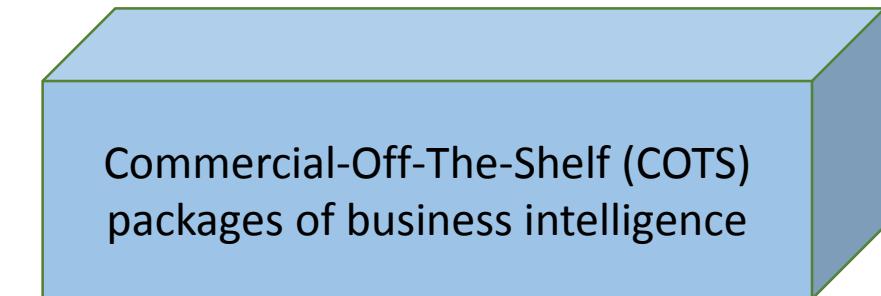


Provide data sources  
required at decision points

Decision Models



Provide existing business rules  
for decisions

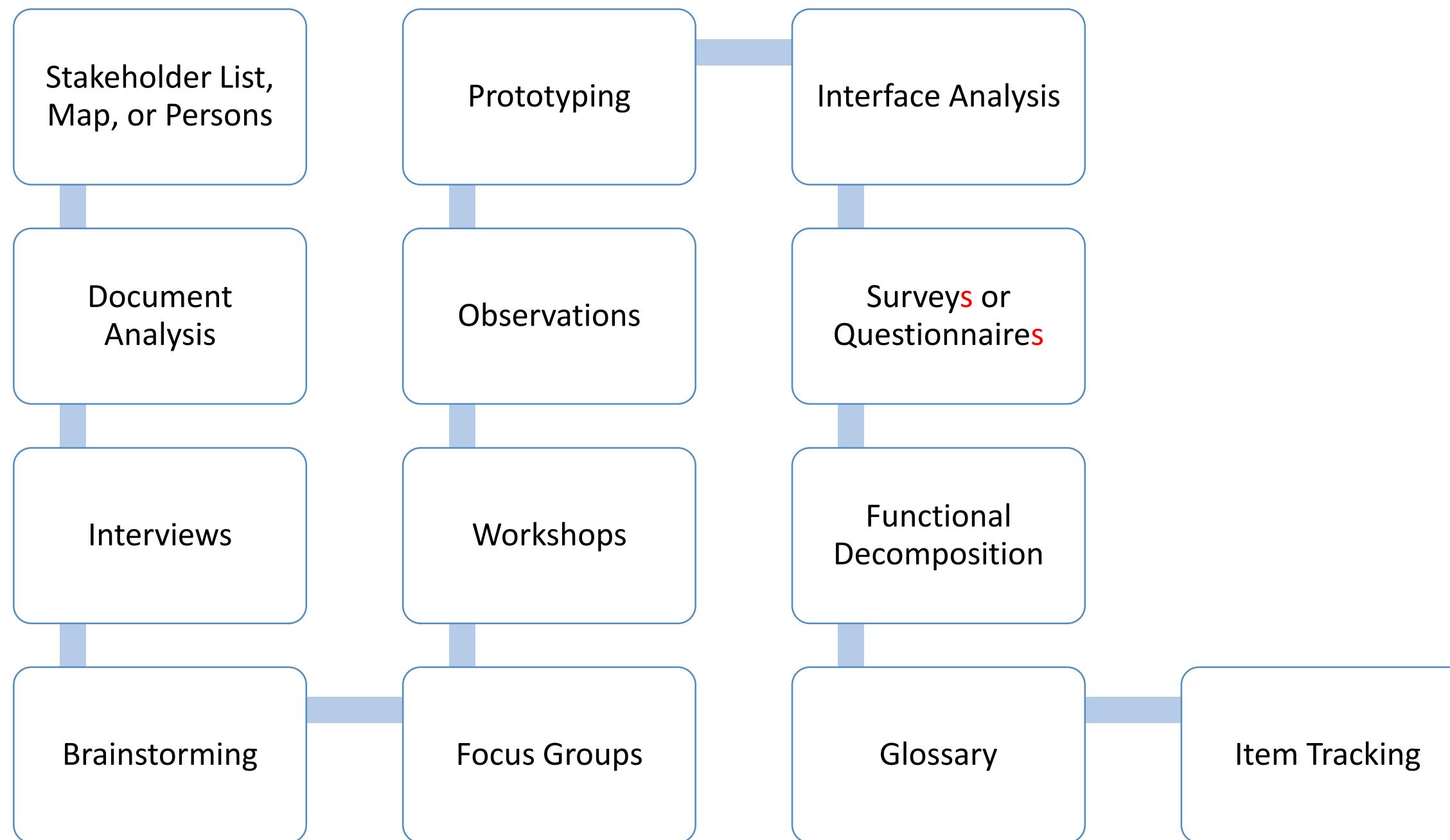


Commercial-Off-The-Shelf (COTS)  
packages of business intelligence

Provide highly effective  
prototyping tools

# IMPACT ON KNOWLEDGE AREAS

## ELICITATION AND COLLABORATION - TECHNIQUES



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT

Trace requirements

Maintain requirements

Prioritize requirements

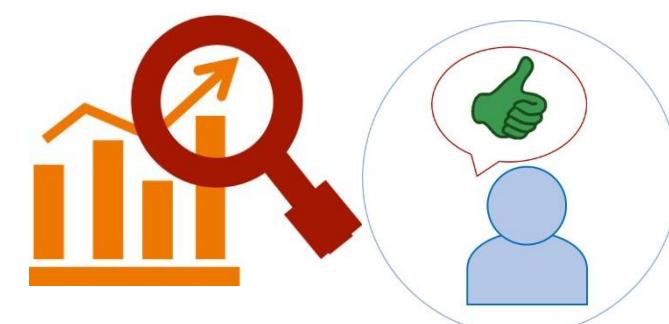
Assess requirement changes

Approve requirements

The tasks that business analysts perform in order to manage and maintain the requirements and the design information from inception to retirement.



Establish meaningful relationships between related requirements and designs



Assess, analyze, and gain consensus on the proposed changes

## IMPACT ON KNOWLEDGE AREAS (contd.)

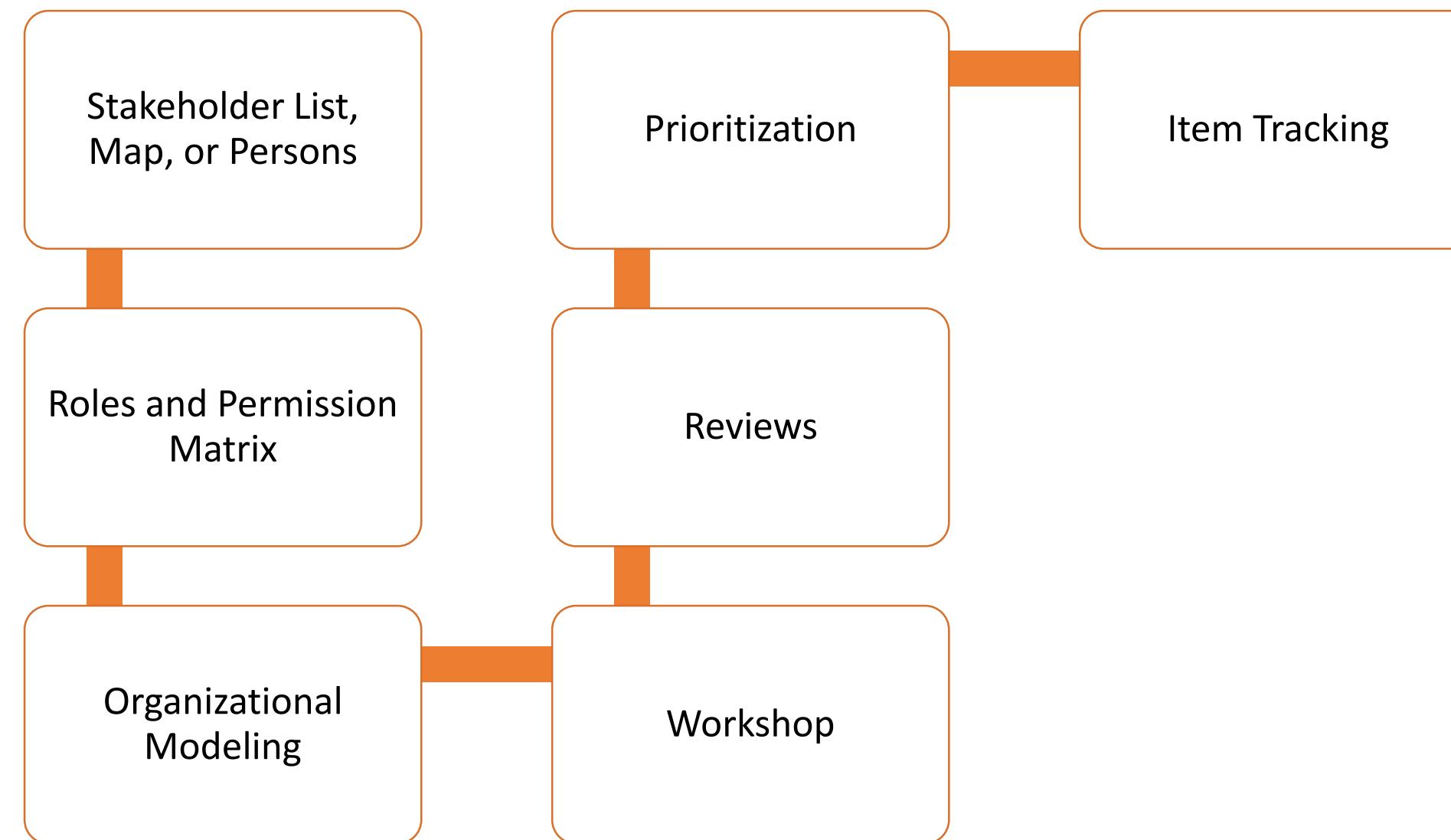
### REQUIREMENTS LIFE CYCLE MANAGEMENT

Business intelligence requires infrastructure capabilities in the solution.

Structural dependencies may drive prioritization.

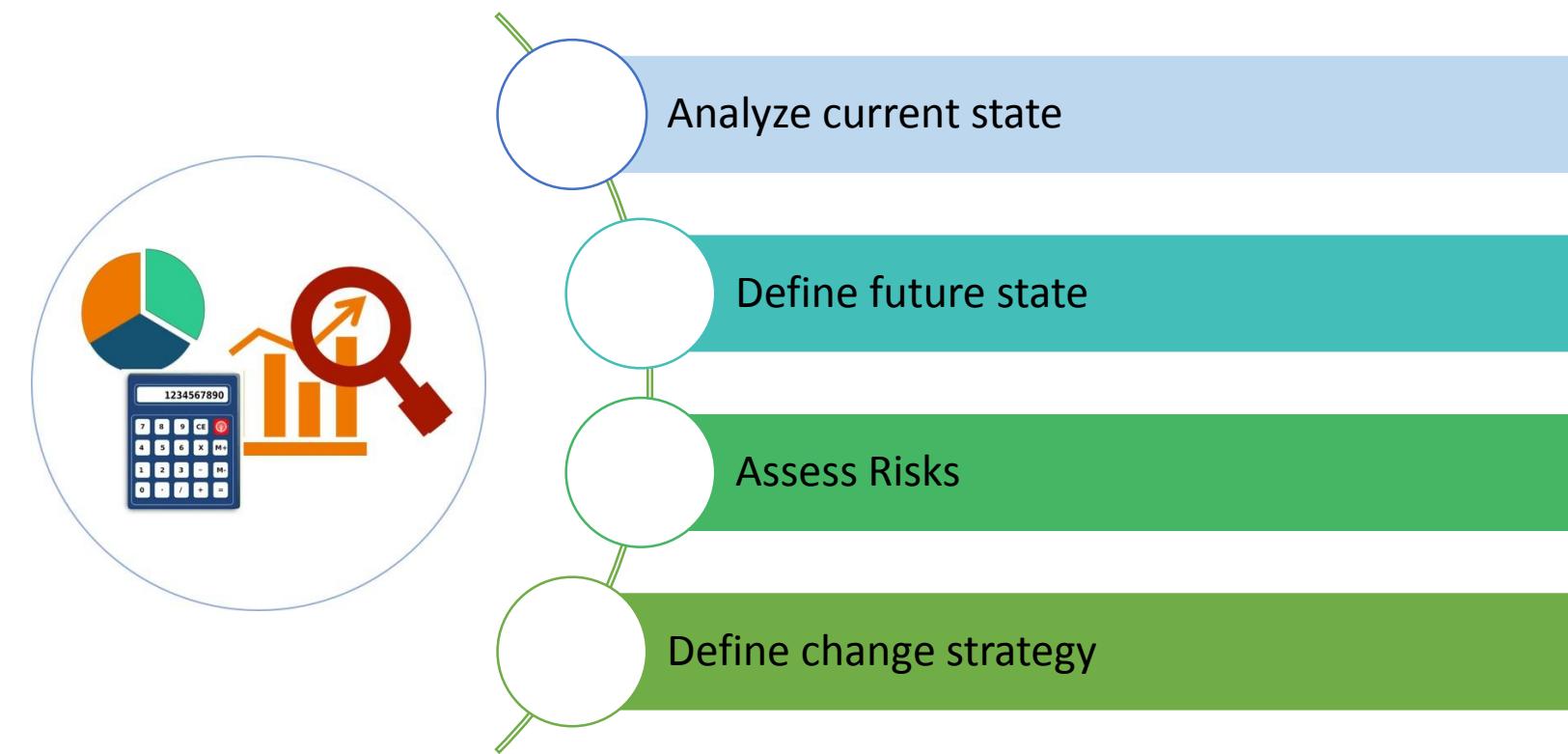
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT - TECHNIQUES



## IMPACT ON KNOWLEDGE AREAS

### STRATEGY ANALYSIS



Collaborate with stakeholders



Enable the enterprise to address that need



Align the resulting strategy

## IMPACT ON KNOWLEDGE AREAS (contd.)

### STRATEGY ANALYSIS

Strategy analysis tasks are modified in the following ways:



Map current state of enterprise information

With high level conceptual data models



Evaluate current data management infrastructure and data governance

With organizational data modeling



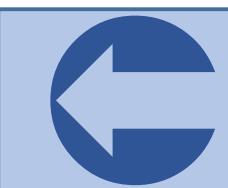
Define future state by mapping the architecture for data storage

With high level models – Logical data models, Data flow models, Decision models, and Physical data models

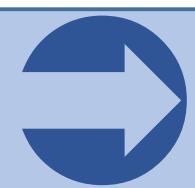


Support incremental implementation across functional areas of business

With extensible architecture solution

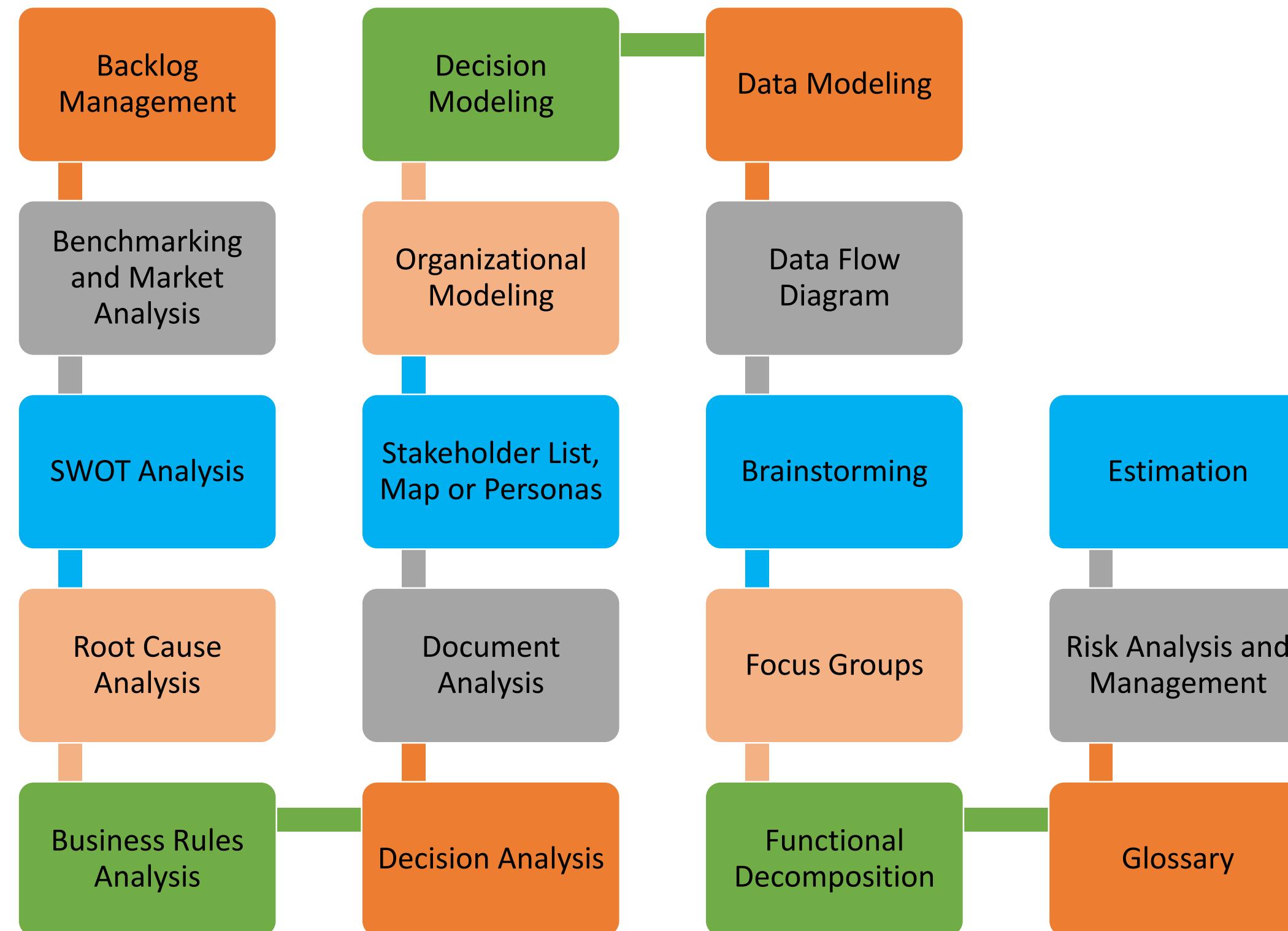


- Change strategy is based on business needs and priority
- May impact business operation and usability of infrastructure



# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS - TECHNIQUES



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS ANALYSIS AND DESIGN DEFINITION



Initial concept  
and exploration  
of the need

Incremental and iterative  
activities

A particular  
recommended  
solution

## IMPACT ON KNOWLEDGE AREAS (contd.)

### REQUIREMENTS ANALYSIS AND DESIGN DEFINITION



Specify and model the data that has been captured



Identify data availability, redundancies, inconsistencies, and data quality issues



Create a future state data model



Define specific business rules



Analyze existing report



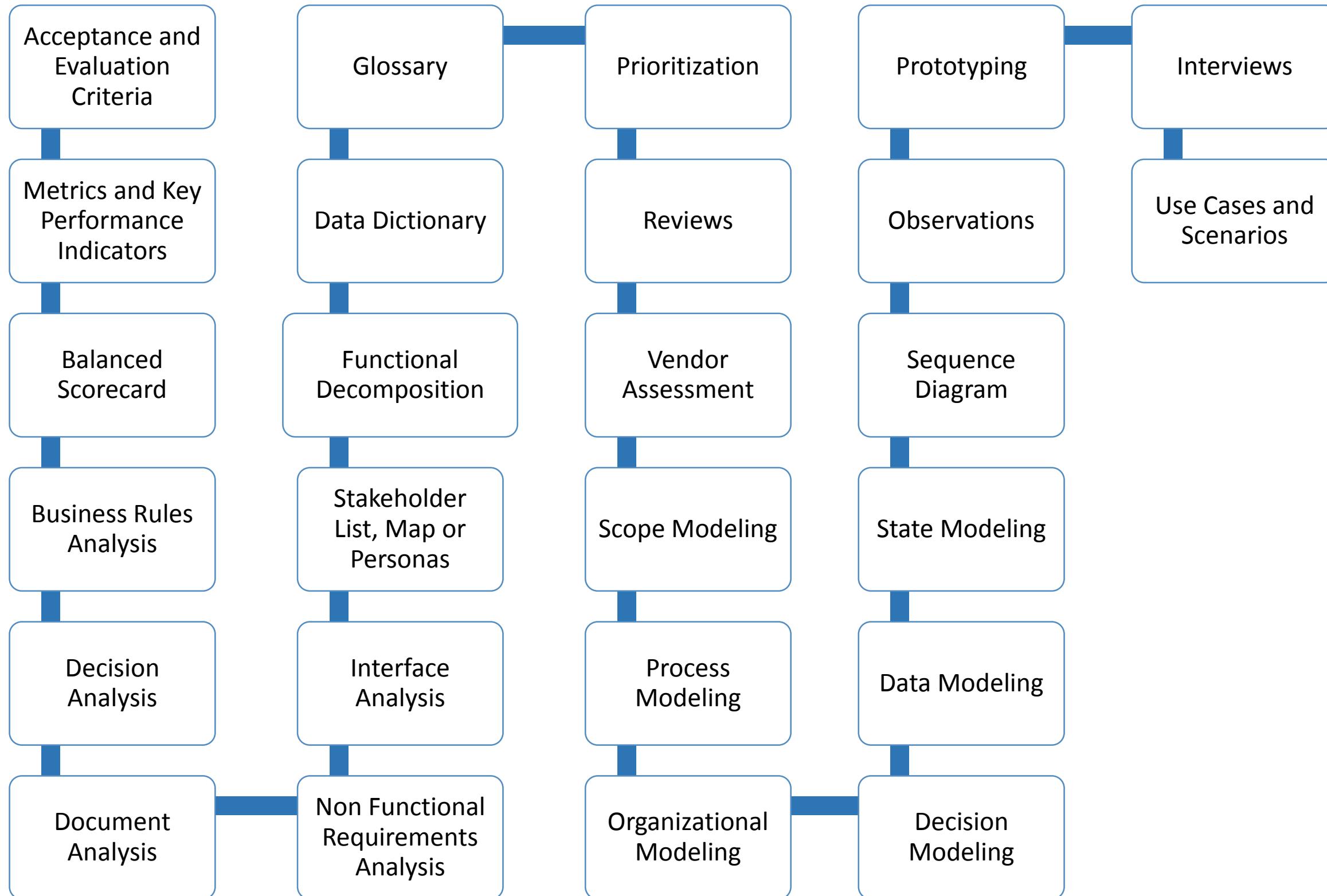
Identify and specify content and format of new business intelligence output



Assess capabilities of COTS with specified requirements

# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS ANALYSIS AND DESIGN DEFINITION - TECHNIQUES



## IMPACT ON KNOWLEDGE AREAS

### SOLUTION EVALUATION

Measure  
solution performance

Analyze  
performance measures

Assess  
solution limitations

Assess  
enterprise limitations

Recommend actions to  
increase solution value

### ADDITIONAL TECHNIQUES

Assess the performance of and value  
delivered by a solution



Recommend removal of barriers or constraints

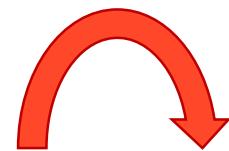


## IMPACT ON KNOWLEDGE AREAS (contd.)

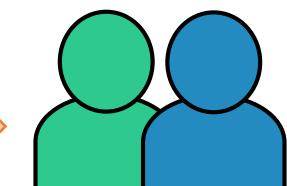
### SOLUTION EVALUATION

Solution Evaluation tasks are modified because of:

Under utilization of information resources and analytic functionality that the solution provides



Stakeholders may not be fully aware of the business intelligence capabilities



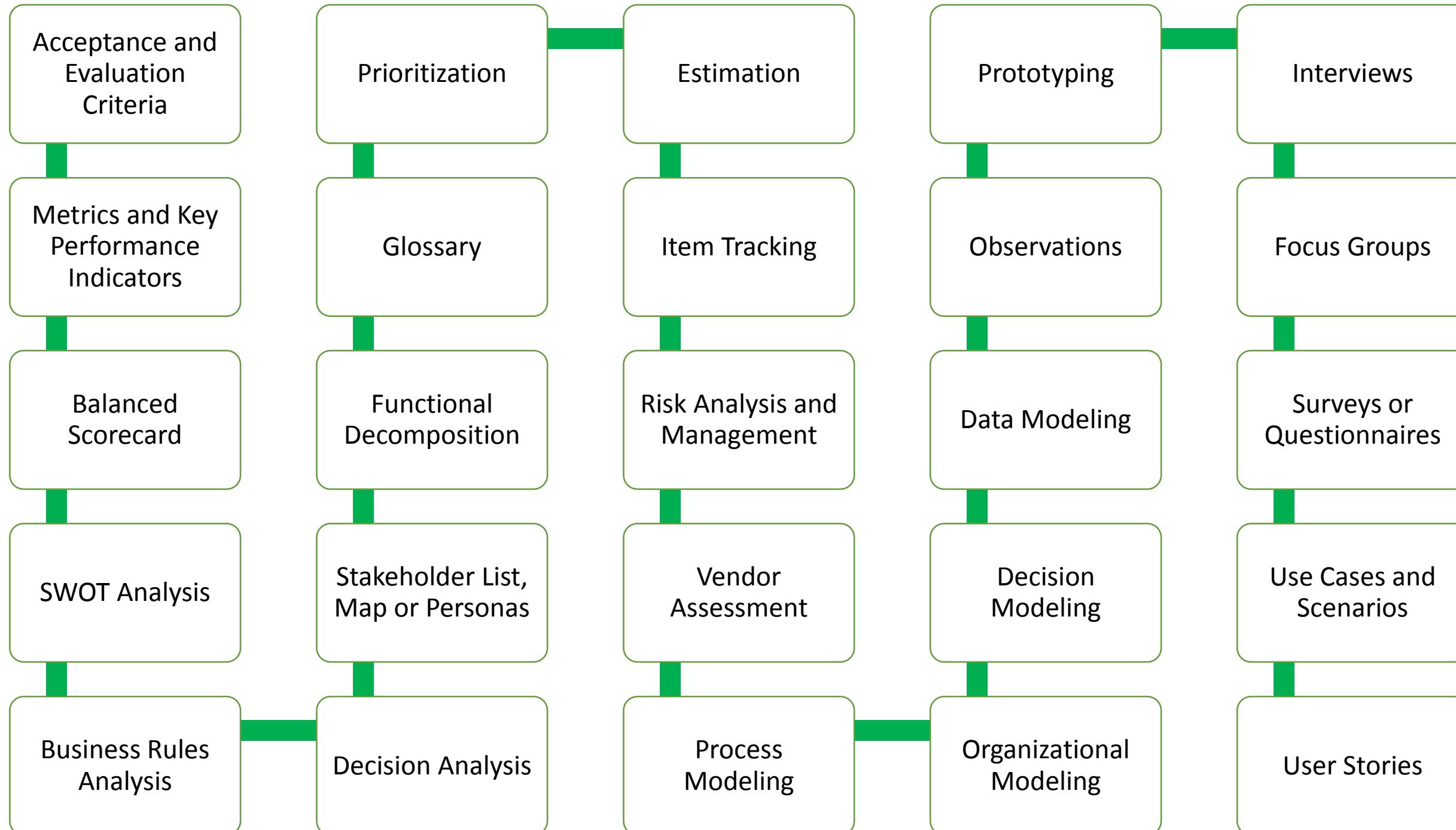
Stakeholders

Need for exploration and evaluation of opportunities for additional value



# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION - TECHNIQUES

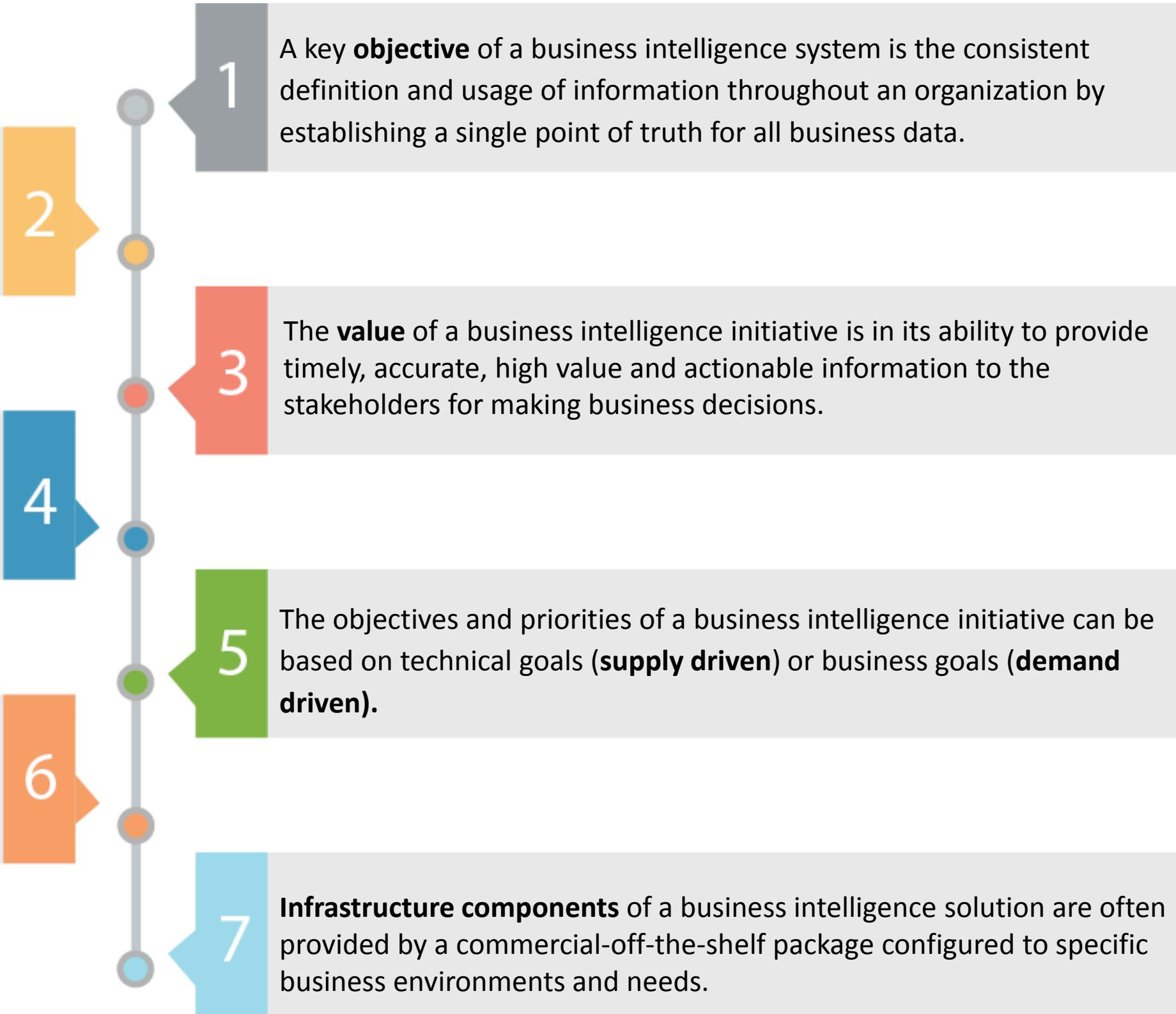


## KEY TAKEAWAYS

Business intelligence initiatives **focus** on the transformation of data into value added information needed to support decision making.

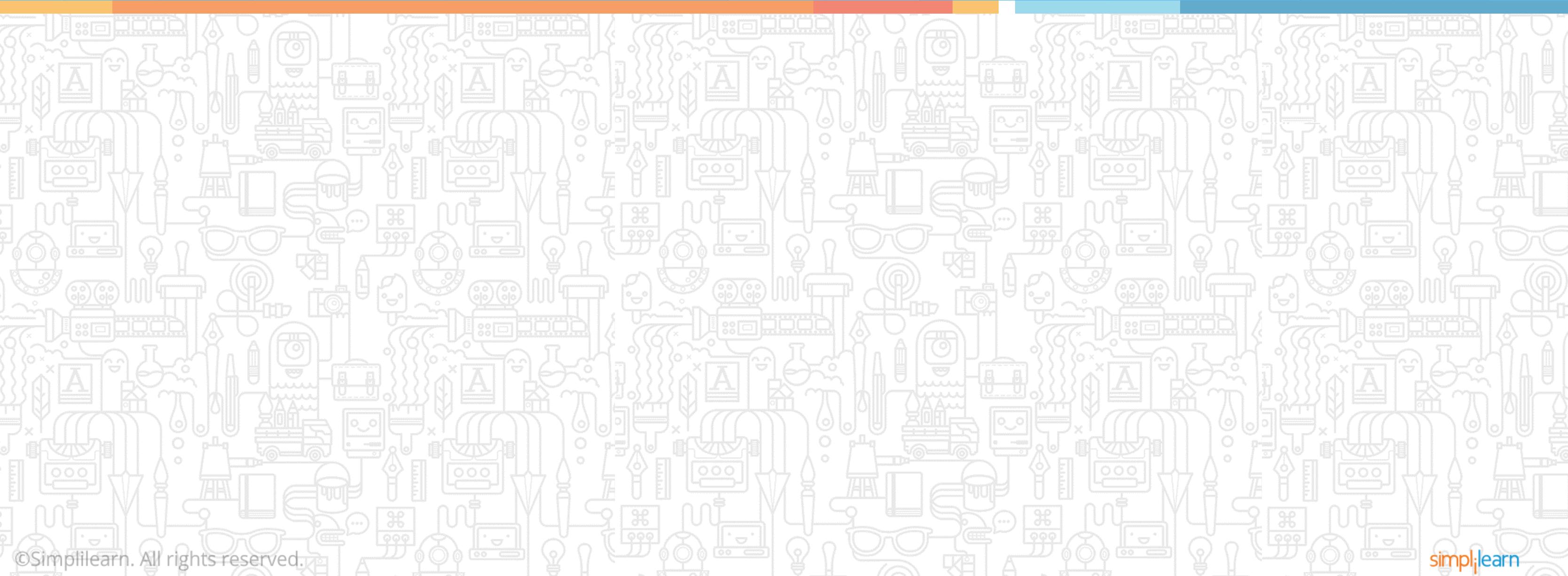
There are three types of data analytics — **Descriptive, Predictive, and Prescriptive** — with increasing levels of systems complexity, cost, and value.

Two types of data, **structured data and unstructured data**, are considered in business intelligence approaches.



# **Lesson 10: Business Intelligence Perspective**

## **Topic 10.6: Case Study Exercise**



# CASE STUDY

---

## OVERVIEW – CURRENT STATE

John is a business analyst in an e-commerce company in the retail segment. This segment is highly competitive and it's important to stay focused on improving solution capabilities and customer experience, analyzing customer feedback, and understanding customer behavior to keep up with volatile sales trends.

Business Intelligence is a critical success factor for any large e-commerce business in this cut-throat industry.

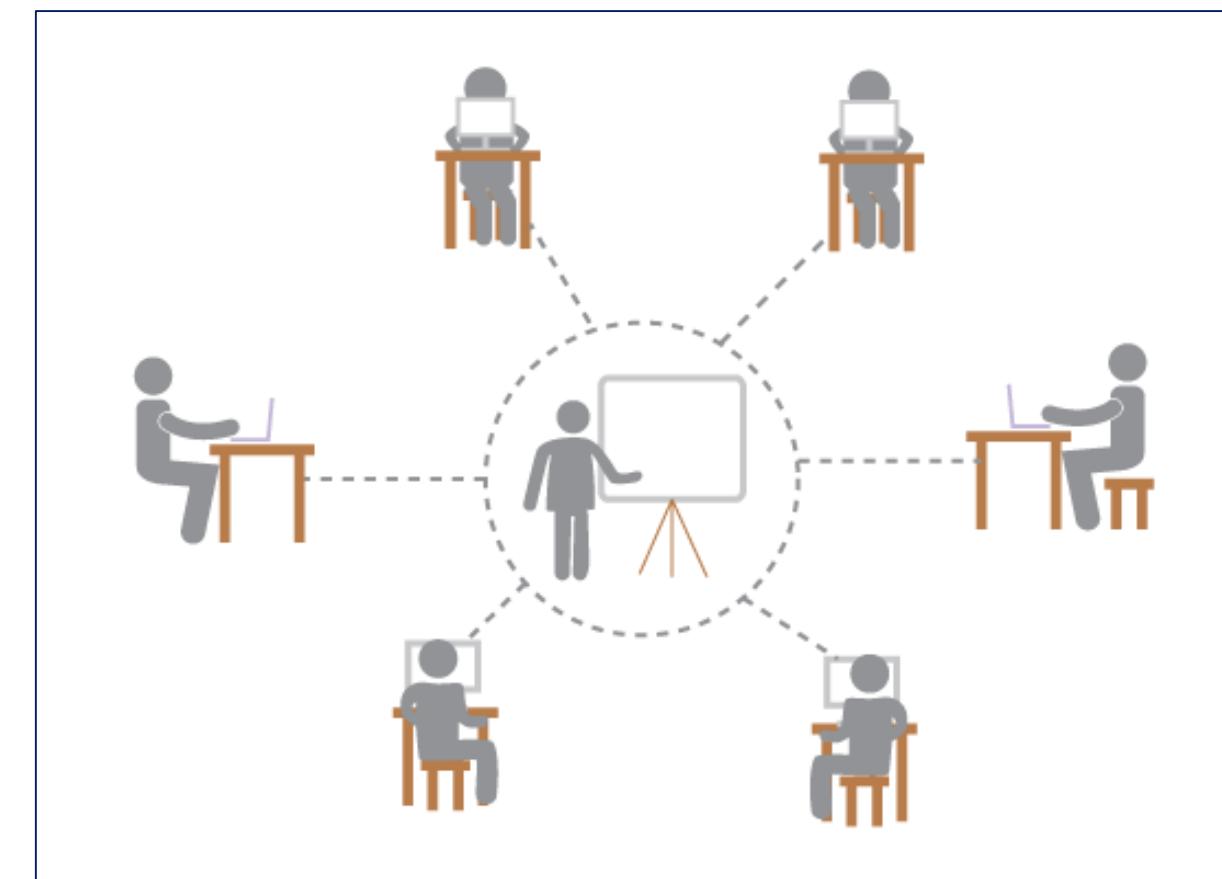


# CASE STUDY

---

## OVERVIEW – FUTURE STATE

The business team needs a solution which can be used for creating various models, and perform analytics to understand trends and patterns. It's also required that the business intelligence solution should integrate transactional data, weblogs, and other social network data. The outcome of analytics would be used for target marketing, maintaining inventory, logistics, and adding more relevant products and so on.



# CASE STUDY

---

## BUSINESS ANALYSIS ACTIVITIES

John has conducted various elicitation sessions with business intelligence stakeholders and solution providers to elicit, analyze, and specify the requirements and designs.

Business analysis activities are performed to:

- Identify data sources, as an integration approach, and for transformation rules
- Determine the frequency at which each data source shall be loaded and processed
- Specify the information required at different levels within the organization
- Determine the infrastructure required
- Identify ways to provide targeted information and analytics insight to business stakeholders



# CASE STUDY

## BUSINESS ANALYSIS ACTIVITIES

Existing artifacts are used to understand the current data management infrastructure, data governance, definitions of the data structure, and business rules. Various models are created when modeling and specifying the business analysis information. It's also determined to use commercial off-the-shelf software for data visualization and integrate with in-house business intelligence solution.

The solution is evaluated to ensure that the deliverables meet the business and stakeholder needs.



Business Analyst



Business Analysis  
Activities



Stakeholders

# CASE STUDY

## EXERCISE

|   | Questions                                                                                                                                               | Options                                                                                                                                                                                                                 |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Business intelligence initiatives focus on the information required at process level. What type of decisions is taken at this level?                    | <input type="radio"/> Process decisions<br><input type="radio"/> Strategic decisions<br><input type="radio"/> Tactical decisions<br><input type="radio"/> Operational decisions                                         |
| 2 | Which analytics technique is used to identify patterns?                                                                                                 | <input type="radio"/> Descriptive analytics<br><input type="radio"/> Predictive analytics<br><input type="radio"/> Prescriptive analytics<br><input type="radio"/> Adaptive analytics                                   |
| 3 | Which models are used to understand the current data management infrastructure, data governance, definitions of the data structure, and business rules? | <input type="radio"/> Data Models and Business Models<br><input type="radio"/> Data Models and Process Models<br><input type="radio"/> Organization Modeling and data Models<br><input type="radio"/> None of the above |
| 4 | Which models are least likely to be referred to or created in the case study?                                                                           | <input type="radio"/> Business Models<br><input type="radio"/> Logical Data Models<br><input type="radio"/> Decision Models<br><input type="radio"/> Physical Data Models                                               |
| 5 | Which elicitation technique is least likely to be used by the business analyst with business intelligence stakeholders and solution providers?          | <input type="radio"/> Interviews<br><input type="radio"/> Workshops<br><input type="radio"/> Brainstorming<br><input type="radio"/> Focus Groups                                                                        |

# CASE STUDY

## ANSWERS

|   | Questions                                                                                                                                               | Response                              |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1 | Business intelligence initiatives focus on the information required at process level. What type of decisions is taken at this level?                    | Operational decisions                 |
| 2 | Which analytics technique is used to identify patterns?                                                                                                 | Adaptive analytics                    |
| 3 | Which models are used to understand the current data management infrastructure, data governance, definitions of the data structure, and business rules? | Organization Modeling and data models |
| 4 | Which models are least likely to be referred to or created in the case study?                                                                           | Business Models                       |
| 5 | Which elicitation technique is least likely to be used by the business analyst with business intelligence stakeholders and solution providers?          | Focus Groups                          |



QUIZ  
1

What does ETL stand for?

- a. Extend, Transfer, Lead
- b. Extract, Transform, Load
- c. Extract, Transact, Learn
- d. Extend, Transform, Load



QUIZ  
1

What does ETL stand for?

- a. Extend, Transfer, Lead
- b. Extract, Transform, Load
- c. Extract, Transact, Learn
- d. Extend, Transform, Load



The correct answer is **b**.

**Explanation:** ETL stands for Extract, Transform, Load.

QUIZ  
2

Tactical decisions are taken at which level of an organization?

- a. Process level
- b. Operational level
- c. Executive level
- d. Management level



QUIZ  
2

Tactical decisions are taken at which level of an organization?

- a. Process level
- b. Operational level
- c. Executive level
- d. Management level



The correct answer is **d**.

**Explanation:** Tactical decisions are taken at the management level of an organization.

**QUIZ  
3**

In which type of data analytics does the business analysis focus on the business objectives, constraints criteria, and the business rules?

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



QUIZ  
3

In which type of data analytics does the business analysis focus on the business objectives, constraints criteria, and the business rules?

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



The correct answer is **c.**

**Explanation:** In prescriptive data analytics, the business analysis focus is on the business objectives, constraints criteria, and the business rules that are the basis for the decision making process.

QUIZ  
4

The value of a business intelligence initiative is in its ability to provide \_\_\_\_\_.

- a. timely, accurate, high value and actionable information to the stakeholders
- b. enterprise wide solution
- c. infrastructure services
- d. transform data into information and present it to the stakeholders



QUIZ  
4

The value of a business intelligence initiative is in its ability to provide \_\_\_\_\_.

- a. timely, accurate, high value and actionable information to the stakeholders
- b. enterprise wide solution
- c. infrastructure services
- d. transform data into information and present it to the stakeholders

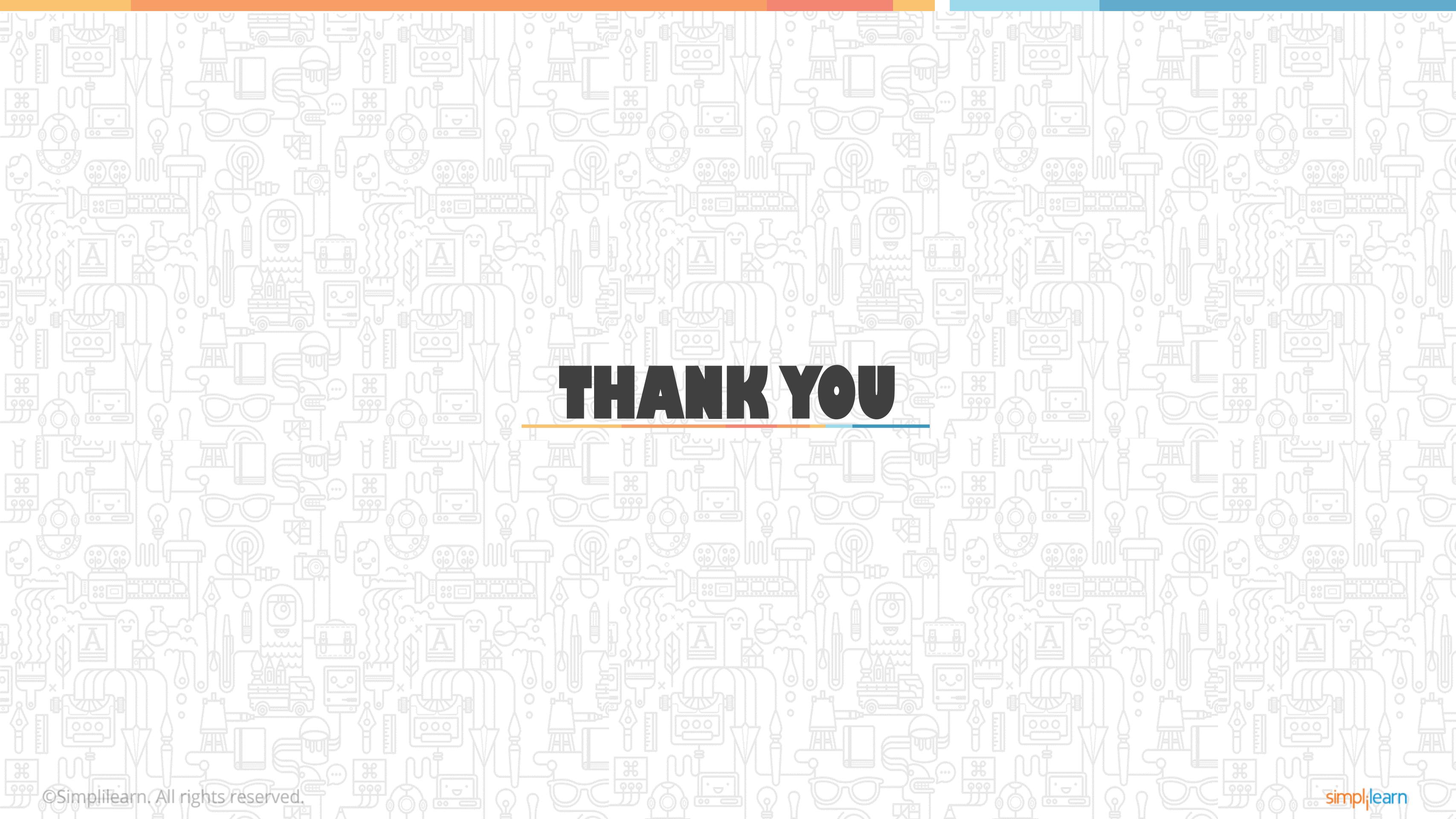


The correct answer is **a**

**Explanation:** The value of a business intelligence initiative is in its ability to provide timely, accurate, high value, and actionable information to the stakeholders.



**The next lesson is “The Information Technology Perspective.”**



# THANK YOU

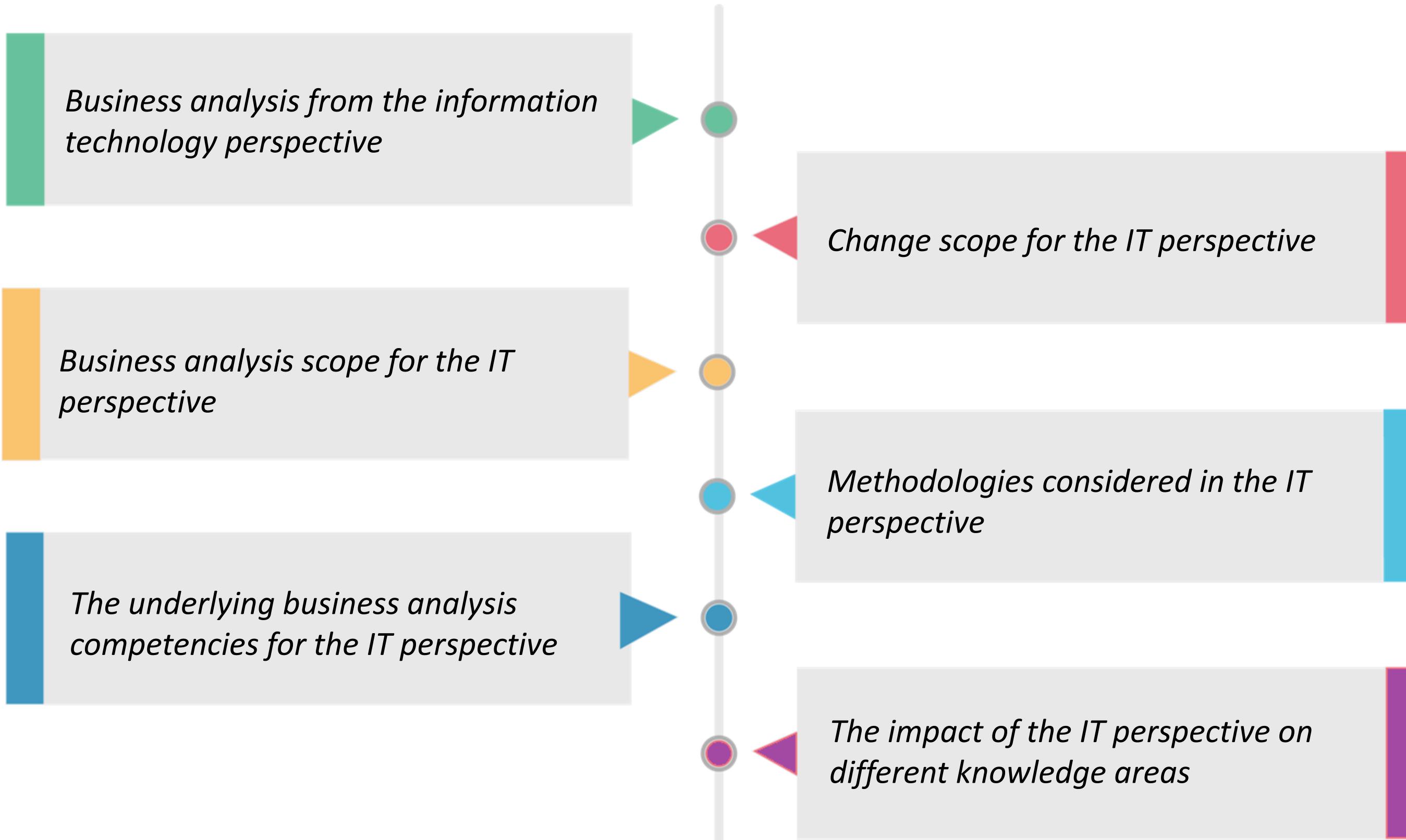
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# **CBAP® Exam Preparation Course**

## **Lesson 11 – Information Technology Perspective**



# WHAT'S IN IT FOR ME



```
graph TD; A[Business analysis from the information technology perspective] --> B[Change scope for the IT perspective]; B --> C[Methodologies considered in the IT perspective]; C --> D[The underlying business analysis competencies for the IT perspective]; D --> E[The impact of the IT perspective on different knowledge areas]
```

*Business analysis from the information technology perspective*

*Change scope for the IT perspective*

*Business analysis scope for the IT perspective*

*Methodologies considered in the IT perspective*

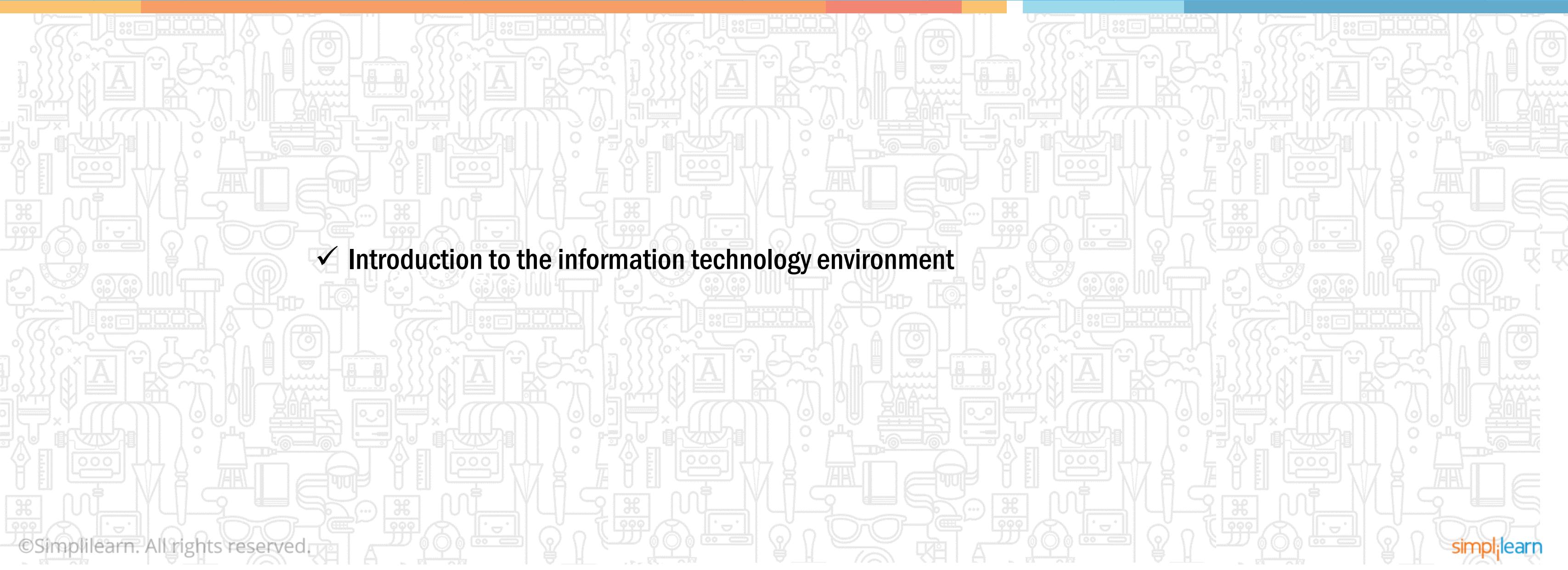
*The underlying business analysis competencies for the IT perspective*

*The impact of the IT perspective on different knowledge areas*

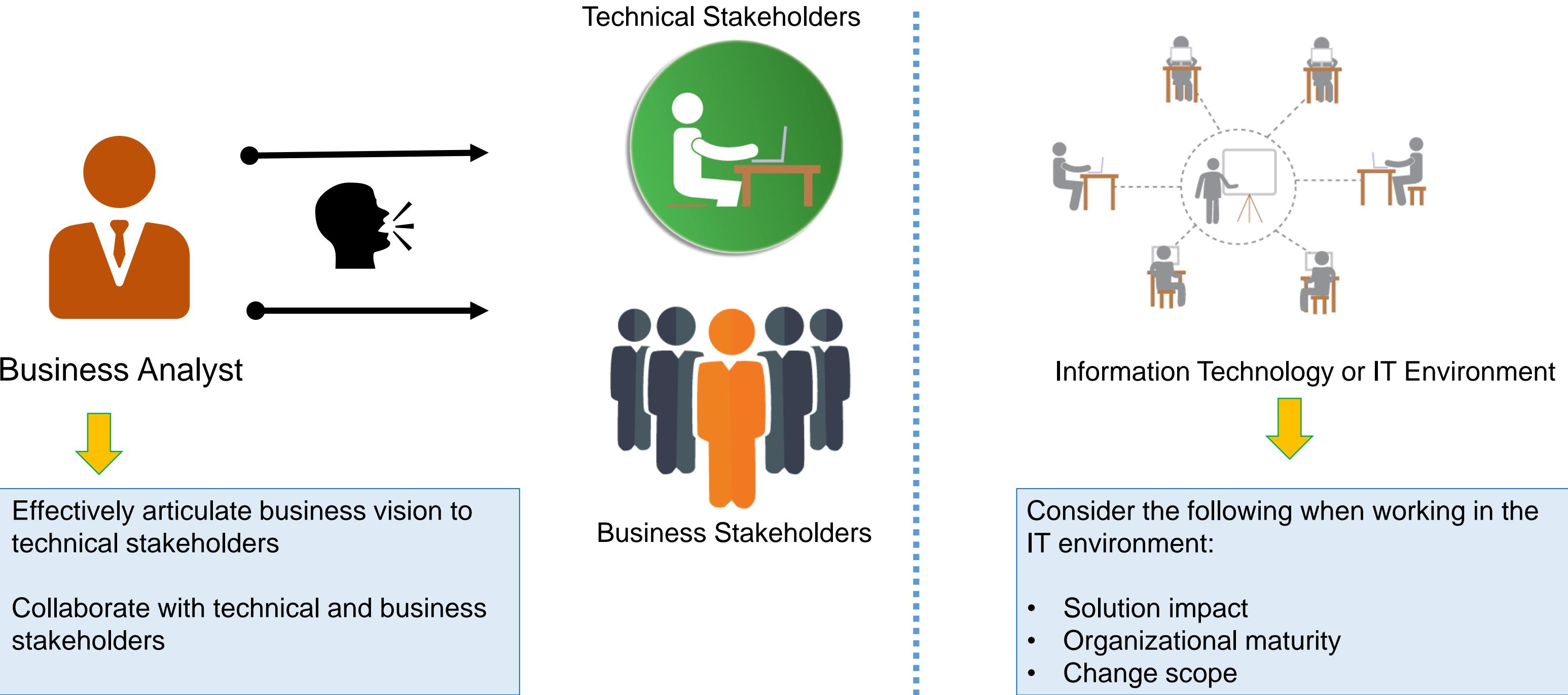
# Lesson 11: Information Technology Perspective

## Topic 11.1: Introduction

✓ **Introduction to the information technology environment**



# INTRODUCTION

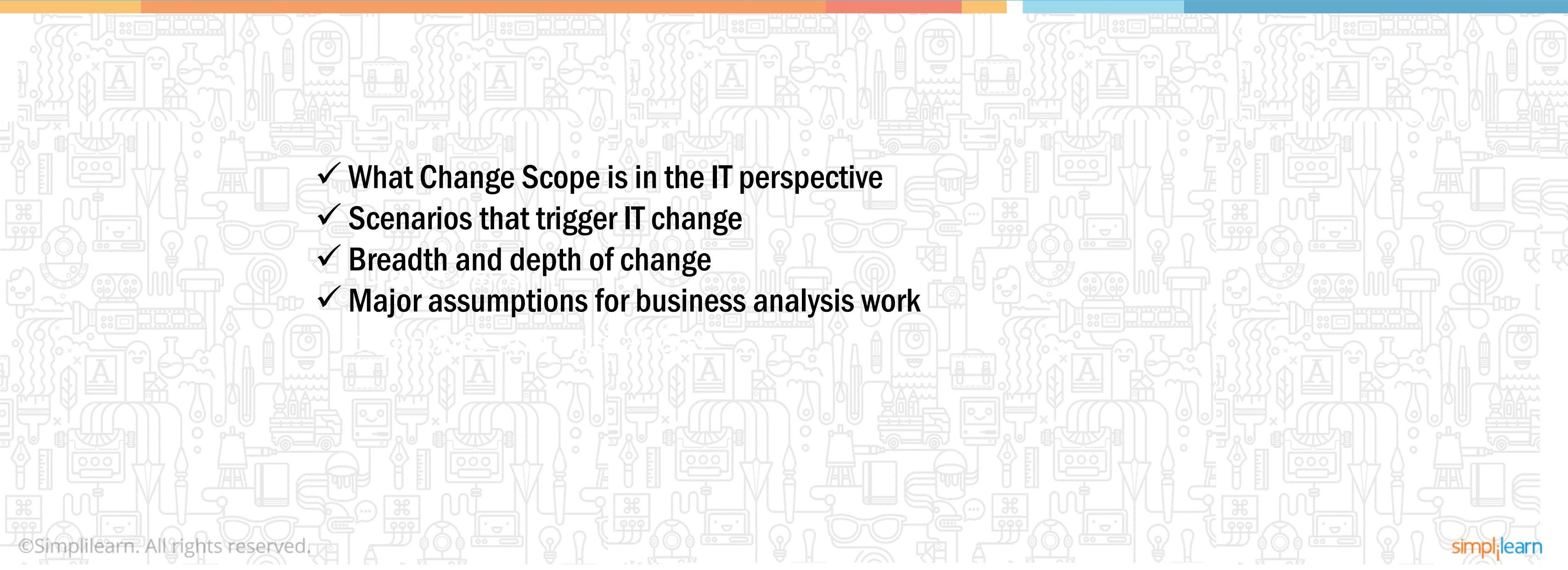


Note: Business Analysts working in the IT context may prefer to use the term “Solution Requirements” instead of “Design” to maintain a clear separation of responsibilities.

# Lesson 11: Information Technology Perspective

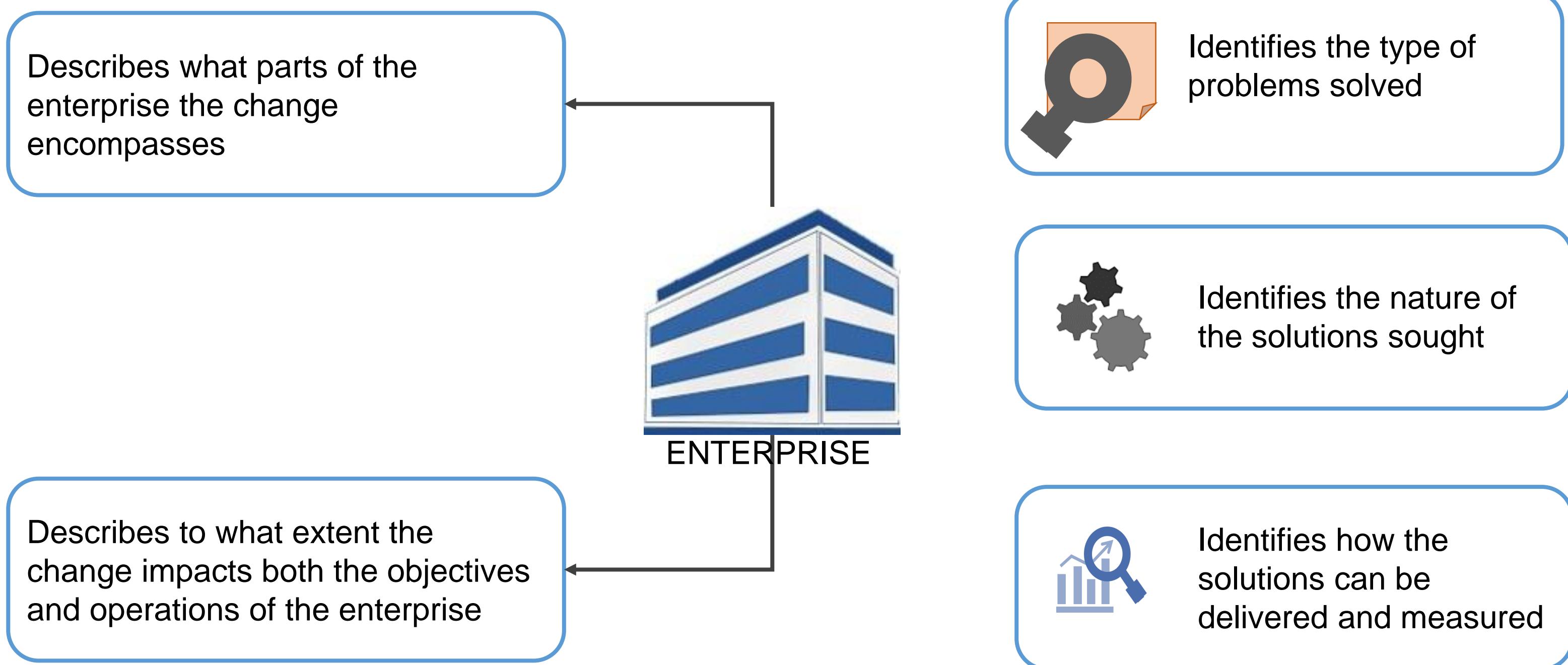
## Topic 11.2: Change Scope

- ✓ What Change Scope is in the IT perspective
- ✓ Scenarios that trigger IT change
- ✓ Breadth and depth of change
- ✓ Major assumptions for business analysis work



# CHANGE SCOPE

## CHANGE SCOPE IN THE IT PERSPECTIVE



## CHANGE SCOPE (contd.)

### TRIGGERS FOR CHANGE

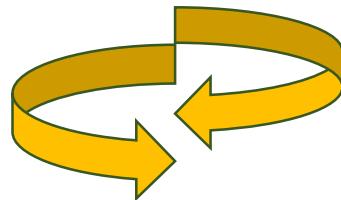
Add a new organizational capability

Enhance an existing capability to achieve an organizational objective

Improve operations to improve organizational efficiency

---

### SCENARIOS THAT TRIGGER CHANGE

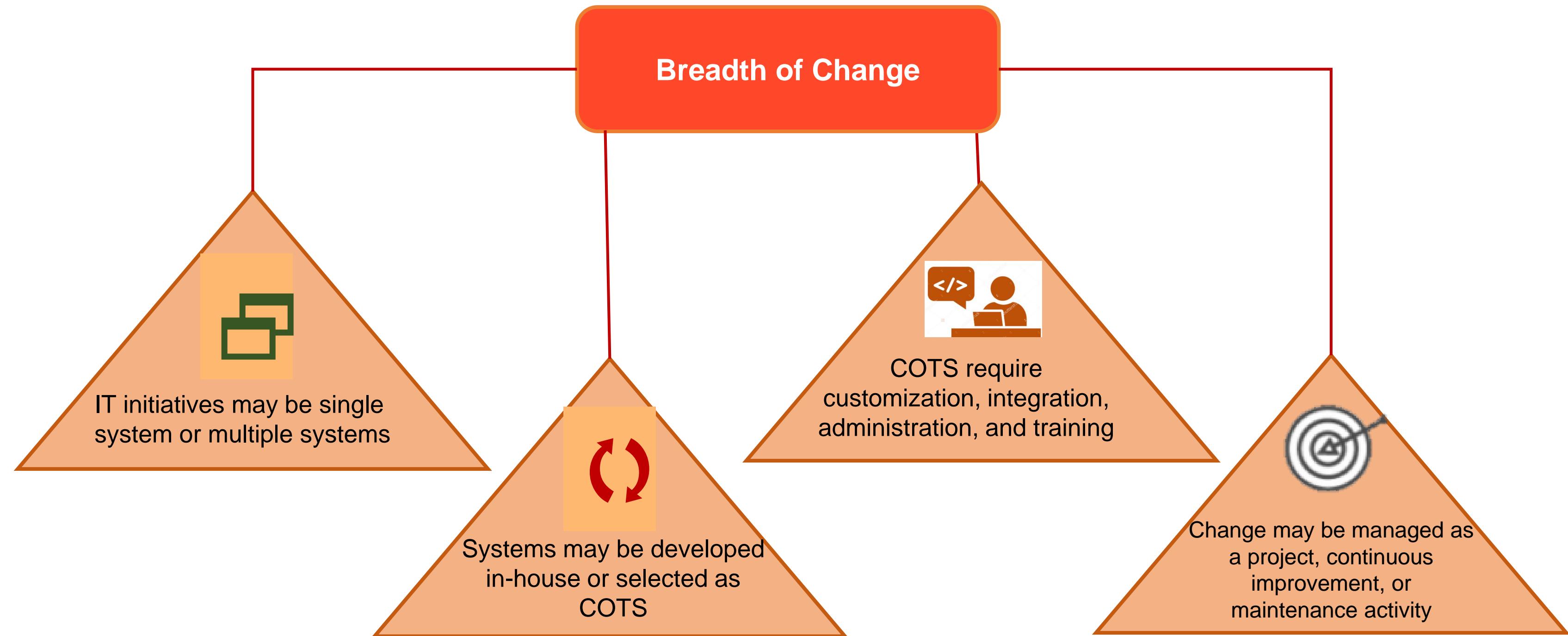


Maintain an existing information technology system

Correct the dysfunction of the information technology system

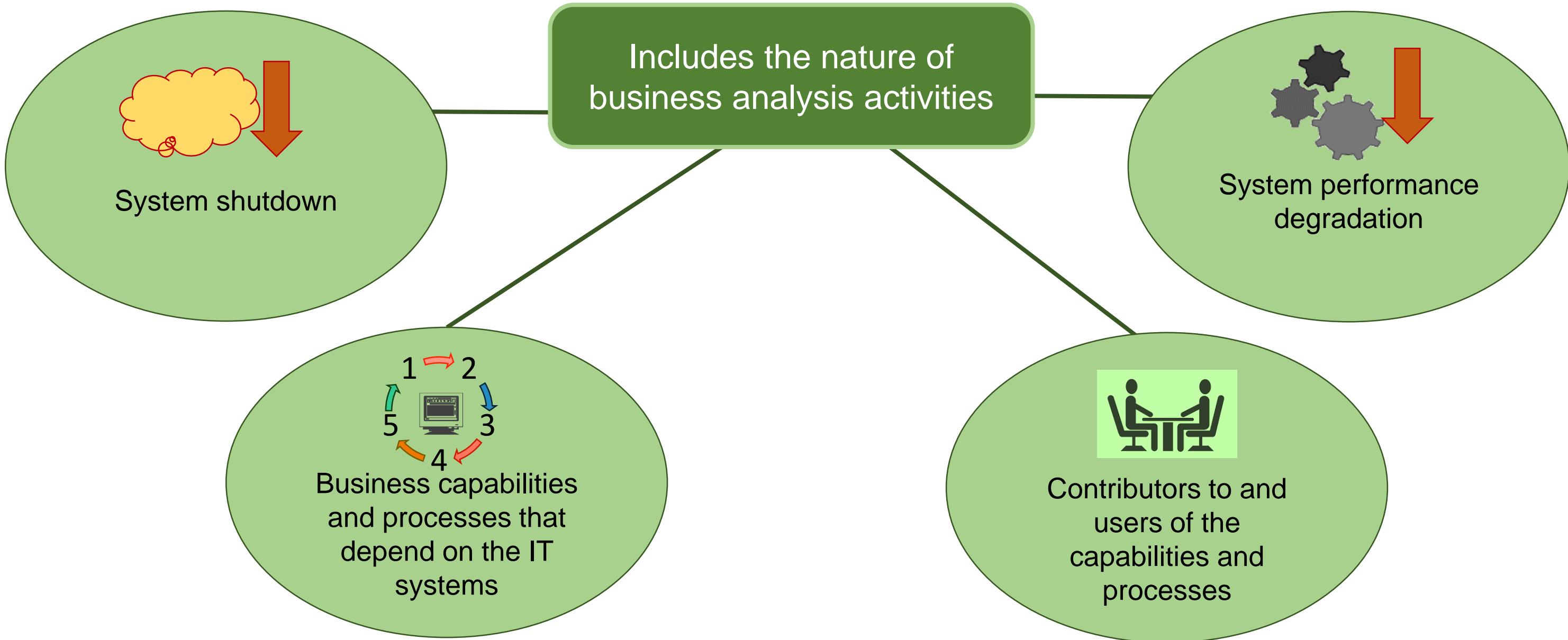
## CHANGE SCOPE (contd.)

### BREADTH OF CHANGE



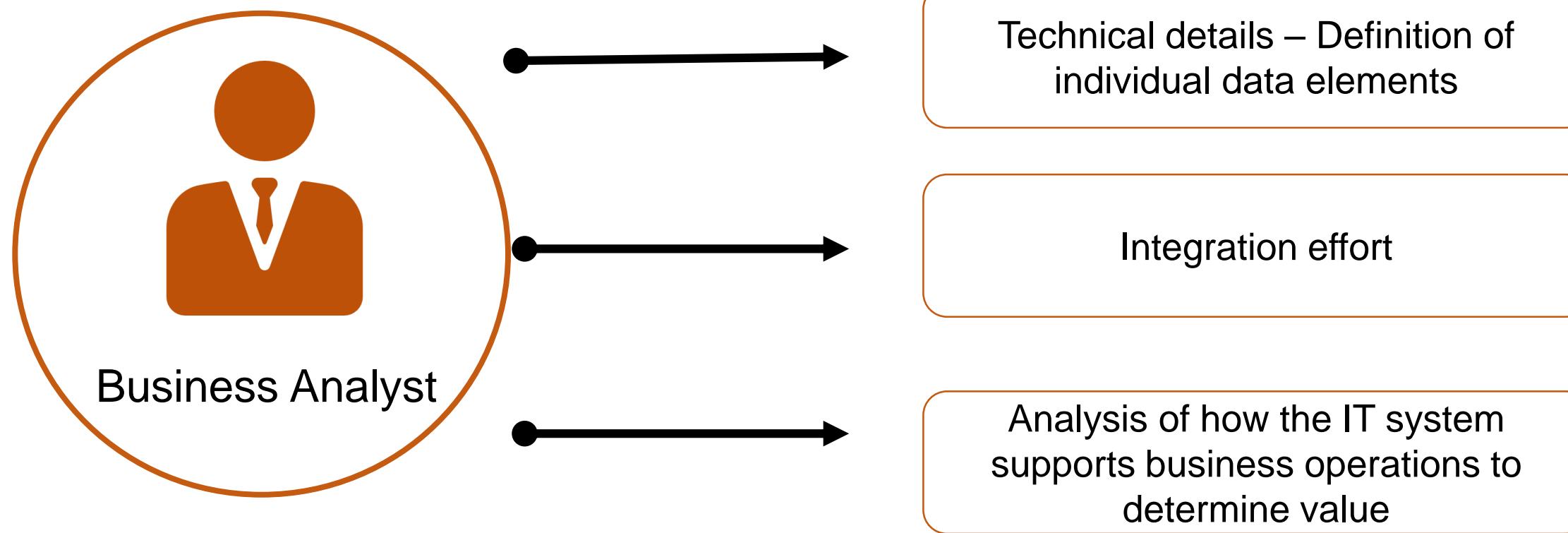
# CHANGE SCOPE

## BREADTH OF CHANGE (contd.)



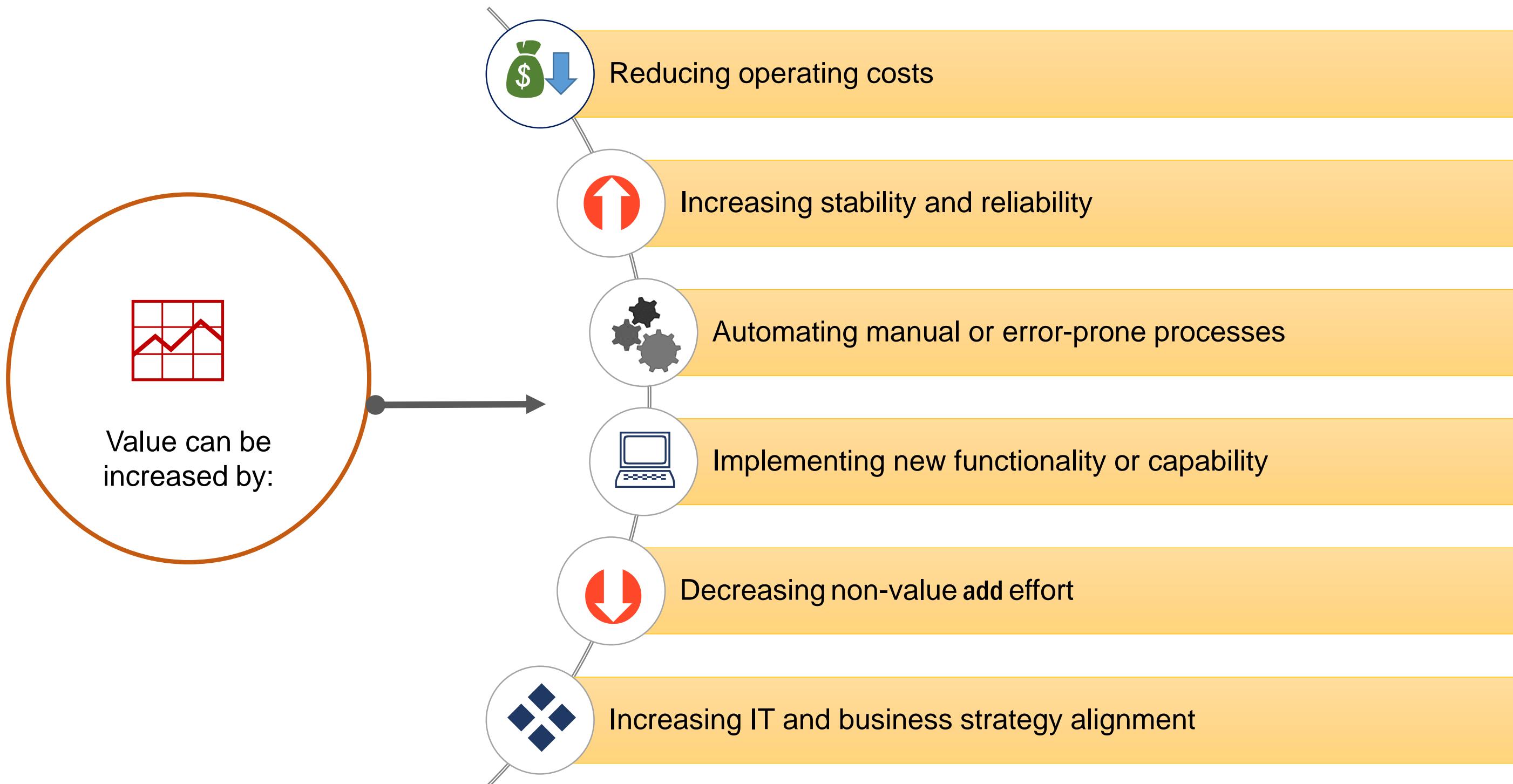
# CHANGE SCOPE (contd.)

## DEPTH OF CHANGE



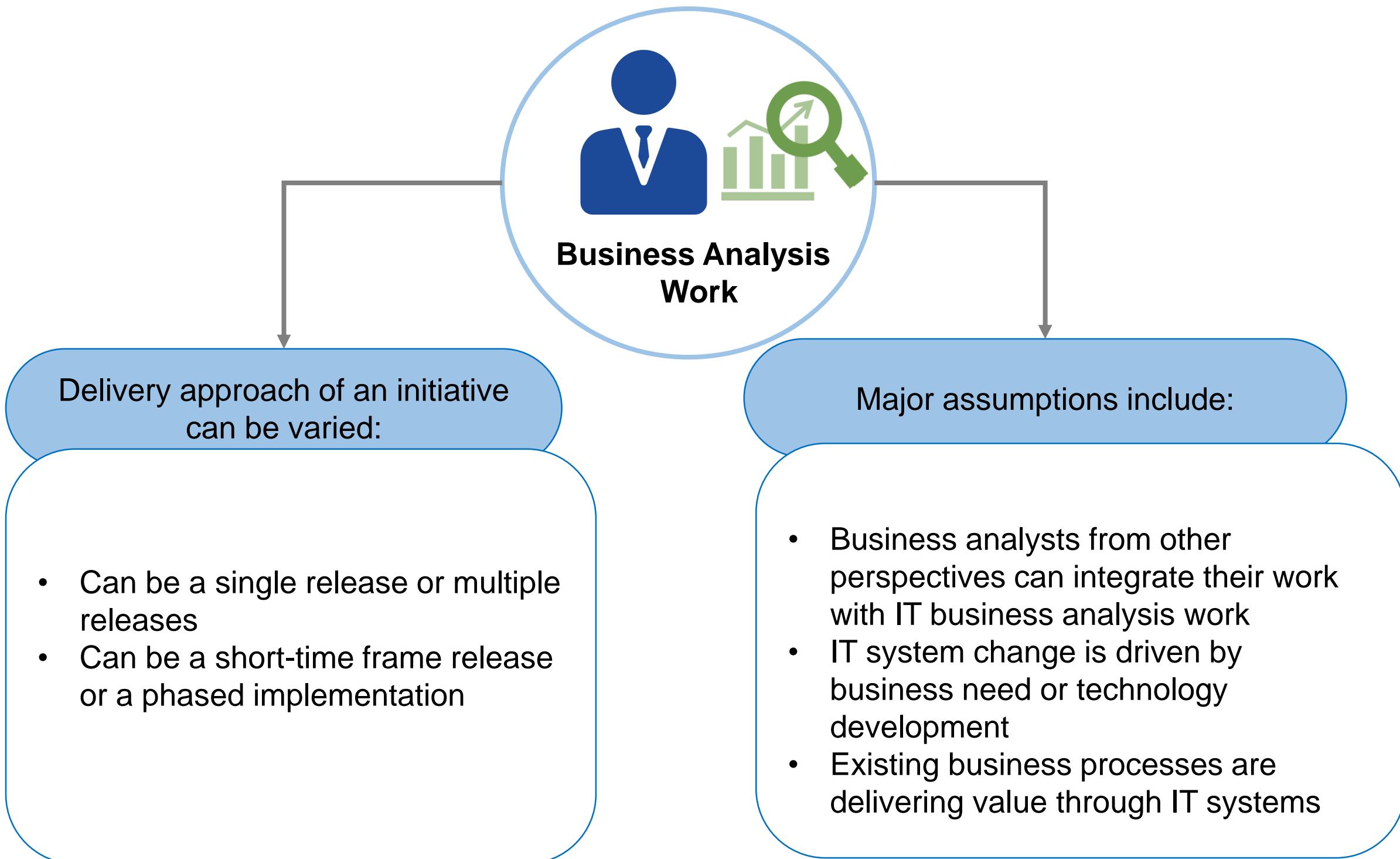
## CHANGE SCOPE (contd.)

### VALUE AND SOLUTION DELIVERED



# CHANGE SCOPE (contd.)

## DELIVERY APPROACH AND MAJOR ASSUMPTIONS



# Lesson 11: Information Technology Perspective

## Topic 11.3: Business Analysis Scope

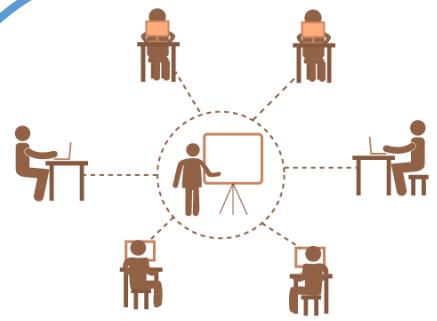
- ✓ Change sponsor
- ✓ Change targets
- ✓ Position of a business analyst
- ✓ Business analysis outcomes



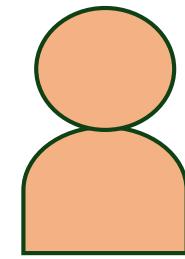
# BUSINESS ANALYSIS SCOPE

## CHANGE SPONSOR AND CHANGE TARGETS

### Likely Change Sponsors



Technical Team



Technical executive



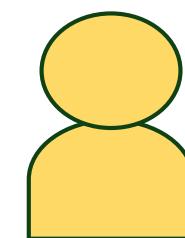
Application owner



Process owner



Business owner

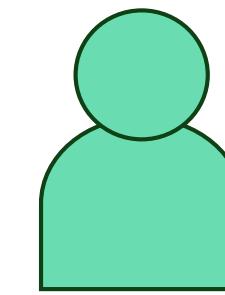


Regulatory representative

### Technical Stakeholder

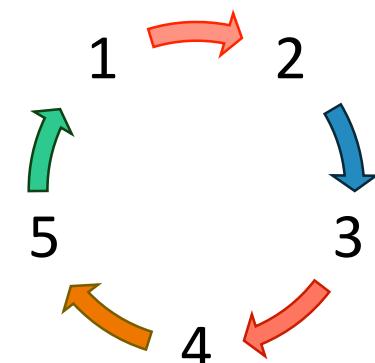


Business Stakeholder

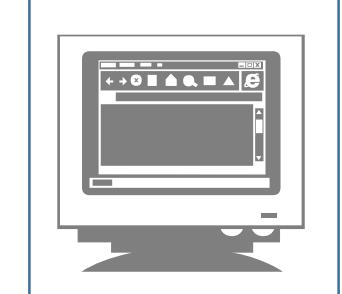


Sponsor

### Change Targets



Departments



Applications



Functions

# BUSINESS ANALYSIS SCOPE (contd.)

## POSITION OF A BUSINESS ANALYST



Business Analyst

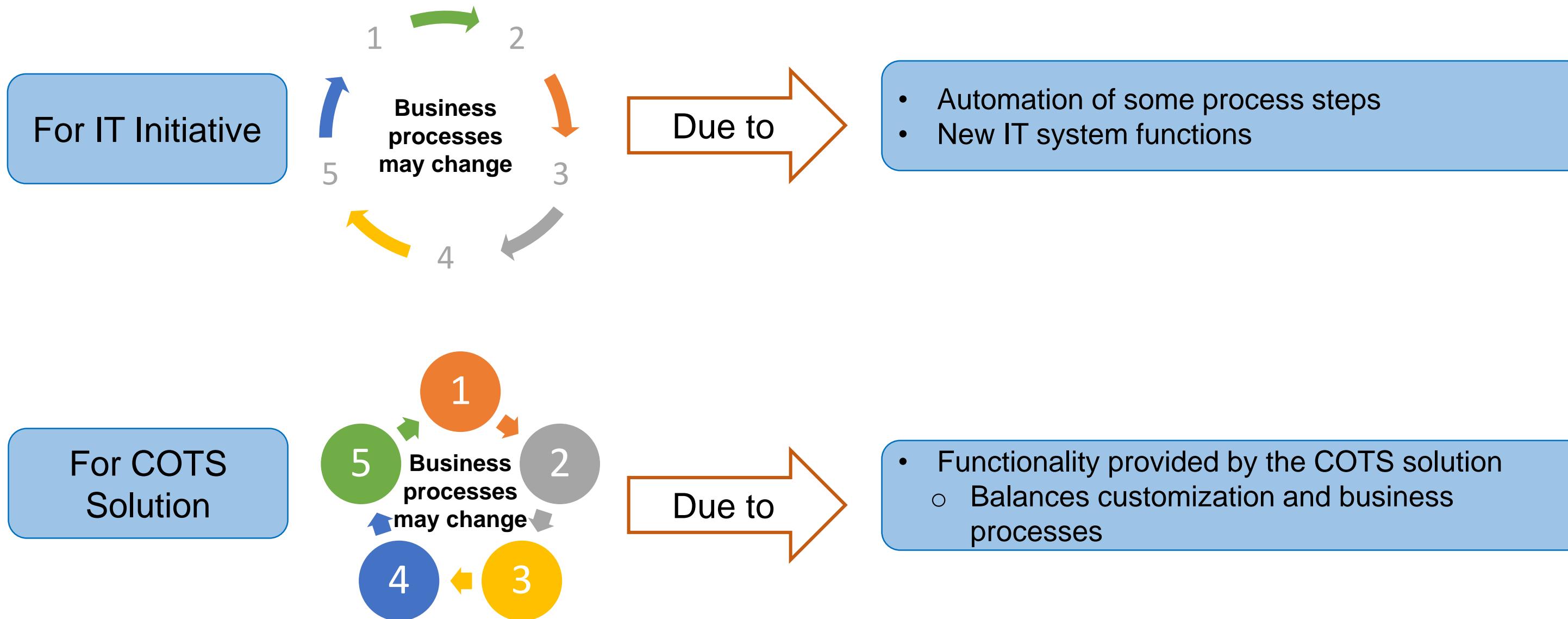


Business Analyst's Activities

- → **SME** with knowledge of current software implementation
- → **Business process owner** who has experience with the business capabilities and processes
- → **System analyst** who has experience with the business domain
- → **Business analyst** who is working with the business users of an IT system
- → **Technical person** with technical experience
- → **COTS representative** who can configure and customize a vendor-packaged solution

# BUSINESS ANALYSIS SCOPE (contd.)

## BUSINESS ANALYSIS OUTCOMES



# BUSINESS ANALYSIS SCOPE

## BUSINESS ANALYSIS OUTCOMES (contd.)

The change approach has a direct impact on business analysis deliverables.

### Business Analysis Deliverables

Define, prioritize, and verify requirements

Specification of business rules

Gap analysis

Interface analysis

Process analysis

Prototypes

Process models

State models

Context models

Data models

Use cases and scenarios

User stories

Other deliverables

Decision models

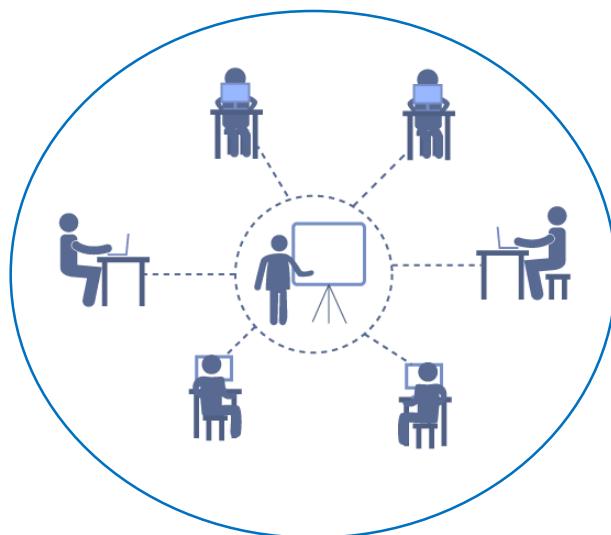
# Lesson 11: Information Technology Perspective

## Topic 11.4: Methodologies

- ✓ Software development methodologies
- ✓ Information technology methodologies



# DEVELOPMENT METHODOLOGIES



Software  
development  
methodologies



- Predictive —focus is on upfront planning and formal documentation
- Adaptive—iterative and incremental
- Hybrid—a mix of both predictive and adaptive processes

Information  
technology  
methodologies



- Homegrown or organization specific
- Requirements Engineering, or RE
- Structured Systems Analysis and Design Method, or SSADM
- Unified Process, or UP, methodologies

# Lesson 11: Information Technology Perspective

## Topic 11.5: Underlying competencies

- ✓ Underlying competencies for business analysts in the IT environment



# UNDERLYING COMPETENCIES



Knowledge of software testing



Knowledge of solution architecture



Knowledge of IT software and applications



Understanding of technical feasibility



Influencing, facilitation, and negotiation skills



System thinking

Business Analyst

# Lesson 11: Information Technology Perspective

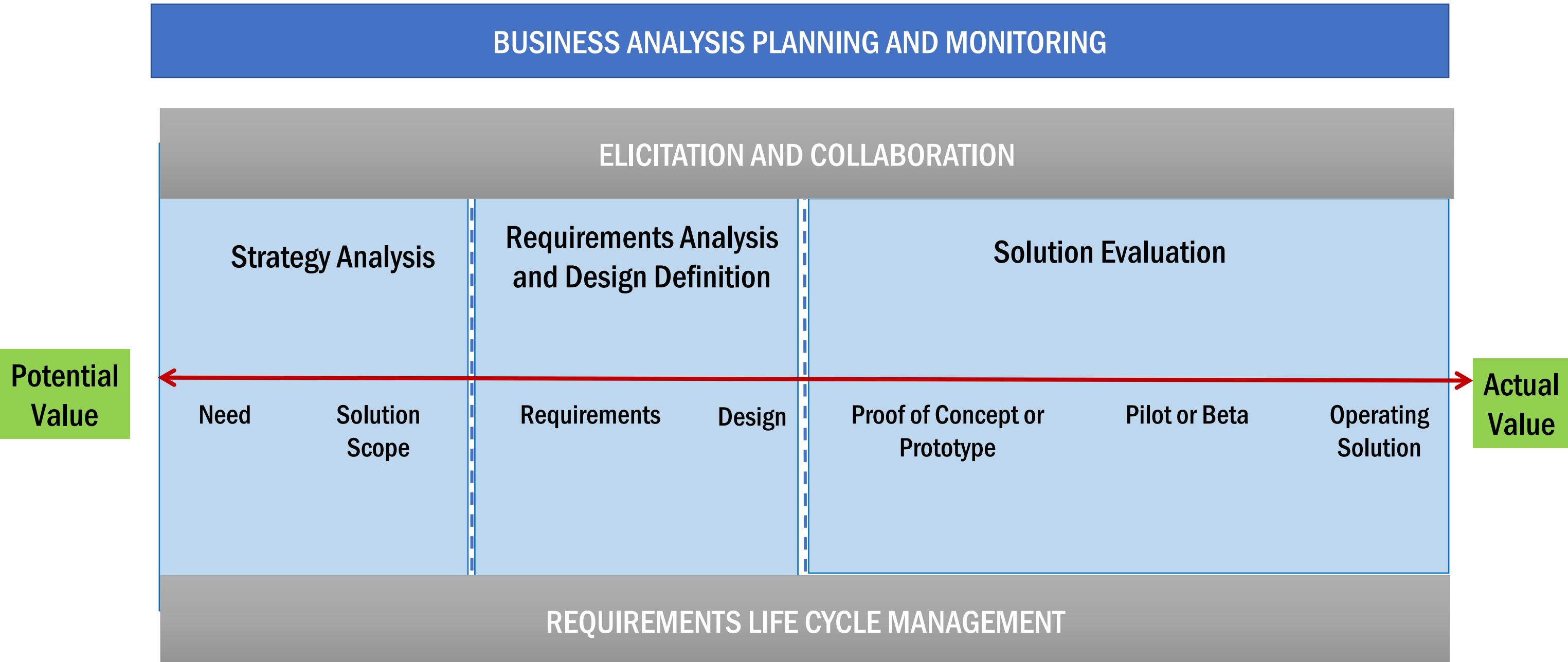
## Topic 11.6: Impact on Knowledge Areas

✓ Impact of the IT perspective on knowledge areas



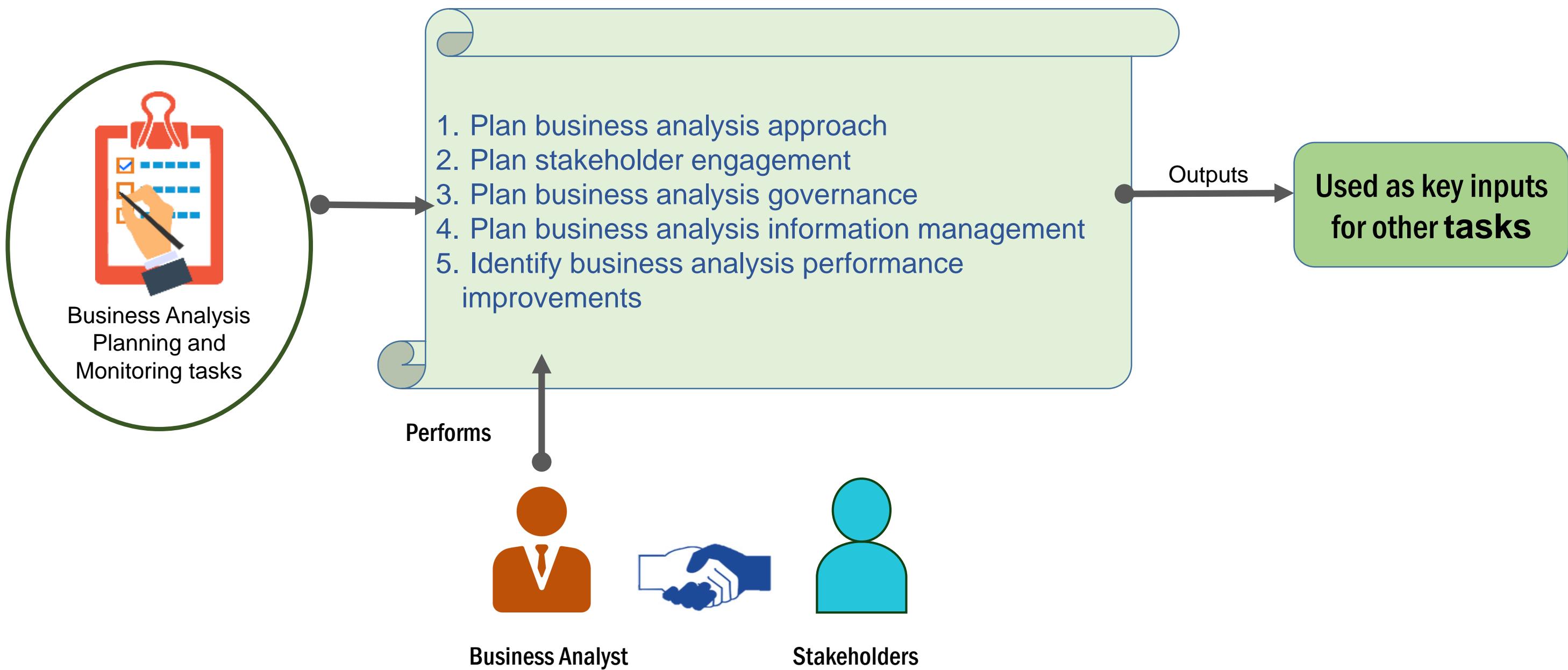
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS KNOWLEDGE AREAS



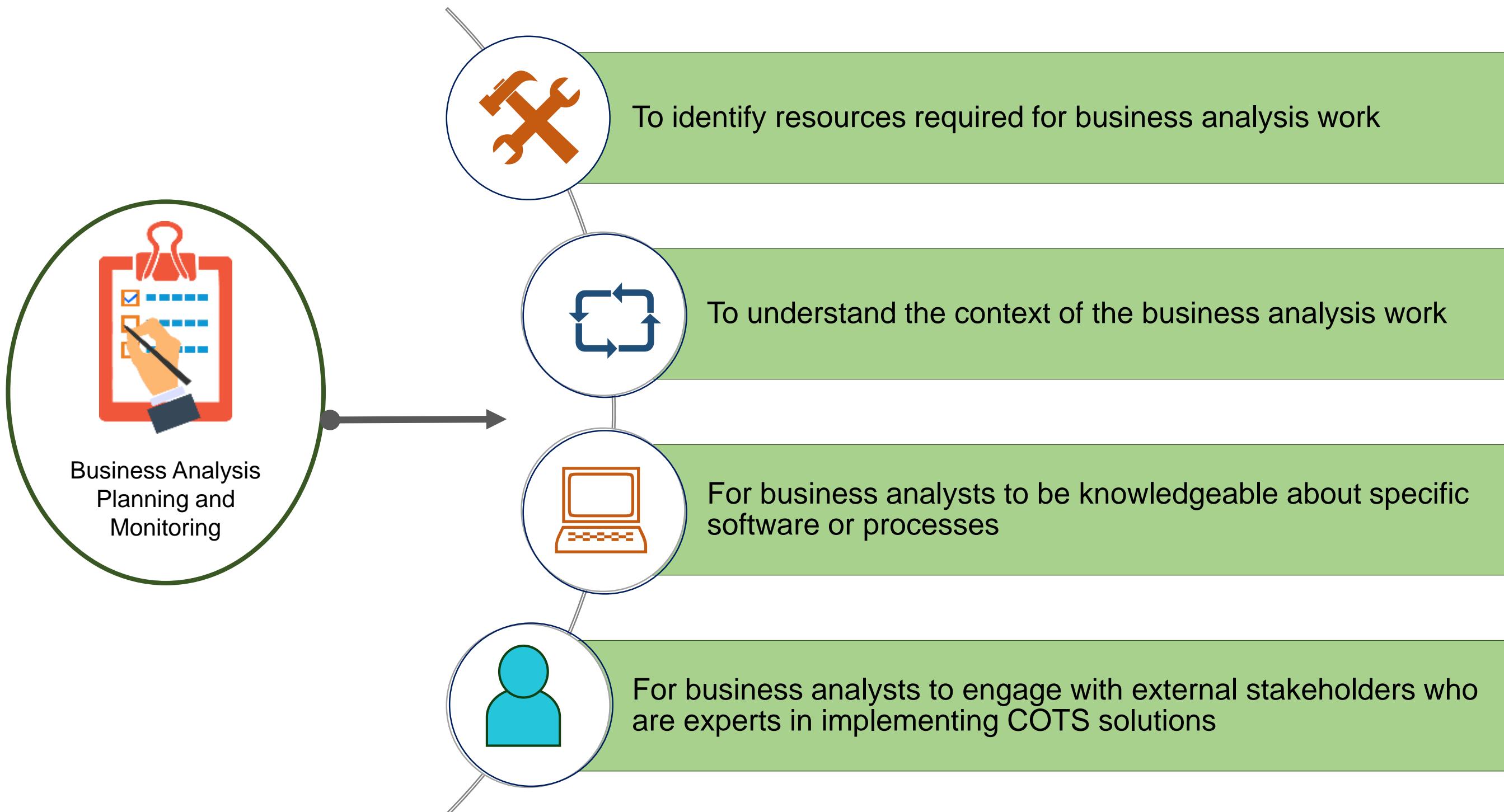
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING



## IMPACT ON KNOWLEDGE AREAS

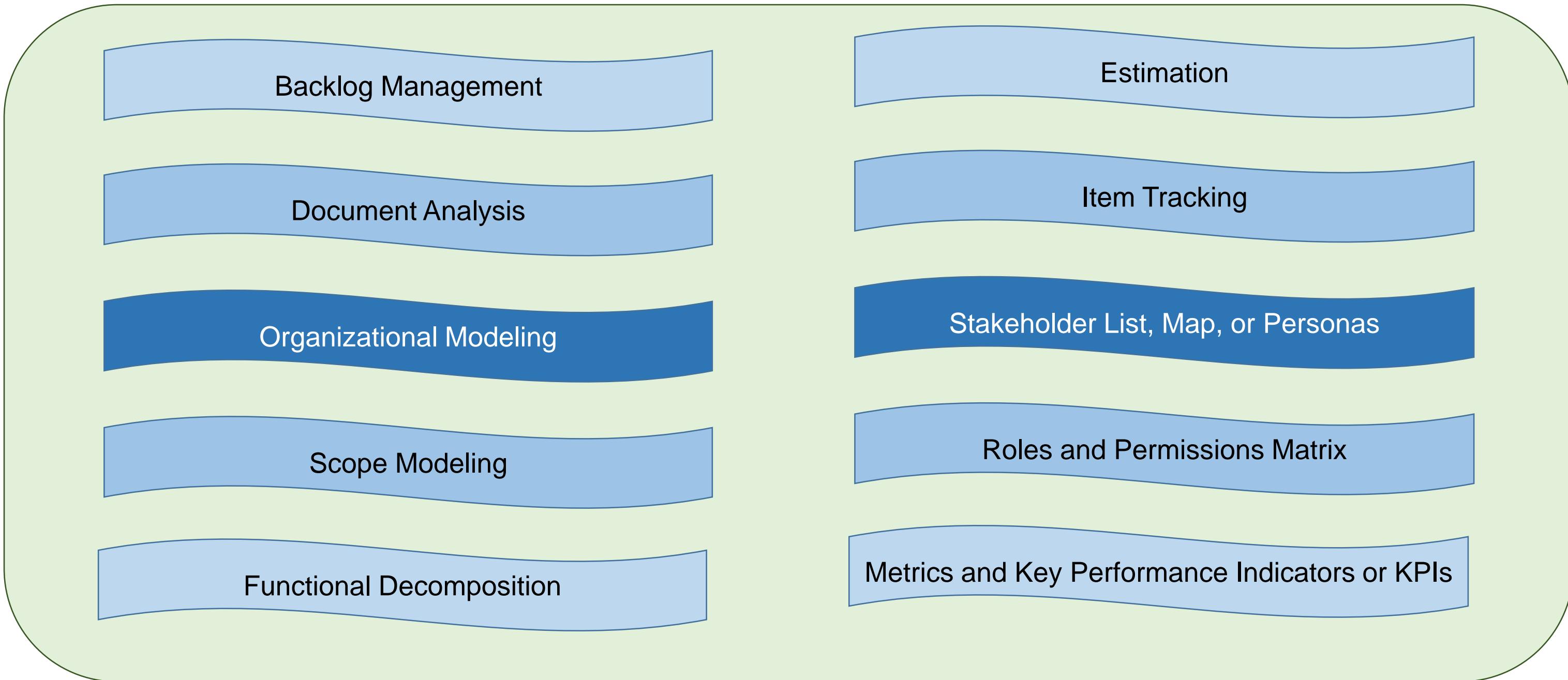
### BUSINESS ANALYSIS PLANNING AND MONITORING (contd.)



# IMPACT ON KNOWLEDGE AREAS

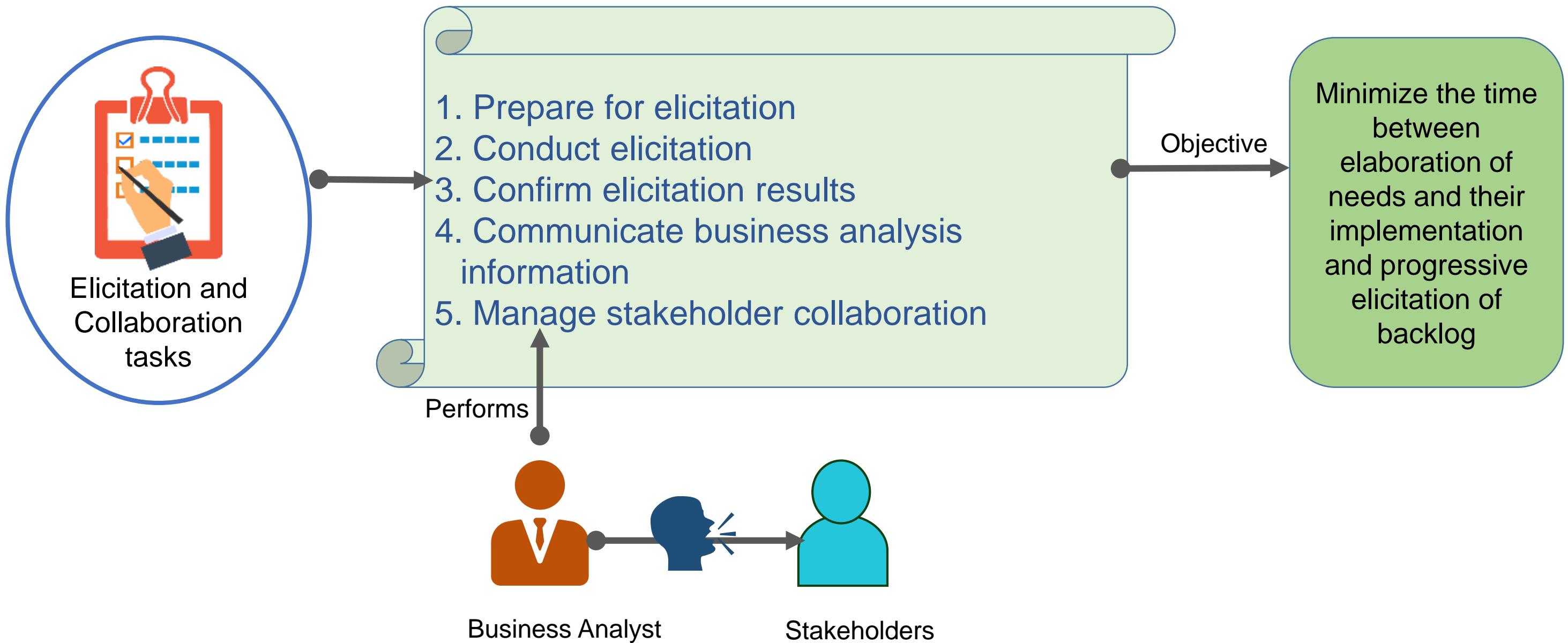
## BUSINESS ANALYSIS PLANNING AND MONITORING (contd.)

### BABOK® Techniques



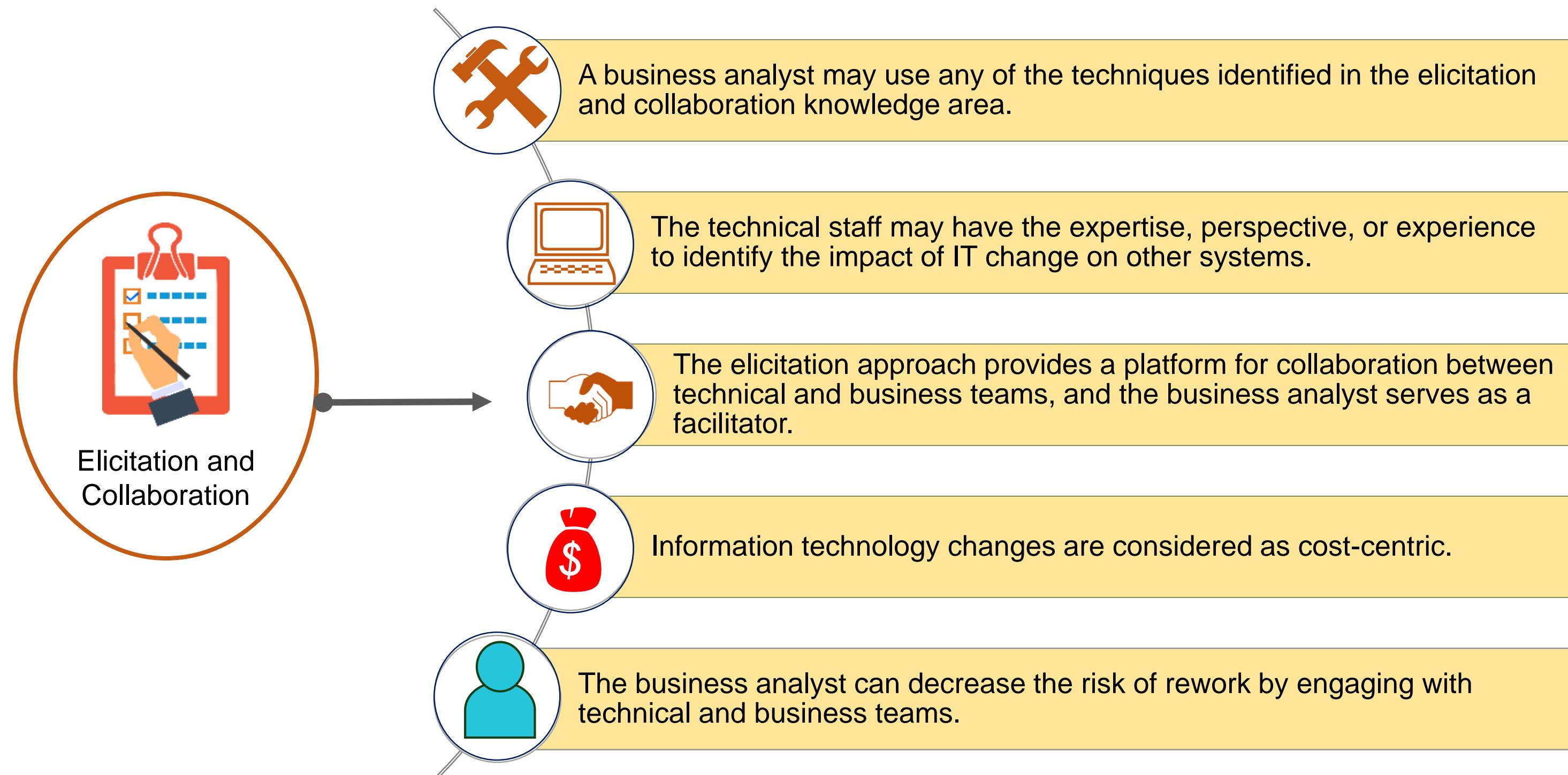
## IMPACT ON KNOWLEDGE AREAS

### ELICITATION AND COLLABORATION



## IMPACT ON KNOWLEDGE AREAS

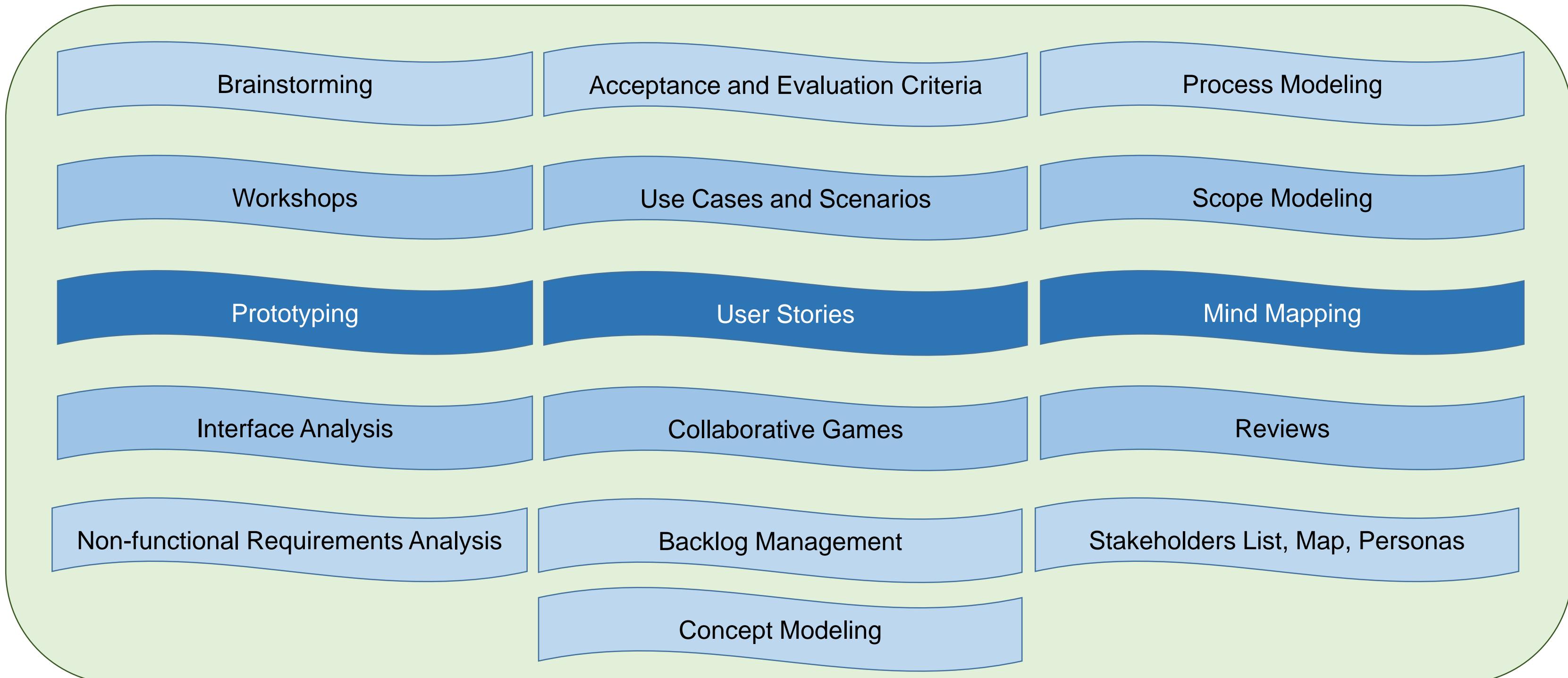
### ELICITATION AND COLLABORATION (contd.)



# IMPACT ON KNOWLEDGE AREAS

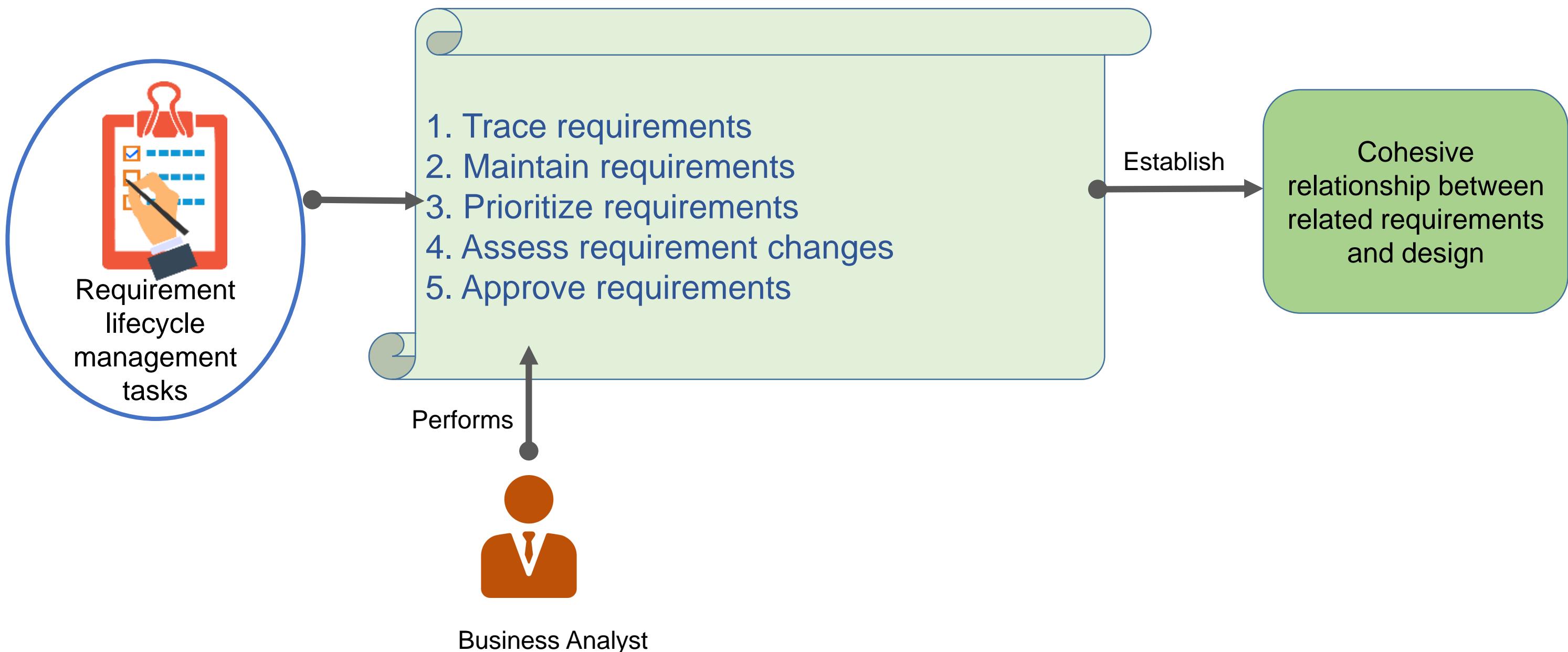
## ELICITATION AND COLLABORATION (contd.)

### BABOK® Techniques



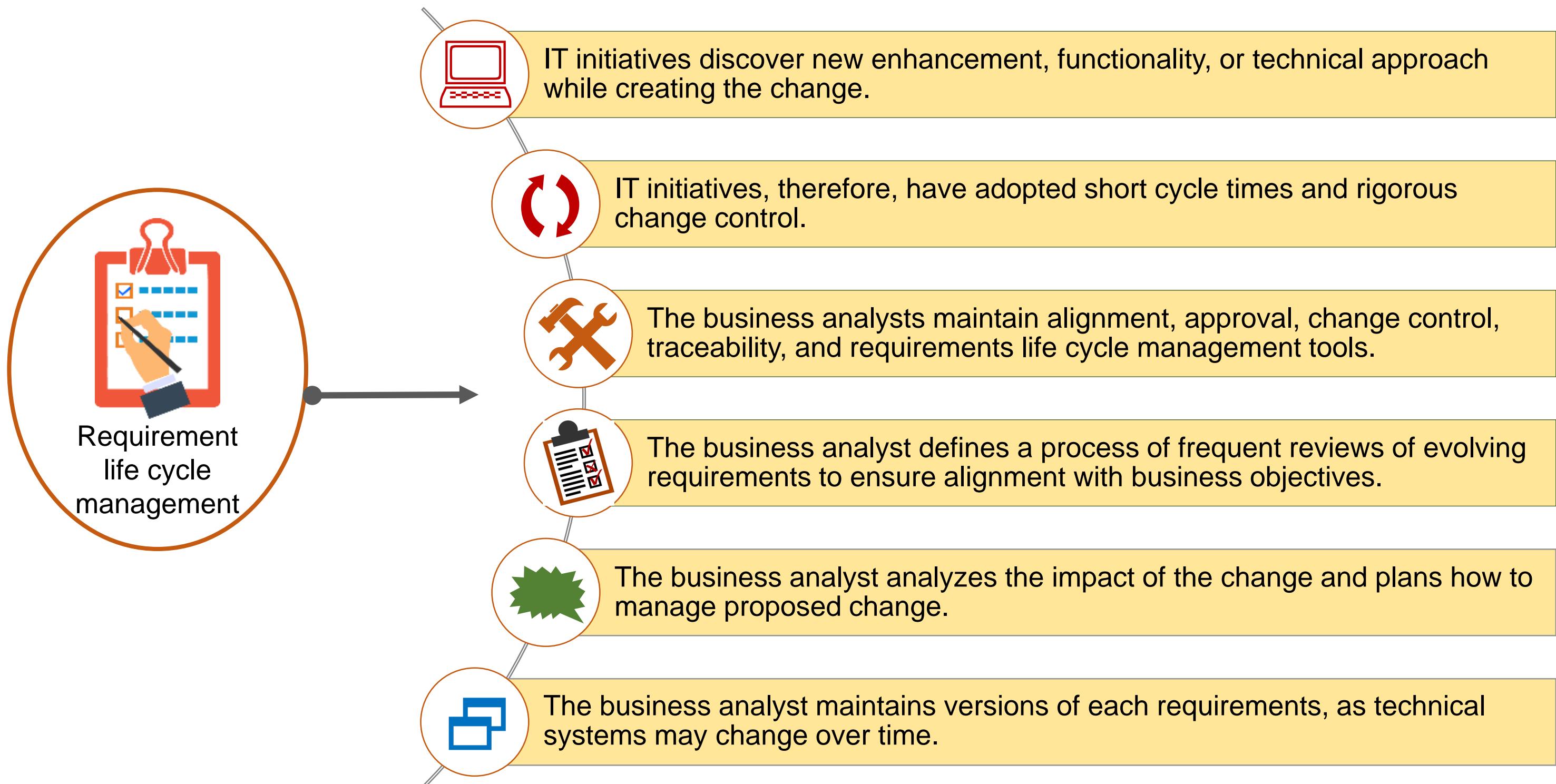
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT



## IMPACT ON KNOWLEDGE AREAS

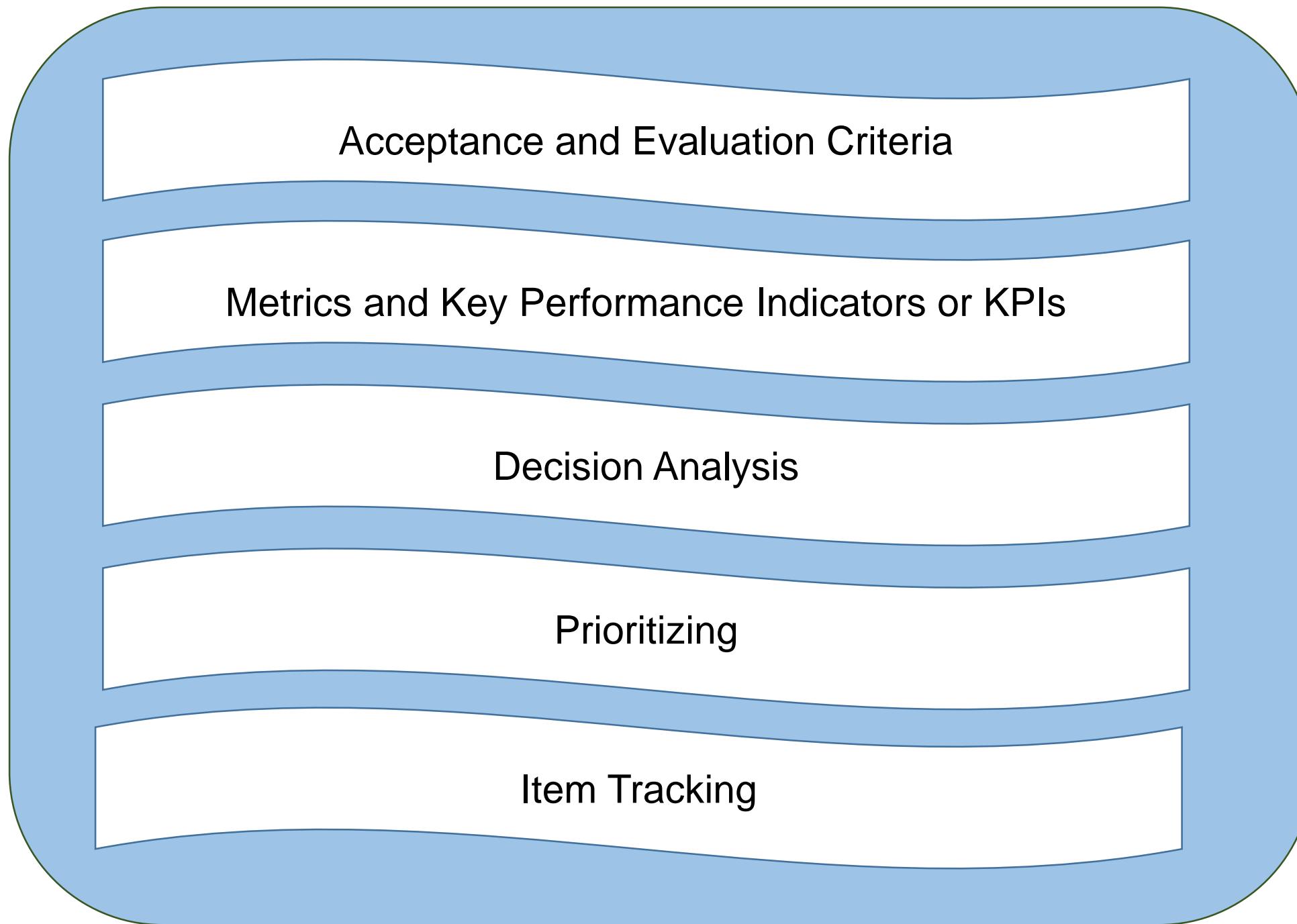
### REQUIREMENTS LIFE CYCLE MANAGEMENT (contd.)



## IMPACT ON KNOWLEDGE AREAS

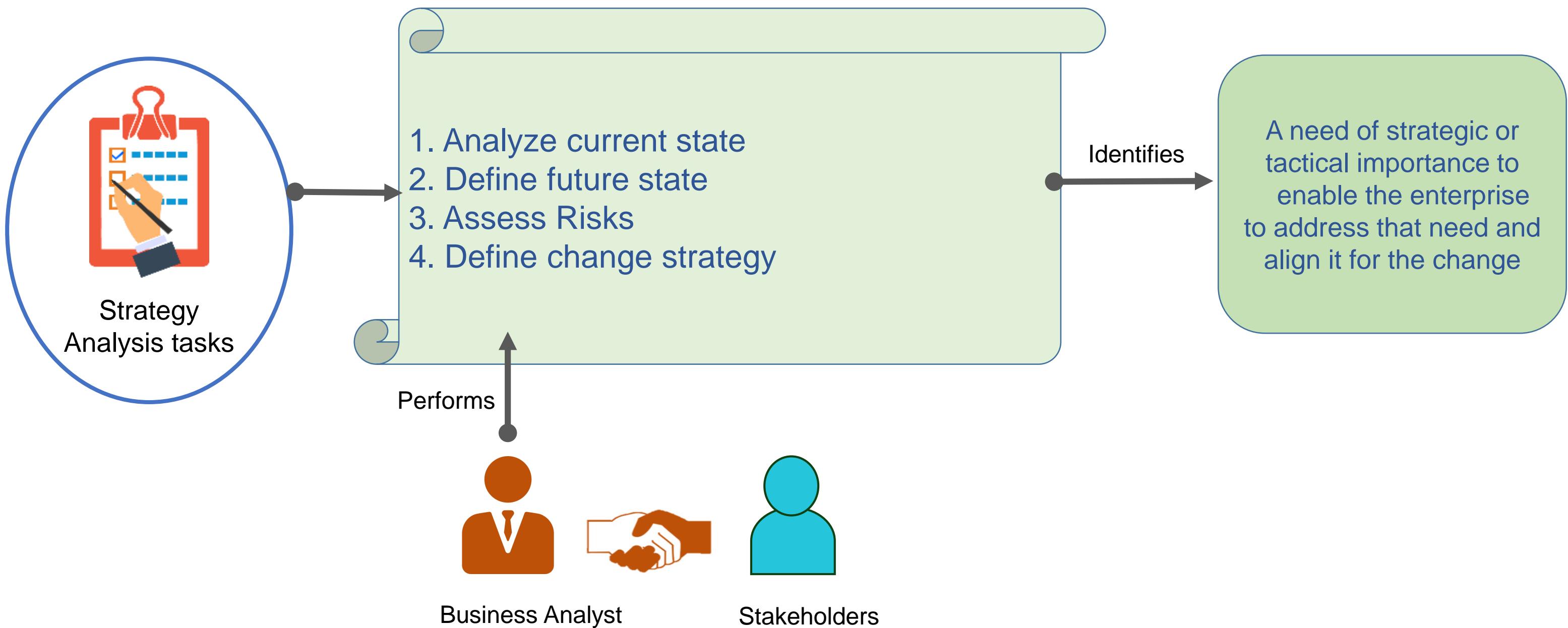
### REQUIREMENTS LIFE CYCLE MANAGEMENT (contd.)

#### BABOK® Techniques



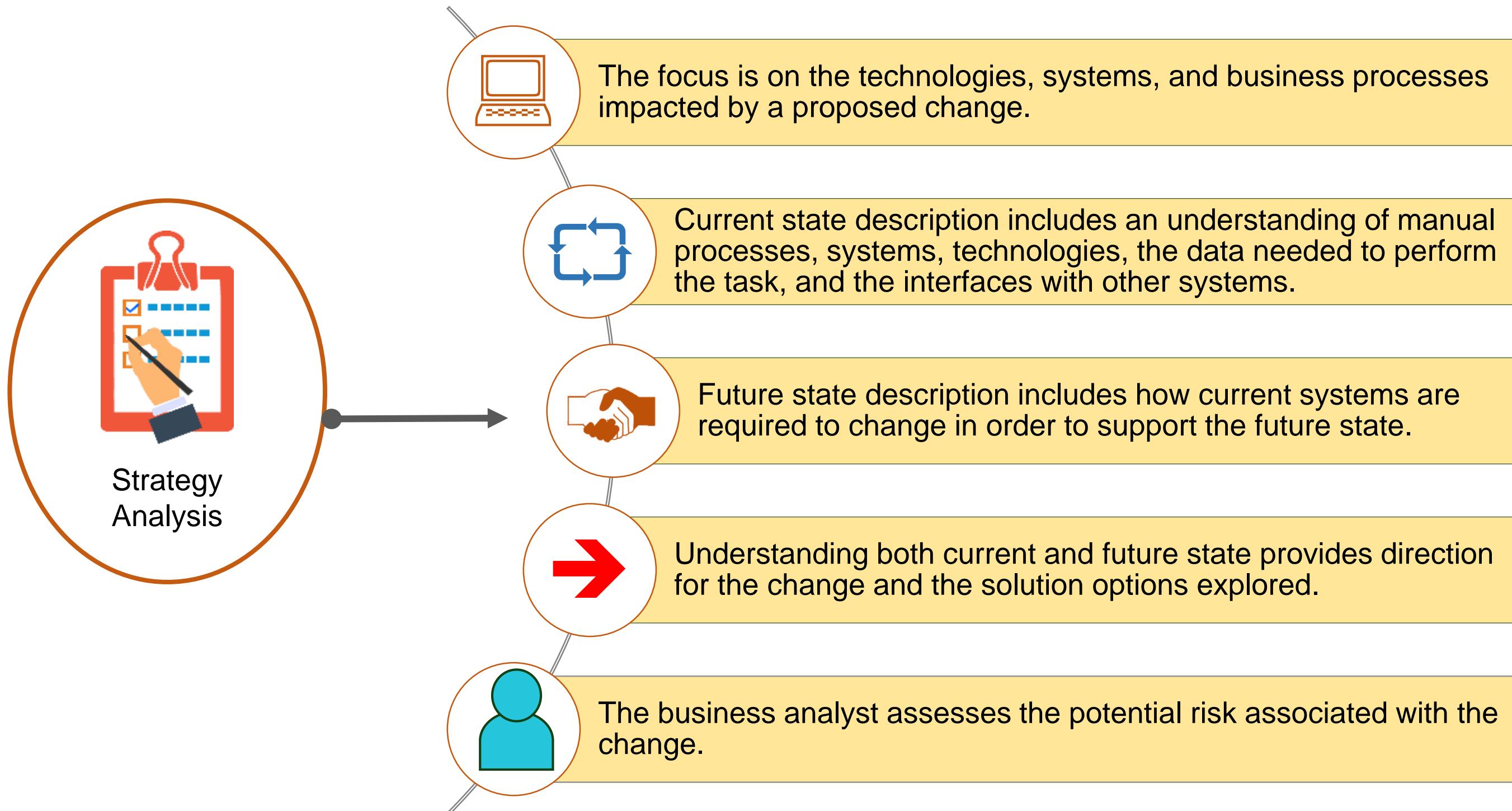
# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS

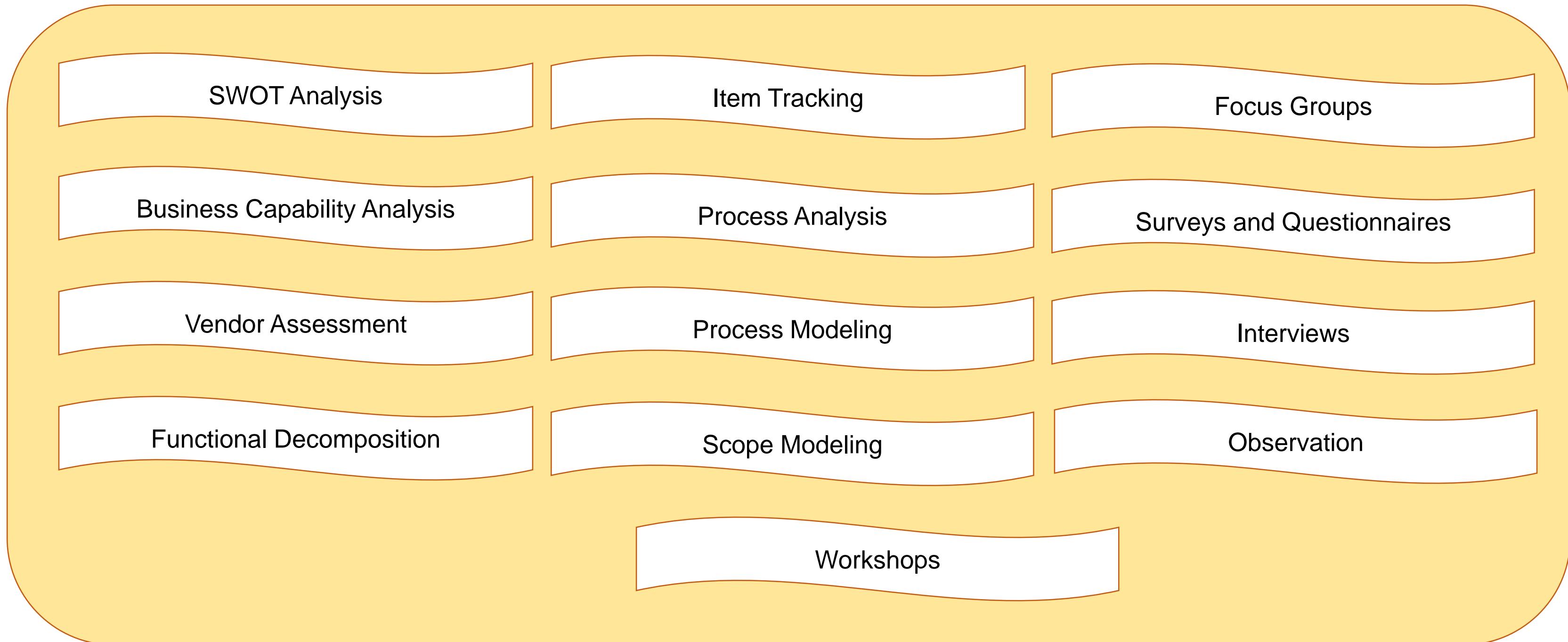
## STRATEGY ANALYSIS (contd.)



# IMPACT ON KNOWLEDGE AREAS

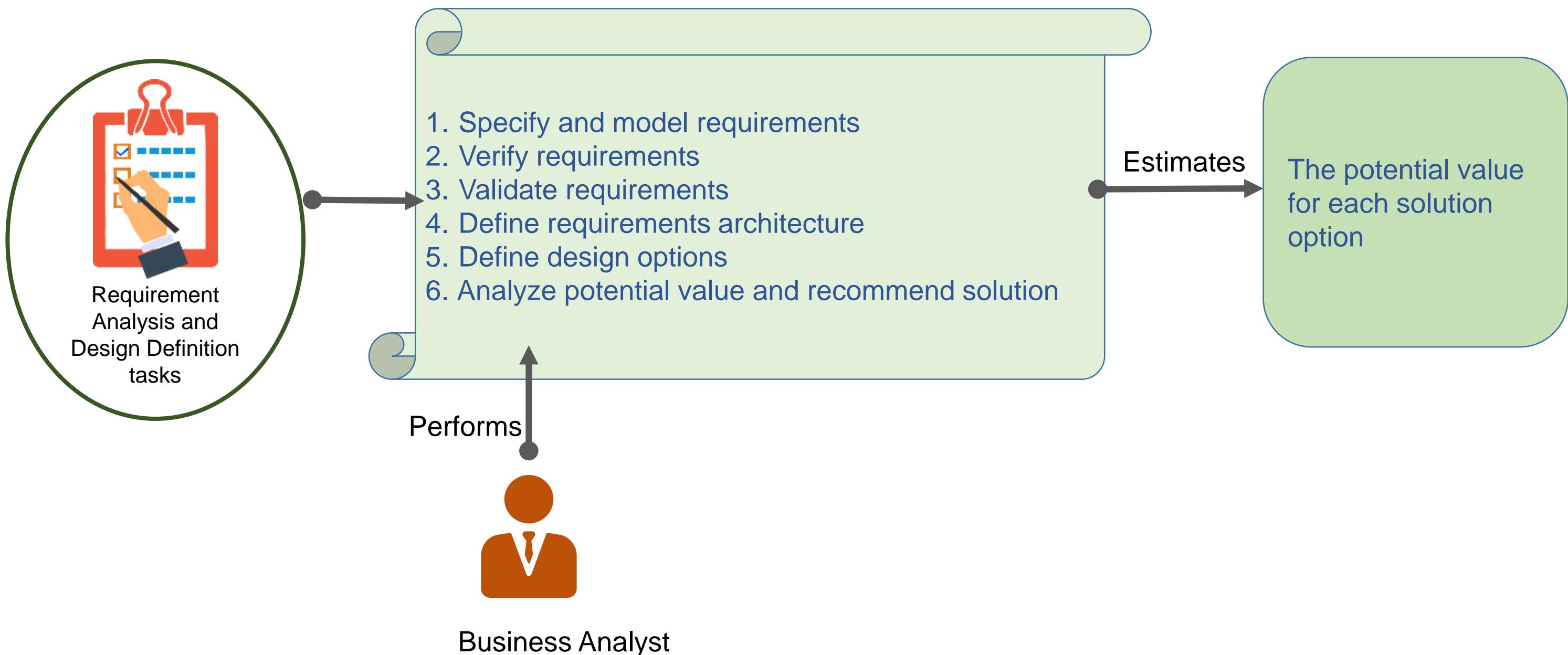
## STRATEGY ANALYSIS (contd.)

### BABOK® Techniques



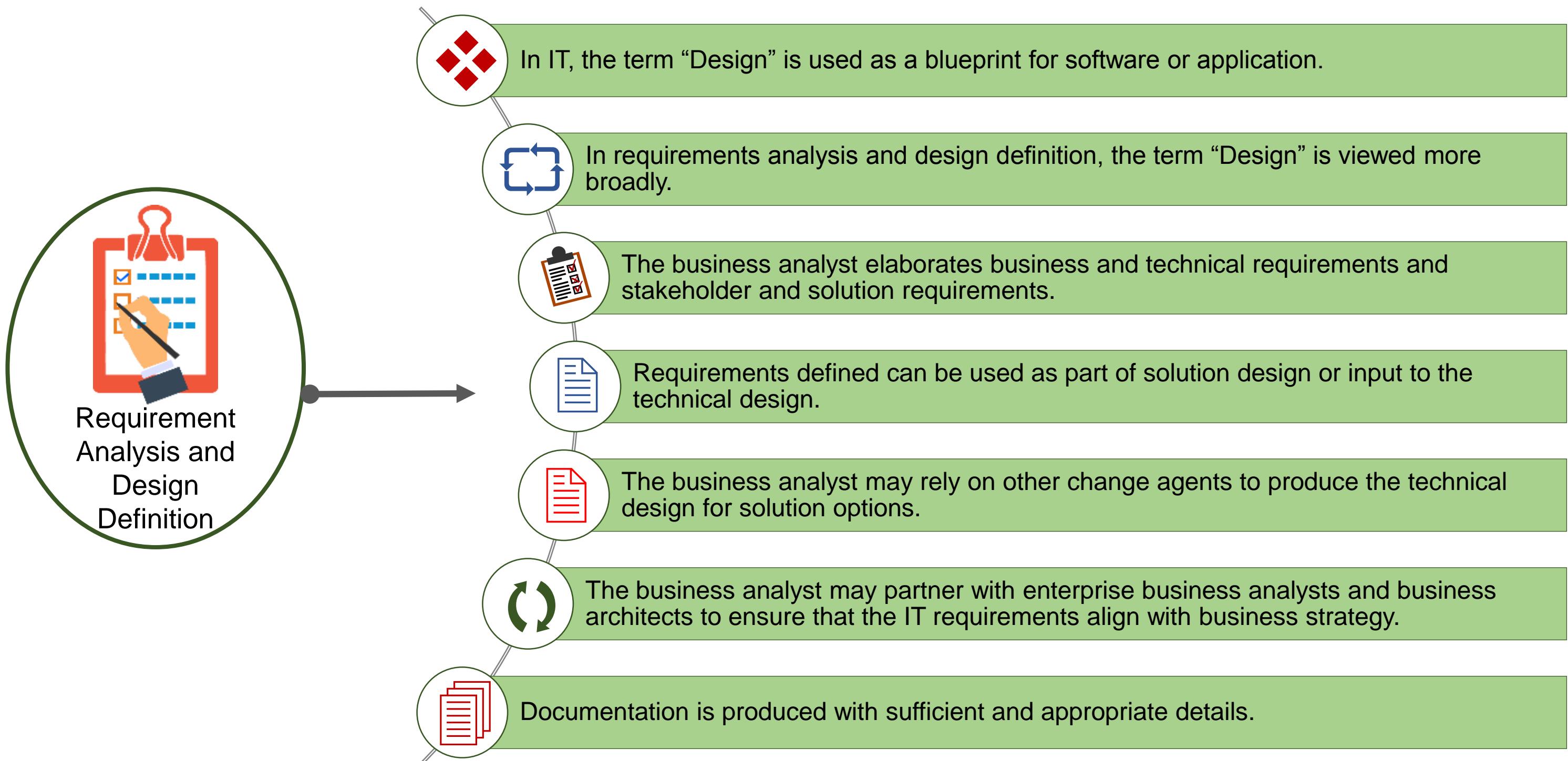
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION (contd.)



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION (contd.)

### BABOK® Techniques

Business Rules Analysis

Rules and Permissions Matrix

Scope Modeling

Sequence Diagram

Decision Analysis

Functional Decomposition

Process Modeling

Data Flow Diagram

Document Analysis

Data Dictionaries

Organizational Modeling

Prototyping

Interface Analysis

Glossary

Decision Modeling

Use Cases and Scenarios

Non-functional Requirements Analysis

Estimation

Data Modeling

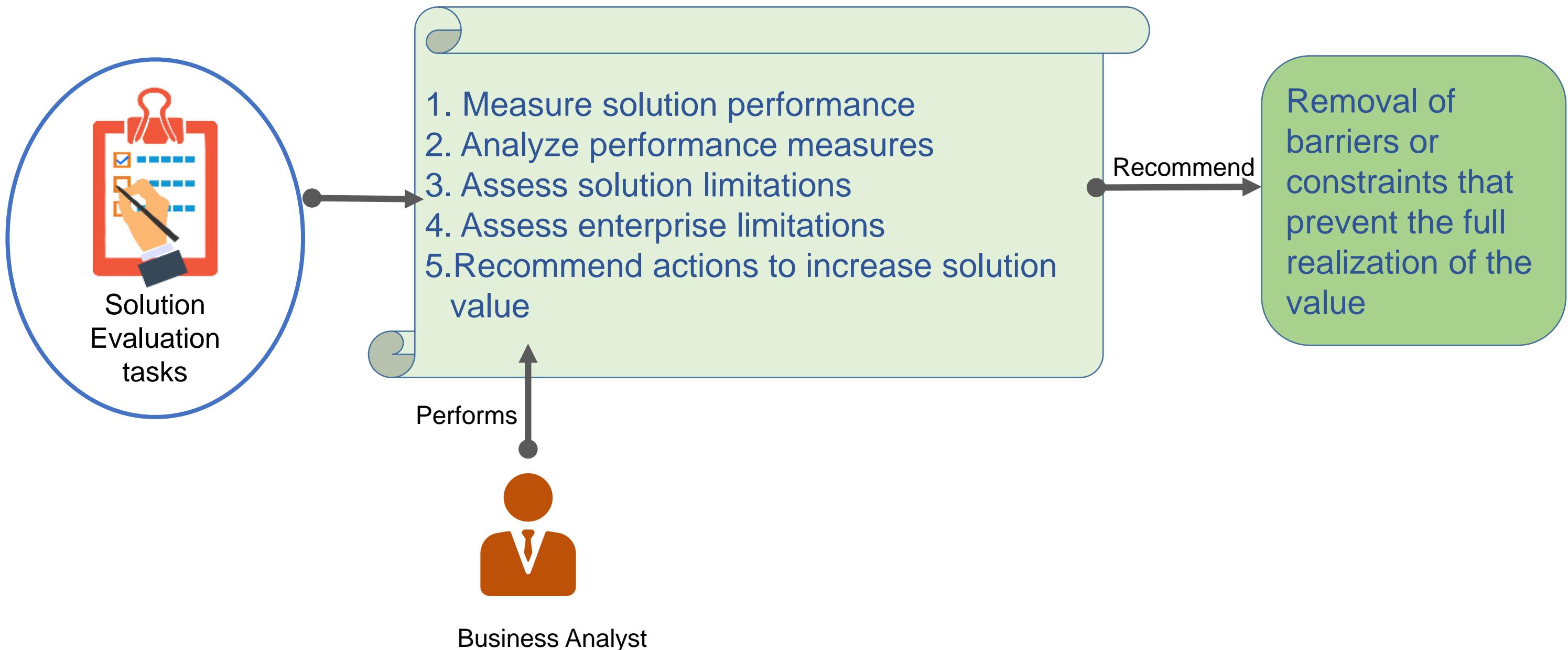
User Stories

Reviews

State Modeling

# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION



## IMPACT ON KNOWLEDGE AREAS

### SOLUTION EVALUATION (contd.)



The focus of solution evaluation is on the solution components and the value they provide.

Within an IT context, change in one system may impact other systems.

Solution evaluation within the IT context is software testing and quality assurance.

The business analyst works with business stakeholders to execute user acceptance tests.

The value realization of IT solutions is associated with the associated business processes.

Both business and technical objectives are associated with benefit and value realization.

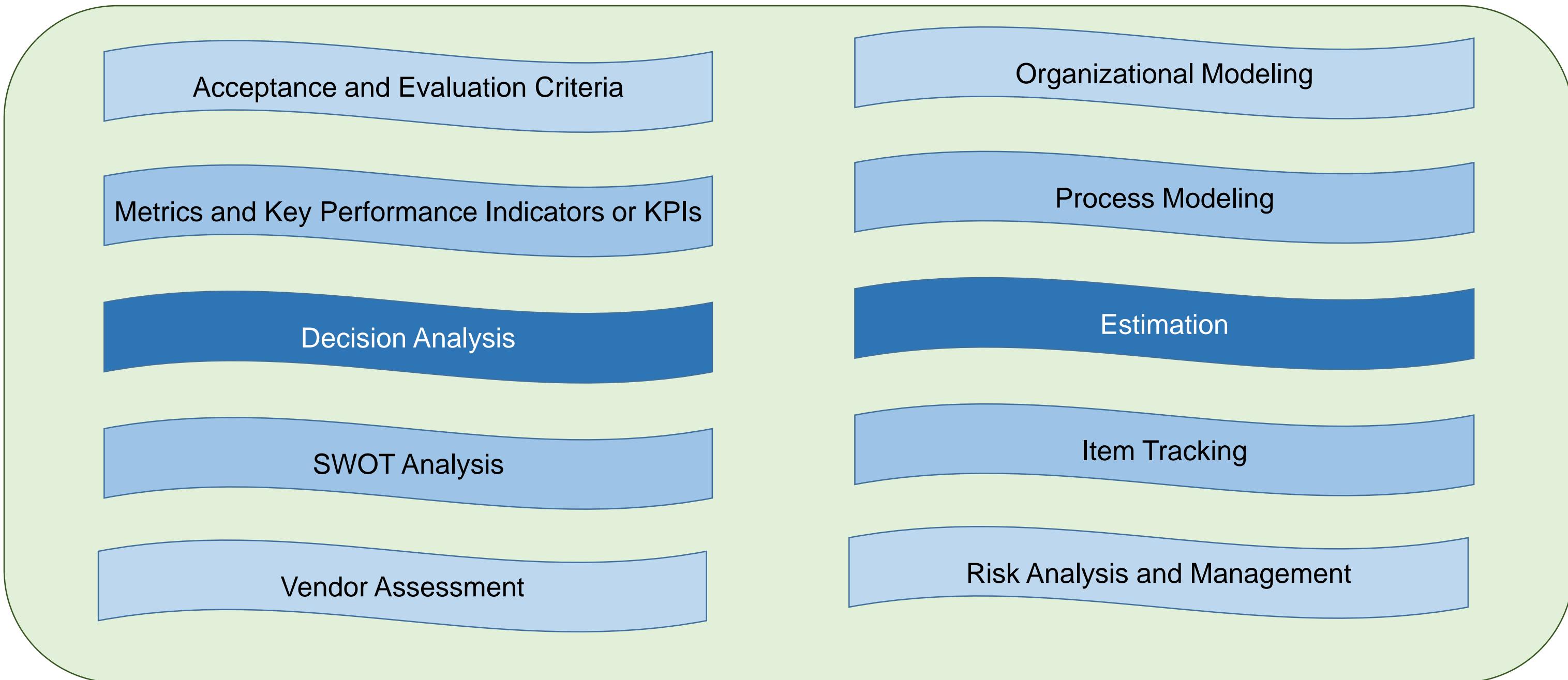
Analysis of the solution's performance is focused on the technical system.

The business analyst works with the project team to assess solution limitations.

## IMPACT ON KNOWLEDGE AREAS

### SOLUTION EVALUATION (contd.)

#### BABOK® Techniques



## KEY TAKEAWAYS

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Key factors to be considered while working in the information technology environment are solution impact, organizational maturity, and change scope.

The elicitation approach provides a platform for collaboration between technical and business teams, where the business analyst serves as a facilitator.

The business analyst may partner with enterprise business analysts and business architects to ensure that the IT requirements align with business strategy.

1 The business Analyst proactively collaborates with technical and business stakeholders to ensure that needs are understood and aligned with organizational strategy.

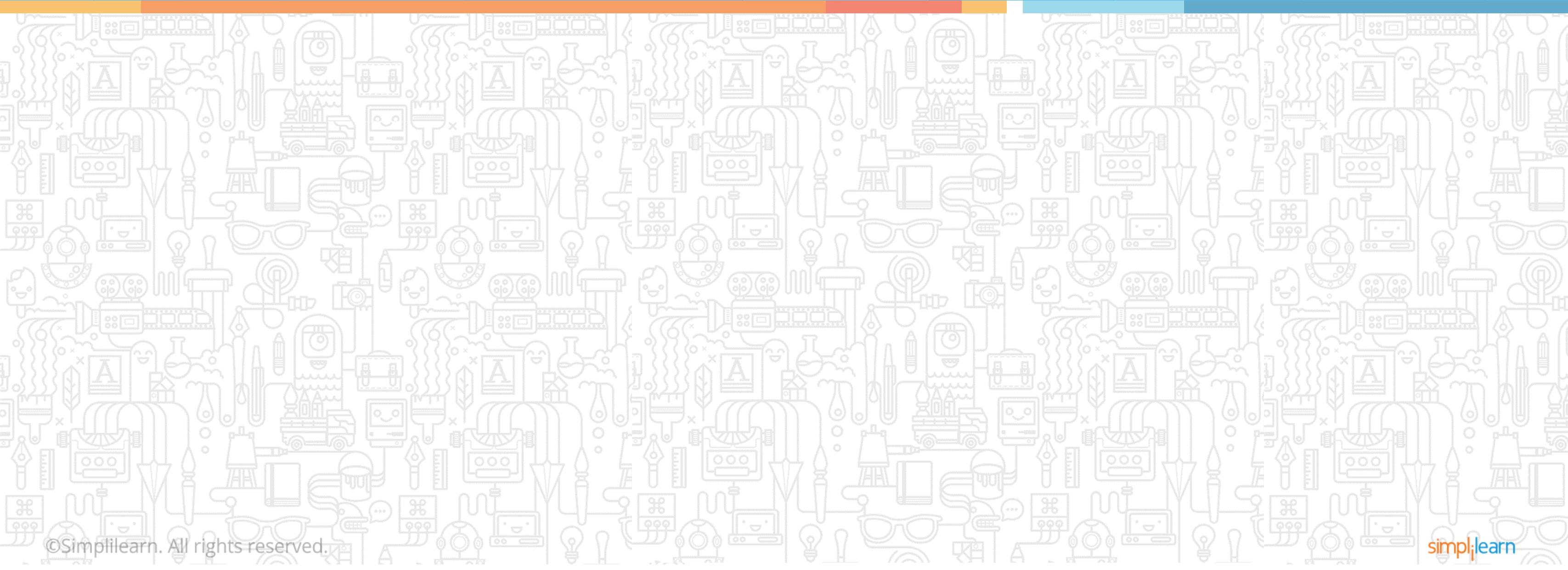
3 In general, software development methodologies fall into two approaches—predictive and adaptive. A hybrid methodology may also be used.

5 When creating a change, IT initiatives frequently discover new enhancements, functionality, or technical approaches.

7 The business analyst works with business stakeholders to plan, develop, and execute user acceptance tests, or UATs, to ensure the solution meets their needs.

# **Lesson 11: Information Technology Perspective**

## **Topic 11.7: Case Study Exercise**



# CASE STUDY

## OVERVIEW – CURRENT STATE

John is a business analyst in the travel industry for the last 10 years. Over a period of time, customer expectations in the travel industry have changed.

Today's customers expect online, 24 x 7 customer support, instant ticket booking, car booking, comprehensive choices, and packaged and customized domestic and international vacation plans for a family group with rock bottom prices.

Recently, there has been a considerable reduction in lead generation and efficiency in lead conversion due to the legacy system and lack of digital marketing.



## CASE STUDY

---

### OVERVIEW – FUTURE STATE

It's important to align business and IT strategy to the competition in the travel industry market.

The business objective is to retain existing customers and increase sales by increasing lead conversion. Business problems have been analyzed, alternative solutions explored, and it has been agreed on by the key stakeholders to implement a commercial-off-the-shelf, or COTS, solution for digital and social marketing.

The COTS needs to be customized and integrated with the existing IT systems. Part of the solution is to build an integrated platform to integrate existing IT systems and some external systems with the COTS solution.



# CASE STUDY

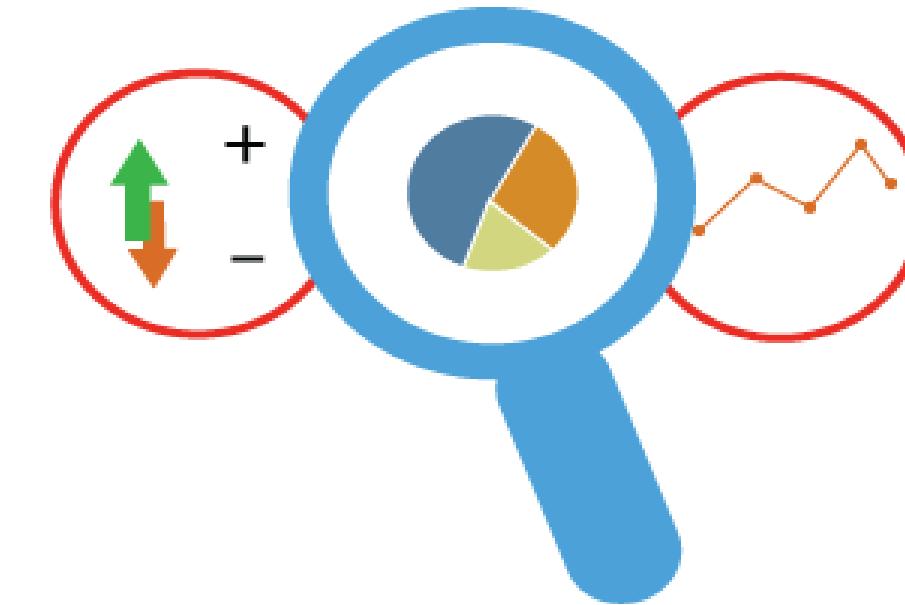
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## BUSINESS ANALYSIS ACTIVITIES

The project team follows the predictive approach to build the integrated platform. The new solution is also expected to impact sales and marketing processes.

Existing processes have been analyzed and “To-Be” processes are defined to leverage some of the advanced capabilities of the COTS solution and to minimize customization.

The initiative is focused on customization, administration, training, and integration of the COTS solution.



Analysis and process definition

# CASE STUDY

---

## BUSINESS ANALYSIS ACTIVITIES

Paul is an IT business analyst focused on integration work, whereas John works on the process changes and other transition requirements.

John is working with a COTS representative in order to define an implementation approach and user trainings. Paul, along with the COTS representative and the technical team, is working to understand and define integration requirements.

Paul and John are also working with the stakeholders to plan, develop, and execute user acceptance tests to ensure that the solution meets their needs.



# CASE STUDY

## EXERCISE

|   | Questions                                                                                                              | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Which one of these is not a valid potential risk in this case study?                                                   | <ul style="list-style-type: none"><li><input type="radio"/> Additional process changes required based on the change initiated</li><li><input type="radio"/> COTS software may not be stable or may not perform as expected</li><li><input type="radio"/> Mandatory data required for the integration may not be available</li><li><input type="radio"/> Additional trainings may be required</li></ul>                                                                                                                             |
| 2 | Which underlying competency is most crucial for business analysts practicing in an IT environment?                     | <ul style="list-style-type: none"><li><input type="radio"/> Technical skills</li><li><input type="radio"/> System thinking</li><li><input type="radio"/> Negotiation skills</li><li><input type="radio"/> Organizational skills</li></ul>                                                                                                                                                                                                                                                                                          |
| 3 | Which capability of the COTS solution is most important to be considered as one of acceptance and evaluation criteria? | <ul style="list-style-type: none"><li><input type="radio"/> Reporting capability</li><li><input type="radio"/> Social marketing capability</li><li><input type="radio"/> Email marketing capability</li><li><input type="radio"/> Integration capability</li></ul>                                                                                                                                                                                                                                                                 |
| 4 | Which of these activities is least likely to be performed as part of solution evaluation?                              | <ul style="list-style-type: none"><li><input type="radio"/> User training</li><li><input type="radio"/> User acceptance training</li><li><input type="radio"/> Assess solution limitations</li><li><input type="radio"/> Assess solution performance</li></ul>                                                                                                                                                                                                                                                                     |
| 5 | Which of the following is not a valid assumption in the case study?                                                    | <ul style="list-style-type: none"><li><input type="radio"/> Process business analysts can integrate their work with the IT business analysts</li><li><input type="radio"/> The COTS representative has experience in customizing and implementing the COTS system</li><li><input type="radio"/> Existing IT systems are delivering value and have the data required for the COTS system</li><li><input type="radio"/> The implementation team has the required skill set to integrate the IT system with the COTS system</li></ul> |

## CASE STUDY

## ANSWERS

|   | Questions                                                                                                                                                                                 | Response                                                                                           |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1 | Which one of these is not a valid potential risk in this case study?                                                                                                                      | Additional trainings may be required                                                               |
| 2 | Which underlying competency is most crucial for business analysts practicing in an IT environment?                                                                                        | System thinking                                                                                    |
| 3 | Which models are used to understand the current data management<br>Which capability of the COTS solution is most important to be considered as one of acceptance and evaluation criteria? | Integration capability                                                                             |
| 4 | Which of the following activities is least likely to be performed as part of solution evaluation?                                                                                         | User training                                                                                      |
| 5 | Which of the following is not a valid assumption in the case study?                                                                                                                       | The implementation team has the required skill set to integrate the IT system with the COTS system |



**QUIZ**

1

**What are the three factors to be considered while performing business analysis tasks in the information technology environment?**

- a. Breadth of Change, Depth of Change, Delivery Approach
- b. Solution Impact, Organizational Maturity, Change Scope
- c. Solution Impact, Organizational Capabilities, Change Scope
- d. Proposed solution, Existing IT systems, Change Scope



**QUIZ**

1

**What are the three factors to be considered while performing business analysis tasks in the information technology environment?**

- a. Breadth of Change, Depth of Change, Delivery Approach
- b. Solution Impact, Organizational Maturity, Change Scope
- c. Solution Impact, Organizational Capabilities, Change Scope
- d. Proposed solution, Existing IT systems, Change Scope



The correct answer is

**b.**

**Explanation: Solution Impact, Organizational Maturity, and Change Scope are the three factors to be considered while performing business analysis tasks in the information technology environment.**

**QUIZ****2****Which of the following is NOT a valid assumption?**

- a. Business analysts working in another perspective can integrate their work with the work in an IT business analysis perspective.
- b. Existing business capabilities and processes are delivering value using IT systems.
- c. IT systems should be upgraded every three years.
- d. IT system change is driven by business need or technological development.



**QUIZ****2****Which of the following is NOT a valid assumption?**

- a. Business analysts working in another perspective can integrate their work with the work in an IT business analysis perspective.
- b. Existing business capabilities and processes are delivering value using IT systems.
- c. IT systems should be upgraded every three years.
- d. IT system change is driven by business need or technological development.



The correct answer is

**c.**

**Explanation:** While the other three assumptions apply to business analysis work in the IT environment, the assumption that IT systems should be upgraded every three years is not applicable in the IT environment.

**QUIZ****3**

**Which of the following underlying competencies is most crucial for business analysts practicing in an IT environment?**

- a. Technical skills
- b. Facilitation skills
- c. Negotiation skills
- d. System thinking



**QUIZ****3**

**Which of the following underlying competencies is most crucial for business analysts practicing in an IT environment?**

- a. Technical skills
- b. Facilitation skills
- c. Negotiation skills
- d. System thinking



The correct answer is

**d.**

**Explanation: System thinking is the most crucial competency for business analysts practicing in an IT environment.**

**QUIZ****4**

**For which of the following is requirements documentation least useful?**

- a. For the business to verify and validate the requirements
- b. For the developers to design the solution
- c. For the testers to measure the solution's performance
- d. For operations to maintain the solution



**QUIZ****4**

**For which of the following is requirements documentation least useful?**

- a. For the business to verify and validate the requirements
- b. For the developers to design the solution
- c. For the testers to measure the solution's performance
- d. For operations to maintain the solution



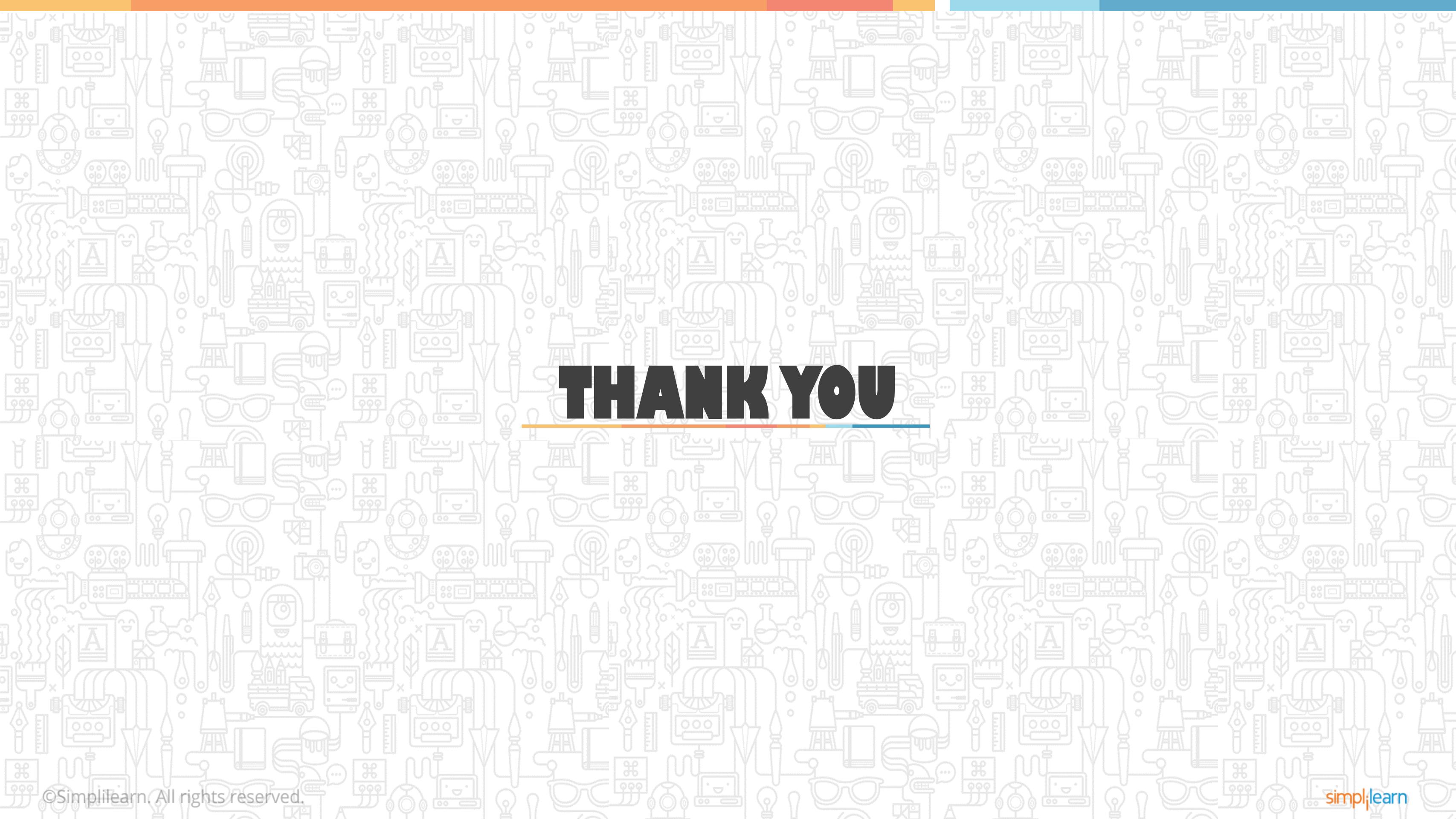
The correct answer is **d.**

**Explanation:** Requirements documentation is least useful for operations to maintain the solution.



**This concludes “Information Technology Perspective.”**

The next lesson is “Business Architecture Perspective.”



# THANK YOU

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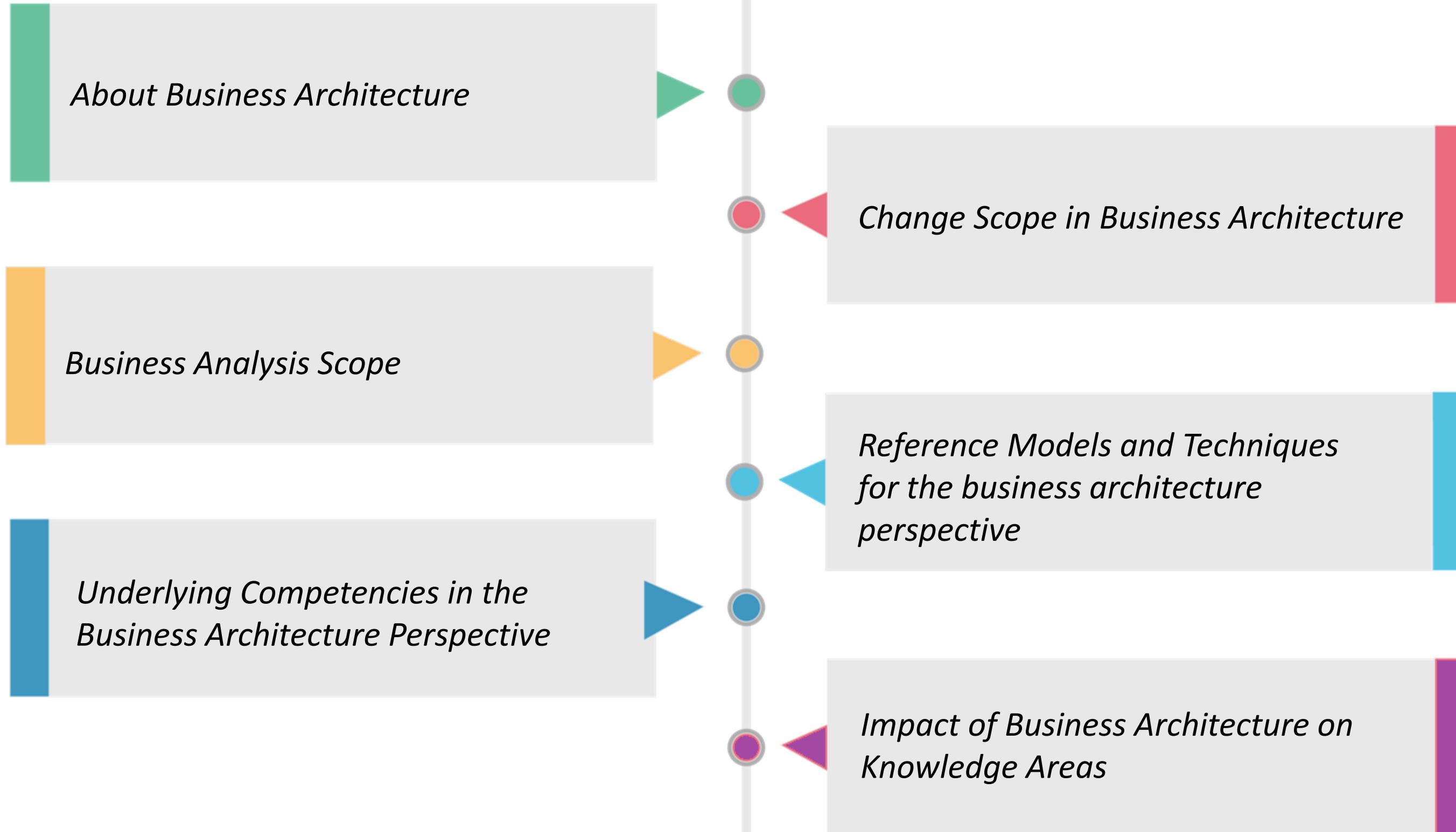
# **CBAP® Exam Preparation Course**

## Lesson 12 – Business Architecture Perspective



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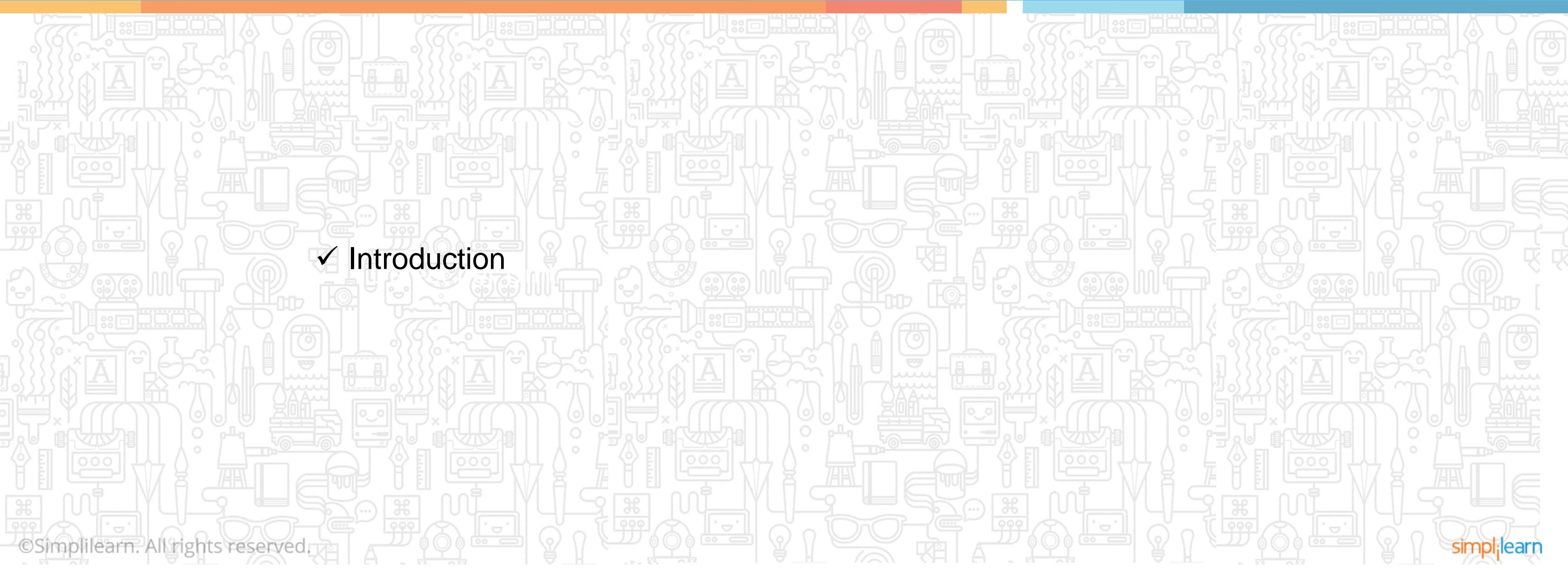
# WHAT'S IN IT FOR ME



# Lesson 12: Business Architecture Perspective

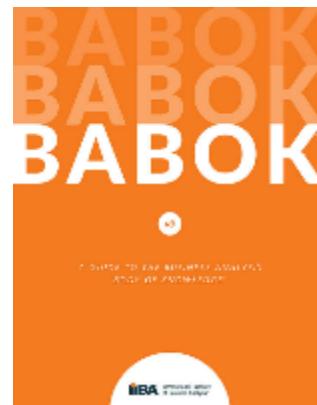
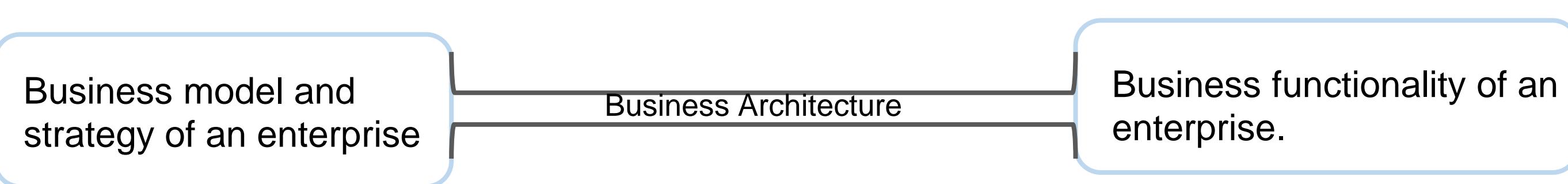
## Topic 12.1: Introduction

✓ Introduction



# INTRODUCTION

It is a blueprint of the enterprise that provides a common understanding of the organization and is used to align strategic objectives and tactical demands.



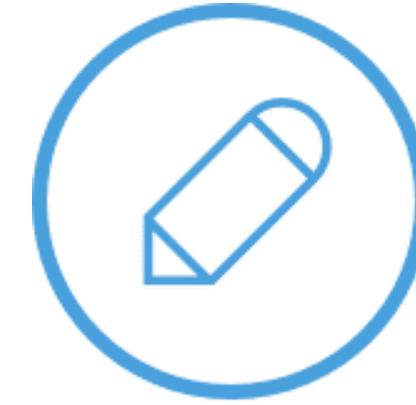
BABOK ® V3.0



Entire Enterprise



Concerns and Context



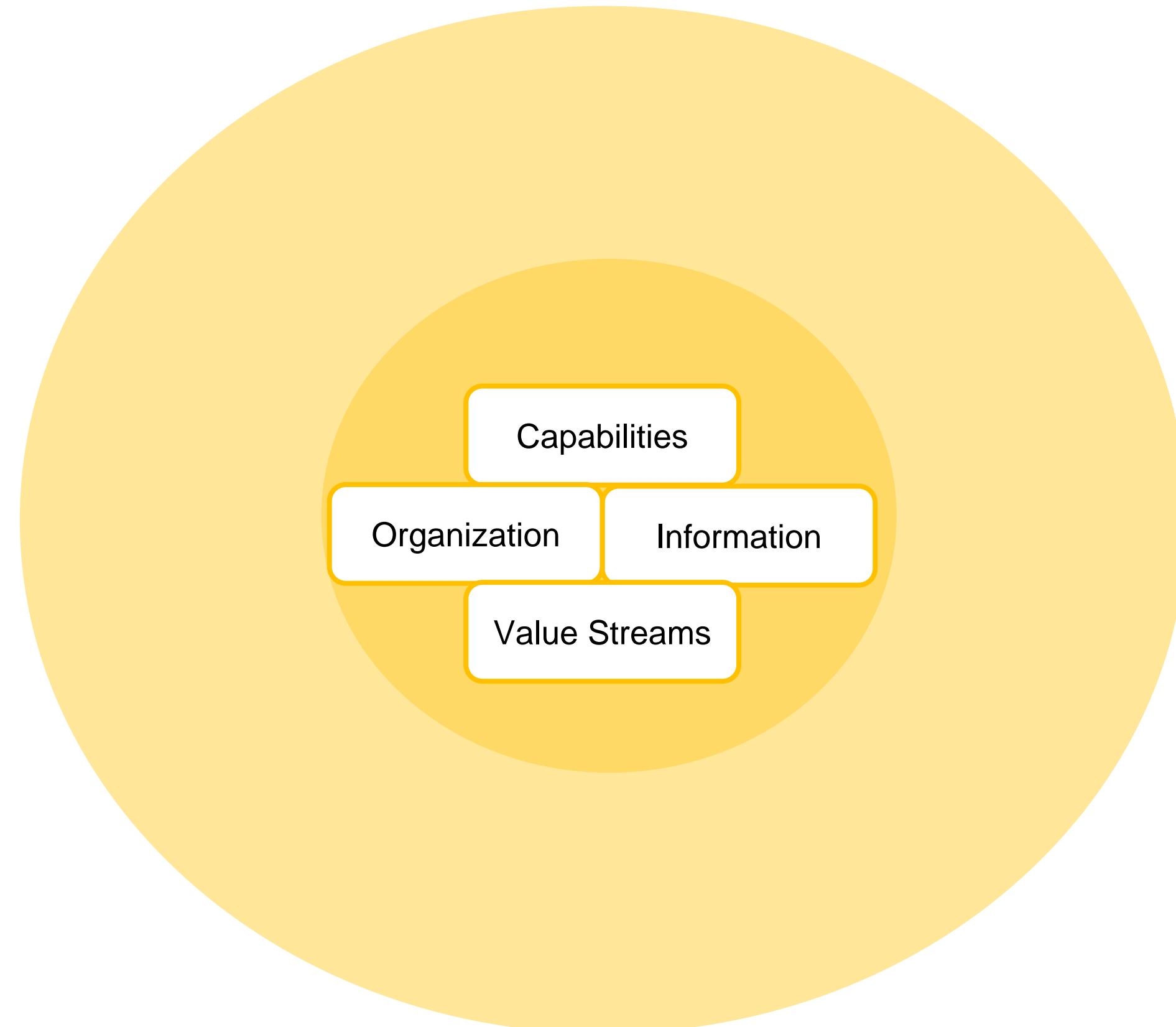
Scenario Driven



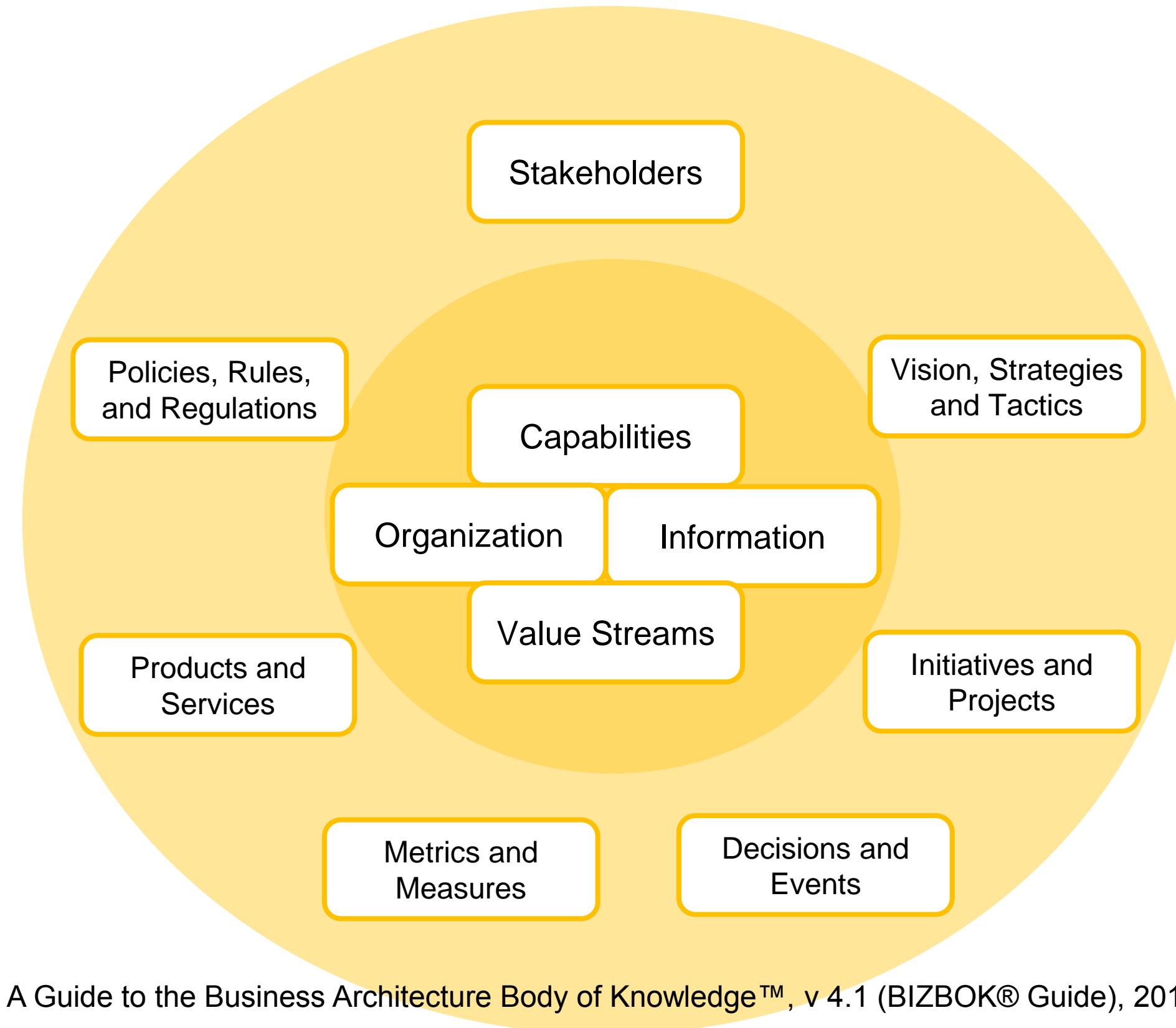
Knowledge Based

# INTRODUCTION

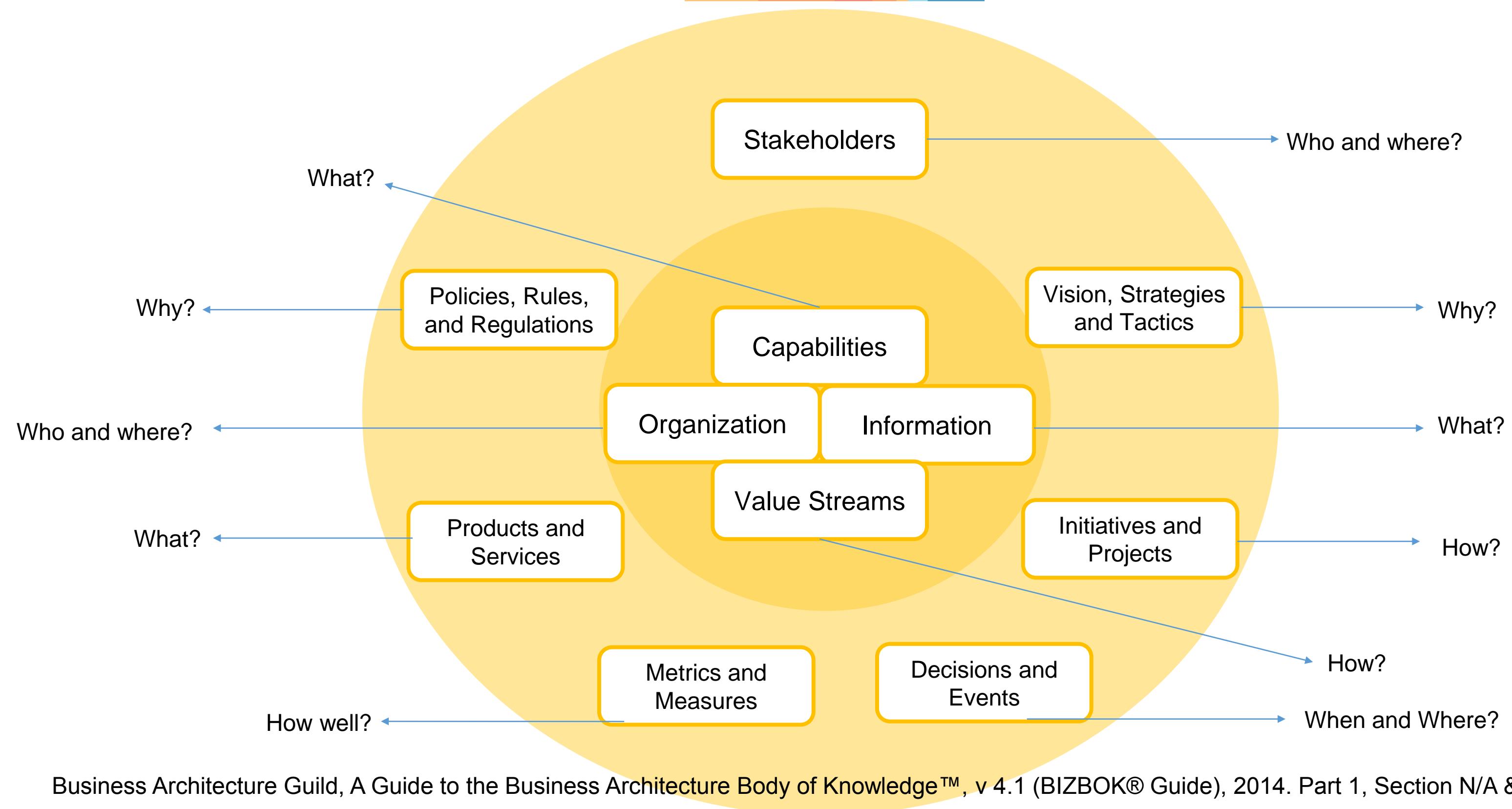
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# INTRODUCTION (contd.)



# INTRODUCTION (contd.)



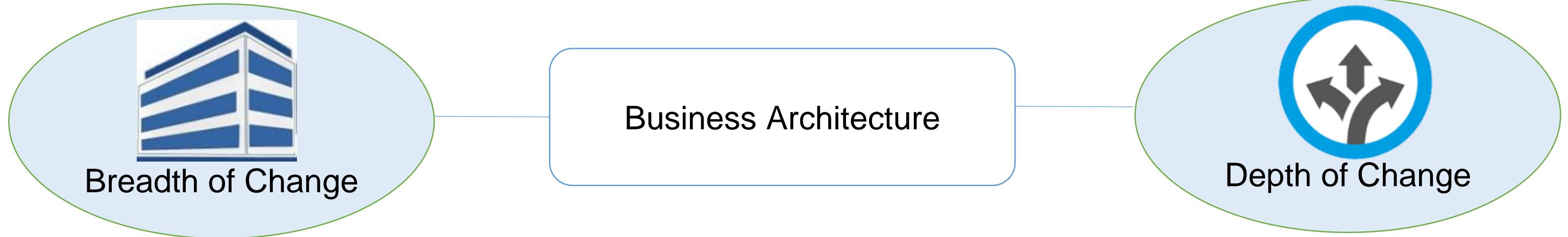
# Lesson 12: Business Architecture Perspective

## Topic 12.2: Change Scope

- ✓ What is change scope in the business architecture perspective
- ✓ Breadth and Depth of change
- ✓ Delivery approach
- ✓ Major assumptions for business analysis work

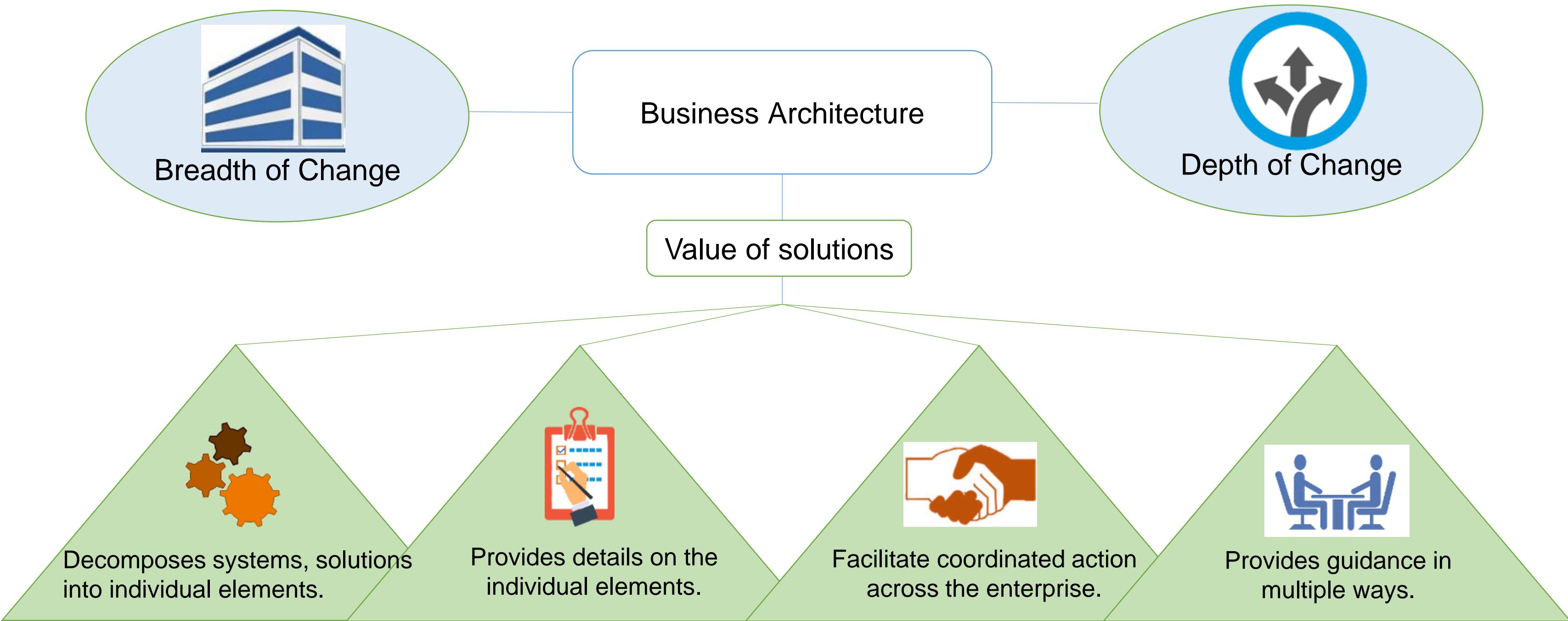
# CHANGE SCOPE

## BREADTH AND DEPTH AND VALUE OF SOLUTIONS



# CHANGE SCOPE (contd.)

## BREADTH AND DEPTH AND VALUE OF SOLUTIONS



## CHANGE SCOPE DELIVERY APPROACH



Provides an insight into the organisation's alignment with its strategy.



Current, Future and more transition states may be defined.



Important role played by business architects in communicating and innovating the org. strategy.



- Support of executive leadership.
- Integration with ongoing initiatives.
- Integration with effective governance processes.



Delivery Approach

# CHANGE SCOPE

## MAJOR ASSUMPTIONS



# **Lesson 12: Business Architecture Perspective**

## **Topic 12.3: Business Analysis Scope**

✓ Business Analysis Scope



# BUSINESS ANALYSIS SCOPE

## CHANGE SPONSOR AND CHANGE TARGETS

### Change Sponsor



Senior Executive/  
Business Owner

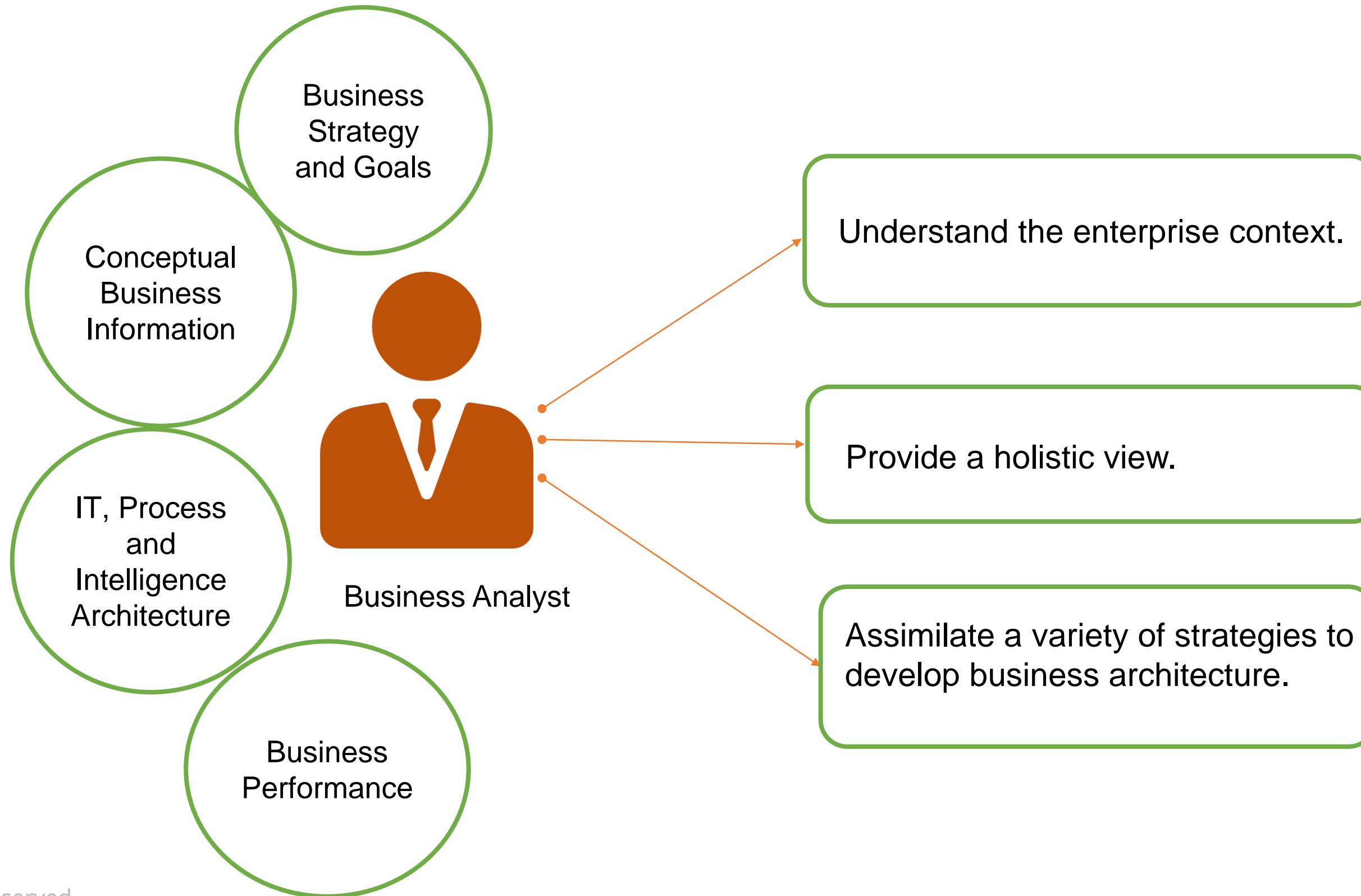
### Change Targets



- Business Capabilities
- Business Value Streams
- Initiative Plans
- Investment Decisions
- Portfolio Decisions

# BUSINESS ANALYSIS SCOPE

## BUSINESS ANALYSIS POSITION



# BUSINESS ANALYSIS SCOPE

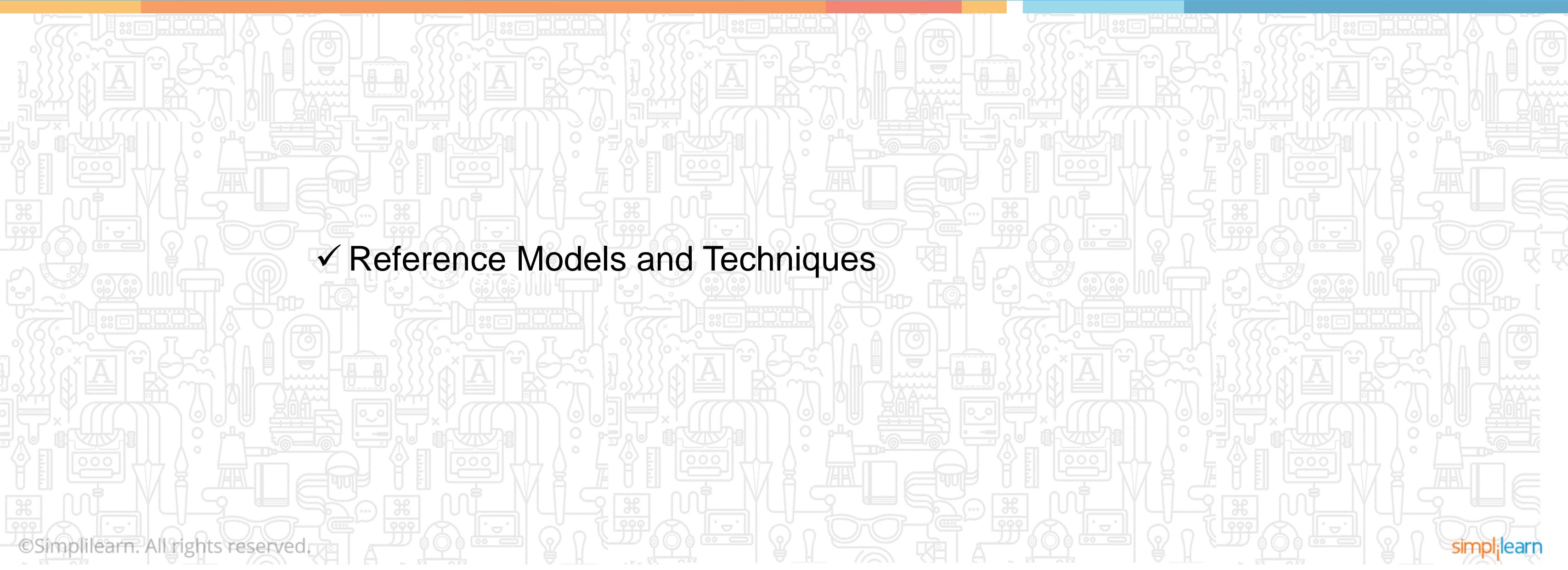
## BUSINESS ANALYSIS OUTCOMES

| Scope                                                                                                     | Purpose                                                                                                                                             | Models and Blueprints                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>Provide a broad scope and a holistic view of the business</li></ul> | <ul style="list-style-type: none"><li>Aligns the organization to its strategy</li><li>Helps plan the change in execution of the strategy.</li></ul> | <ul style="list-style-type: none"><li>Business capability maps</li><li>Value stream maps</li><li>Organization maps</li><li>Business information concepts</li><li>High level process architecture</li><li>Business motivation models</li></ul> |

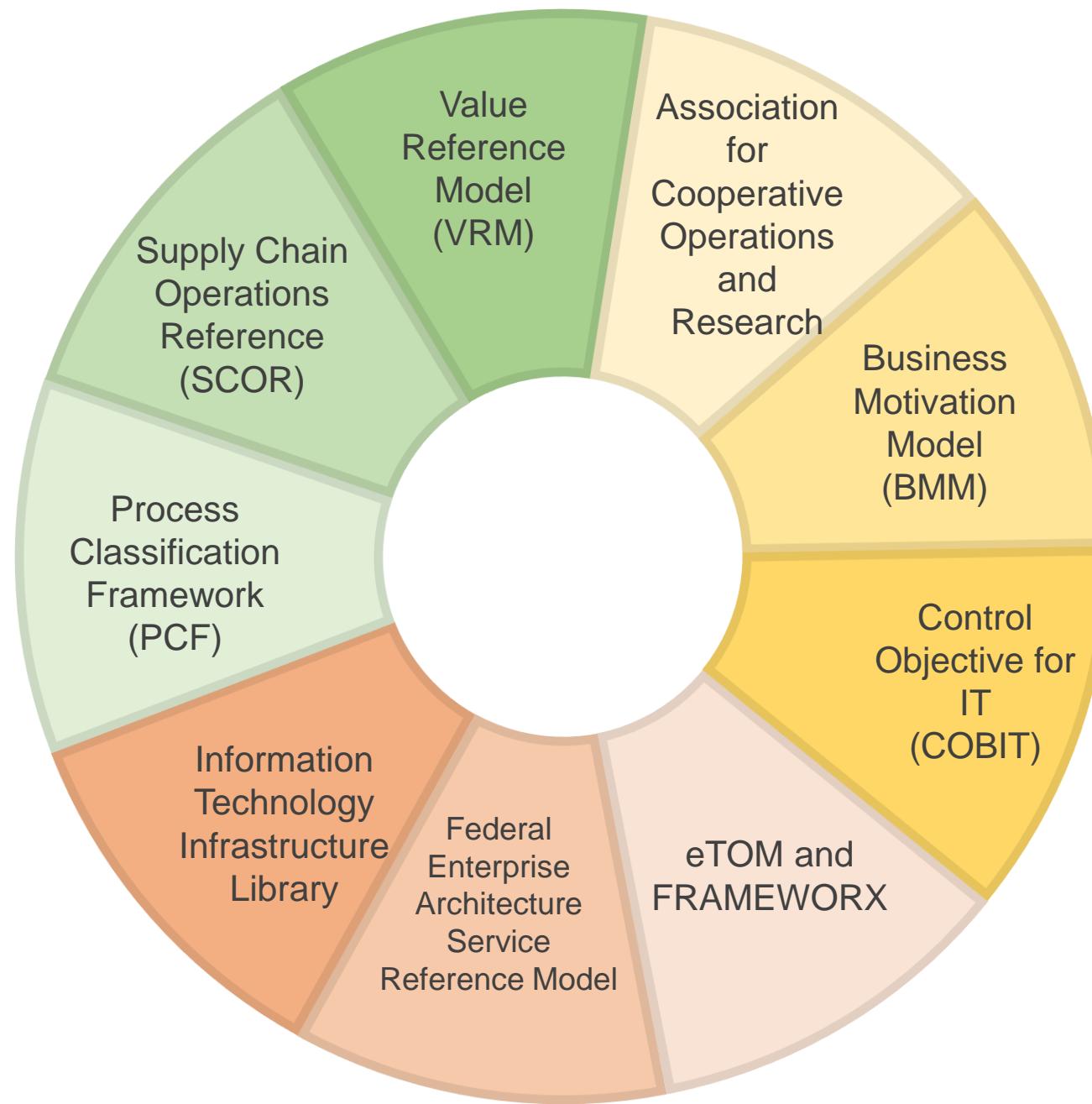
# **Lesson 12: Business Architecture Perspective**

## **Topic 12.4: Reference Models and Techniques**

✓ Reference Models and Techniques

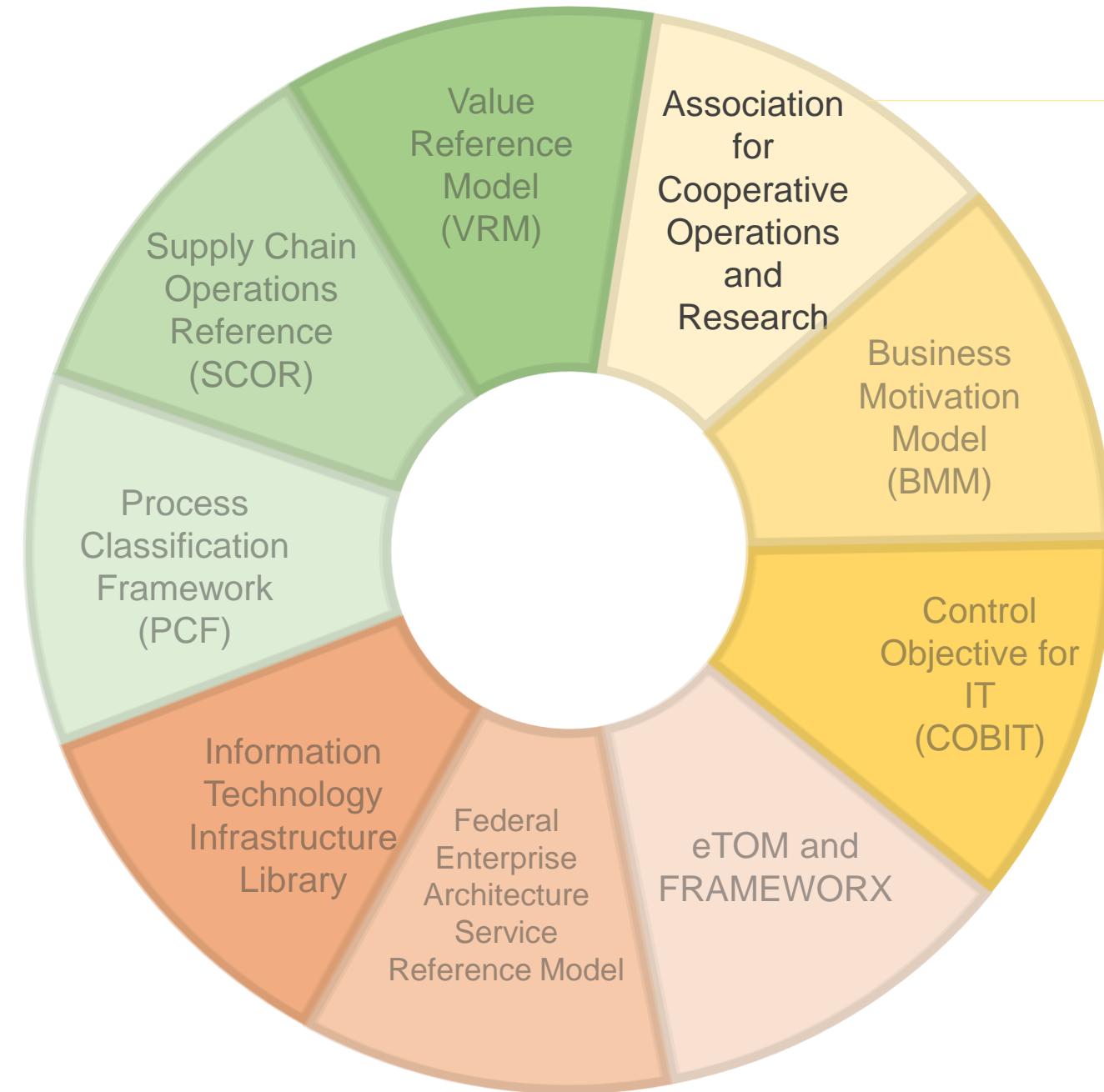


# BUSINESS ARCHITECTURE REFERENCE MODELS



# BUSINESS ARCHITECTURE REFERENCE MODELS

## ASSOCIATION FOR COOPERATIVE OPERATIONS AND RESEARCH (ACORD)



The ACORD Reference Architecture is a series of five interrelated industry models, or facets, that use different views to define the nature of the insurance industry.

<https://www.acord.org/standards/framework/Pages/default.aspx>

# BUSINESS ARCHITECTURE REFERENCE MODELS

## ASSOCIATION FOR COOPERATIVE OPERATIONS AND RESEARCH (ACORD)

### Business Glossary

It contains standardized definitions of insurance concepts.

### Capability Model

It defines a baseline for the components of that industry and in particular what the insurance companies need to do based on the company's capabilities.

### Component Model

It is a set of reusable component templates for the various data services in the insurance industry, organized based on the components described in the other business models for the industry.

### Data Model

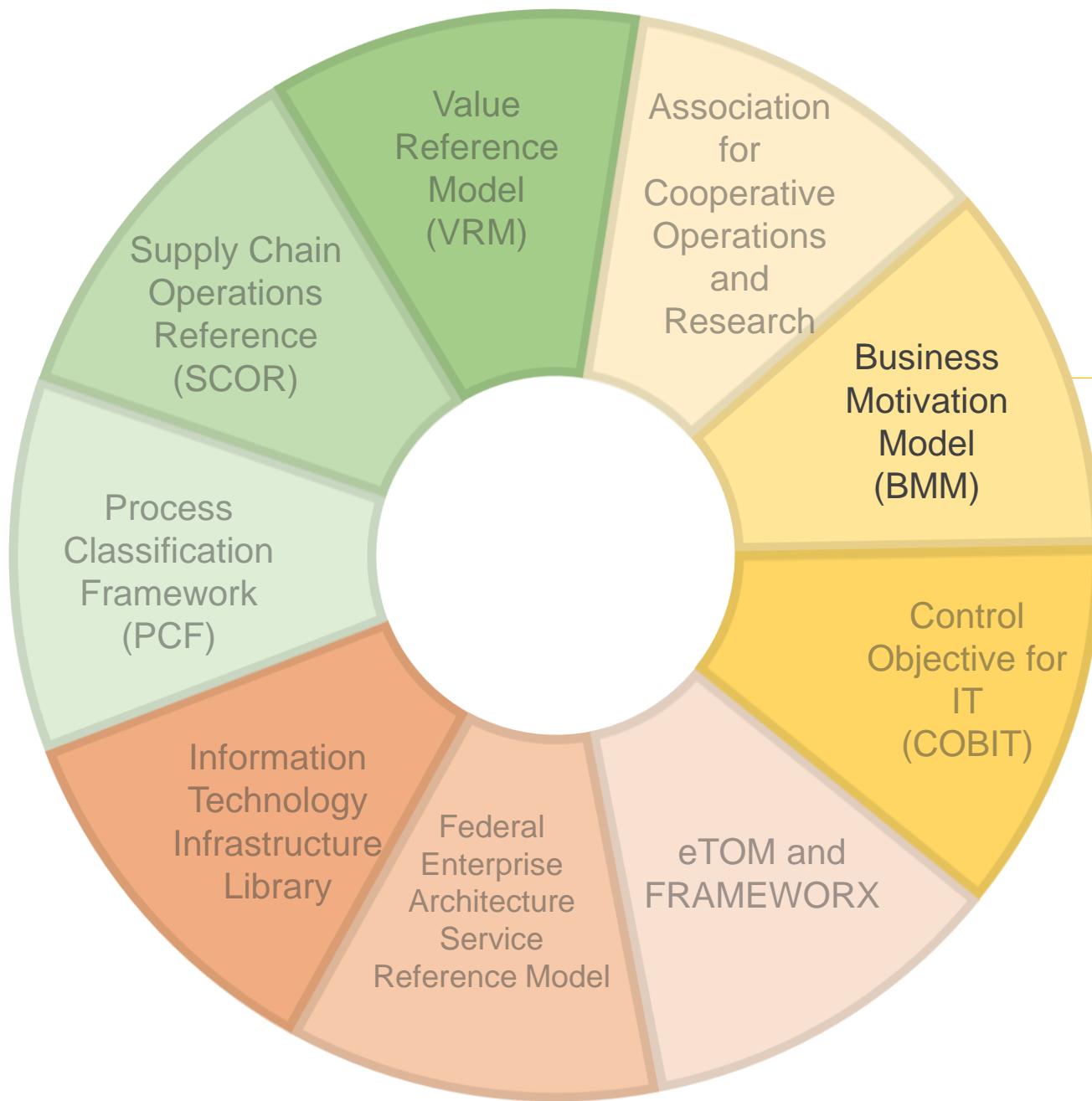
It is a logical level entity-relationship model that can be utilized in any database implementation. Some of the many uses of the ACORD Data Model include designing physical data models, data warehouses, or validating your own data models. It is generated from the Information Model.

### Information Model

It provides the relationships among insurance concepts, such as Policy, Product, Party, and Claims.

# BUSINESS ARCHITECTURE REFERENCE MODELS

## BUSINESS MOTIVATION MODEL (BMM)



It was initially developed by Business Rule Group (BRG) provides a scheme or structure for developing, communicating, and managing business plans in an organized manner. Now BMM specifications are maintained by Object Management Group (OMG).

# BUSINESS ARCHITECTURE REFERENCE MODELS (contd.)

## BUSINESS MOTIVATION MODEL (BMM)

Ends

It is what the business wants to accomplish.

Means

It specifies how the business intends to accomplish its ends.

Directives

These are the business rules and policies that constrain or limit the available means.

Influencers

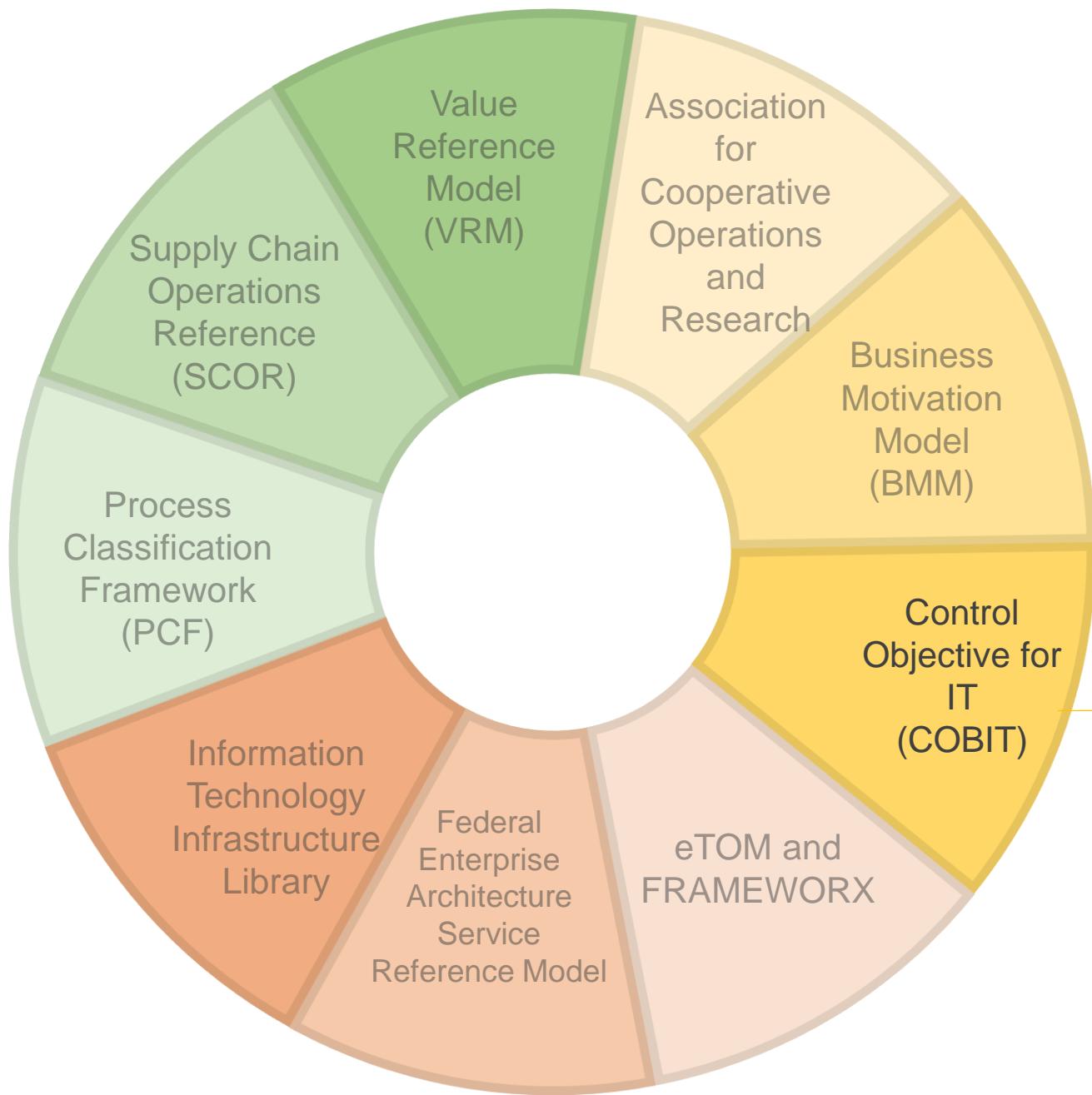
These can cause changes that affect the organization's use of its means or achievement of its ends.

Assessment

It is the judgment of an Influencer that affects the organization's ability to use its means or achieve its ends.

# BUSINESS ARCHITECTURE REFERENCE MODELS

## CONTROL OBJECTIVE FOR IT



- It is a good-practice framework created by international professional association ISACA for information technology (IT) management and IT governance. It provides an implementable "set of controls over information technology and organizes them around a logical framework of IT-related processes and enablers.
- The COBIT 5 framework for the governance and management of enterprise IT is a leading-edge business optimization and growth roadmap that leverages proven practices, global thought leadership and ground-breaking tools to inspire IT innovation and fuel business success.

# BUSINESS ARCHITECTURE REFERENCE MODELS (contd.)

## CONTROL OBJECTIVE FOR IT

### Framework

It organizes IT governance objectives and good practices by IT domains and processes and links them to business requirements.

### Process Descriptions

It is a reference process model and common language for everyone in an organization.

### Control Objectives

They provide a complete set of high-level requirements to be considered by management for effective control of each IT process.

### Management Guidelines

These help assign responsibility, agree on objectives, measure performance, and illustrate interrelationship with other processes..

### Maturity Models

They assess maturity and capability per process and helps to address gaps.

Audit and Assurance

Risk Management

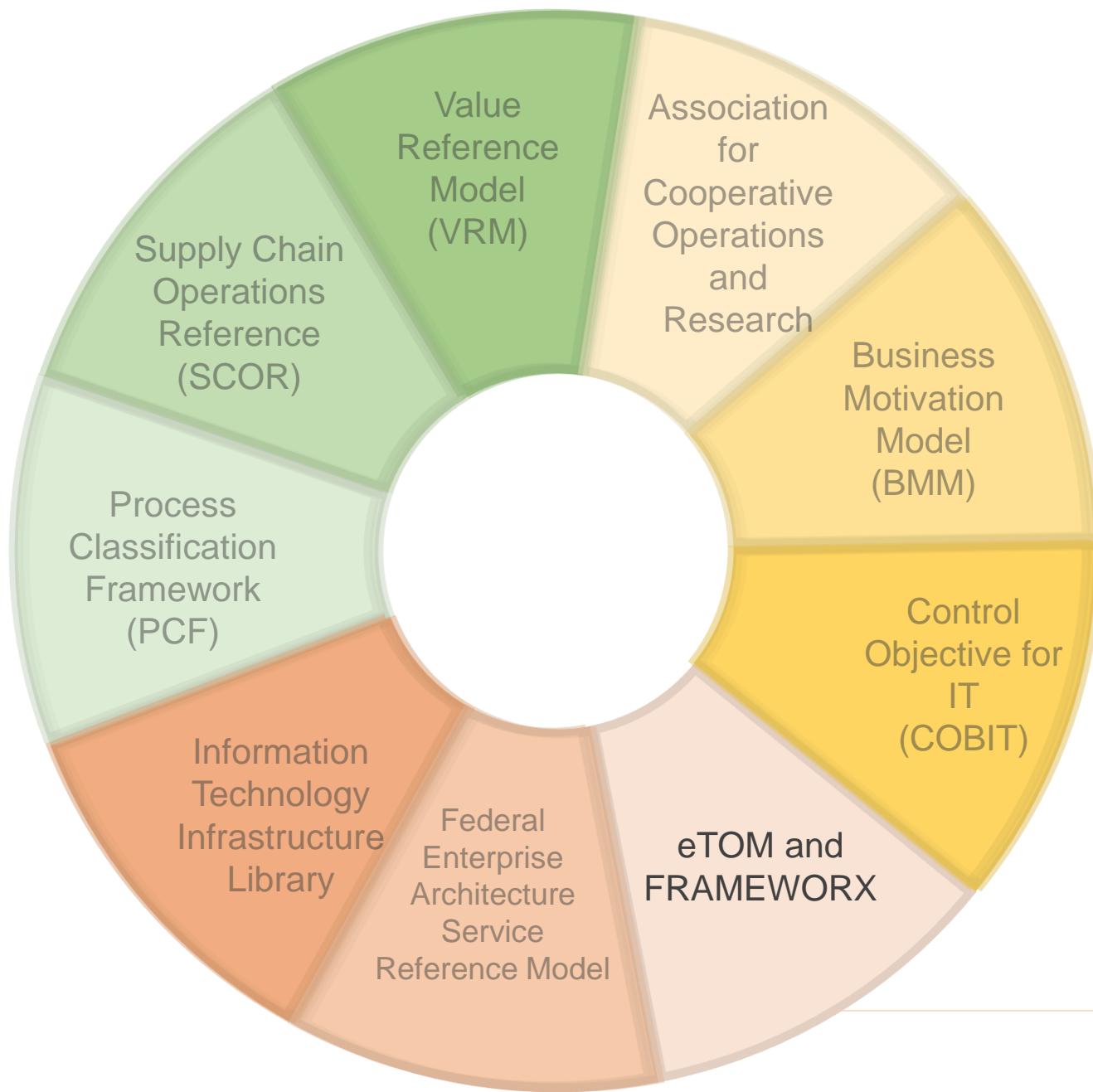
Information Security

Regulatory and  
Compliance

Governance of  
Enterprise IT

# BUSINESS ARCHITECTURE REFERENCE MODELS

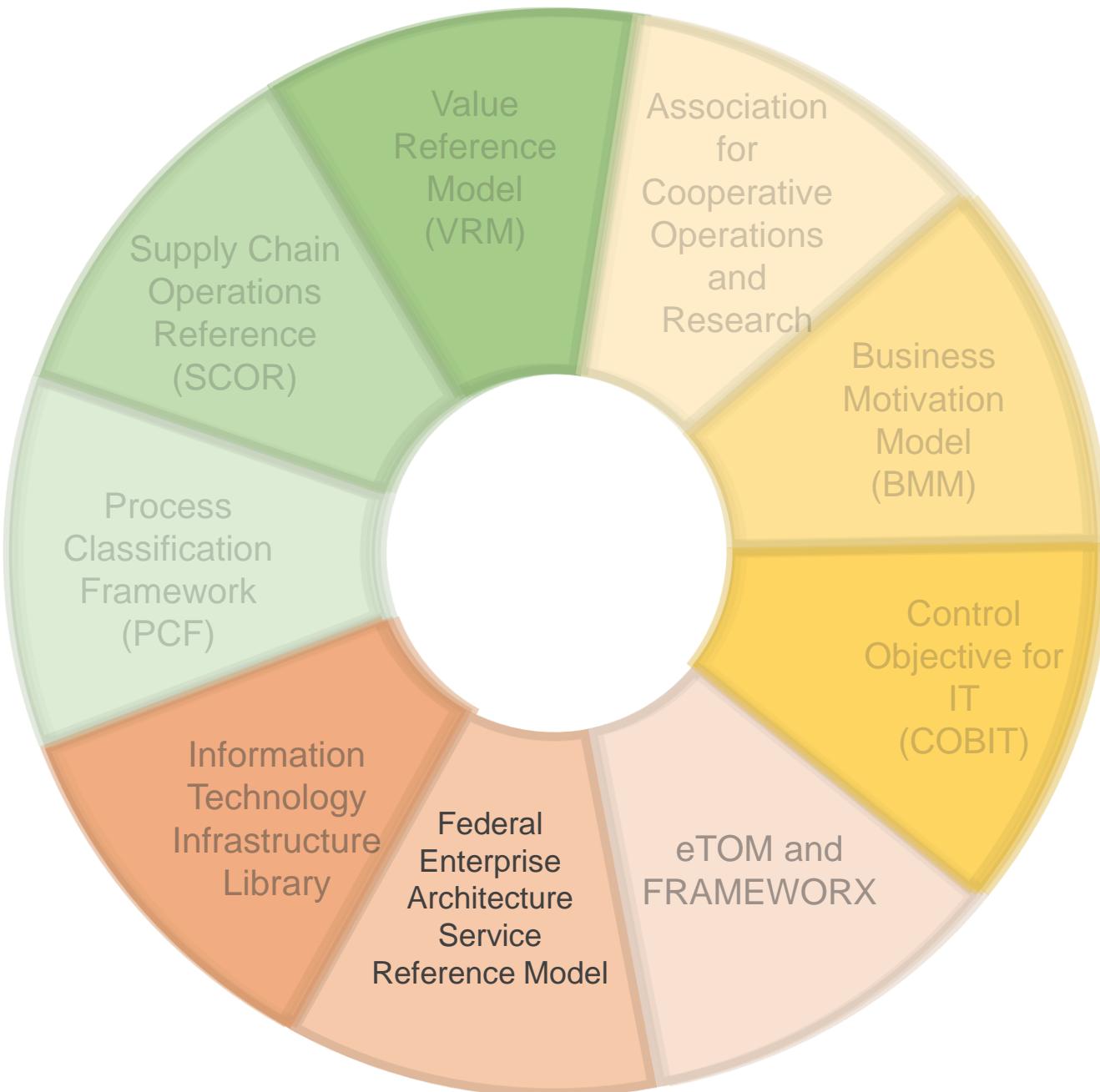
## eTOM and FRAMEWORK



- The Business Process Framework (eTOM) is a critical component of Frameworkx for enabling successful business transformation.
- It is a comprehensive, industry-agreed, multi-layered view of the key business processes required to run an efficient, effective and agile digital enterprise.
- ICT enterprises can leverage the experiences of the IT service and telecommunications industry in the operations space by simultaneously adopting two of the most successful approaches, ITIL and the Business Process Framework (eTOM).
- Frameworkx is a suite of the best practices and standards which, when adopted enable a service-oriented, highly automated and efficient approach to business operations.

# BUSINESS ARCHITECTURE REFERENCE MODELS

## Federal Enterprise Architecture Service Reference Model (FEASRM)



**A federal enterprise architecture (FEA):**

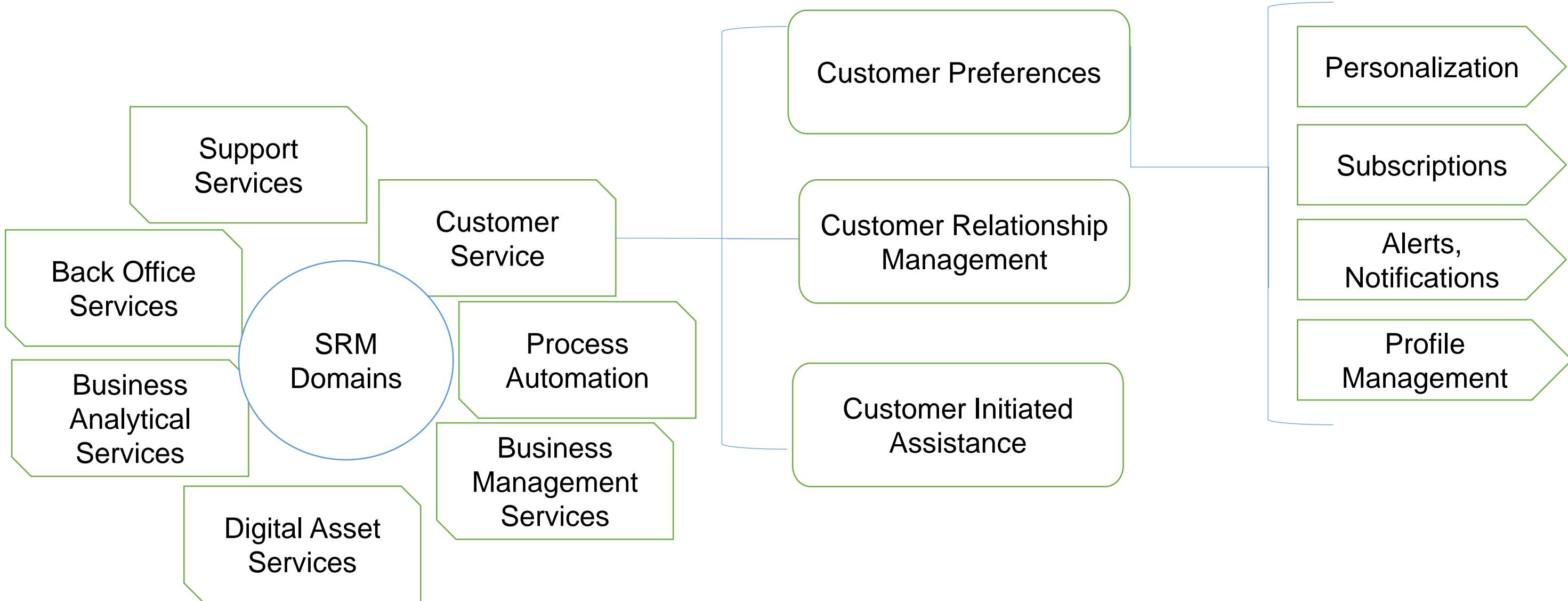
- Is the enterprise architecture of a federal government
- Provides a common approach for the integration of strategic, business and technology management
- Is governed by a set of federal laws and mandates

**The Service Component Reference Model (SRM)** is a business and performance-driven, functional framework that classifies Service Components with respect to how they support business and/or performance objectives.

# BUSINESS ARCHITECTURE REFERENCE MODELS (contd.)

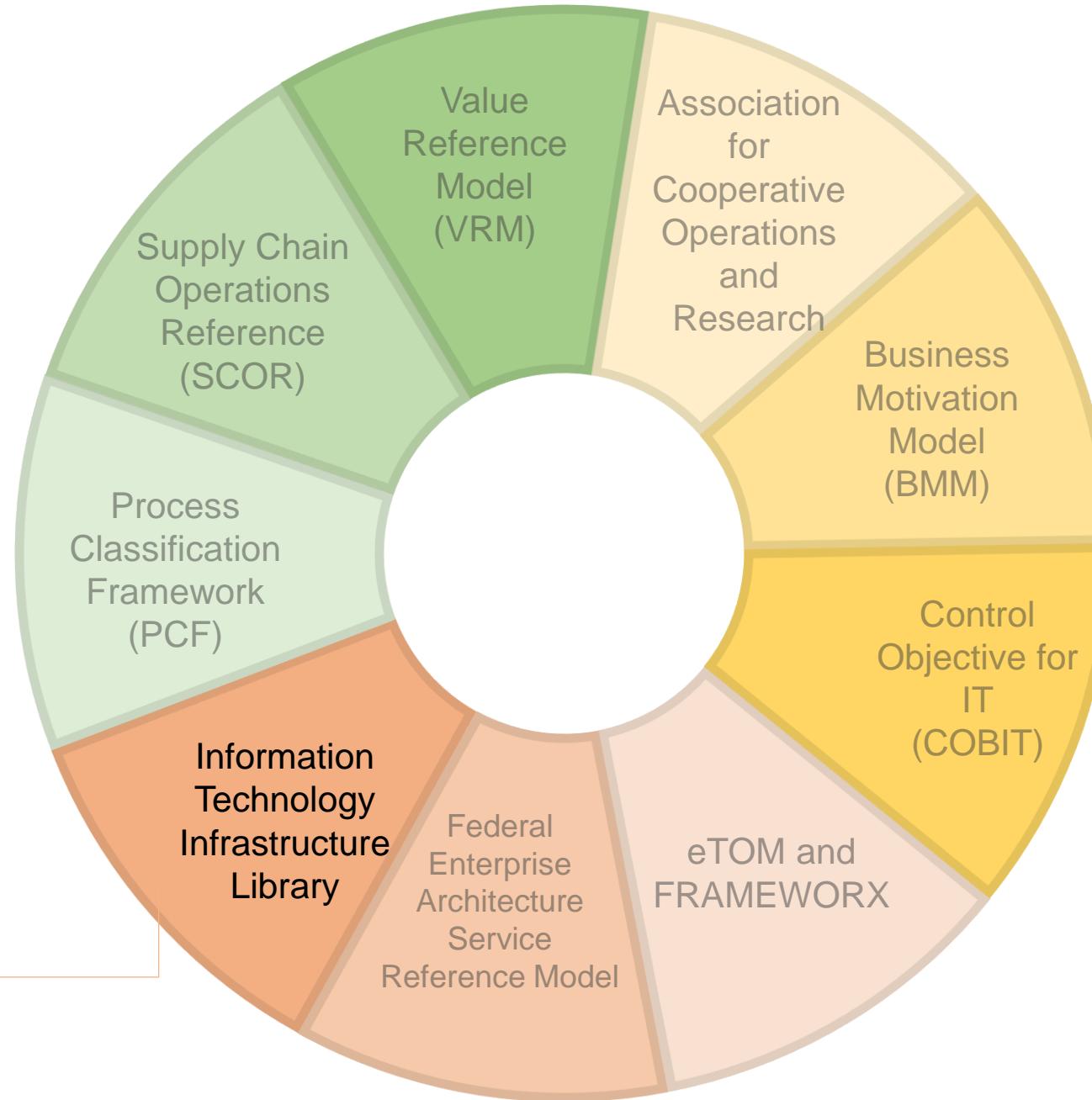
## Federal Enterprise Architecture Service Reference Model (FEASRM)

Service Domain → Service Types → Service Components



# BUSINESS ARCHITECTURE REFERENCE MODELS

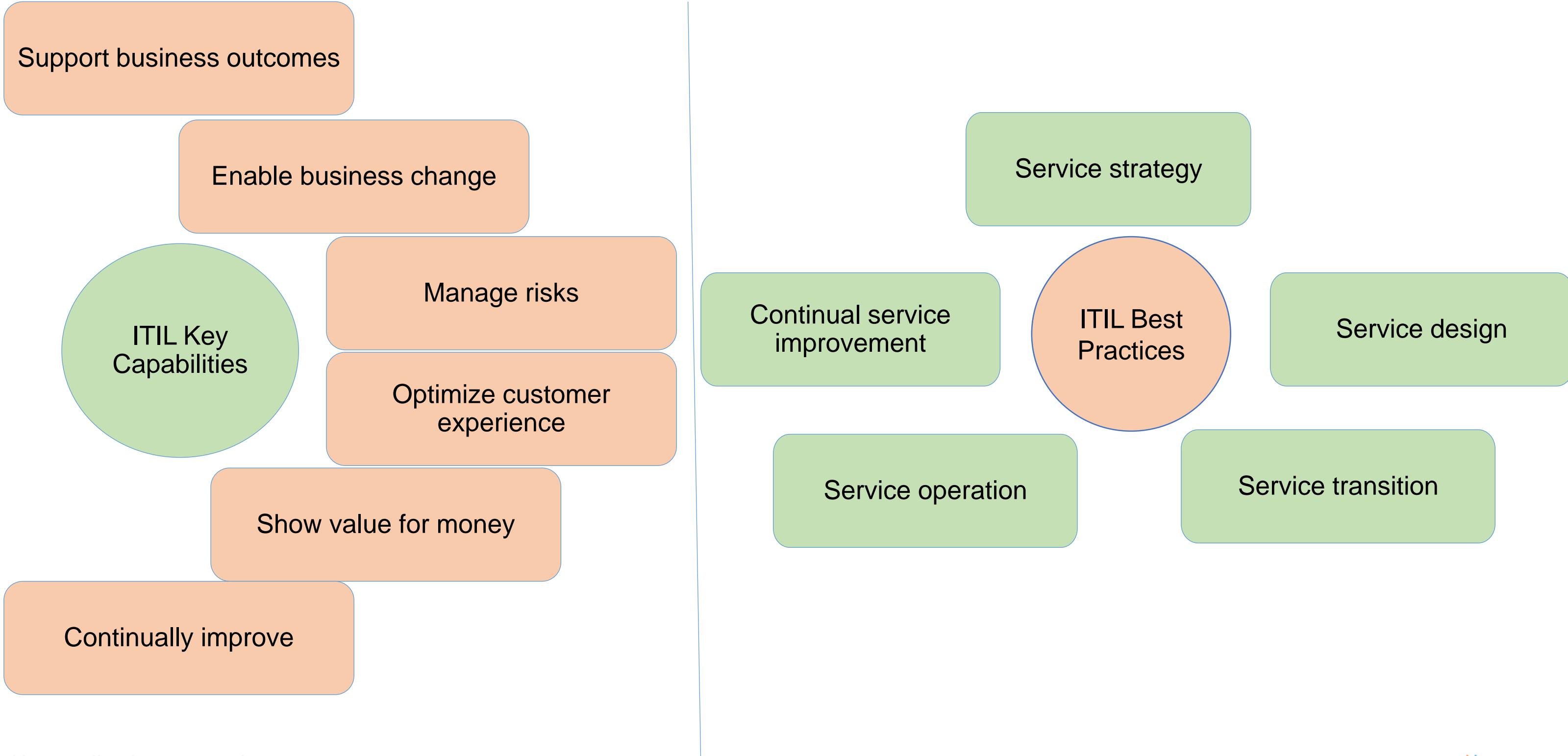
## INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY (ITIL)



Information Technology Infrastructure Library (ITIL) is a widely accepted approach to IT Service Management (ITSM), which has been adopted by individuals and organizations across the world. ITIL provides a cohesive set of best practices, drawn from the public and private sectors internationally.

# BUSINESS ARCHITECTURE REFERENCE MODELS

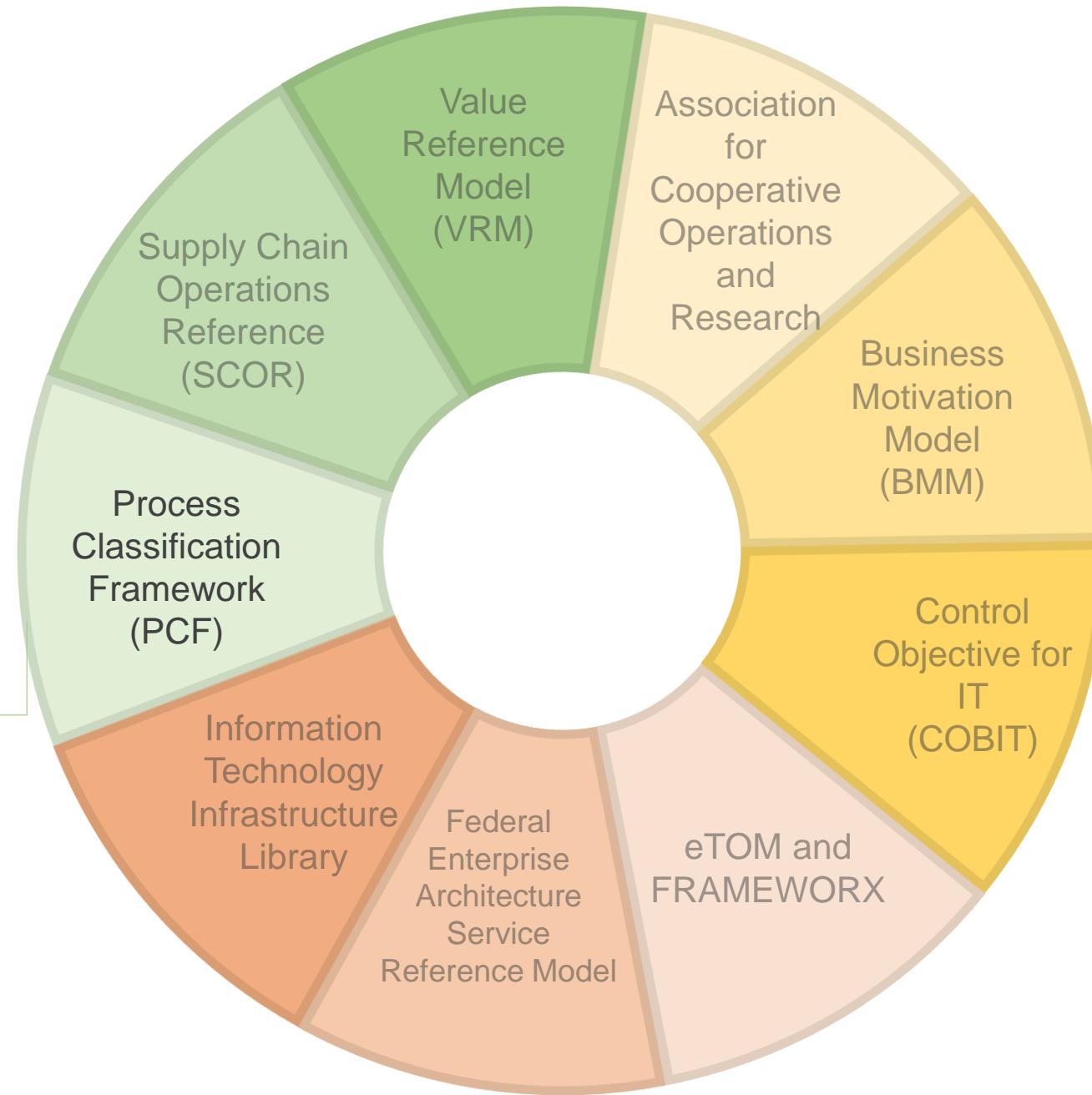
## INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY (ITIL)



# BUSINESS ARCHITECTURE REFERENCE MODELS

## PROCESS CLASSIFICATION FRAMEWORK

APQC's Process Classification Framework®(PCF) is the most used process framework in the world. It creates a common language for organizations to communicate and define work processes comprehensively and without redundancies. Organizations use it to support benchmarking, manage content, and perform other important performance management activities.



# BUSINESS ARCHITECTURE REFERENCE MODELS (contd.)

## PROCESS CLASSIFICATION FRAMEWORK

### Organizations use APQC's PCF to:

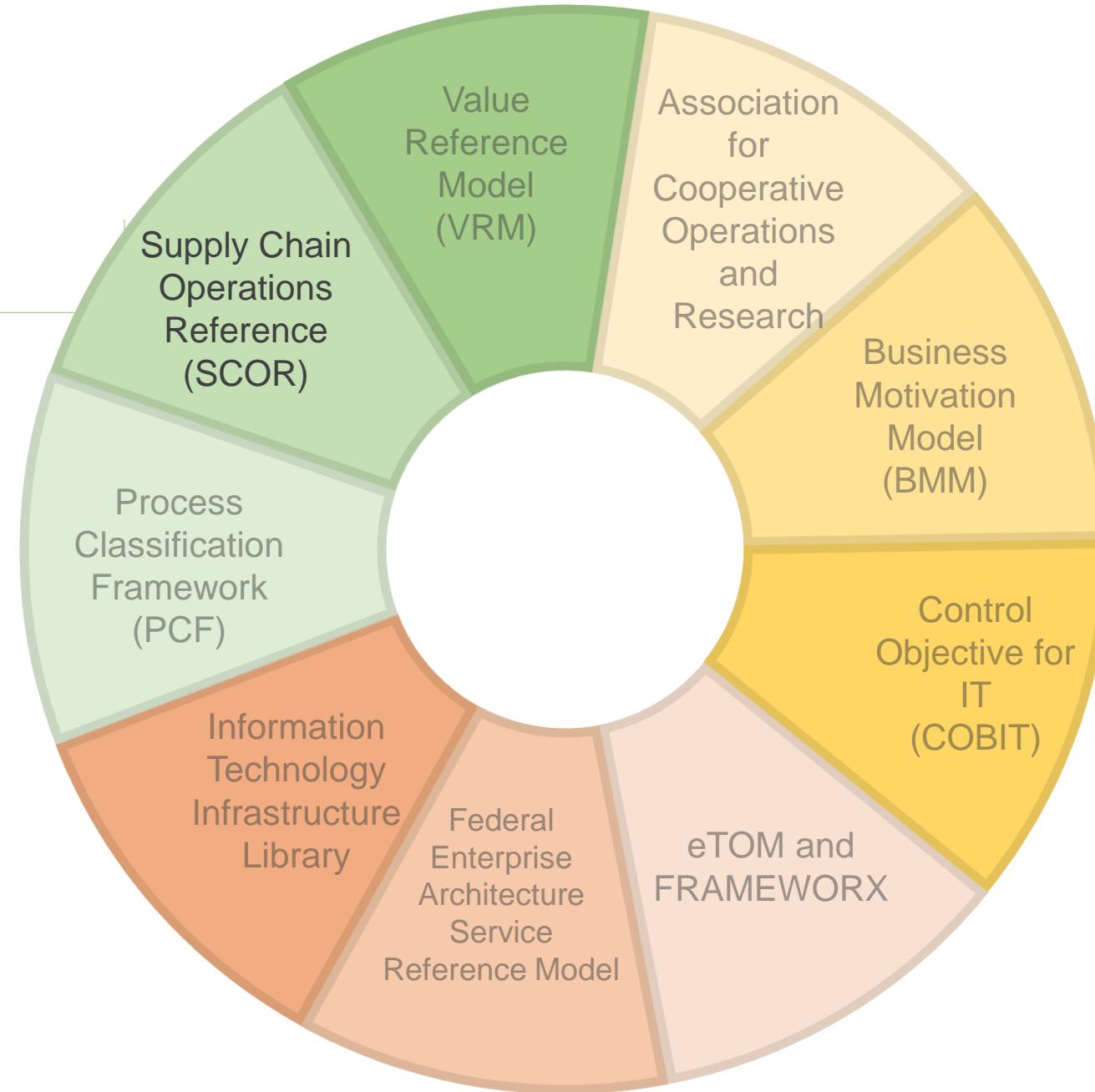
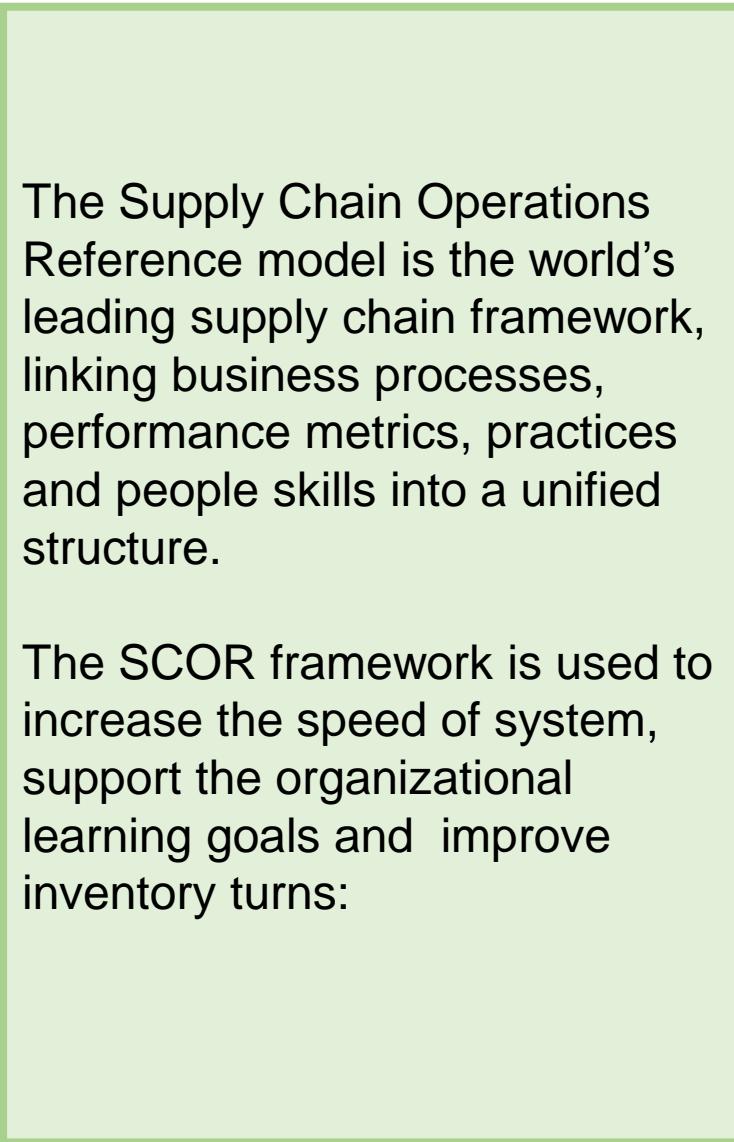
- identify and prioritize improvement efforts,
- define and communicate accountability for business processes that need to be improved,
- benchmark internally as well as with other organizations,
- align IT rollouts and updates for similar processes across the organization,
- establish structure for measuring performance,
- understand dependencies and inter-connections across/between processes, and
- consolidate enterprise content and knowledge.

### PCF is available for:

- Cross-Industry
- Aerospace and Defence
- Airline
- Automotive
- Banking
- Broadcasting
- City Government
- Consumer Electronics
- Consumer Products
- Downstream Petroleum
- Education
- Healthcare
- Insurance
- Life Sciences
- Property and Casualty Insurance
- Retail
- Telecommunications
- Upstream Petroleum
- Utilities

# BUSINESS ARCHITECTURE REFERENCE MODELS

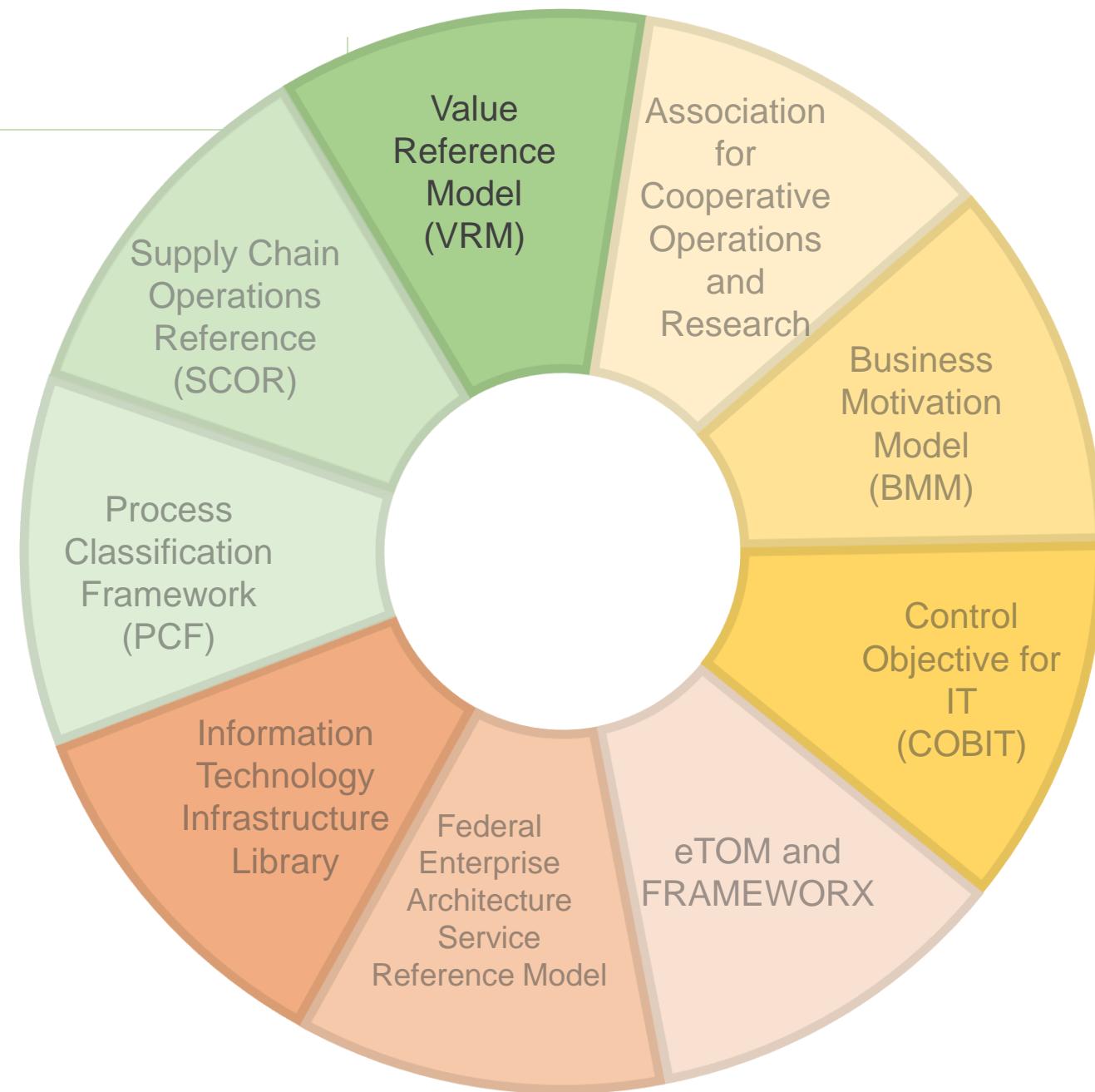
## SUPPLY CHAIN OPERATIONS REFERENCES (SCOR)



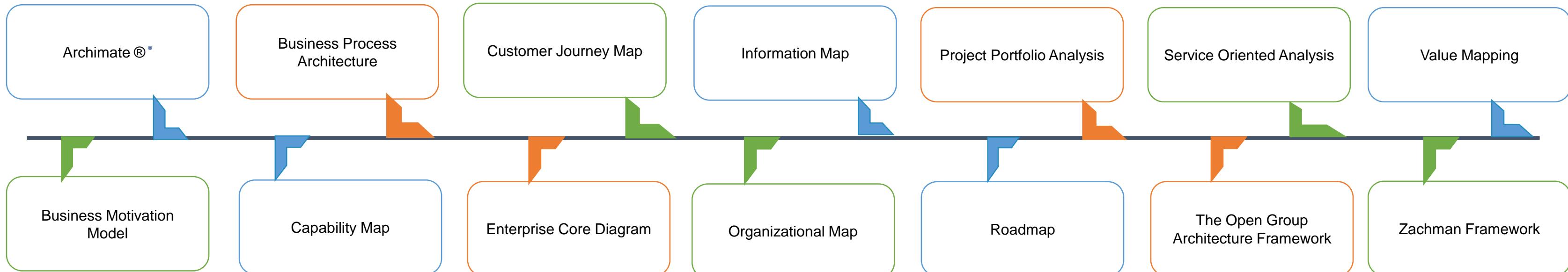
# BUSINESS ARCHITECTURE REFERENCE MODELS

## VALUE REFERENCE MODEL (VRM)

The Value Reference Model (VRM) lists all the categories of processes required to support and enable the value chain execution under Govern and Plan categories. This supports and enables corporations to integrate four critical domains: Enterprise Management, Product Development, Supply Chain Integration and Customer Relationship Management, using one reference model to support the vision of an integrated value chain. The key elements of the standard process VRM dictionary include inputs/outputs, metrics and best practices.



# BUSINESS ARCHITECTURE TECHNIQUES



A business analyst is expected to have knowledge of business architecture technique working on specific initiatives.

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

Archimate ®® visual Modeling leverages the architecture practice and helps in describing and understanding complex systems.

## Archimate ®

Business Process Architecture

Customer Journey Map

Information Map

Project Portfolio Analysis

Service Oriented Analysis

Value Mapping

Business Motivation Model

Capability Map

Enterprise Core Diagram

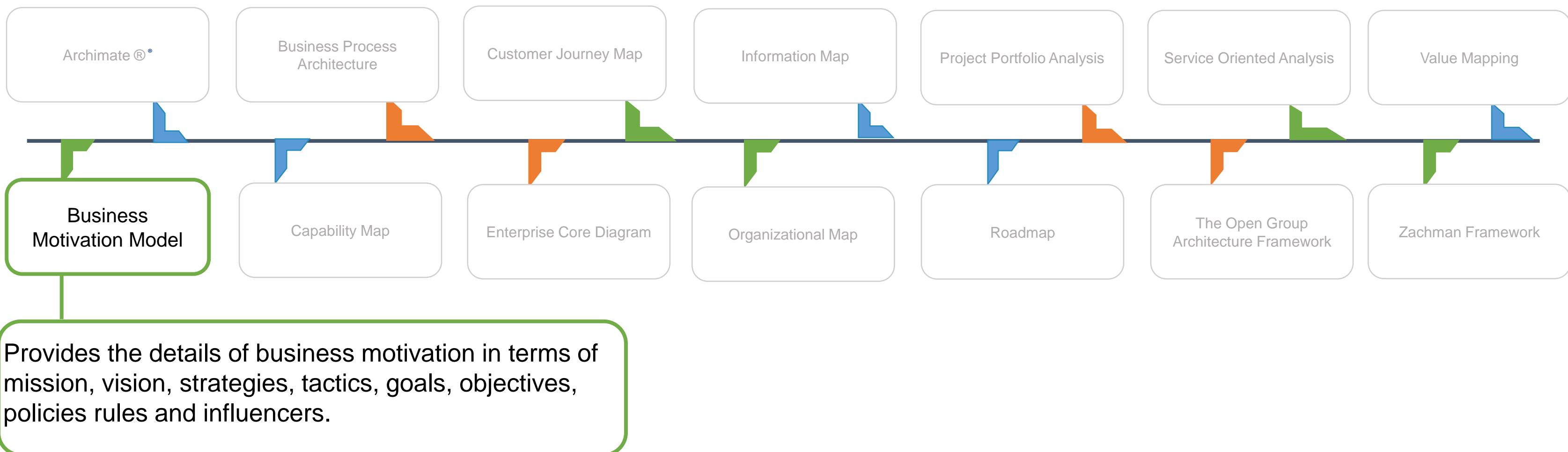
Organizational Map

Roadmap

The Open Group  
Architecture Framework

Zachman Framework

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)



# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

It is the Modeling of the business processes, including the interface points to provide a holistic view of the processes that exists within an organization.

## Business Process Architecture

Archimate ®

Customer Journey Map

Information Map

Project Portfolio Analysis

Service Oriented Analysis

Value Mapping

Business Motivation Model

Capability Map

Enterprise Core Diagram

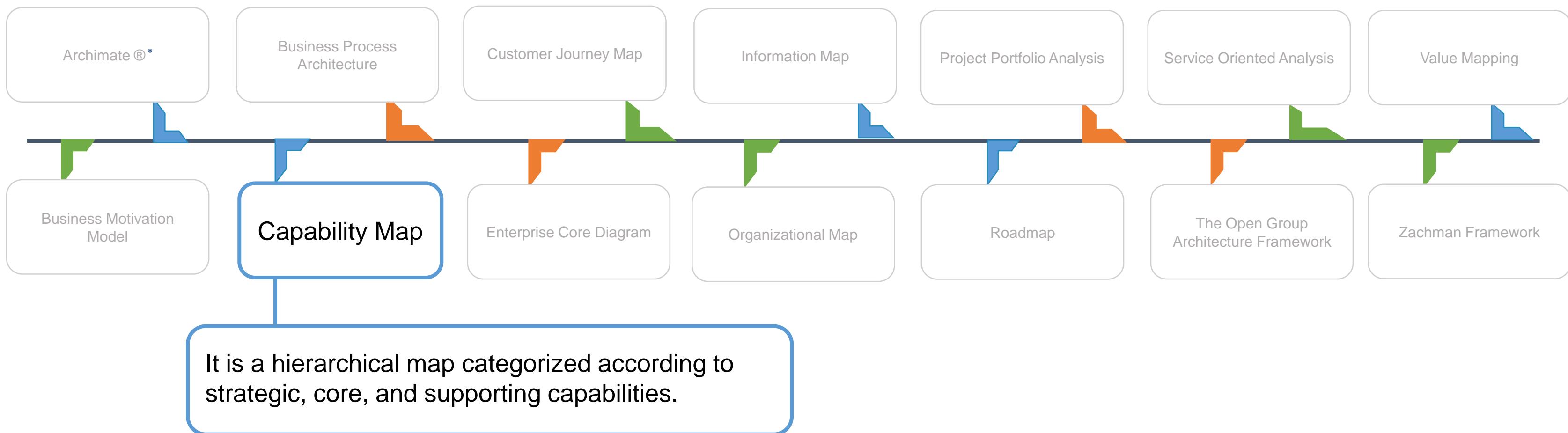
Organizational Map

Roadmap

The Open Group Architecture Framework

Zachman Framework

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)



# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

It is a model that shows the journey of a customer through various touch points in the organization and their engagement with various stakeholders within the service or organization

## Customer Journey Map

Archimate ®

Business Process Architecture

Information Map

Project Portfolio Analysis

Service Oriented Analysis

Value Mapping

Business Motivation Model

Capability Map

Enterprise Core Diagram

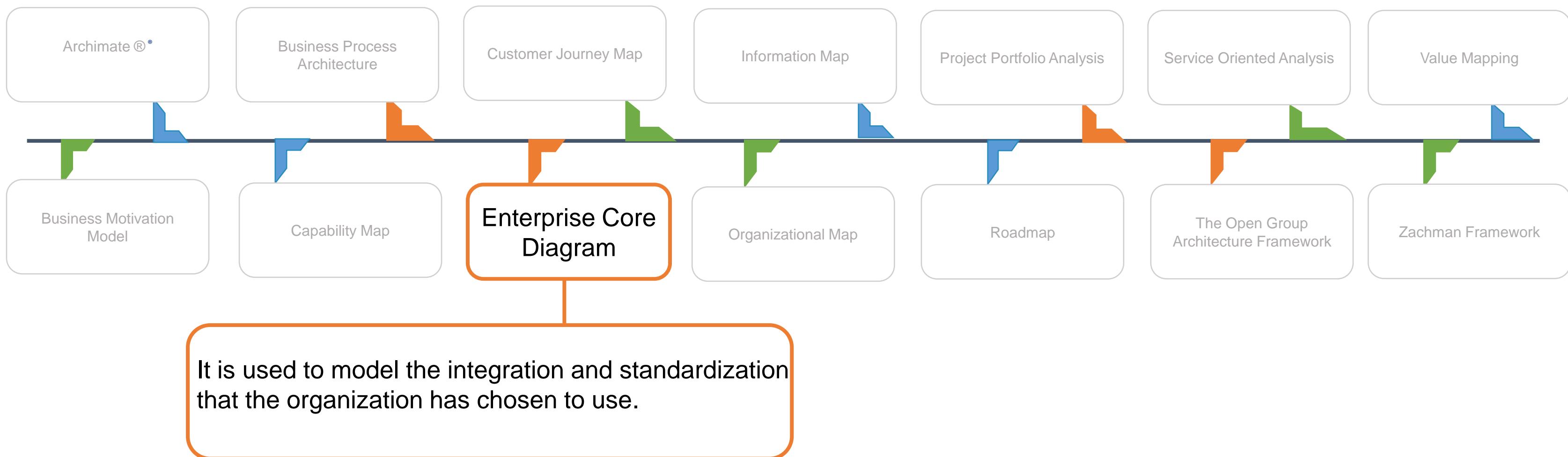
Organizational Map

Roadmap

The Open Group Architecture Framework

Zachman Framework

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)



# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

It is a catalogue of important business concepts associated with the business capabilities and value delivery of the business.

## Information Map

Archimate ®

Business Process Architecture

Customer Journey Map

Business Motivation Model

Capability Map

Enterprise Core Diagram

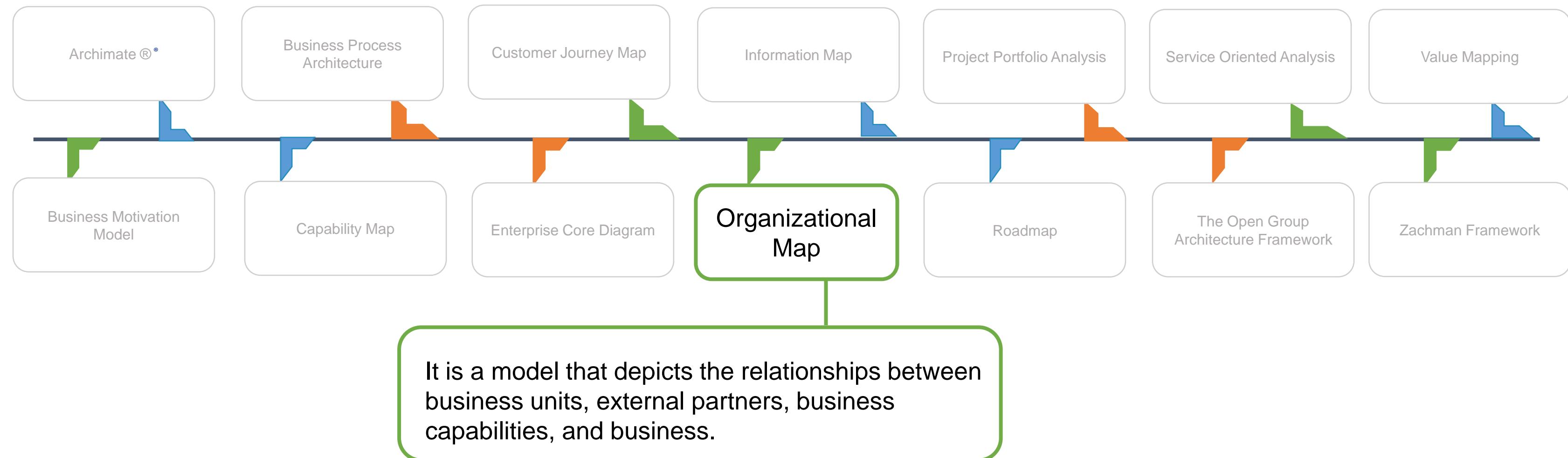
Organizational Map

Roadmap

The Open Group Architecture Framework

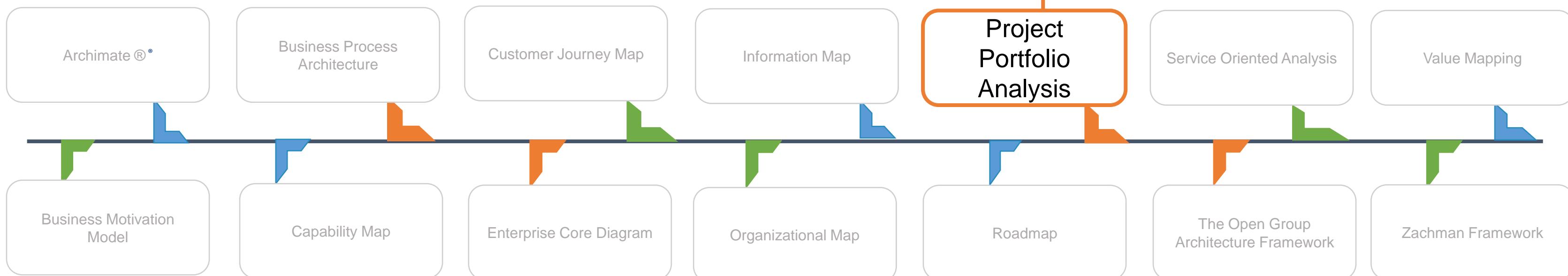
Zachman Framework

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

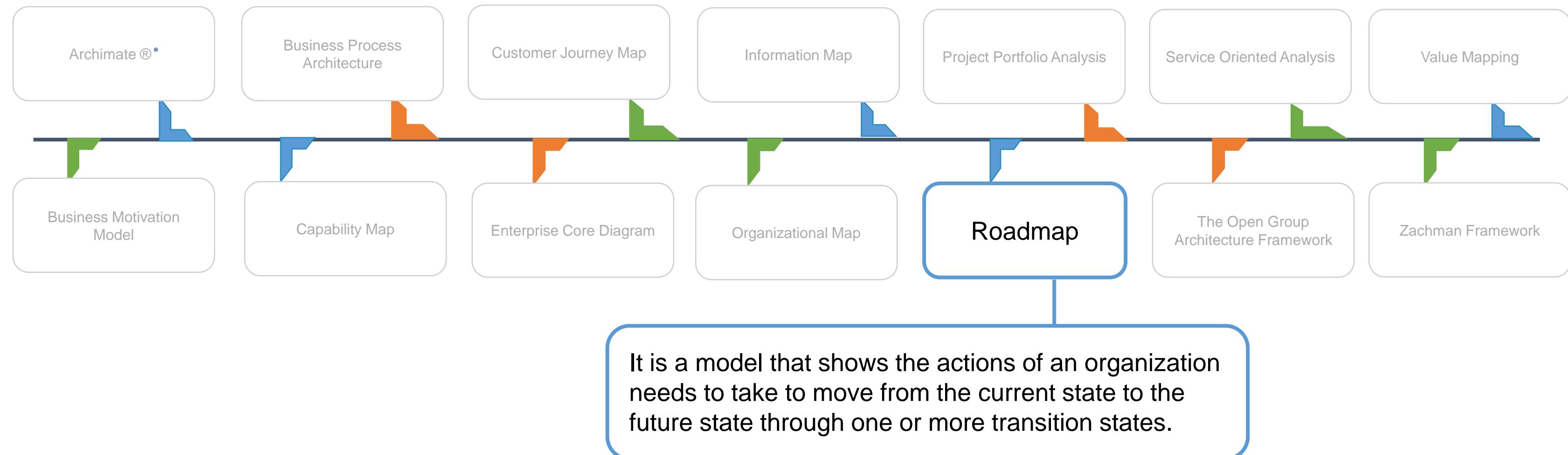


# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

It is used to model the projects, programs and portfolios to provide a holistic view of the organization initiatives.



# BUSINESS ARCHITECTURE TECHNIQUES (contd.)



# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

It is used to model analysis, design, and architecture of systems and software to provide a holistic view of the IT infrastructure of the organization.

Archimate ®

Business Process  
Architecture

Customer Journey Map

Information Map

Project Portfolio Analysis

**Service Oriented  
Analysis**

Value Mapping

Business Motivation  
Model

Capability Map

Enterprise Core Diagram

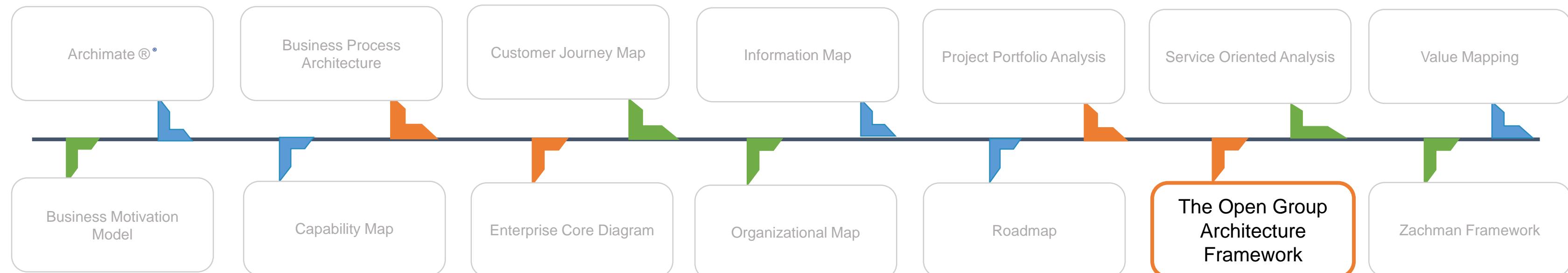
Organizational Map

Roadmap

The Open Group  
Architecture Framework

Zachman Framework

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)



TOGAF® - the Enterprise Architecture standard used by the world's leading organizations to improve business efficiency  
TOGAF Part II - Architecture Development Method (ADM) – Phase B is focused on development of business architecture.

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)

It provides a holistic representation of the stream of activities required to deliver value. It is used to identify opportunities for an improvement and used in business architecture.

Archimate®

Business Process  
Architecture

Customer Journey Map

Information Map

Project Portfolio Analysis

Service Oriented Analysis

**Value Mapping**

Business Motivation  
Model

Capability Map

Enterprise Core Diagram

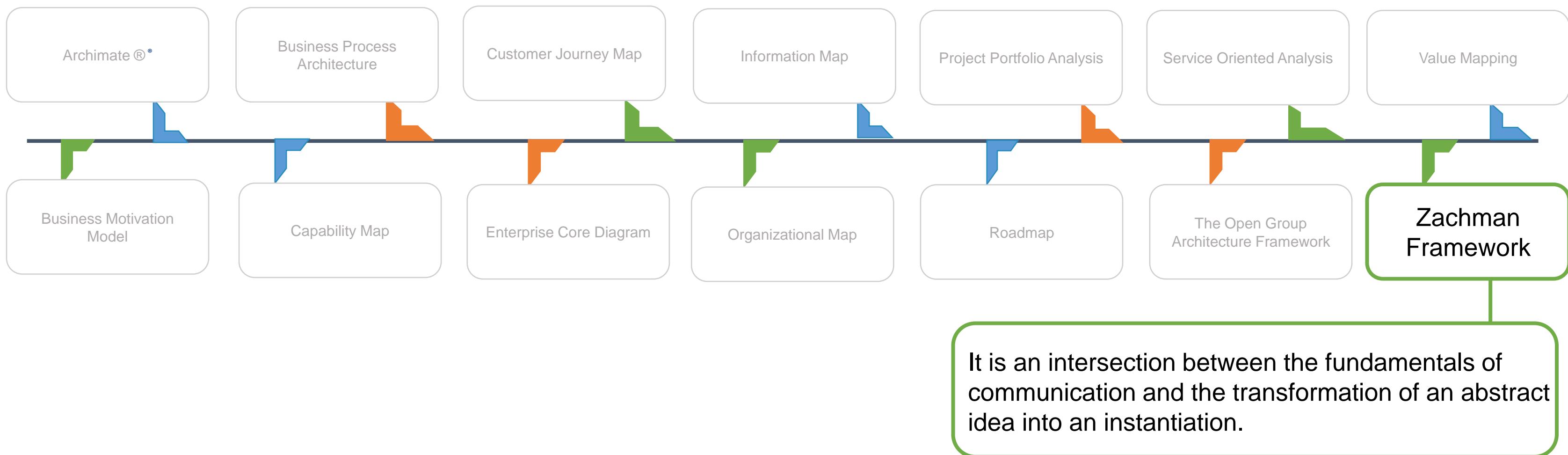
Organizational Map

Roadmap

The Open Group  
Architecture Framework

Zachman Framework

# BUSINESS ARCHITECTURE TECHNIQUES (contd.)



# Lesson 12: Business Architecture Perspective

## Topic 12.5: Underlying competencies

✓ Underlying Competencies



# UNDERLYING COMPETENCIES

Deal with political situations

Put things into broader context.

Tolerance for ambiguity and uncertainty

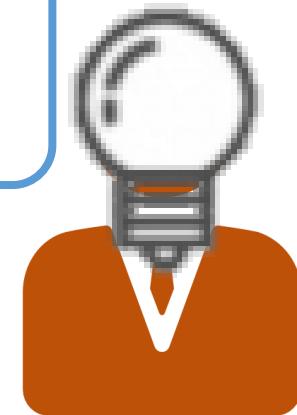
Transform requirements into design of solution.

Lead and direct change in the organization

Suppress unnecessary information to provide high level views.

Consider multiple scenarios

Think ahead of the times.



**Business Analyst**

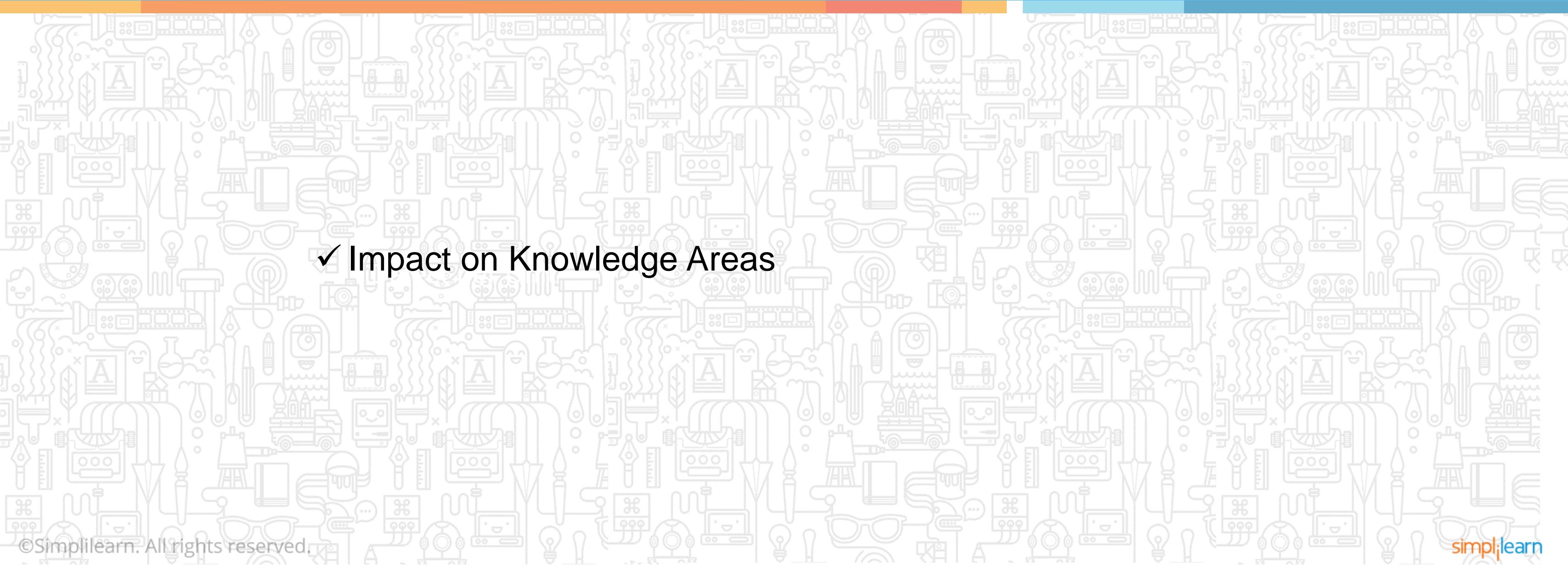
Interact with people at the executive level

Deliver tactical outcomes

# Lesson 12: Business Architecture Perspective

## Topic 12.6: Impact on Knowledge Areas

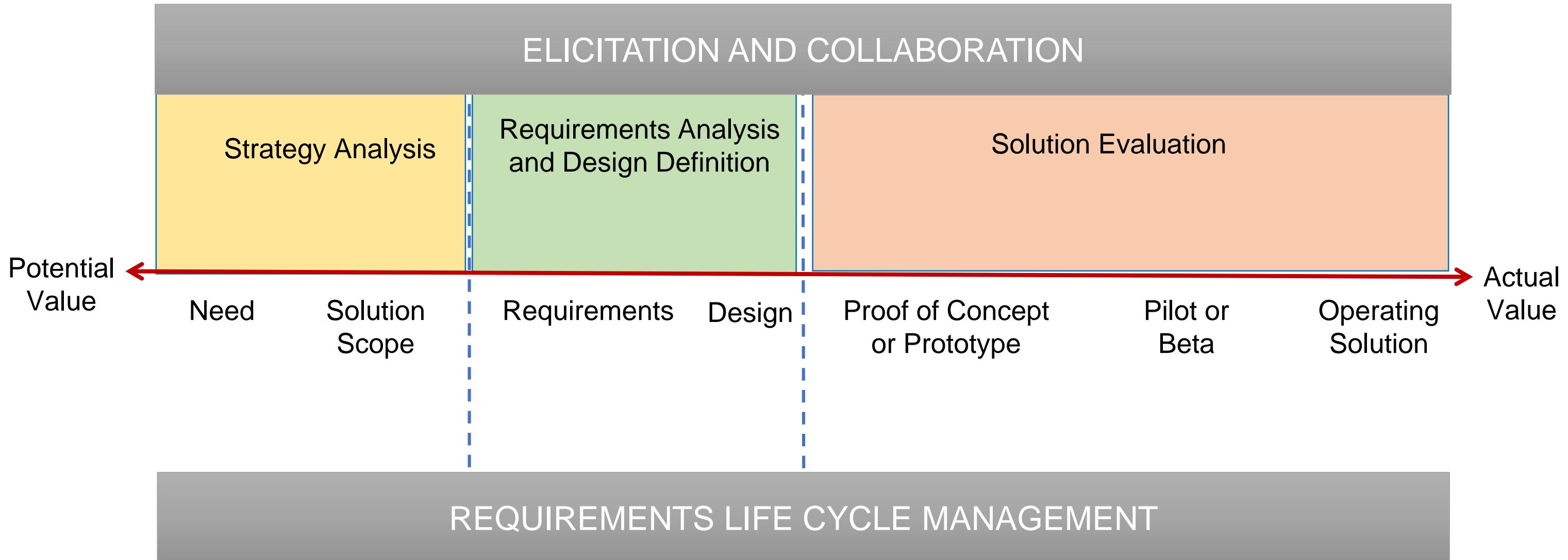
✓ Impact on Knowledge Areas



# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS KNOWLEDGE AREAS

### BUSINESS ANALYSIS PLANNING AND MONITORING



# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING



## IMPACT ON KNOWLEDGE AREAS (contd.)

### BUSINESS ANALYSIS PLANNING AND MONITORING



#### Understand the organizations:

- Strategy and direction
- Operating model and value proposition
- Current business and operational capabilities
- Stakeholder engagement
- Plan for growth, government and planning processes
- Culture and environment
- Capacity for change

#### Focus on:

- Selection of those projects or initiatives that will provide maximum benefit.
- Determining which framework and models exist within the organization.

# IMPACT ON KNOWLEDGE AREAS (contd.)

## BUSINESS ANALYSIS PLANNING AND MONITORING

### BABOK® Techniques

1. Business Capability Analysis
2. Root Cause Analysis
3. Decision Analysis
4. Non Functional Requirements Analysis
5. Functional Decomposition
6. Estimation
7. Item Tracking
8. Scope Modeling
9. Organizational Modeling
10. Process Modeling
11. Brainstorming
12. Interviews
13. Survey or Questionnaire
14. Acceptance and Evaluation Criteria
15. Metrics and Key Performance Indicators (KPIs)
16. Risk Analysis and Management
17. Stakeholder List, Map or Personas
18. Roles and Permission Matrix
19. Reviews
20. Use Cases and Scenarios
21. User Stories



# IMPACT ON KNOWLEDGE AREAS (contd.)

## BUSINESS ANALYSIS PLANNING AND MONITORING

### BABOK® Techniques

1. Business Capability Analysis
2. Root Cause Analysis
3. Decision Analysis
4. Non Functional Requirements Analysis
5. Functional Decomposition
6. Estimation
7. Item Tracking
8. Scope Modeling
9. Organizational Modeling
10. Process Modeling
11. Brainstorming
12. Interviews
13. Survey or Questionnaire
14. Acceptance and Evaluation Criteria
15. Metrics and Key Performance Indicators (KPIs)
16. Risk Analysis and Management
17. Stakeholder List, Map or Personas
18. Roles and Permission Matrix
19. Reviews
20. Use Cases and Scenarios
21. User Stories



### Other Techniques

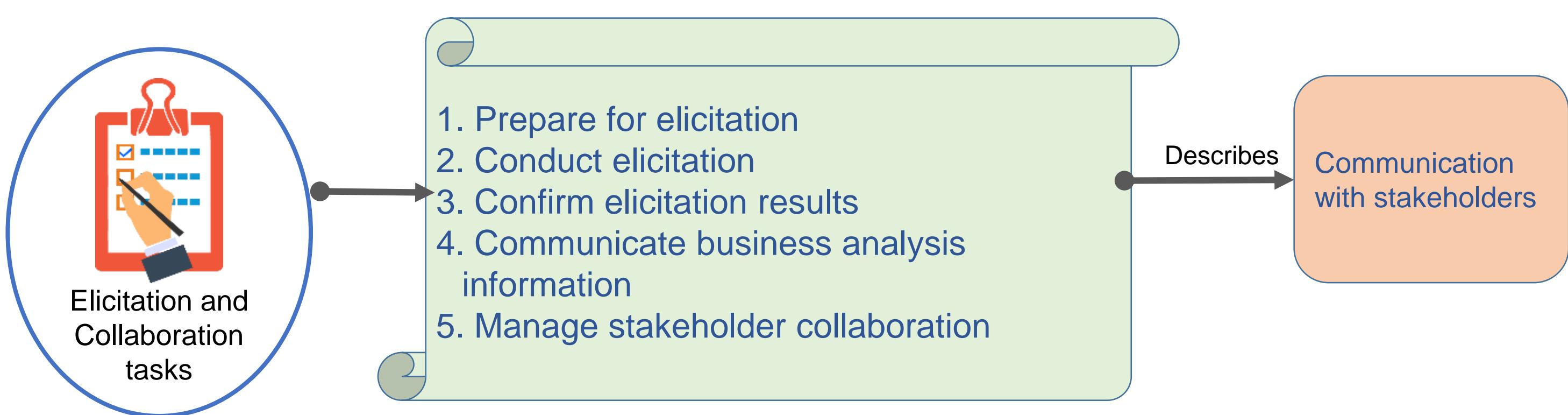
1. Business Process Architecture
2. Capability Map
3. Project Portfolio Analysis
4. Service Oriented Analysis



## IMPACT ON KNOWLEDGE AREAS

---

### ELICITATION AND COLLABORATION



## IMPACT ON KNOWLEDGE AREAS

### ELICITATION AND COLLABORATION



## IMPACT ON KNOWLEDGE AREAS (contd.)

### ELICITATION AND COLLABORATION

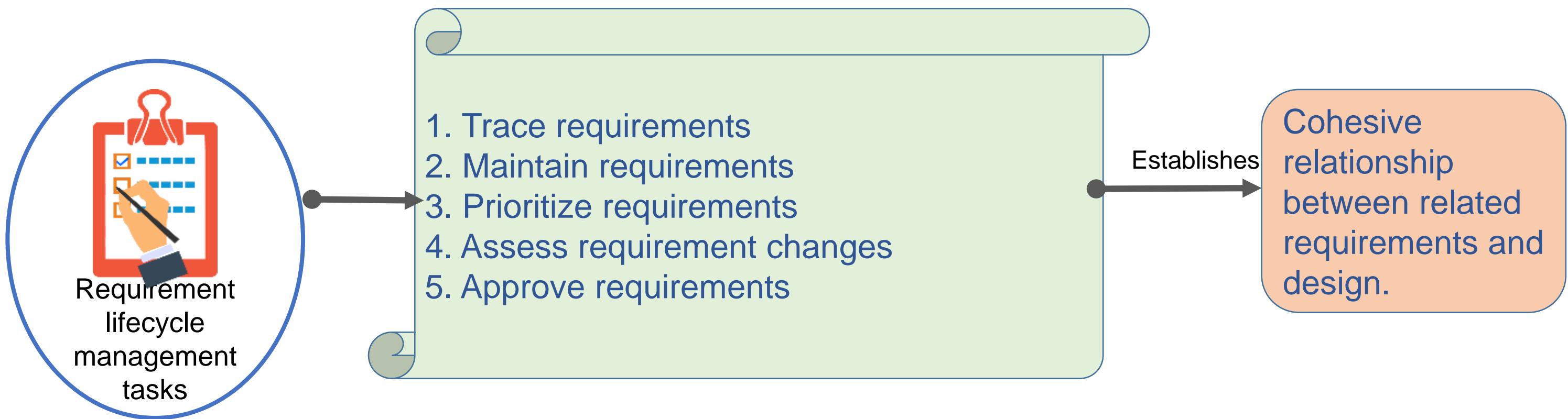
#### **BABOK® Techniques**

1. Brainstorming
2. Document Analysis
3. Focus Groups
4. Interviews
5. Interface Analysis
6. Observation
7. Prototyping
8. Survey or Questionnaire
9. Workshops
10. Glossary
11. Functional Decomposition
12. Item Tracking
13. Stakeholder List, Map, or Personas



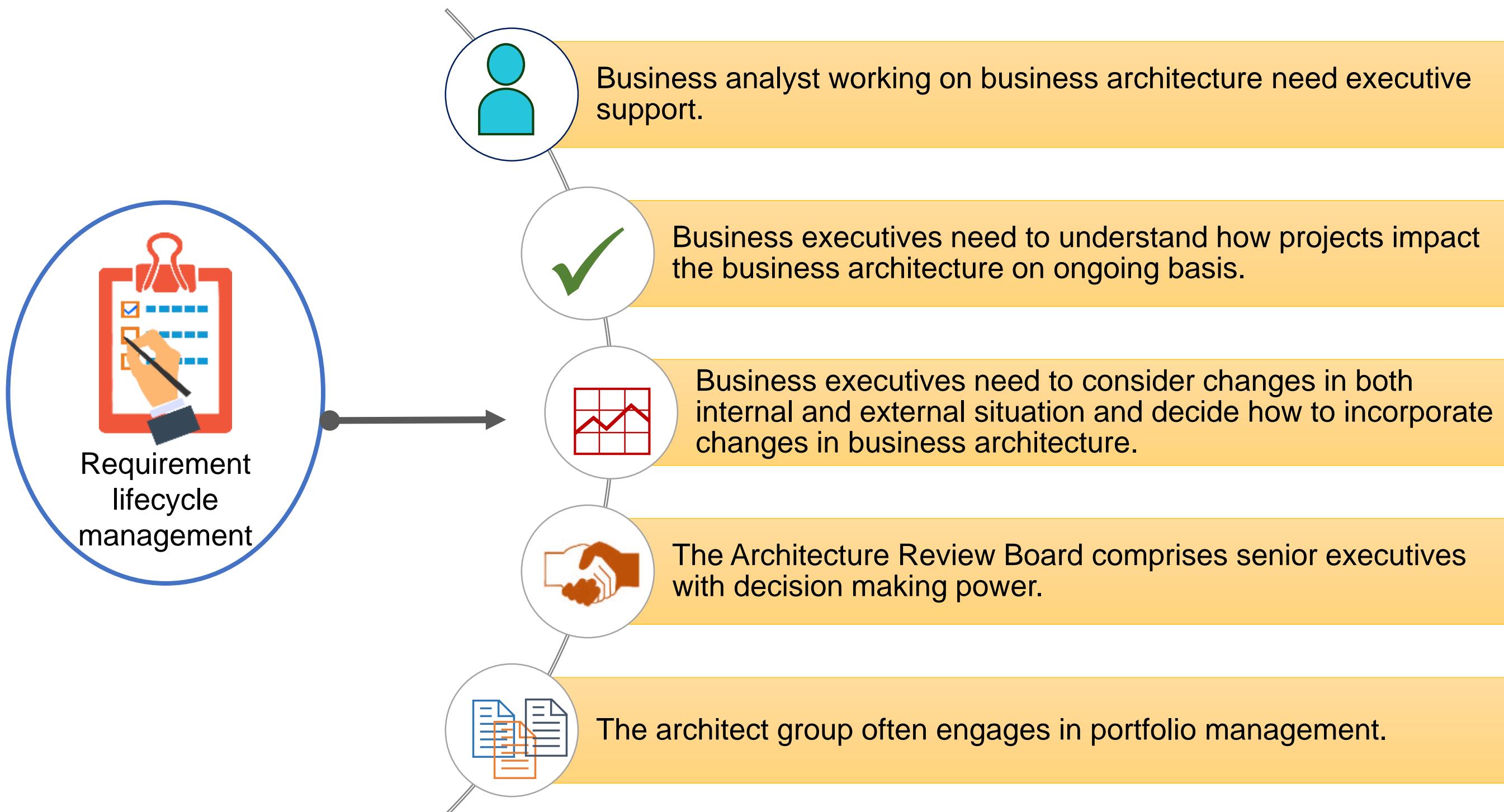
## IMPACT ON KNOWLEDGE AREAS

### REQUIREMENTS LIFE CYCLE MANAGEMENT



## IMPACT ON KNOWLEDGE AREAS (contd.)

### REQUIREMENTS LIFE CYCLE MANAGEMENT



## IMPACT ON KNOWLEDGE AREAS (contd.)

### REQUIREMENTS LIFE CYCLE MANAGEMENT

#### BABOK® Techniques

1. Balanced Scorecard
2. Benchmarking and Market Analysis
3. Business Capability Analysis
4. SWOT Analysis
5. Root Cause Analysis
6. Process Analysis
7. Decision Analysis
8. Interface Analysis
9. Collaborative Games
10. Estimation
11. Item Tracking
12. Reviews
13. Lessons Learned
14. Organizational Modeling
15. Process Modeling
16. Data Modeling
17. Stakeholder List, Map, or Personas
18. Roles and Permissions Matrix
19. Metrics and Key Performance Indicators (KPIs)
20. Risk Analysis and Management

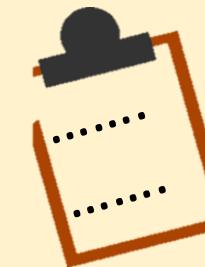


## IMPACT ON KNOWLEDGE AREAS (contd.)

### REQUIREMENTS LIFE CYCLE MANAGEMENT

#### BABOK® Techniques

1. Balanced Scorecard
2. Benchmarking and Market Analysis
3. Business Capability Analysis
4. SWOT Analysis
5. Root Cause Analysis
6. Process Analysis
7. Decision Analysis
8. Interface Analysis
9. Collaborative Games
10. Estimation
11. Item Tracking
12. Reviews
13. Lessons Learned
14. Organizational Modeling
15. Process Modeling
16. Data Modeling
17. Stakeholder List, Map, or Personas
18. Roles and Permissions Matrix
19. Metrics and Key Performance Indicators (KPIs)
20. Risk Analysis and Management



#### Other Techniques

1. Archimate ®
2. Business Process Architecture
3. Business Value Modeling
4. Capability Map
5. Enterprise Core Diagram
6. Project Portfolio Analysis
7. Roadmap
8. Service Oriented Analysis
9. Value Mapping



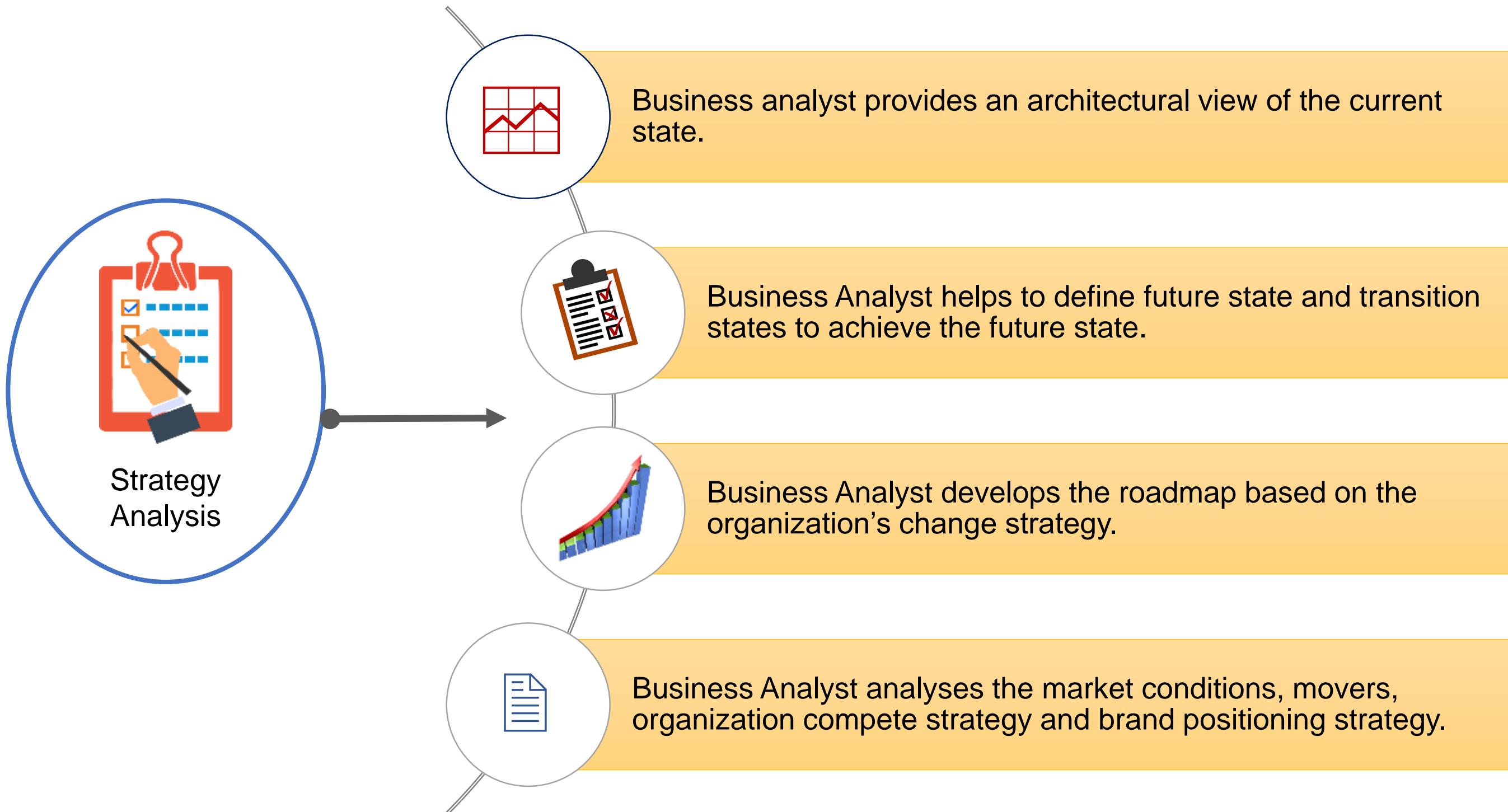
# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS (contd.)

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS (contd.)

## STRATEGY ANALYSIS

### BABOK® Techniques

1. Balanced Scorecard
2. Business Model Canvas
3. Benchmarking and Market Analysis
4. Business Capability Analysis
5. SWOT Analysis
6. Business Rules Analysis
7. Collaborative Games
8. Estimation
9. Reviews
10. Organizational Modeling
11. Data Modeling
12. Brainstorming
13. Document Analysis
14. Focus Groups
15. Survey or Questionnaire
16. Workshops
17. Glossary
18. Stakeholder List, Map, or Personas
19. Metrics and Key Performance Indicators (KPIs)
20. Risk Analysis and Management

## IMPACT ON KNOWLEDGE AREAS (contd.)

### STRATEGY ANALYSIS

#### BABOK® Techniques

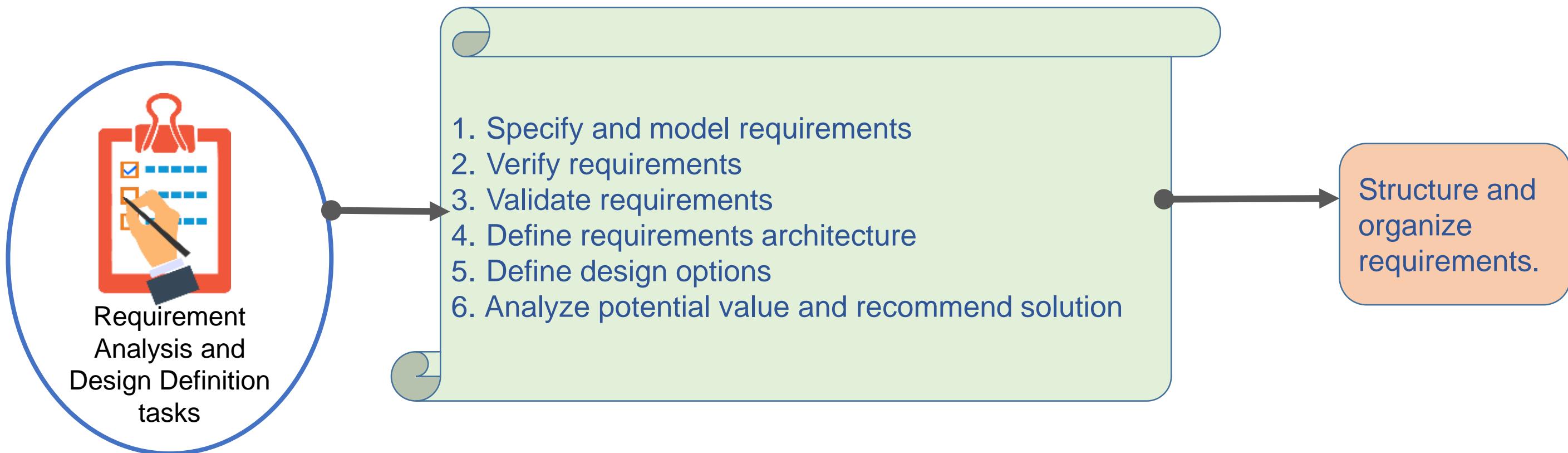
1. Balanced Scorecard
2. Business Model Canvas
3. Benchmarking and Market Analysis
4. Business Capability Analysis
5. SWOT Analysis
6. Business Rules Analysis
7. Collaborative Games
8. Estimation
9. Reviews
10. Organizational Modeling
11. Data Modeling
12. Brainstorming
13. Document Analysis
14. Focus Groups
15. Survey or Questionnaire
16. Workshops
17. Glossary
18. Stakeholder List, Map, or Personas
19. Metrics and Key Performance Indicators (KPIs)
20. Risk Analysis and Management

#### Other Techniques

1. Archimate®
2. Business Process Architecture
3. Capability Map
4. Customer Journey Map
5. Enterprise Core Diagram
6. Project Portfolio Analysis
7. Roadmap
8. Service Oriented Analysis
9. Strategy Map
10. Value Mapping

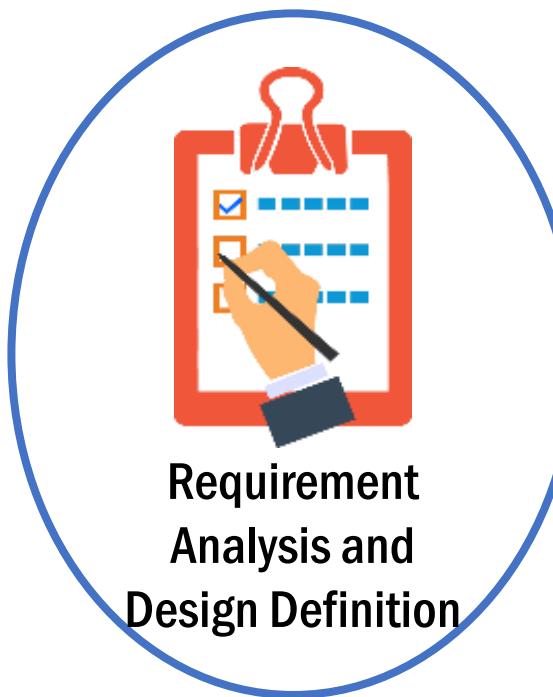
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION



## IMPACT ON KNOWLEDGE AREAS (contd.)

### REQUIREMENT ANALYSIS AND DESIGN DEFINITION



- Architectural views can be provided by capability map, value map, organization map and information and business process models.
- Models are intended to provide context and information that results in better requirements and designs.
- Design is done in conjunction with understanding needs and requirements.
- Business analyst may use readily available architectural view provided by business architecture.
- Business architecture provides the context to analyze the strategic alignment of proposed change.
- Business architecture attempts to ensure that the enterprise as a whole continues to deliver value.
- Focus is on the value provided by organization from a holistic view.
- Avoid local optimization.
- Local optimization may not align with organizational strategy.

# IMPACT ON KNOWLEDGE AREAS (contd.)

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION

### **BABOK® Techniques**

1. Balanced Scorecard
2. Business Model Canvas
3. Benchmarking and Market Analysis
4. Business Capability Analysis
5. Root Cause Analysis
6. Process Analysis
7. Collaborative Games
8. Risk Analysis and Management
9. Decision Analysis
10. Non Functional Requirements Analysis
11. Acceptance and Evaluation Criteria
12. Metrics and Key Performance Indicators (KPIs)
13. Stakeholder List, Map, or Personas
14. Roles and Permission Matrix
15. Vendor Assessment

# IMPACT ON KNOWLEDGE AREAS (contd.)

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION

### BABOK® Techniques

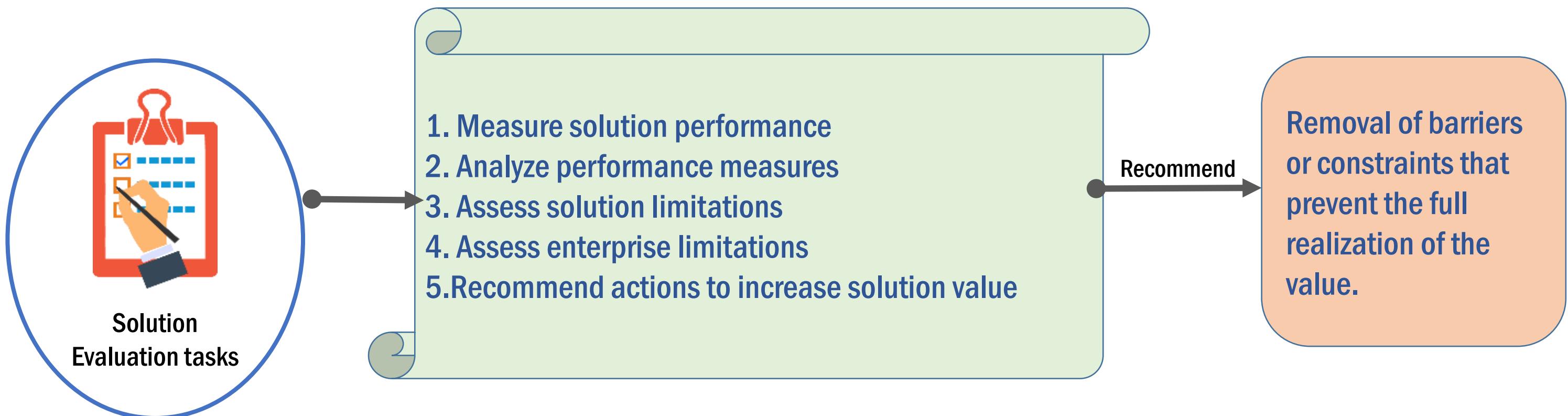
31. Interface Analysis
32. Business Rules Analysis
33. Non Functional Requirements Analysis
34. Brainstorming
35. Document Analysis
36. Focus Groups
37. Survey or Questionnaire
38. Prototyping
39. Observation
40. Workshops
41. Data Dictionary
42. Glossary

### Other Techniques

1. Archimate ®
2. Business Process Architecture
3. Capability Map
4. Customer Journey Map
5. Enterprise Core Diagram
6. Project Portfolio Analysis
7. Roadmap
8. Service Oriented Analysis
9. Value Mapping

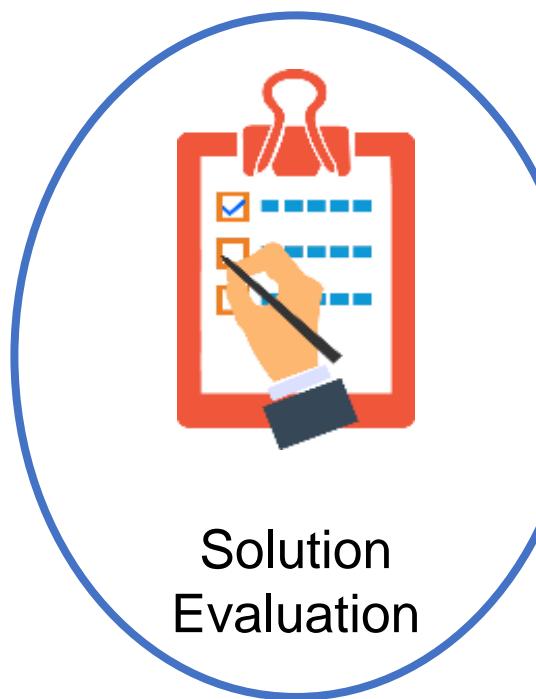
# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION



## IMPACT ON KNOWLEDGE AREAS (contd.)

### SOLUTION EVALUATION



- During solution evaluation, an important question that needs to be asked is how well is the business performing?
- To answer this, several other questions need to be answered.
- Questions
  - What outcomes are the business, initiative or component expecting to achieve?
  - How can those outcomes to be measured, in terms of SMART objectives?
  - What information is needed to measure those objectives?
  - What processes, services are needed to collect the information?
  - How is the performance information is best presented?
  - How is this information is used to make investment decisions in the future?
- The business analyst analyzes the results of measurement and factors them in when planning for the future.

# IMPACT ON KNOWLEDGE AREAS (contd.)

## SOLUTION EVALUATION

### BABOK® Techniques

1. Balanced Scorecard
2. Business Capability Analysis
3. Collaborative Games
4. SWOT Analysis
5. Root Cause Analysis
6. Benchmarking and Market Analysis
7. Metrics and Key Performance Indicators (KPIs)
8. Brainstorming
9. Focus Groups
10. Observation
11. Survey or Questionnaire
12. Process Analysis
13. Organizational Modeling
14. Process Modeling
15. Stakeholder List, Map, or Personas
16. Roles and Permissions Matrix
17. Item Tracking
18. Lessons Learned
19. Risk Analysis and Management



# IMPACT ON KNOWLEDGE AREAS (contd.)

## SOLUTION EVALUATION

### BABOK® Techniques

1. Balanced Scorecard
2. Business Capability Analysis
3. Collaborative Games
4. SWOT Analysis
5. Root Cause Analysis
6. Benchmarking and Market Analysis
7. Metrics and Key Performance Indicators (KPIs)
8. Brainstorming
9. Focus Groups
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12. Process Analysis
13. Organizational Modeling
14. Process Modeling
15. Stakeholder List, Map, or Personas
16. Roles and Permissions Matrix
17. Item Tracking
18. Lessons Learned
19. Risk Analysis and Management



### Other Techniques

1. Business Motivation Modeling
2. Business Process Architecture
3. Capability Map
4. Customer Journey Map
5. Service Oriented Analysis
6. Value Mapping



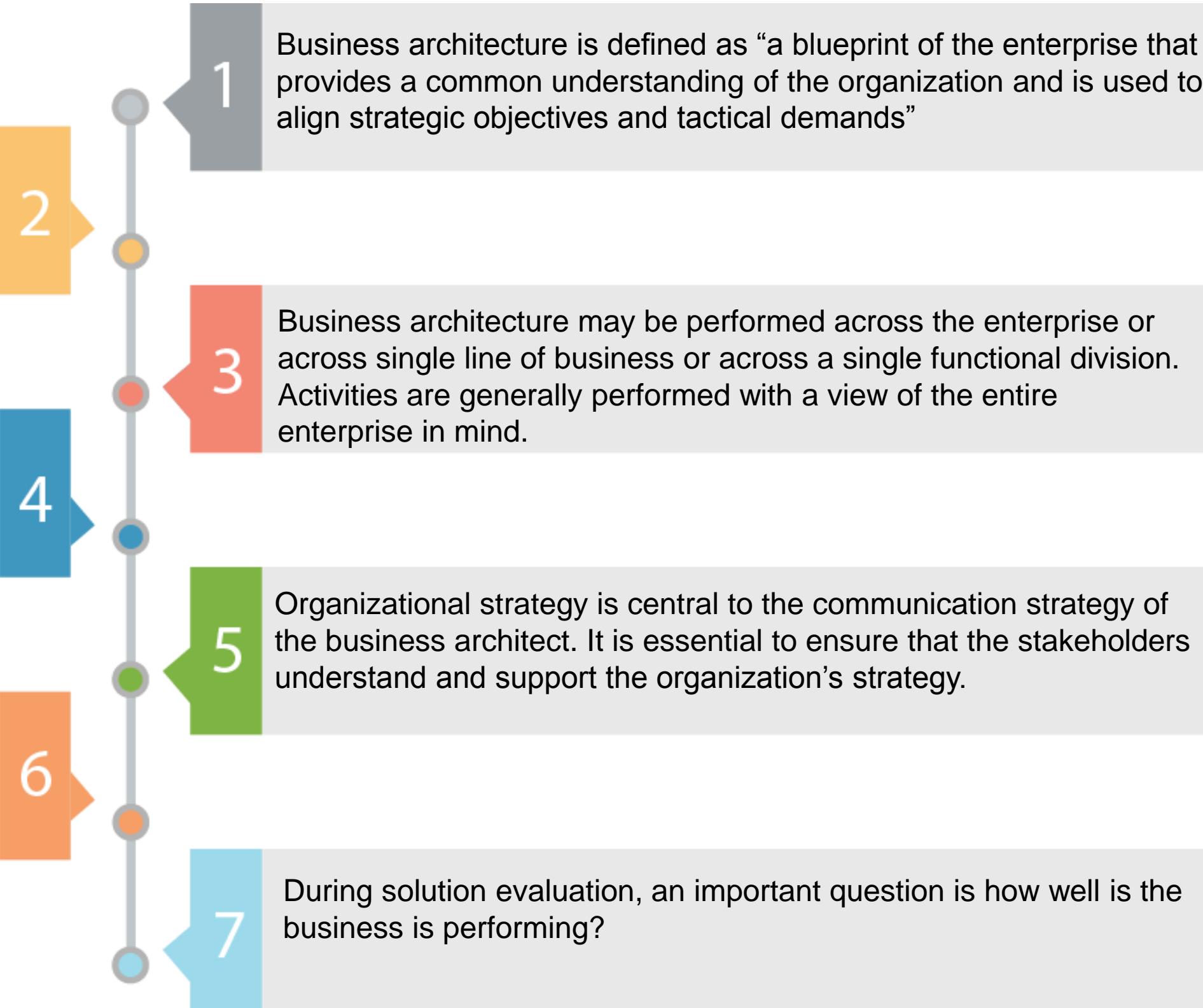
## KEY TAKEAWAYS

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Organization, capability, value, and information are the foundations of the business architecture. These four categories are relatively stable compared to the extended set of business architecture domains.

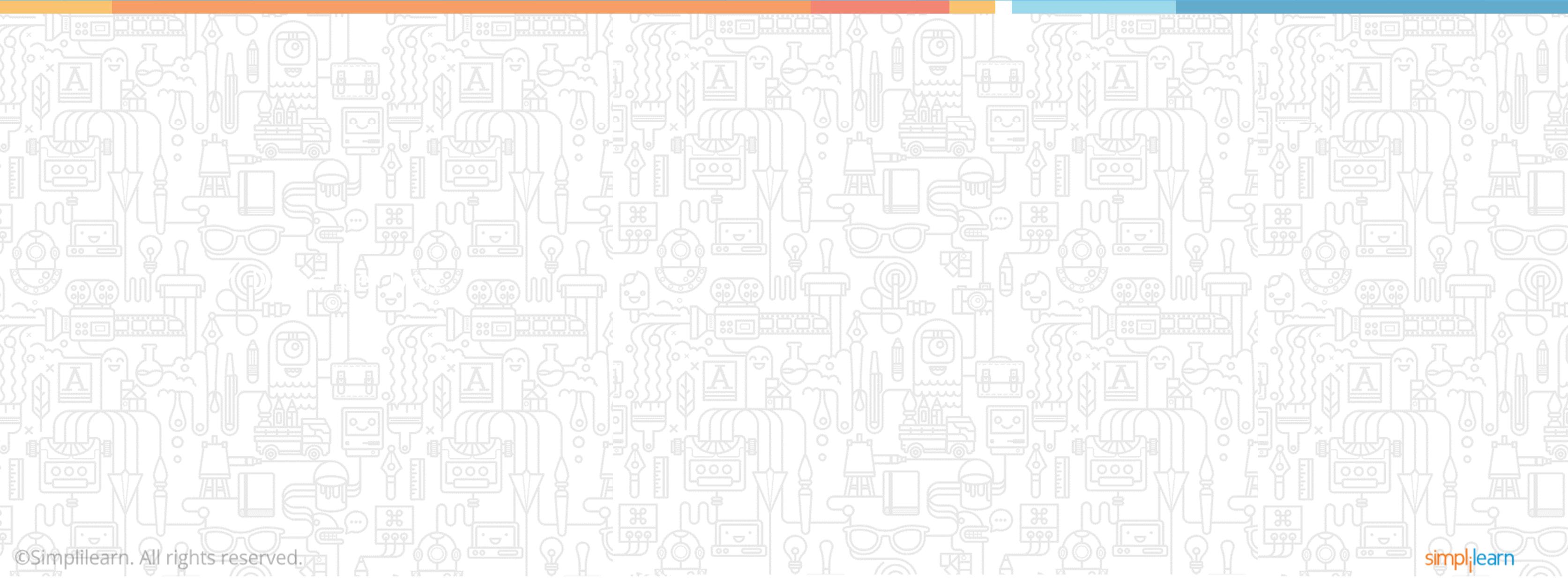
The architectural blueprint helps in understanding of how well the organization aligns to its strategy. For each blueprint, current state, future state and one or more transition state may be defined.

Architectural views can be provided by capability maps, value maps, organization maps, and information and business process models. Models are intended to provide context and information that result in better requirements and designs.



# **Lesson 12: Business Architecture Perspective**

## **CASE STUDY EXERCISE**



## CASE STUDY

### OVERVIEW - BUSINESS NEED

Standard Inc is a leading US based insurance company with 3,000 employees and 30,00,000 customers, providing life and health insurance services to retail and corporate clients, directly and through partners.

Redstar Inc is a company with 1,100 employees with 15,00,000 customers in Asia pacific region and providing home, travel and life insurance products.

It was a strategic decision for Standard to acquire Redstar, so that they can expand their market and leverage capabilities of Redstar in Asia pacific region.



## CASE STUDY

### BUSINESS ANALYSIS

Business leaders asked John, a senior business analyst, to assess the impacts on enterprise architecture and develop an enterprise architecture strategy in order to align the business, information and application layer of both the companies.

Standard Inc. was using a proven framework, which helped their businesses to integrate with Redstar businesses.



## CASE STUDY

### BUSINESS ANALYSIS

John and his team developed future state architecture, considering the business, information and application tier of both the companies. The future state architecture contains various models and blueprints created by the team of business analysts.

The initiatives involve collaboration with all levels of both organizations, including senior leadership, functional managers, portfolio, program and project managers, product managers, solution architects, operations and IT team.

It was important for John to ensure that the companies continue to deliver value to stakeholders during normal operations and during change.



## CASE STUDY

### BUSINESS ANALYSIS

John developed a roadmap based on the organization's change strategy. These were the steps:

- Merge essential employee and accounting transactions internal to the organization
- Focus on customer-facing processes with common lines of business
- Integrate the processes related to the new lines of business

From an EA perspective, John has taken a holistic look at all architectural activities including applications, data, integration, infrastructure, technology services, security and change management. Support of executive business leadership team and regular meetings with key stakeholders helped the two companies to merge quickly.



# CASE STUDY

## QUESTIONS

| Questions                                                                                                                                      | Response                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 What is the breadth of change described in the case study?                                                                                   | <input type="radio"/> Across a single functional division<br><input type="radio"/> Across a single line of business<br><input type="radio"/> Across the enterprise as a whole<br><input type="radio"/> Across all information technology systems and applications                     |
| 2 Which of the following underlying competencies is least likely to be demonstrated in the case study?                                         | <input type="radio"/> The ability to put things in context<br><input type="radio"/> A high tolerance of ambiguity and uncertainty<br><input type="radio"/> The ability to lead and direct change in organizations<br><input type="radio"/> The ability to deal with external politics |
| 3 Which one of the following is most likely to be used by the Standard Inc., for helping their businesses integrate with Redstar's businesses? | <input type="radio"/> ACORD<br><input type="radio"/> ACCORD<br><input type="radio"/> NAIC<br><input type="radio"/> PCF                                                                                                                                                                |

## CASE STUDY

### QUESTIONS

|   | Questions                                                                                                                                 | Response                                                                                                                                                                                                                                                                                                                                                                         |
|---|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | Which one of the following factors contributed most towards the success of the business architecture work as described in the case study? | <ul style="list-style-type: none"><li><input type="radio"/> The support of the business leadership team</li><li><input type="radio"/> Integration with ongoing initiatives</li><li><input type="radio"/> Access to senior leadership team, functional managers and other key stakeholders</li><li><input type="radio"/> Integration with effective governing processes</li></ul> |
| 5 | Which of the following is central to the communication strategy of business architects?                                                   | <ul style="list-style-type: none"><li><input type="radio"/> Organisational change management</li><li><input type="radio"/> Advocacy for the organizational strategy</li><li><input type="radio"/> Organizational hierarchy and map</li><li><input type="radio"/> Stakeholder management</li></ul>                                                                                |

## CASE STUDY

### ANSWERS

| Questions                                                                                                                                      | Answers                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 1 What is the breadth of change described in the case study?                                                                                   | Across the enterprise as a whole.           |
| 2 Which of the following underlying competencies is least likely to be demonstrated in the case study?                                         | The ability to deal with external politics. |
| 3 Which one of the following is most likely to be used by the Standard Inc., for helping their businesses integrate with Redstar's businesses? | ACORD                                       |
| 4 Which one of the following factors contributed most towards the success of the business architecture work as described in the case study?    | The support of business leadership team     |
| 5 Which of the following is central to the communication strategy of business architects?                                                      | Advocacy for the organizational strategy    |



**QUIZ**

1

**Which one of the following is considered as the foundation of the business architecture?**

- a. Organization, Capability, Value, Information
- b. Organization, Product, Employees, Suppliers
- c. Mission, Vision, Goal, Strategy
- d. Organization, Stakeholder, Product & Services, Capability



**QUIZ**

1

**Which one of the following is considered as the foundation of the business architecture?**

- a. Organization, Capability, Value, Information
- b. Organization, Product, Employees, Suppliers
- c. Mission, Vision, Goal, Strategy
- d. Organization, Stakeholder, Product & Services, Capability



The correct answer is

**a.**

**Explanation: Organization, capability, value, and information represented comprises the foundation of the business architecture.**

**QUIZ****2****Which one of the following is not a valid assumption?**

- a. A view of the entire organization under analysis
- b. Full support from the implementation team
- c. Participation of business owners and Subject Matter Experts (SMEs)
- d. Organizational strategy is in place



**QUIZ****2****Which one of the following is not a valid assumption?**

- a. A view of the entire organization under analysis
- b. Full support from the implementation team
- c. Participation of business owners and Subject Matter Experts (SMEs)
- d. Organizational strategy is in place.



The correct answer is **b.**

**Explanation: Full support from the implementation team is not a valid assumption; what is important is to have full support from the senior leadership.**

**QUIZ****3****Which reference model is the most used reference model?**

- a. Process Classification Framework® (PCF)
- b. Information Technology Infrastructure Library (ITIL)
- c. Control Objective for IT (COBIT)
- d. Supply Chain Operations Reference (SCOR)



**QUIZ****3****Which reference model is the most used reference model?**

- a. Process Classification Framework® (PCF)
- b. Information Technology Infrastructure Library (ITIL)
- c. Control Objective for IT (COBIT)
- d. Supply Chain Operations Reference (SCOR)



The correct answer is

**a.**

**Explanation:** Process Classification Framework® (PCF) is the most used process framework in the world.

**QUIZ****4**

**Which technique is used to model the relation between business units to each other, to external partners, to capabilities and information?**

- a. Capability map
- b. Information map
- c. Organization map
- d. Business process architecture



**QUIZ****4**

**Which technique is used to model the relation between business units to each other, to external partners, to capabilities, and to information?**

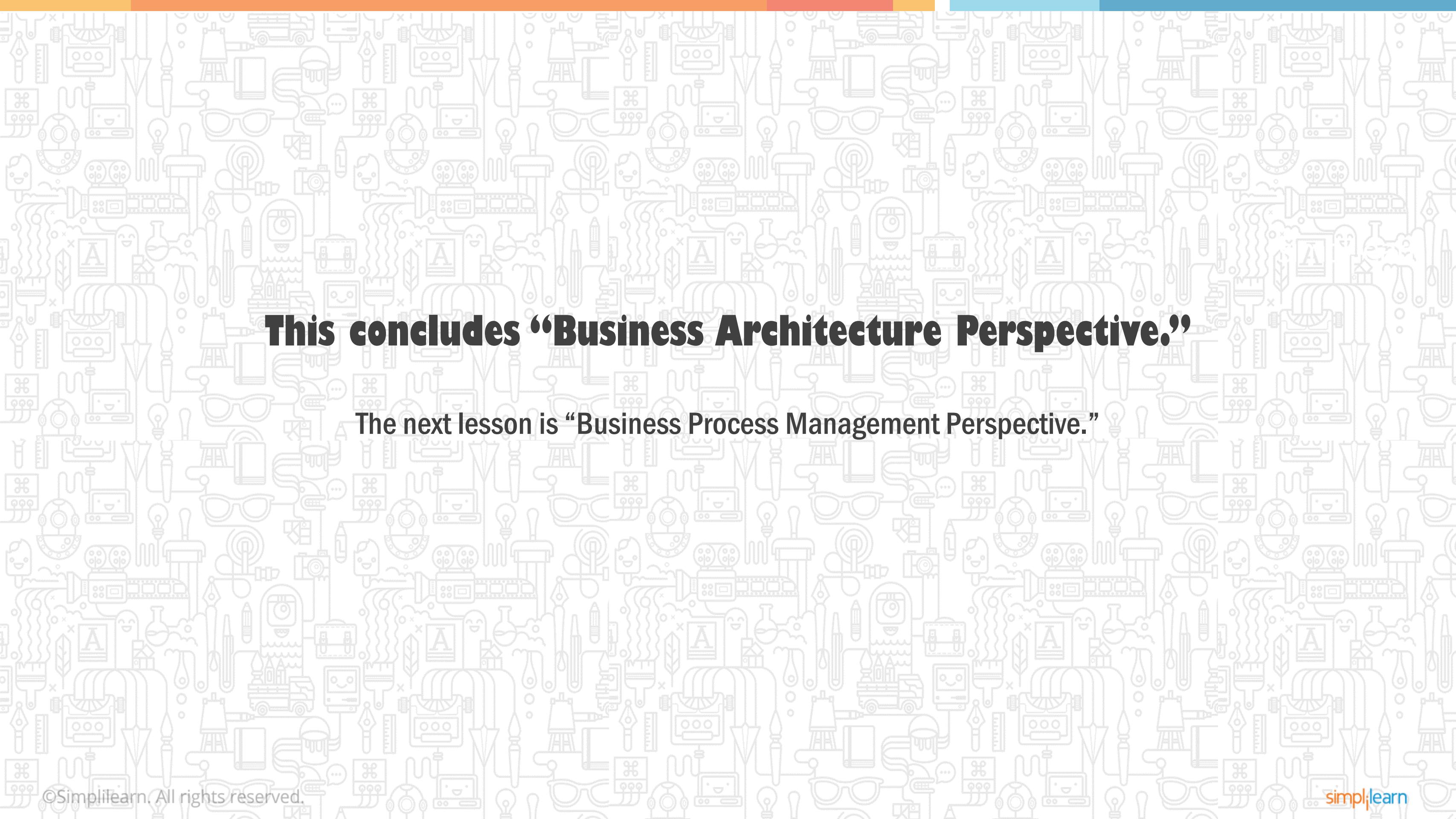
- a. Capability map
- b. Information map
- c. Organization map
- d. Business process architecture



The correct answer is

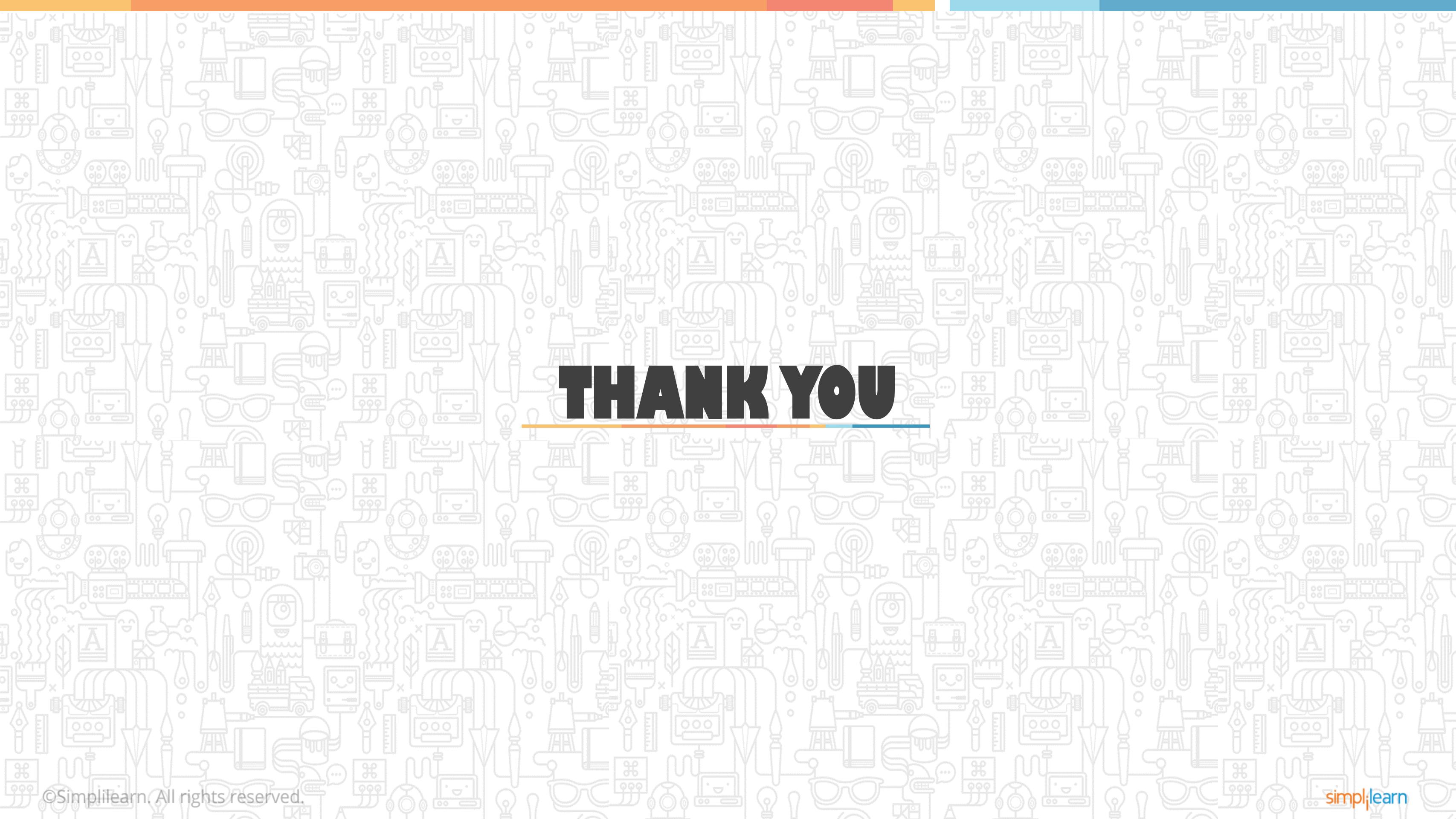
**c.**

**Explanation: Organizational map is a model to depict relationship between business units to each other, to external partners, to capabilities, and to information.**



**This concludes “Business Architecture Perspective.”**

The next lesson is “Business Process Management Perspective.”



# THANK YOU

# **CBAP® Exam Preparation Course**

## **Lesson 13—Business Process Management Perspective**



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# WHAT'S IN IT FOR ME

The diagram illustrates a vertical timeline or flow from left to right, represented by a grey bar with colored vertical markers at the top and bottom. Six main concepts are arranged along this timeline, connected by arrows pointing from left to right. A vertical grey line with circular markers serves as a central axis.

- About Business Process Management** (Green marker)
- Change Scope** (Red marker)
- Business Analysis Scope** (Orange marker)
- Frameworks, Methodologies, and Techniques** (Blue marker)
- Underlying competencies** (Teal marker)
- Impact on Knowledge Areas** (Purple marker)

Arrows indicate the flow from **About Business Process Management** to **Change Scope**, from **Business Analysis Scope** to **Frameworks, Methodologies, and Techniques**, from **Underlying competencies** to **Impact on Knowledge Areas**.

*About Business Process Management*

*Change Scope*

*Business Analysis Scope*

*Frameworks, Methodologies, and Techniques*

*Underlying competencies*

*Impact on Knowledge Areas*

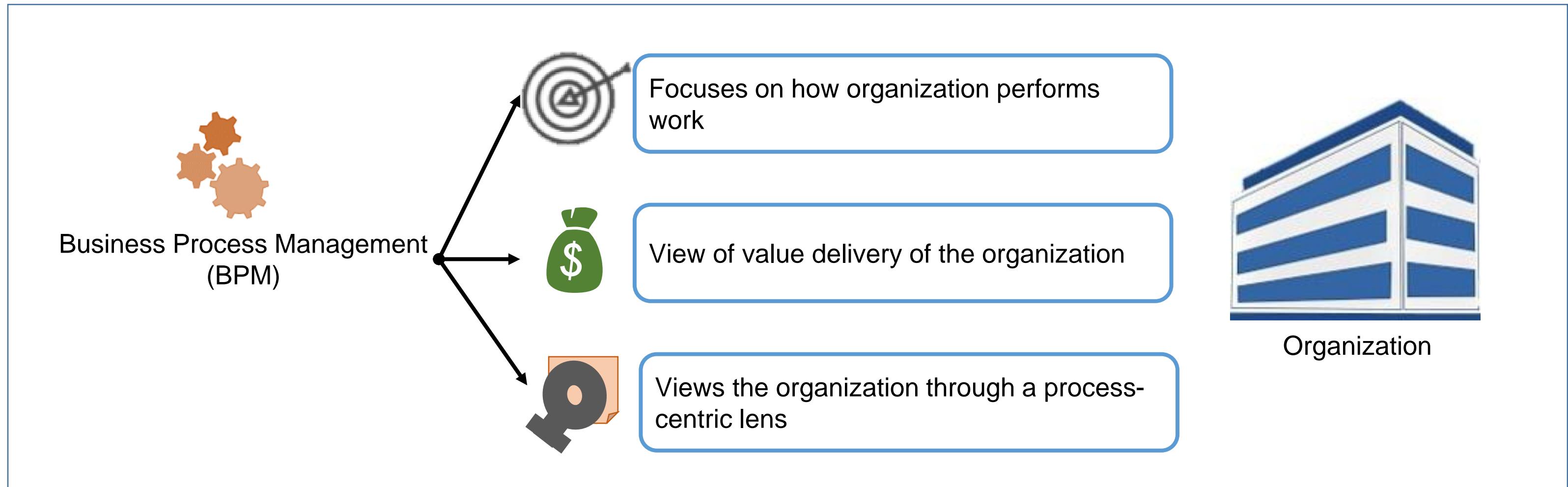
# Lesson 13: Business Process Management Perspective

## Topic 13.1: Introduction

✓ **Introduction to the Business Process Management perspective**



# INTRODUCTION



Note: BPM is an ongoing effort and an integral part of the ongoing management and the operation of the organization.

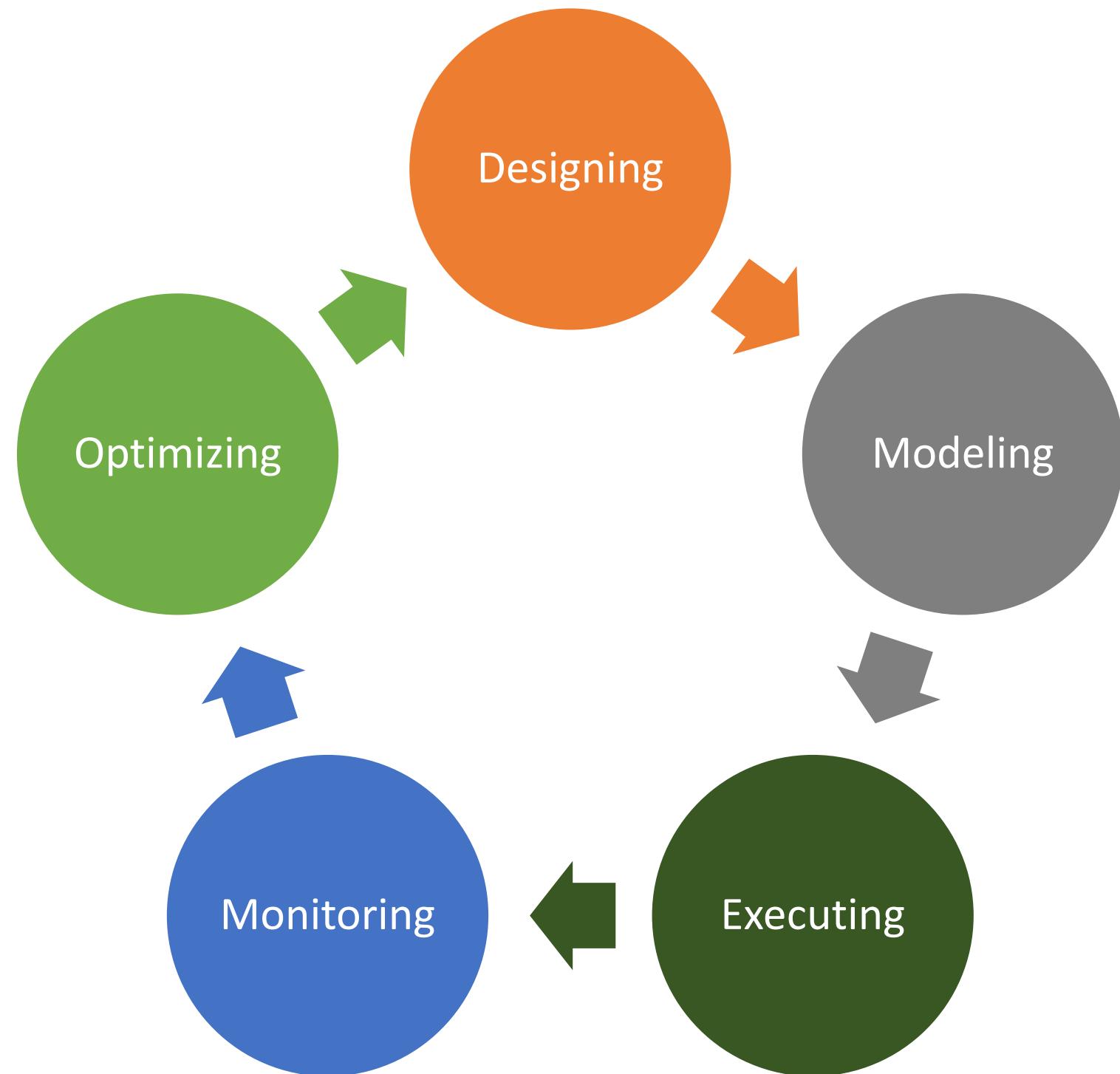
# Lesson 13: Business Process Management Perspective

## Topic 13.2: Change Scope

- ✓ What Change Scope is in the Business Process Management perspective
- ✓ Breadth and Depth of change
- ✓ Value and solution delivered
- ✓ BPM drivers
- ✓ Delivery approach
- ✓ Process improvement approach
- ✓ Major assumptions

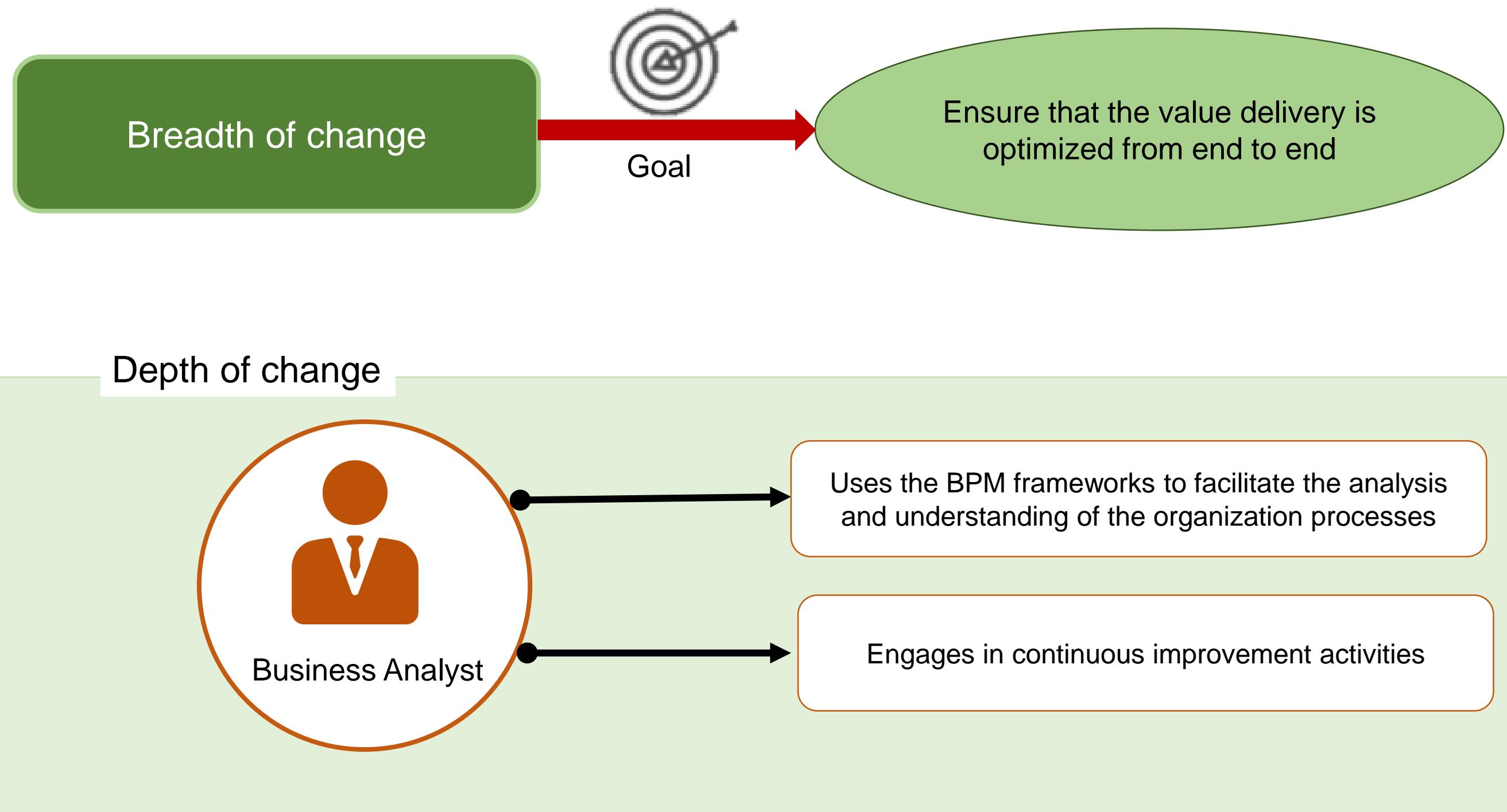
# CHANGE SCOPE

## BUSINESS PROCESS MANAGEMENT LIFECYCLE



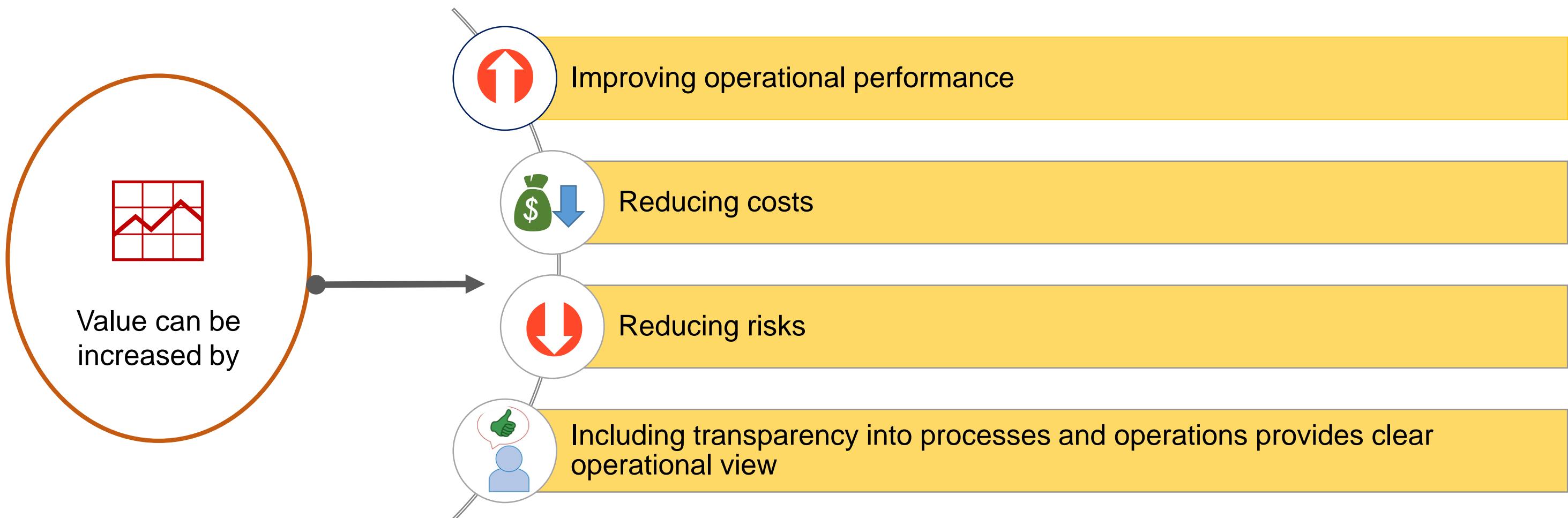
# CHANGE SCOPE

## BREADTH AND DEPTH OF CHANGE



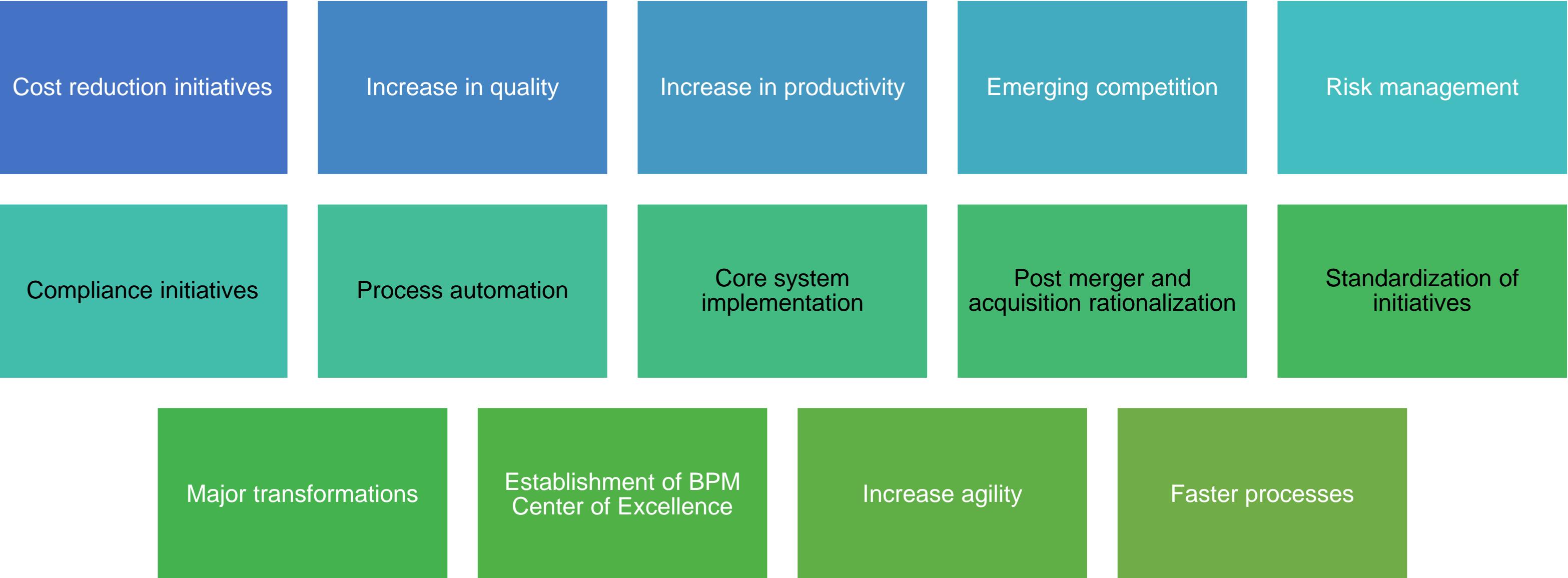
# CHANGE SCOPE

## VALUE AND SOLUTION DELIVERED



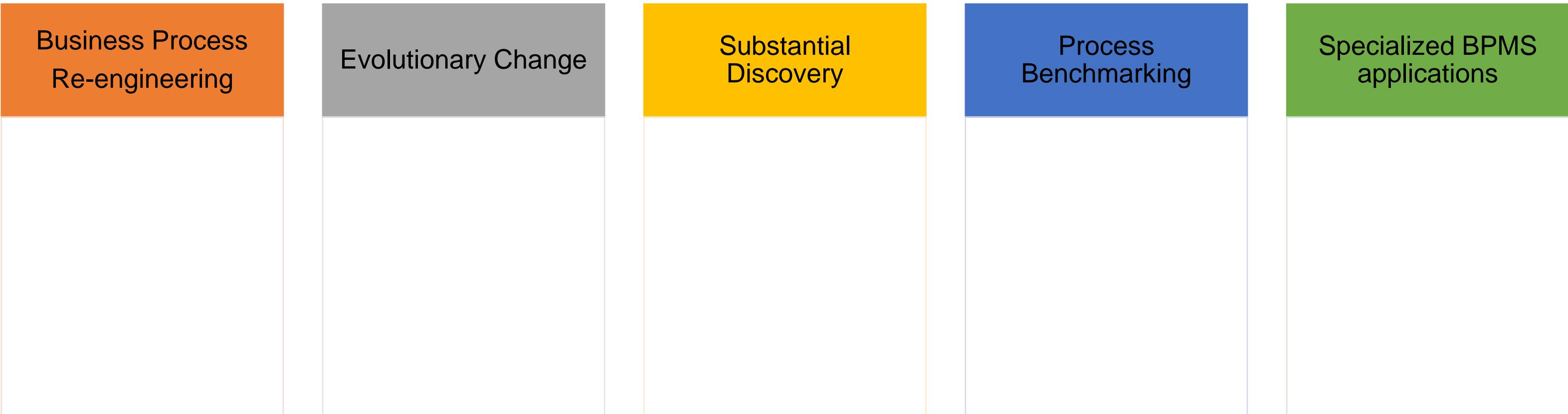
# CHANGE SCOPE

## BPM DRIVERS



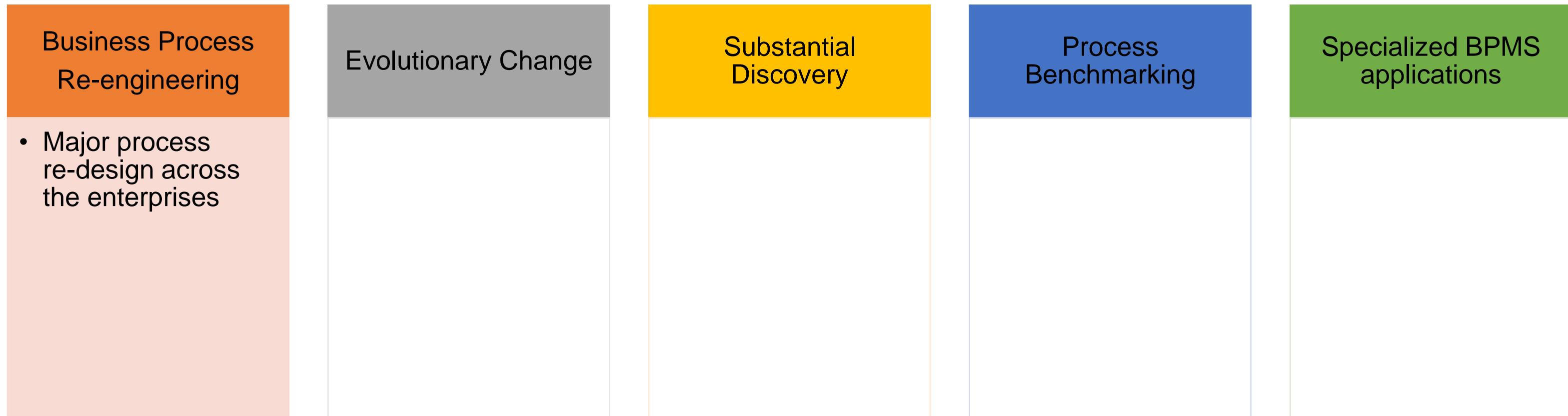
# CHANGE SCOPE

## DELIVERY APPROACH—IMPLEMENTATION MECHANISM



# CHANGE SCOPE

## DELIVERY APPROACH—IMPLEMENTATION MECHANISM



# CHANGE SCOPE

## DELIVERY APPROACH—IMPLEMENTATION MECHANISM

|                                 |                                                                                                                                                                                      |                       |                      |                               |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|-------------------------------|
| Business Process Re-engineering | Evolutionary Change <ul style="list-style-type: none"><li>• Overall objectives of the process</li><li>• Individual changes at sub-process level in line with process goals</li></ul> | Substantial Discovery | Process Benchmarking | Specialized BPMS applications |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|-------------------------------|

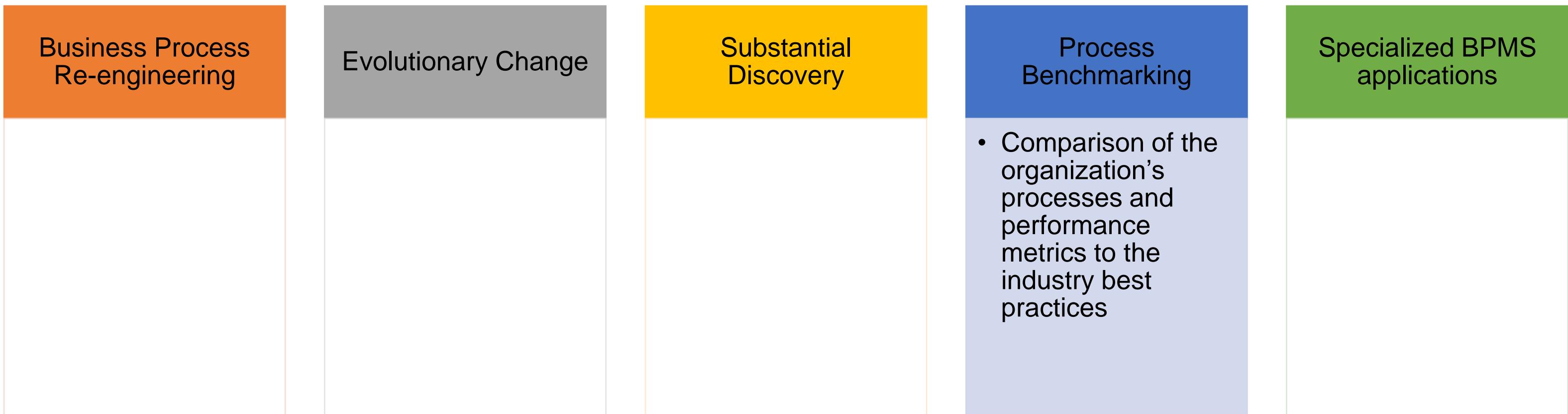
# CHANGE SCOPE

## DELIVERY APPROACH—IMPLEMENTATION MECHANISM

|                                 |                     |                                                                                                                                                                           |                      |                               |
|---------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------|
| Business Process Re-engineering | Evolutionary Change | Substantial Discovery                                                                                                                                                     | Process Benchmarking | Specialized BPMS applications |
|                                 |                     | <ul style="list-style-type: none"><li>• Methods used when processes are undefined</li><li>• When the documented version is different from actual process in use</li></ul> |                      |                               |

# CHANGE SCOPE

## DELIVERY APPROACH—IMPLEMENTATION MECHANISM



# CHANGE SCOPE

## DELIVERY APPROACH—IMPLEMENTATION MECHANISM

|                                 |                     |                       |                      |                                                                                                                               |
|---------------------------------|---------------------|-----------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Business Process Re-engineering | Evolutionary Change | Substantial Discovery | Process Benchmarking | Specialized BPMS applications                                                                                                 |
|                                 |                     |                       |                      | <ul style="list-style-type: none"><li>• Designed to support BPM initiatives and execute the process models directly</li></ul> |

# CHANGE SCOPE

---

## PROCESS IMPROVEMENT APPROACHES

- Top-down
- Bottom-up
- People-centric
- IT-centric

# CHANGE SCOPE

## PROCESS IMPROVEMENT APPROACHES



- Orchestrated by Senior Management
- Spanning end-to-end processes



# CHANGE SCOPE

## PROCESS IMPROVEMENT APPROACHES



Tactical approaches to improve the individual processes or sub-processes

# CHANGE SCOPE

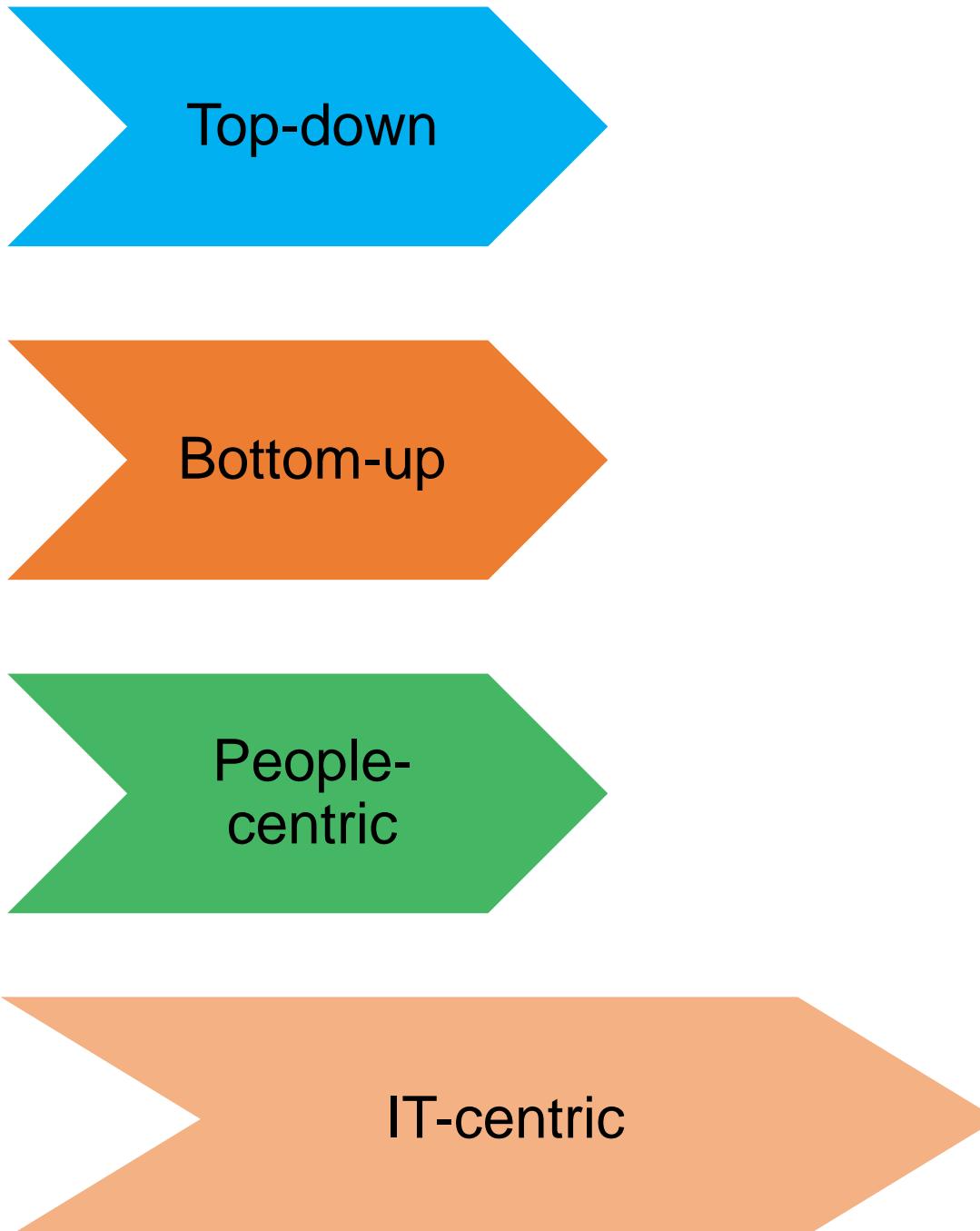
## PROCESS IMPROVEMENT APPROACHES



Change is related to the activities and workflows in an organization

# CHANGE SCOPE

## PROCESS IMPROVEMENT APPROACHES



Initiatives are focused on process automation

# CHANGE SCOPE

## MAJOR ASSUMPTIONS



**Business Analysis  
Work**

Major assumptions include

- Processes are generally supported by IT systems. Development of IT systems are not covered under BPM.
- BPM initiatives have senior management support.
- BPM system requires a tight integration with organizational strategy.
- BPM initiatives are cross functional.
- BPM initiatives are end-to-end processes in the organization.

# Lesson 13: Business Process Management Perspective

## Topic 13.3: Business Analysis Scope

- ✓ Change sponsor
- ✓ Change targets
- ✓ Position of a business analyst
- ✓ Business analysis outcomes

# BUSINESS ANALYSIS SCOPE

## CHANGE SPONSOR AND CHANGE TARGETS

### Change Sponsors

- Focus on value and outcomes
- BA practices applied to BPM initiatives



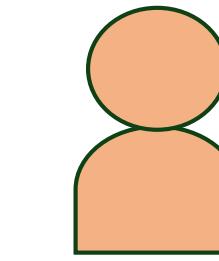
Executive

Initiate and manage process improvements



Process Manager

### Change Targets



Customer



Regulator



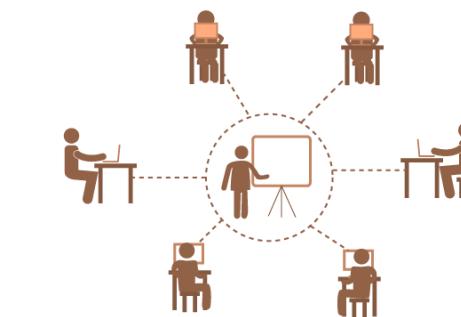
Process owner



Process participants



Process manager



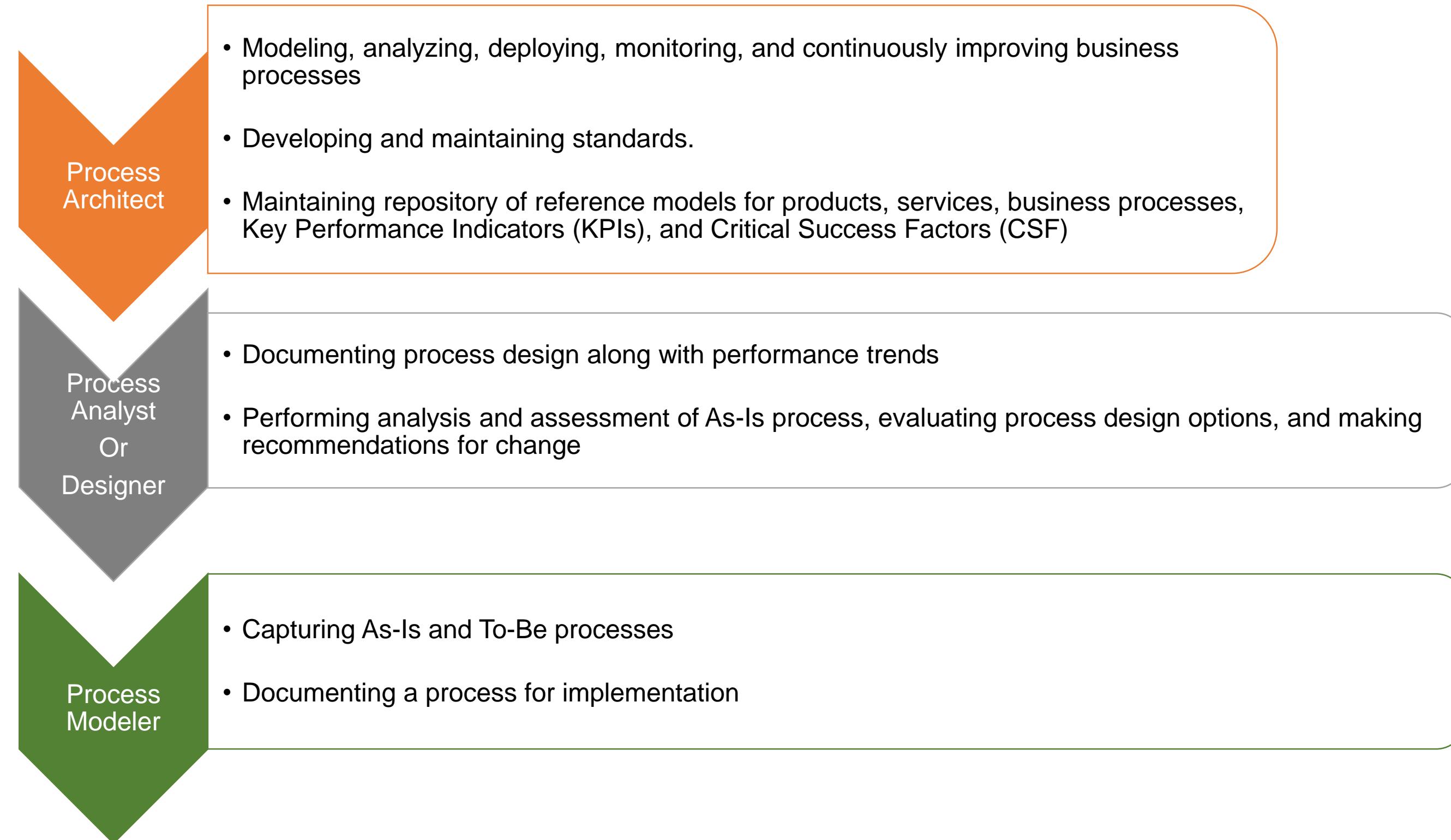
Implementation Team

# BUSINESS ANALYSIS SCOPE

## POSITION OF A BUSINESS ANALYST

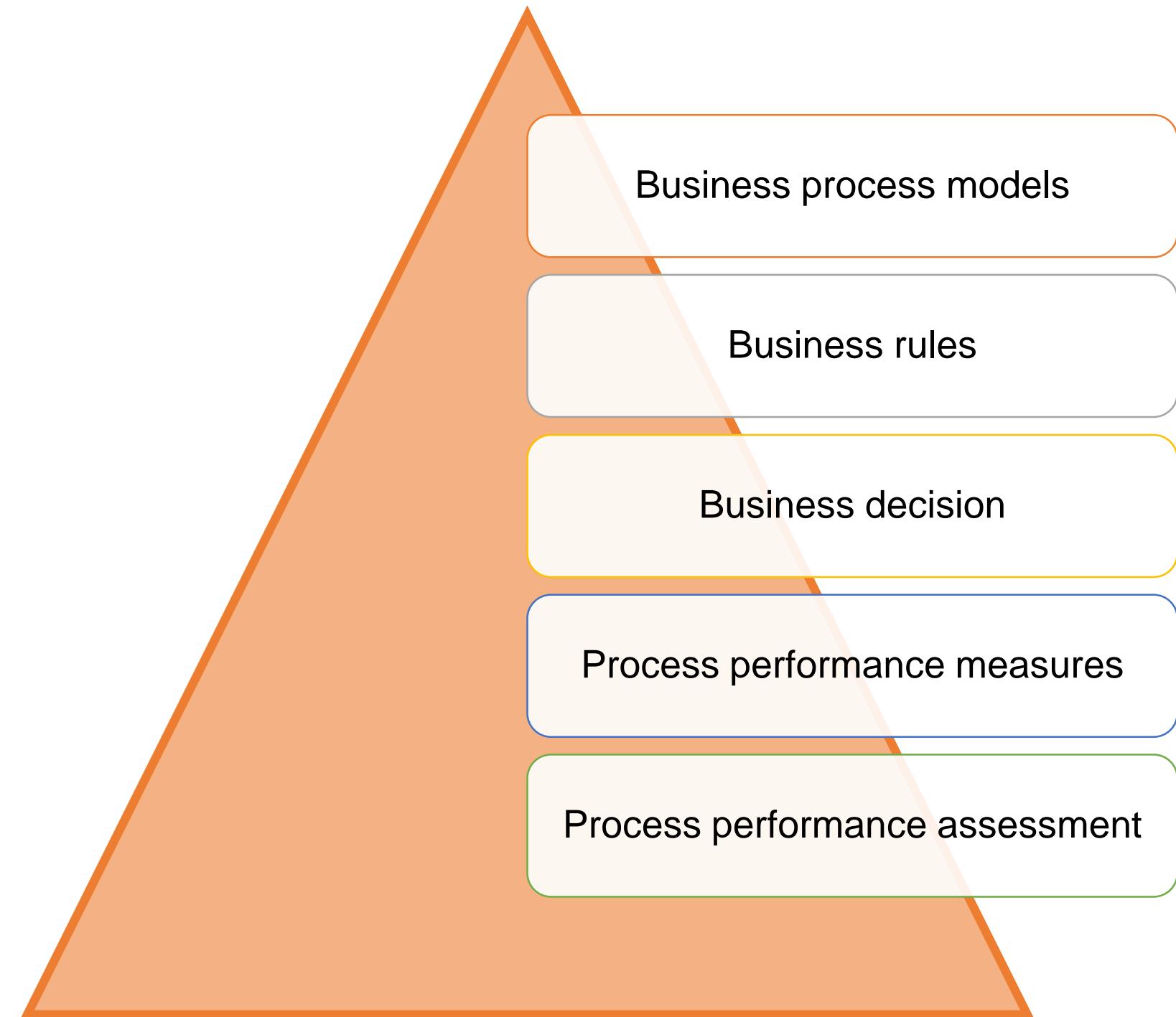


Business Analyst



# BUSINESS ANALYSIS SCOPE

## BUSINESS ANALYSIS OUTCOMES



# Lesson 13: Business Process Management Perspective

## Topic 13.4: Frameworks, Methodologies, and Techniques

- ✓ BPM Frameworks
- ✓ BPM Methodologies
- ✓ BPM Techniques



# FRAMEWORKS, METHODOLOGIES, AND TECHNIQUES

## BPM FRAMEWORKS

### ACCORD

Maps current state models and unstructured data to conceptual models

### Enhanced Telecommunications Operations Map (eTOM)

Maps out the processes involved at the enterprise level



### Model based and integrated process improvement (MIPI)

- Understand business needs and process
- Model and Analysis process
- Redesign process
- Implement new process
- Assess new process and methodology
- Review process

### Governments Strategic Reference Model (GSRM)

Provides generic government processes and patterns for each stage of organizational maturity

### Business Analyst

### Process Classification Framework (PCF)

Creates a common language for organizations to communicate and define work processes comprehensively and without redundancies

# FRAMEWORKS, METHODOLOGIES, AND TECHNIQUES

## BPM METHODOLOGIES

Adaptive Case Management  
(ACM)

Business Process Re-engineering  
(BPR)

Continuous Improvement (CI)

Lean

Six Sigma

Theory Of Constraints (TOC)

Total Quality Management (TQM)

# FRAMEWORKS, METHODOLOGIES, AND TECHNIQUES

## BPM METHODOLOGIES

### Adaptive Case Management (ACM)

- Used when processes are not static and have a lot of human interaction
- May be different each time it is performed

### Continuous Improvement (CI)

Ongoing monitoring and adjustment of existing processes to bring them closer to goals or performance targets

### Business Process Re-engineering (BPR)

Redesigning business processes for improvements in critical performance measures

### Lean

Continuous improvement methodology focusing on eliminating waste in a process

# FRAMEWORKS, METHODOLOGIES AND TECHNIQUES

## BPM METHODOLOGIES

Six Sigma

Continuous improvement methodology focusing on eliminating variations in the outcome of a process

Total Quality Management (TQM)

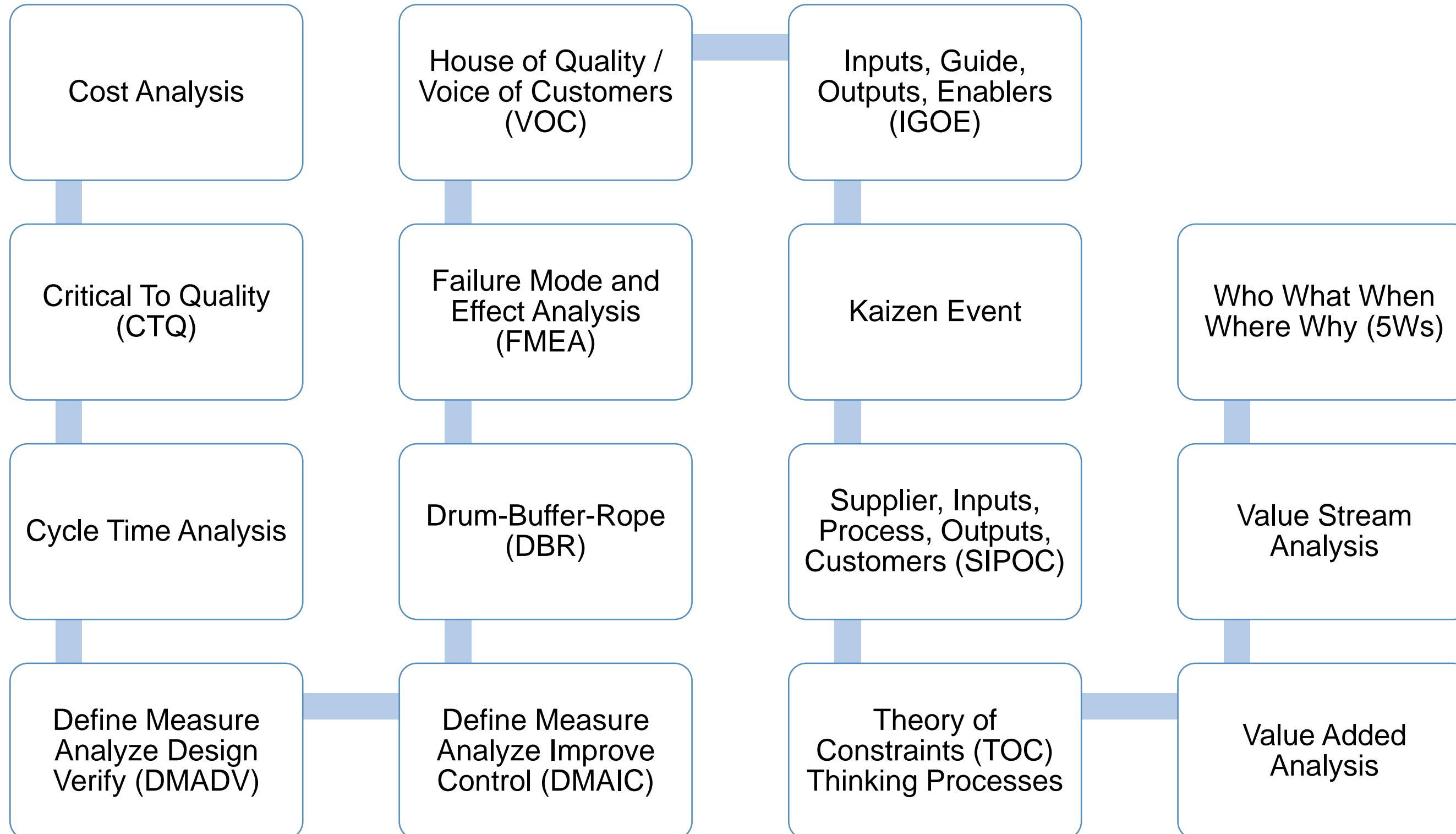
- Organization processes should provide highest quality products and services to the customer and stakeholders
- Products or services should meet or exceed the customer and stakeholder expectations

Theory Of Constraints (TOC)

- Controls the performance, and can be optimized by managing the variables
- Variables are throughput, operational expenses, and product inventory

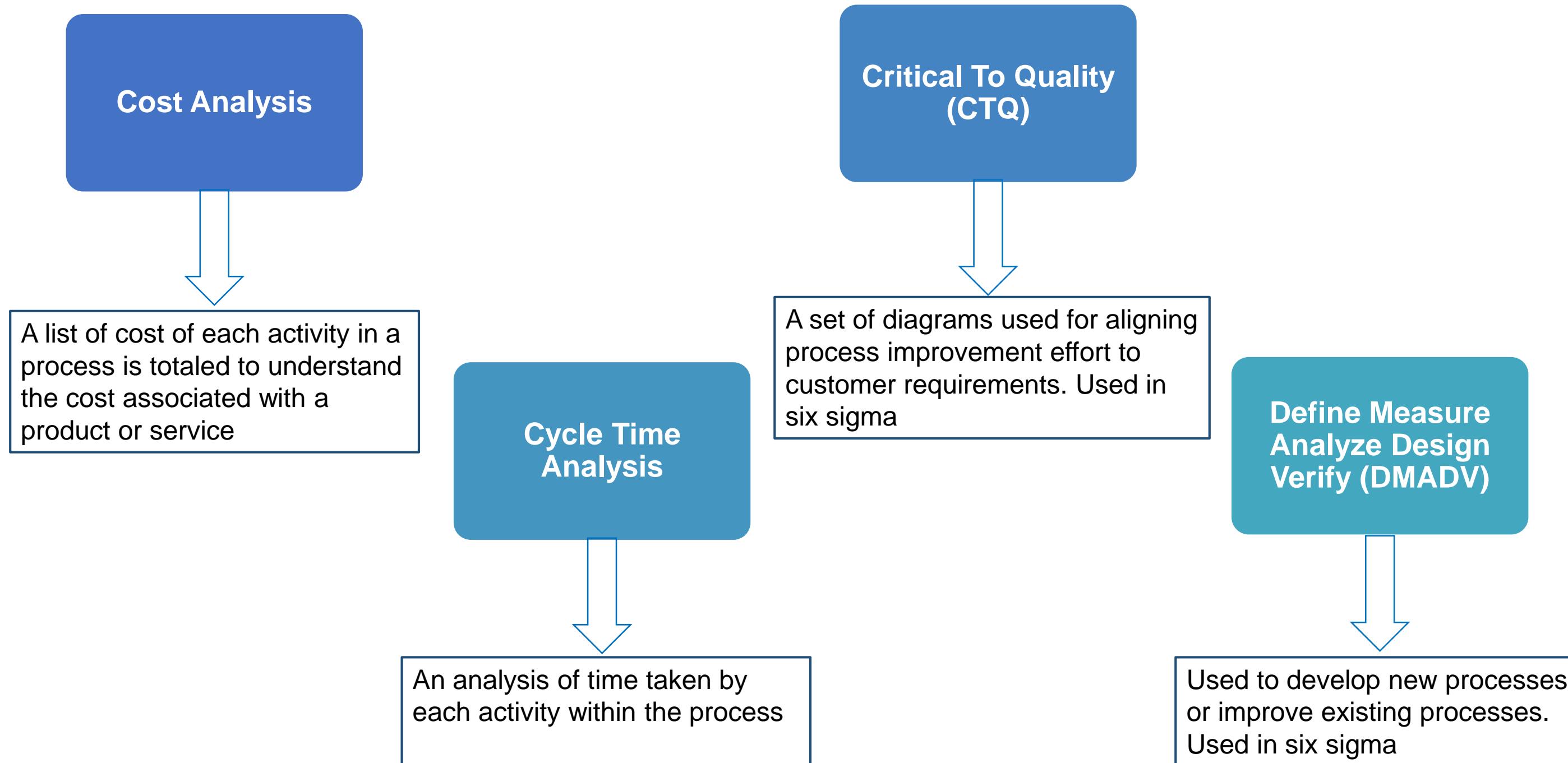
# FRAMEWORKS, METHODOLOGIES, AND TECHNIQUES

## BPM TECHNIQUES



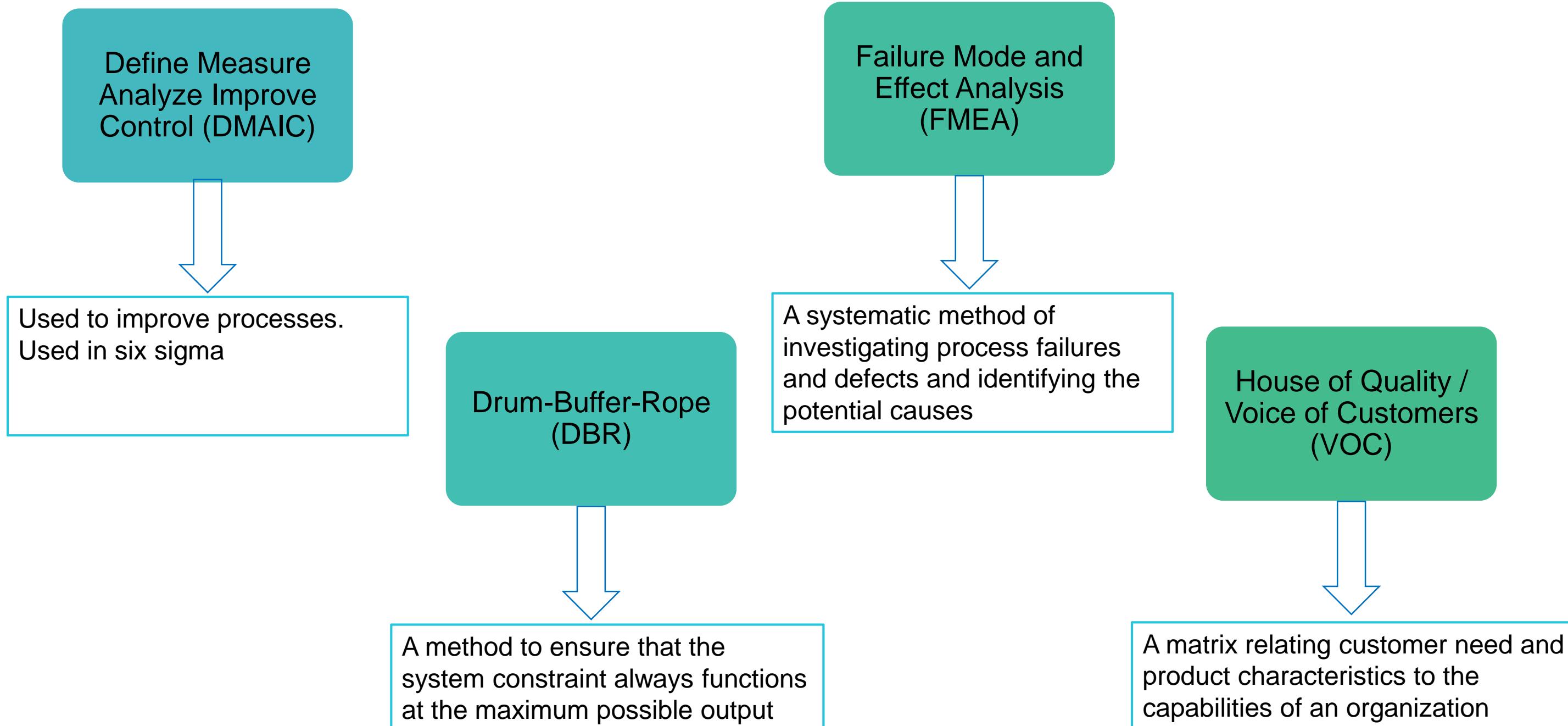
# FRAMEWORKS, METHODOLOGIES, AND TECHNIQUES

## BPM TECHNIQUES



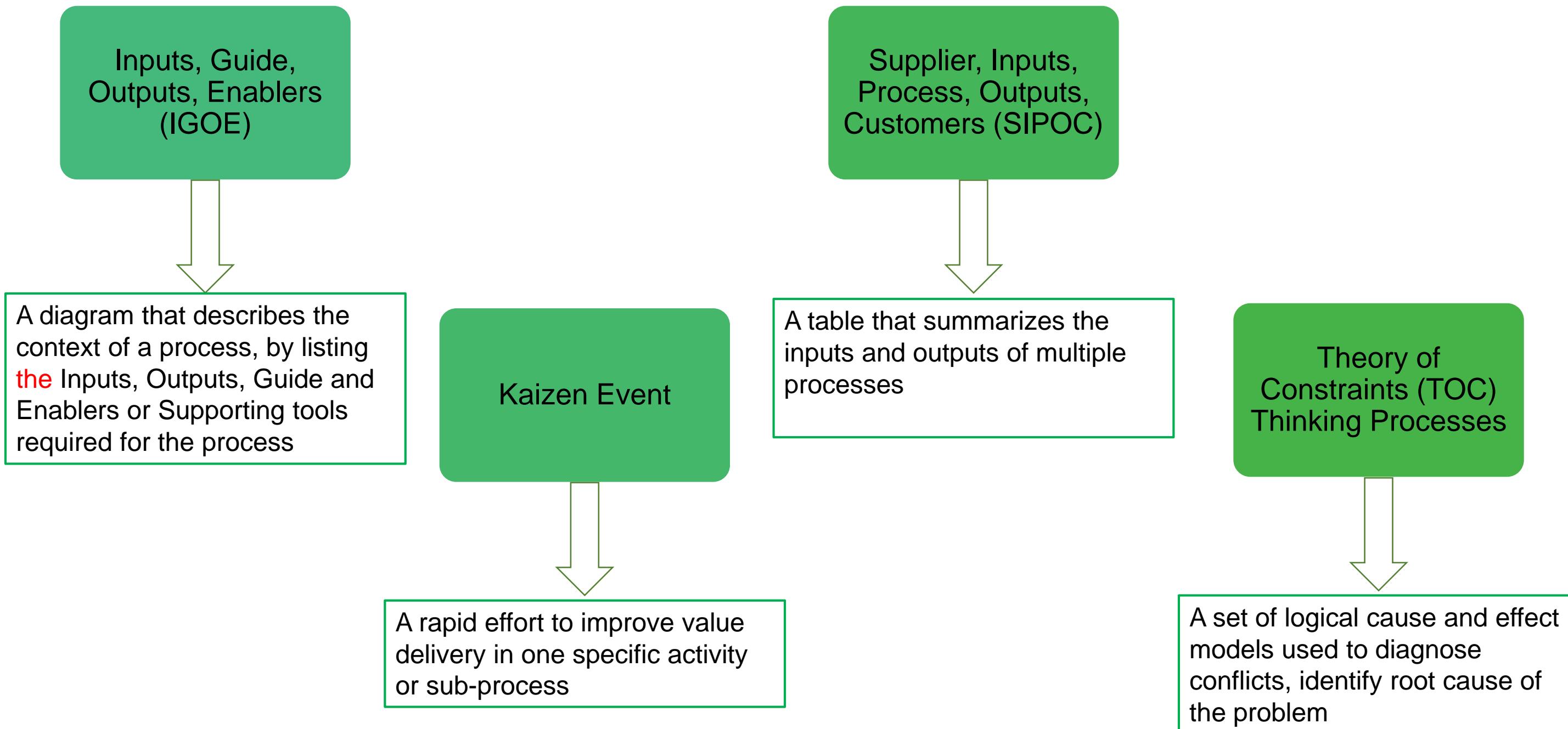
# FRAMEWORKS, METHODOLOGIES AND TECHNIQUES

## BPM TECHNIQUES



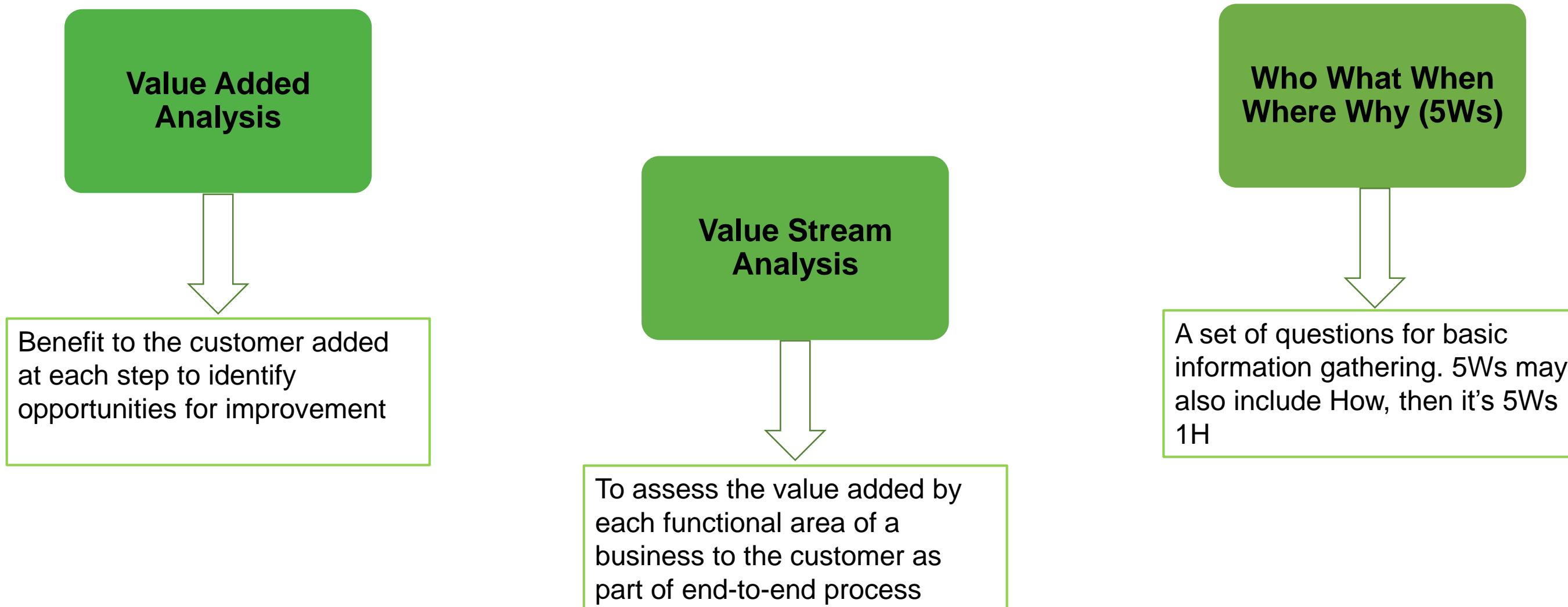
# FRAMEWORKS, METHODOLOGIES AND TECHNIQUES

## BPM TECHNIQUES



# FRAMEWORKS, METHODOLOGIES AND TECHNIQUES

## BPM TECHNIQUES



# Lesson 13: Business Process Management Perspective

## Topic 13.5: Underlying Competencies

✓ Underlying competencies in the BPM perspective

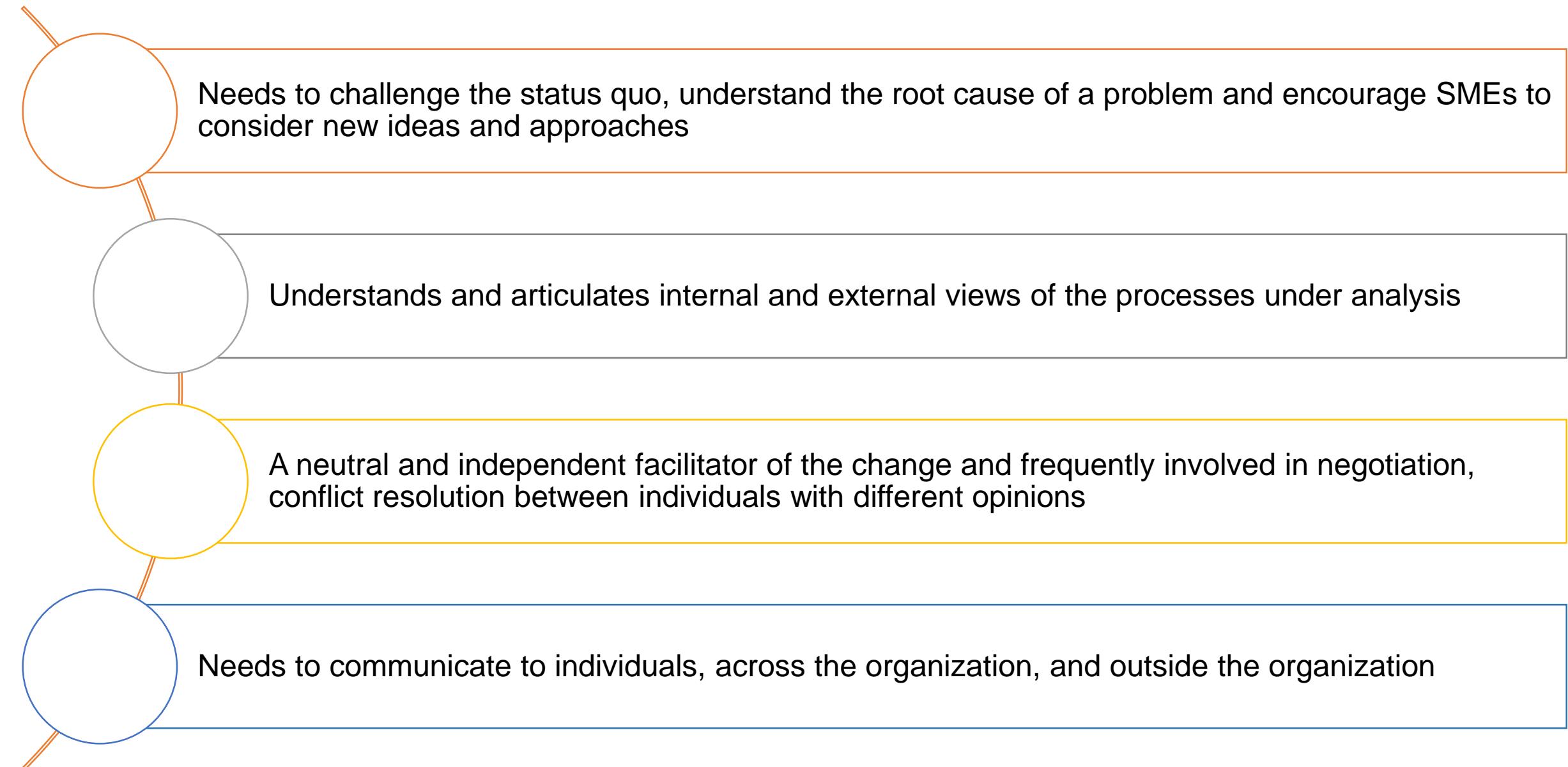


# UNDERLYING COMPETENCIES

## INTRODUCTION



### Business Analyst



# Lesson 13: Business Process Management Perspective

## Topic 13.6: Impact of Knowledge Areas

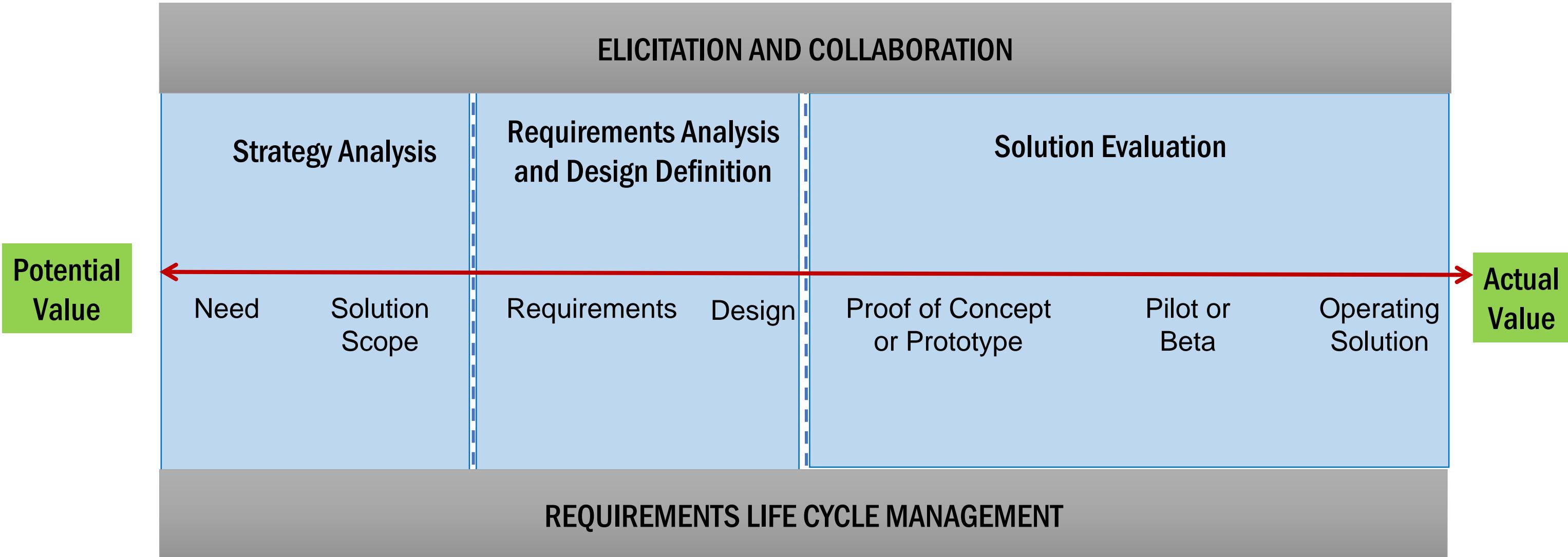
✓ Impact of the BPM Perspective on Knowledge Areas



# IMPACT ON KNOWLEDGE AREAS

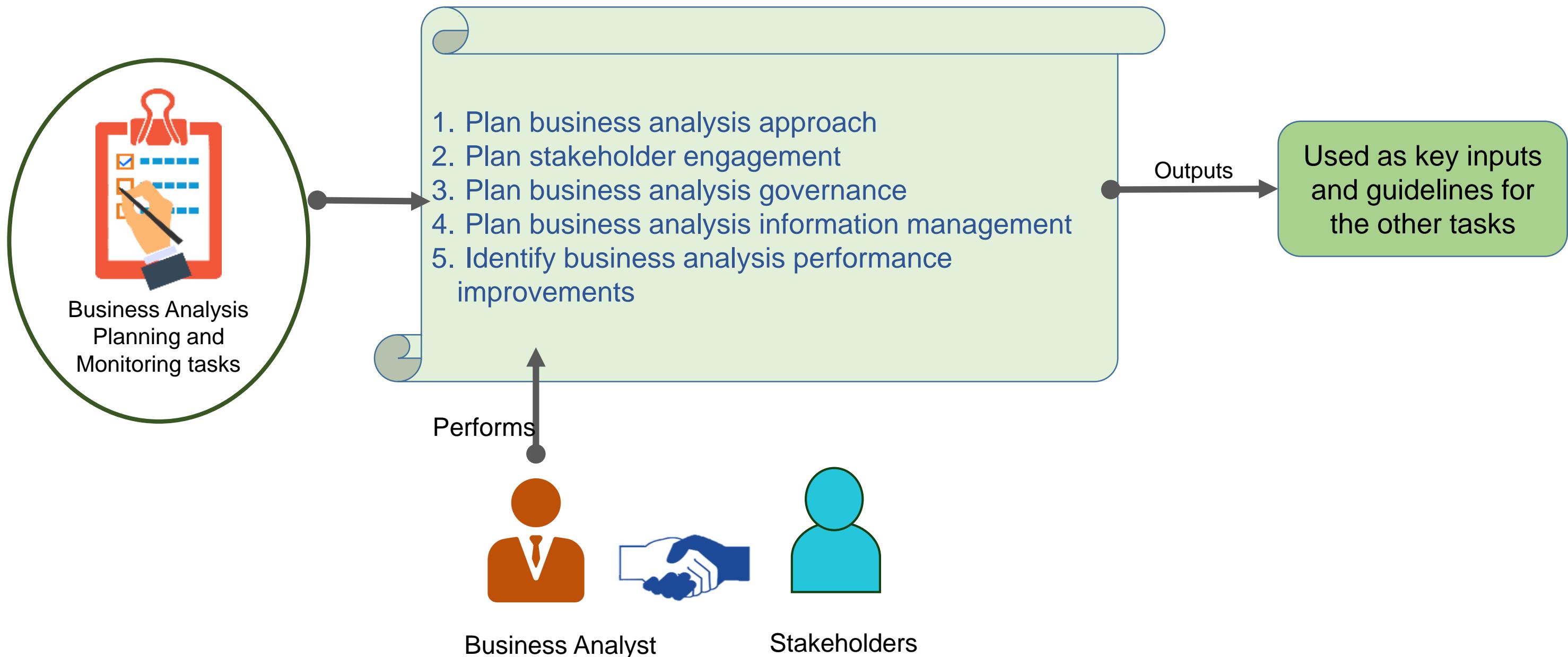
## BUSINESS ANALYSIS KNOWLEDGE AREAS

### BUSINESS ANALYSIS PLANNING AND MONITORING



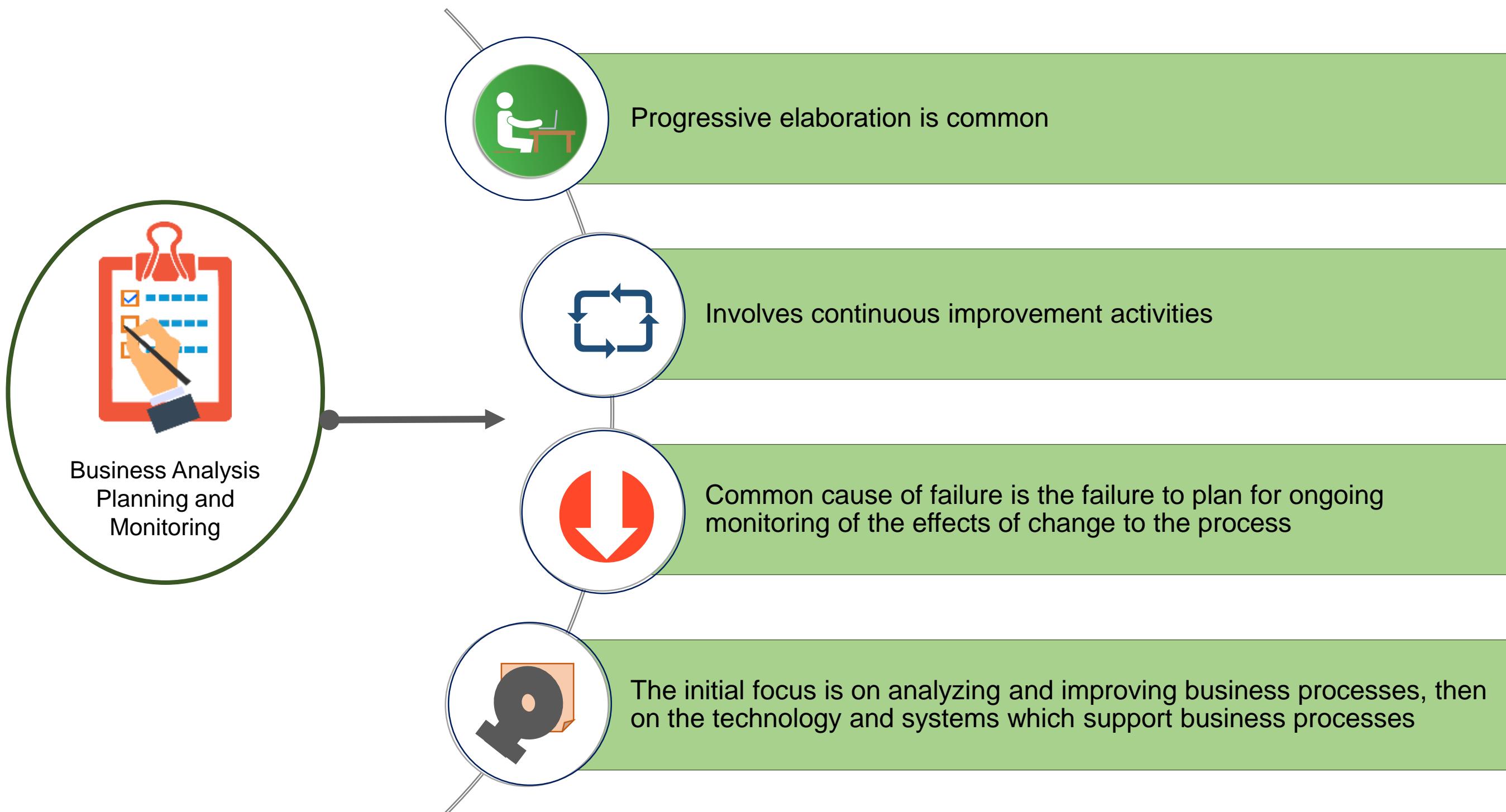
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING



# IMPACT ON KNOWLEDGE AREAS

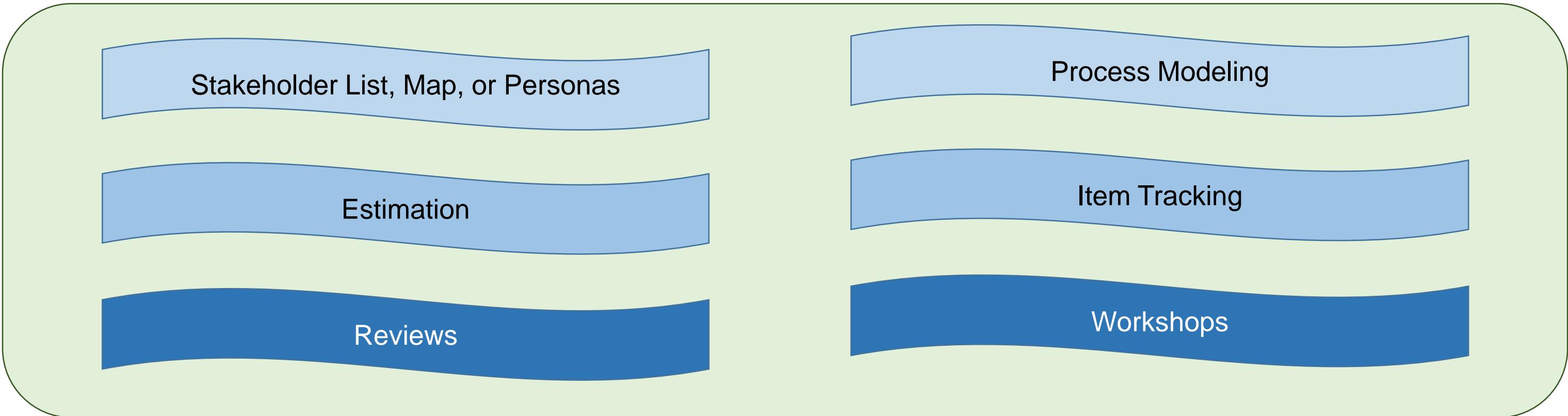
## BUSINESS ANALYSIS PLANNING AND MONITORING



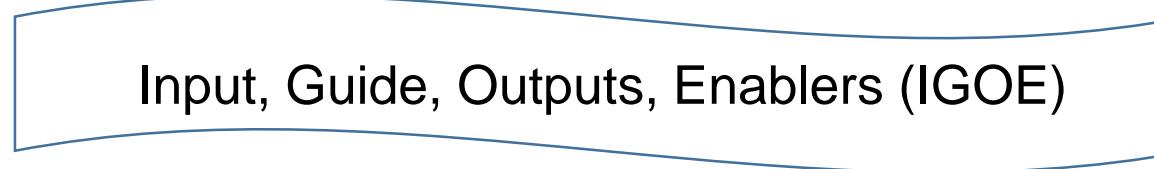
# IMPACT ON KNOWLEDGE AREAS

## BUSINESS ANALYSIS PLANNING AND MONITORING

### BABOK® Techniques

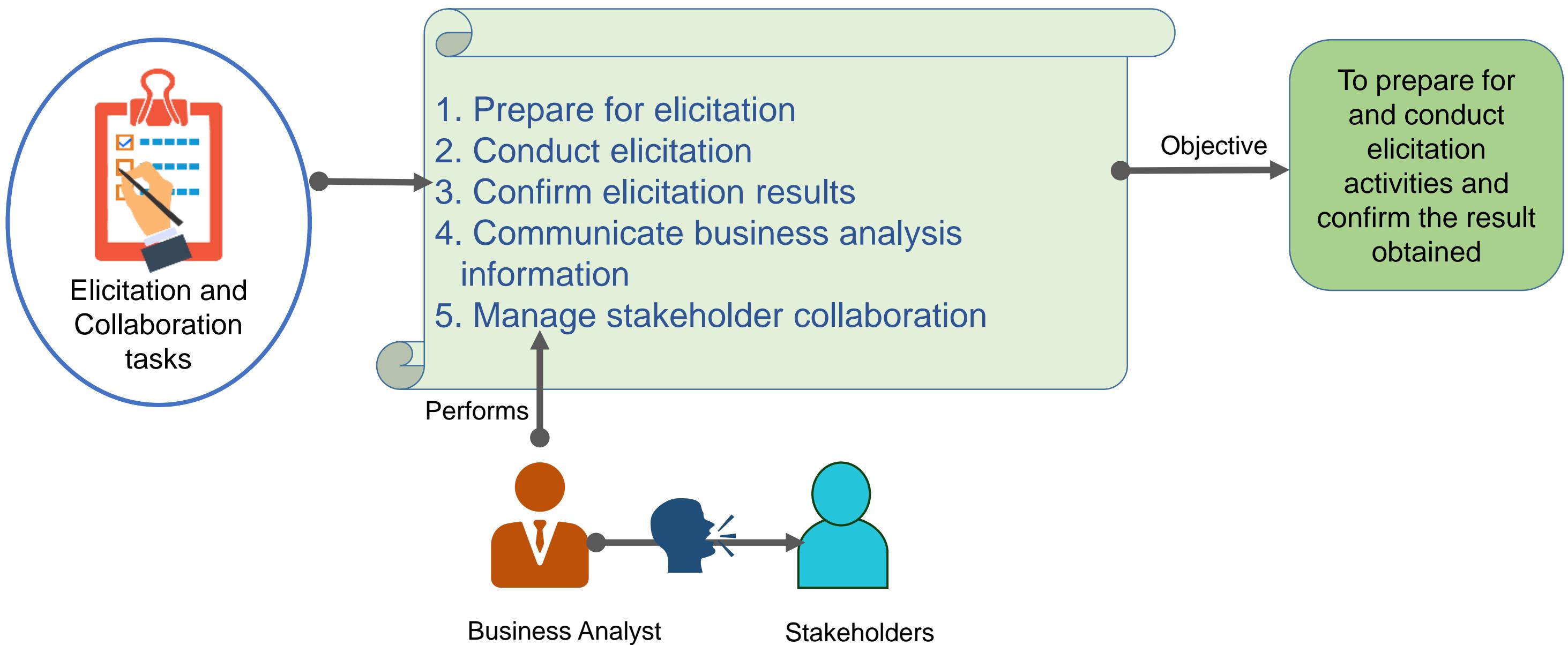


### Other Techniques



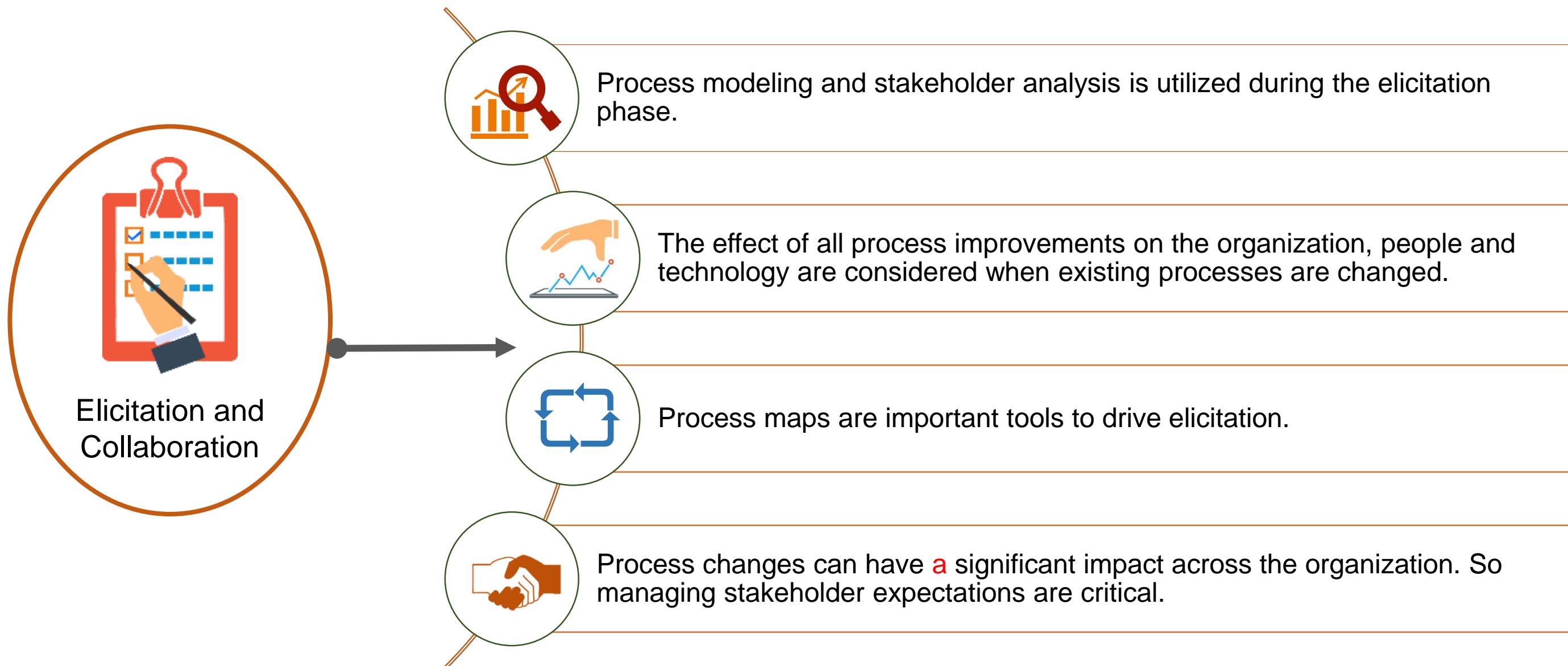
# IMPACT ON KNOWLEDGE AREAS

## ELICITATION AND COLLABORATION



# IMPACT ON KNOWLEDGE AREAS

## ELICITATION AND COLLABORATION



# IMPACT ON KNOWLEDGE AREAS

## ELICITATION AND COLLABORATION

### BABOK® Techniques

Stakeholders List, Map, Personas

Root Cause Analysis

Scope Modeling

Process Modeling

Brainstorming

Document Analysis

Focus Groups

Interface Analysis

Interviews

Observations

Prototyping

Surveys and Questionnaire

Workshops

Reviews

Use Cases and Scenarios

User Stories

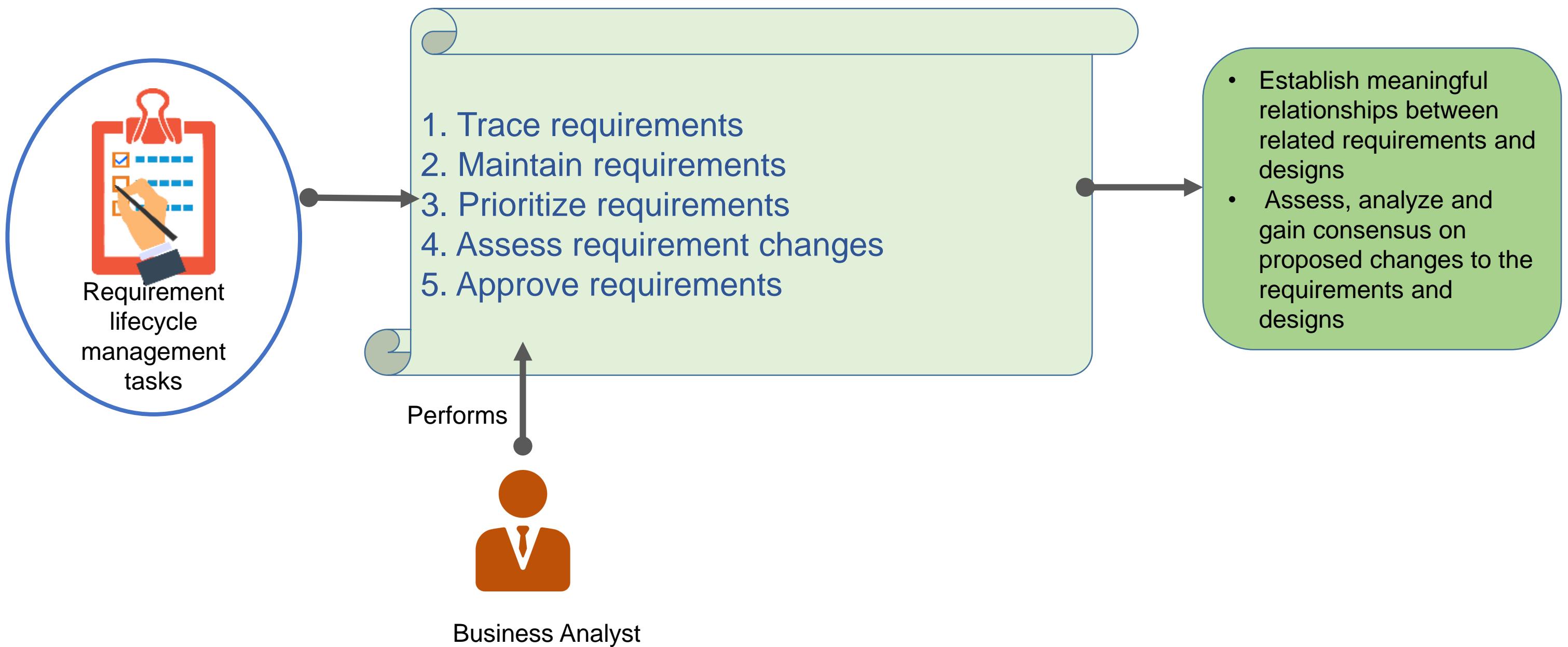
Metrics and Key Performance Indicators (KPIs)

### Other Techniques

House of Quality / Voice of Customer

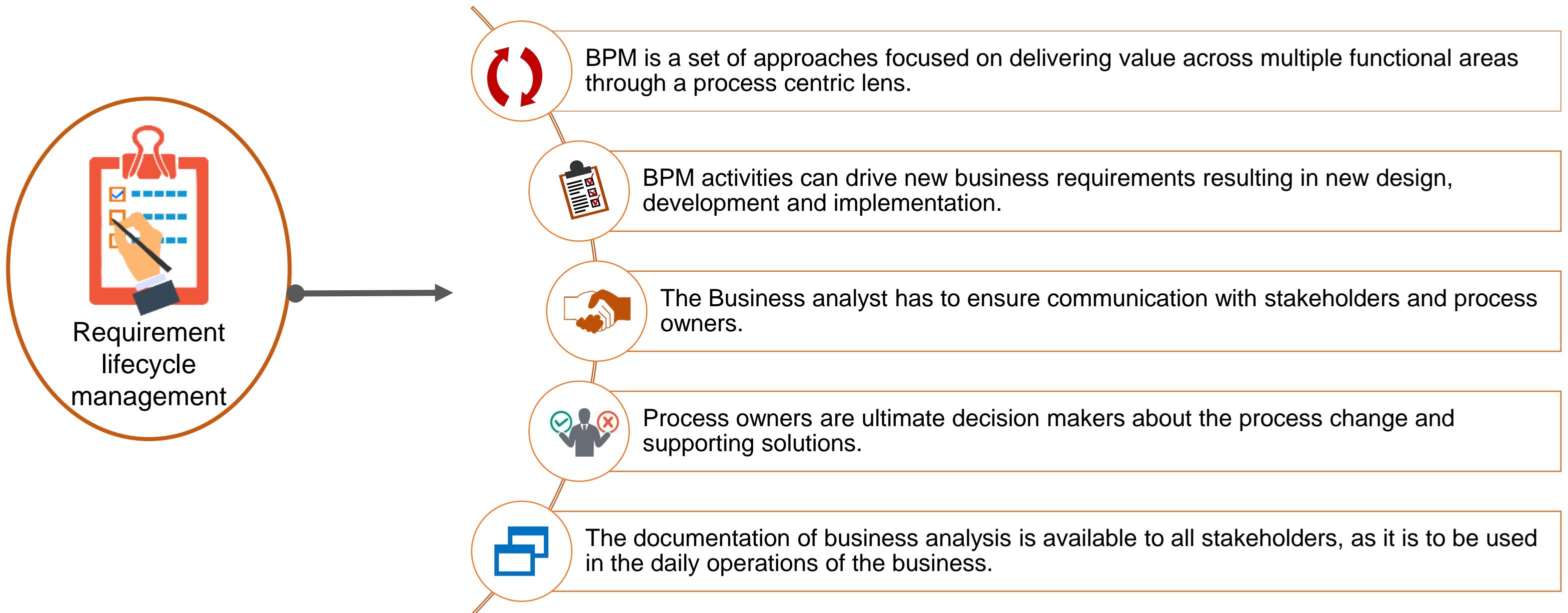
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENTS LIFE CYCLE MANAGEMENT

### BABOK® Techniques

Acceptance and Evaluation Criteria

Scope Modeling

Process Modeling

Process Analysis

Business Rules Analysis

Non Functional Requirements Analysis

Backlog Management

Prioritization

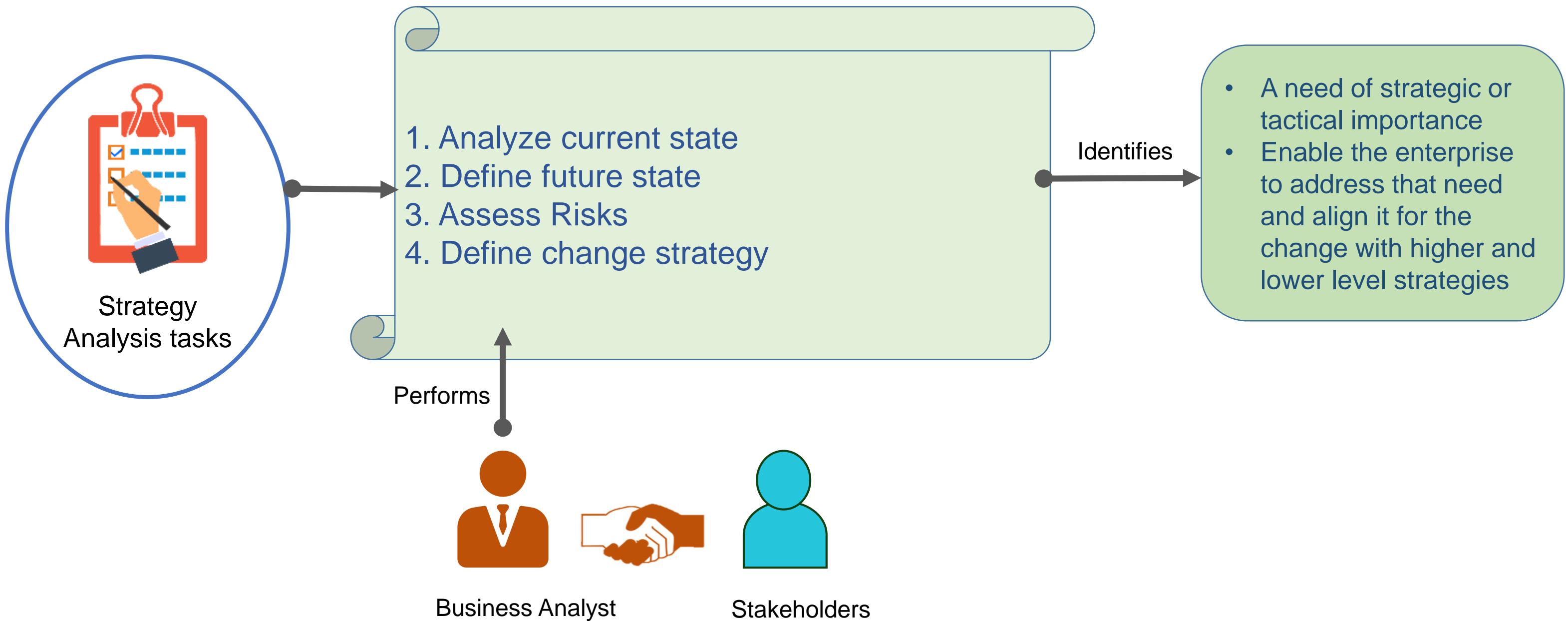
Brainstorming

Prototyping

Workshops

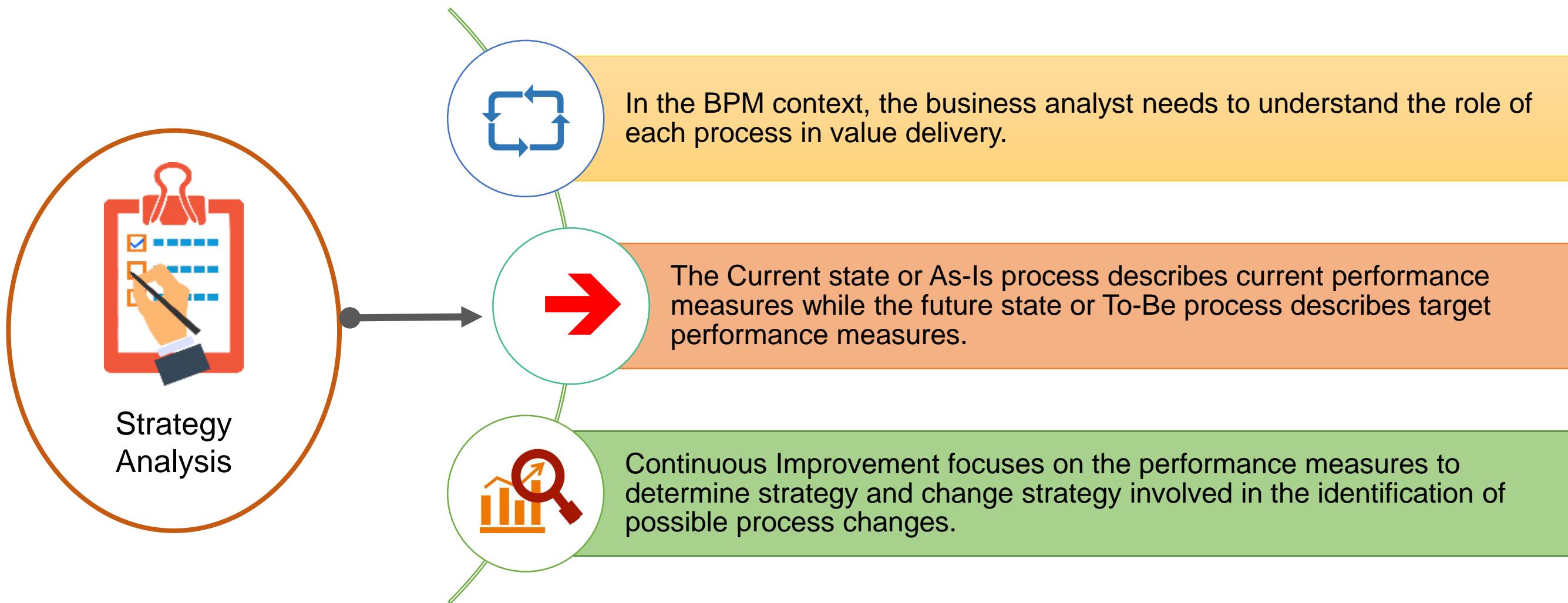
# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS



# IMPACT ON KNOWLEDGE AREAS

## STRATEGY ANALYSIS

### BABOK® Techniques

Process Modeling

Process Analysis

Document Analysis

Functional Decomposition

Lessons Learned

Interviews

### Other Techniques

House of Quality/Voice of Customer

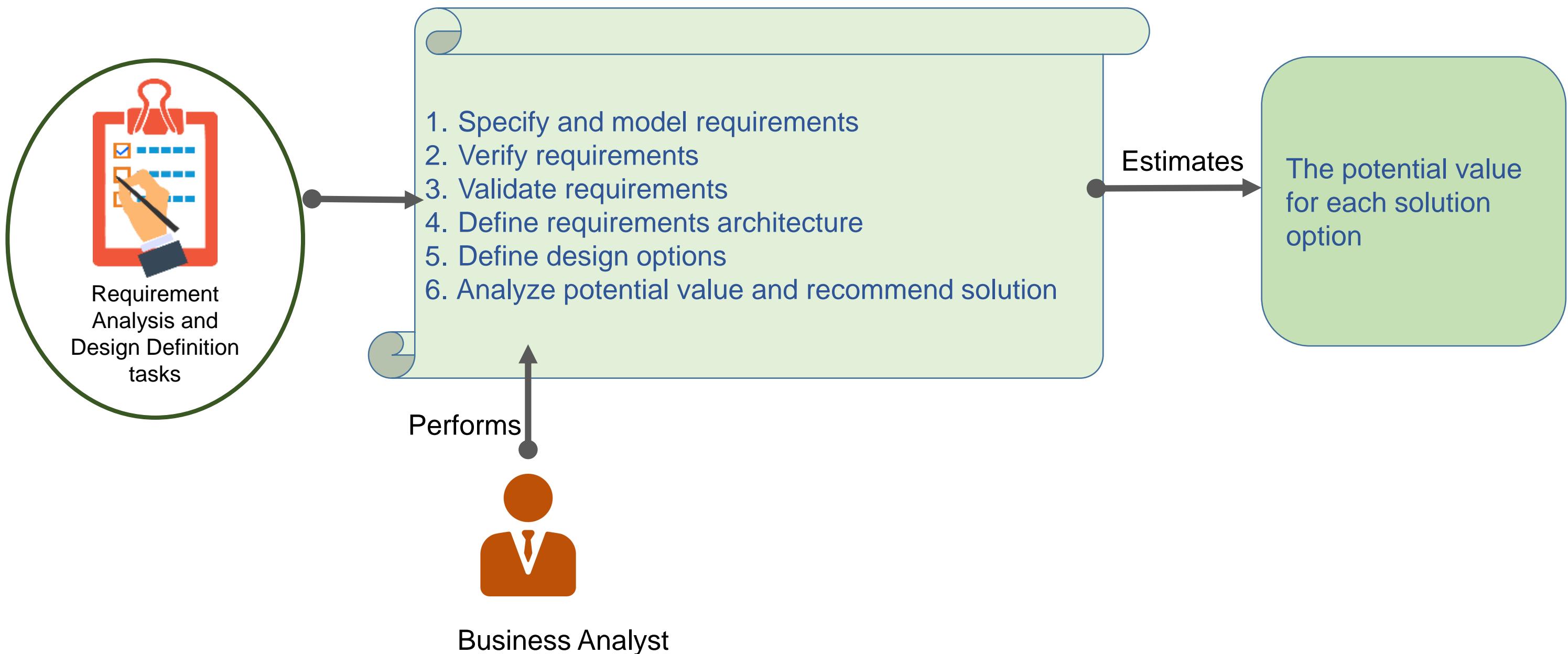
Input, Guide, Outputs, Enablers (IGOE)

Drum-Buffer-Rope

TOC Thinking Processes

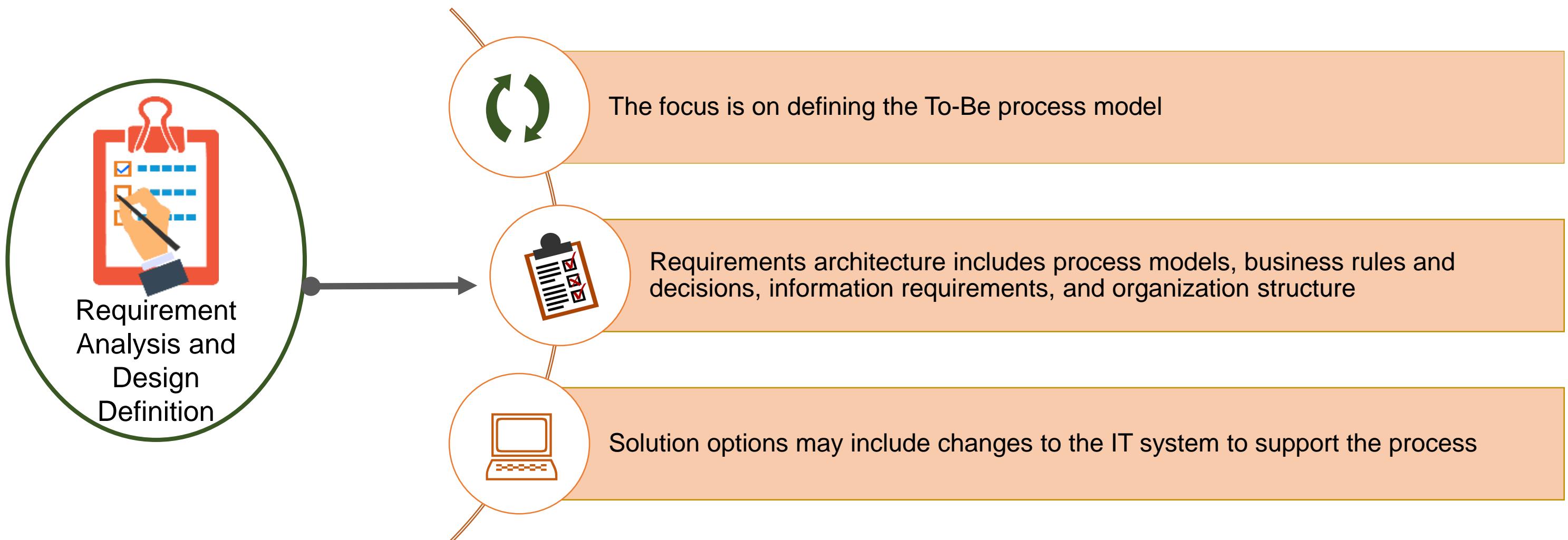
# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION



# IMPACT ON KNOWLEDGE AREAS

## REQUIREMENT ANALYSIS AND DESIGN DEFINITION

### BABOK® Techniques

Benchmarking and Market Analysis

Business Rules Analysis

Scope Modeling

Decision Modeling

Functional Decomposition

Stakeholder List, Maps or Personas

Metrics and Key Performance Indicators (KPIs)

Estimation

Prioritization

Prototyping

Workshops

### Other Techniques

Kaizen Event

Process Simulation

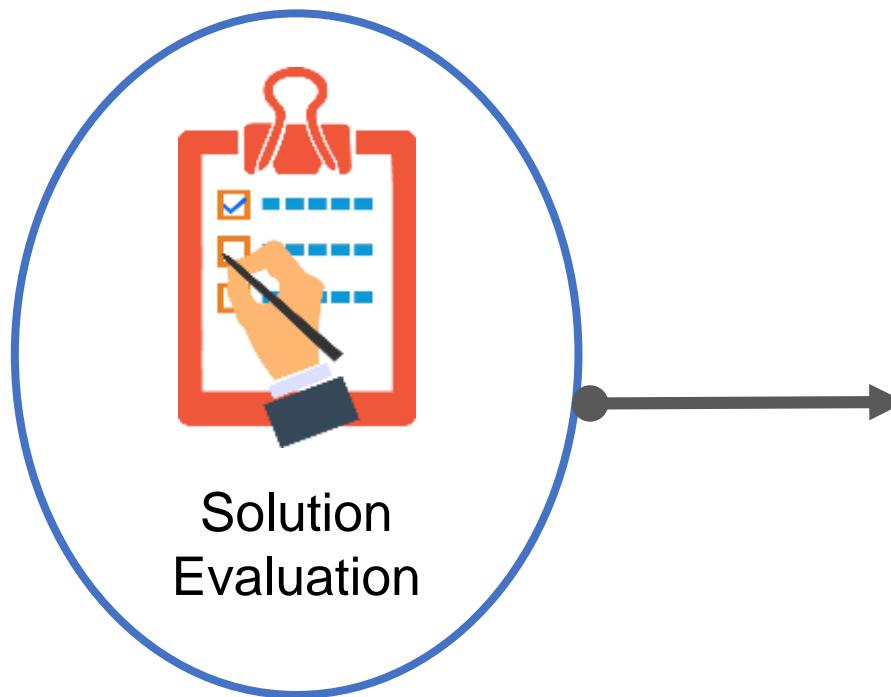
# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION



# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION



Solution evaluation occurs repeatedly during BPM initiatives

Solution evaluation provides insights about the impact of process improvements and value delivered by process change

Analyze solution performance task is performed to understand the difference between potential and actual value

Solution evaluation examines the opportunities or constraints of the implemented solution

New opportunities trigger a repeat of the BPM life cycle

# IMPACT ON KNOWLEDGE AREAS

## SOLUTION EVALUATION

### BABOK® Techniques

Benchmarking and Market Analysis

Balanced Scorecard

SWOT Analysis

Root Cause Analysis

Business Capability Analysis

Business Rules Analysis

Decision Analysis

Risk Analysis and Management

Stakeholder List, Maps or Personas

Metrics and Key Performance Indicators (KPIs)

Acceptance and Evaluation Criteria

Estimation

Process Modeling

Organizational Modeling

Brainstorming

Document Analysis

Interviews

Observation

Reviews

Survey or Questionnaire

### Other Techniques

Kaizen Event

Process Simulation

Value Stream Analysis

Failure Mode and Effect Analysis (FMEA)

## KEY TAKEAWAYS

The BPM life cycle generally includes designing, modeling, executing, monitoring, and optimizing.

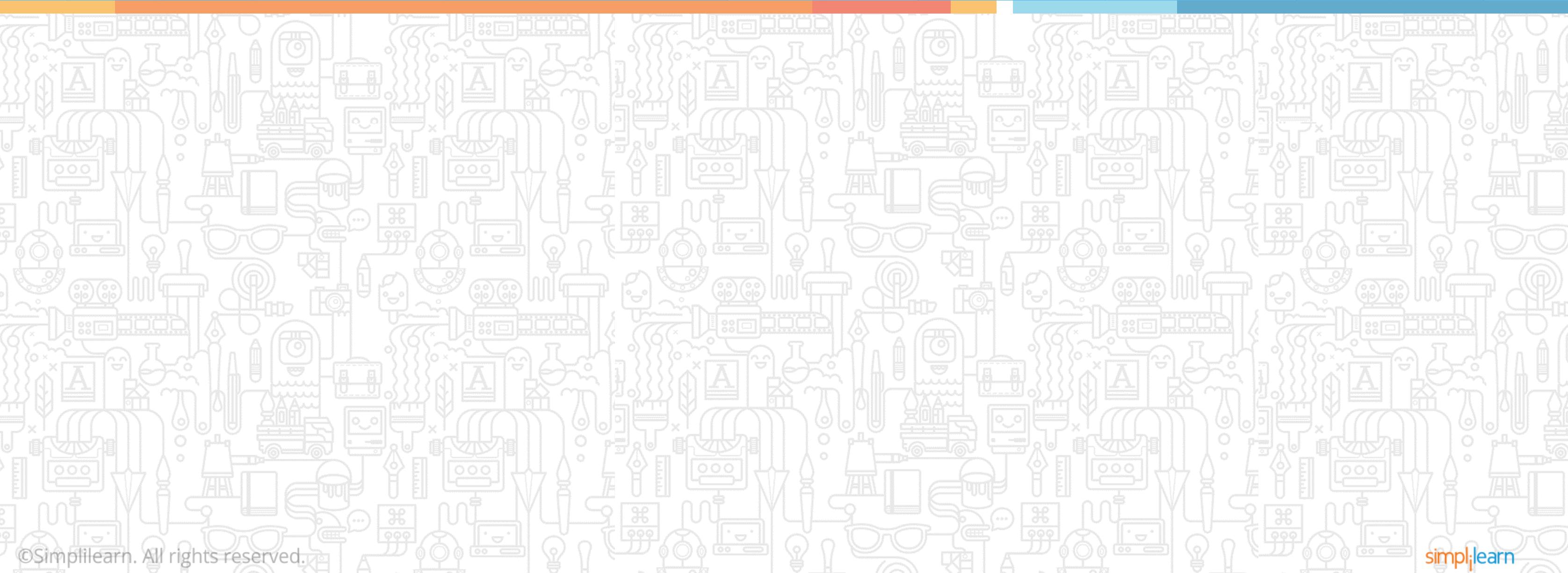
BPM implementation approaches are Business Process Re-engineering, Evolutionary Change, Substantial Discovery, Process benchmarking, and Specialized BPMS applications.

Primary change targets may include, customer, regulator, process owner, process participants, process manager, and implementation team. Business Analyst may assume a role of process architect, process analyst, process designer, or process modeler.

- 
- 1 A BPM Initiative delivers value by implementing the improvement the way work is performed in an organization. BPM is ongoing effort and integral part of the ongoing management and operation of the organization.
  - 2
  - 3 The goal of BPM is to ensure that value delivery is optimized across end-to-end processes. A BPM initiative can span the entire enterprise to make a process-centric organization. Individual initiative may improve specific processes and sub-processes.
  - 4
  - 5 Process improvement approaches are Top-down, Bottom-up, People-centric and IT-centric.
  - 6
  - 7 Managing stakeholder expectations are critical, as process changes can have a significant impact across the organization. Without effective stakeholder management, process changes may not be successful..

# **Lesson 13: Business Process Management Perspective**

## **Topic 13.7: Case Study Exercise**



# CASE STUDY

## OVERVIEW - BUSINESS NEED

Standard Inc. is a leading insurance company with 3000 employees and 30,00,000 customers. The company's strategic objectives are to improve the insurance agent-customer interaction, increase up-sales and cross-sales, improve claims processing efficiency, improve profitability, and reduce costs. The company provides customized services to corporate clients apart from serving retail clients directly and through partners.



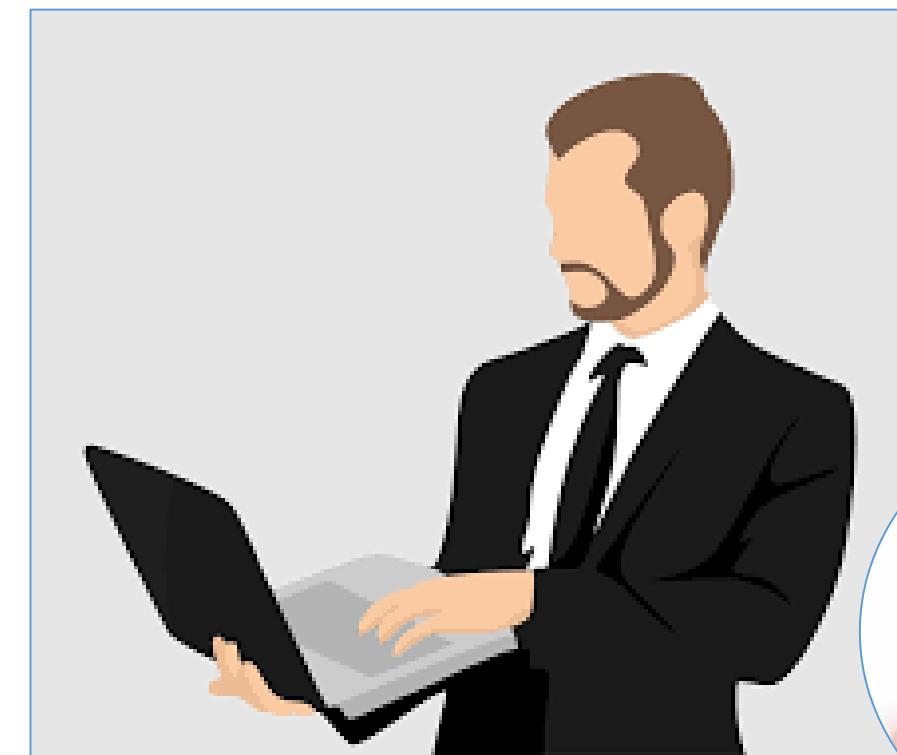
Standard Inc.

# CASE STUDY

---

## OVERVIEW – CURRENT STATE

Paul is a Sr. Business Analyst assigned to this strategic initiative to improve the process efficiency. He is working with a couple of junior business analysts. He performed an initial document analysis to understand the current state of the company. He observed that the available process diagrams are generic and inconsistent in terminology and notations. He asked all BAs to utilize standard notation for documenting the existing process, so that the new process can be designed.



Sr. Business Analyst



Jr. Business Analysts

# CASE STUDY

---

## BUSINESS ANALYSIS ACTIVITIES

Paul has also considered industry standards to standardize insurance operations, integrate applications, and streamline customer and partner interaction.

The key processes are Quote Insurance Premium, Underwriting proposal, Generate Insurance Policy, Renewal, Estimate Validation, Approval, and Claims Processing.

The key applications are Insurance Management Software, CRM, and Document Management Software.



Sr. Business Analyst

# CASE STUDY

## BUSINESS ANALYSIS ACTIVITIES

Paul has conducted a number of elicitation sessions to challenge the existing process, develop a To-Be process, and determine target performance measures.

During the elicitation sessions, he encouraged the subject matter experts to explore new ideas and approaches, facilitate discussion among the stakeholders, and arbitrated between individuals with differing opinions.

The delivery approach is to focus on individual processes based on the priority considering impact, changes on the existing IT systems, and delivering value to the stakeholders.



Sr. Business Analyst

## CASE STUDY

### EXERCISE

|   | Questions                                                                                                                                                        | Options                                                                                                                                                                                                                                                                                                                                               |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Paul has asked all BAs to utilize standard notation for documenting existing processes. Which one of the following is most likely to be used?                    | <ul style="list-style-type: none"><li><input type="radio"/> Business Process Model and Notation</li><li><input type="radio"/> Decision Model and Notation</li><li><input type="radio"/> Case Management Model and Notation</li><li><input type="radio"/> IDEF3 – Process Description Capture</li></ul>                                                |
| 2 | Which underlying competency is less likely to be demonstrated in the case study?                                                                                 | <ul style="list-style-type: none"><li><input type="radio"/> Problem solving skills</li><li><input type="radio"/> Interaction skills</li><li><input type="radio"/> Negotiation Skills</li><li><input type="radio"/> Adaptability</li></ul>                                                                                                             |
| 3 | Which one of the following is an industry standard to standardize insurance operations, integrate applications, and streamline customer and partner interaction? | <ul style="list-style-type: none"><li><input type="radio"/> ACORD</li><li><input type="radio"/> ACCORD</li><li><input type="radio"/> NAIC</li><li><input type="radio"/> PCF</li></ul>                                                                                                                                                                 |
| 4 | In the case study, delivery approach is focused on individual processes. Which type of process improvement approach is this?                                     | <ul style="list-style-type: none"><li><input type="radio"/> Hybrid approach</li><li><input type="radio"/> Individual approach</li><li><input type="radio"/> Bottom up approach</li><li><input type="radio"/> Top down approach</li></ul>                                                                                                              |
| 5 | Which one of the following is the most important in Business Process Management initiatives?                                                                     | <ul style="list-style-type: none"><li><input type="radio"/> Effective elicitation and collaboration in process analysis and design work</li><li><input type="radio"/> Effective stakeholder management</li><li><input type="radio"/> Communication with stakeholders and process owners</li><li><input type="radio"/> Executive involvement</li></ul> |

## CASE STUDY

## ANSWERS

|   | Questions                                                                                                                                                                 | Options                             |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1 | Paul has asked all BAs to utilize standard notation for documenting existing processes. Which one of the following is most likely to be used?                             | Business Process Model and Notation |
| 2 | Which underlying competency is less likely to be demonstrated in the case study?                                                                                          | Adaptability                        |
| 3 | Which one of the following is one of the industry standards to standardize insurance operations, integrate applications, and streamline customer and partner interaction? | ACORD                               |
| 4 | In the case study, delivery approach focuses on individual processes. Which type of process improvement approach is this?                                                 | Bottom up approach                  |
| 5 | Which one of the following is most important in Business Process Management initiatives?                                                                                  | Effective stakeholder management    |



**QUIZ**

1

**Which BPM technique is used to design new processes or improve existing processes?**

- a. DBR
- b. DMADV
- c. DMAIC
- d. FMEA



## QUIZ

1

**Which BPM technique is used to design new processes or improve existing processes?**

- a. DBR
- b. DMADV
- c. DMAIC
- d. FMEA



The correct answer is

**b**

**Explanation: DMADV is used to develop new processes or improve existing processes. DMADV is used in six sigma, but is not exclusive to six sigma.**

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

- a. Define, Measure, Analyze, Implement, Control
- b. Design, Measure, Analyze, Improve, Control
- c. Define, Measure, Analyze, Improve, Control
- d. Design, Measure, Analyze, Implement, Control



## QUIZ

2

### What does DMAIC stand for?

- a. Define, Measure, Analyze, Implement, Control
- b. Design, Measure, Analyze, Improve, Control
- c. Define, Measure, Analyze, Improve, Control
- d. Design, Measure, Analyze, Implement, Control



The correct answer is

c

**Explanation: DMAIC stands for Define, Measure, Analyze, Improve, Control. DMAIC is used in six sigma, but is not exclusive to six sigma.**

**QUIZ**  
**3**

**Which BPM methodology is a continuous improvement method that focuses on eliminating variations in the outcome of a process?**

- a. Six Sigma
- b. Continuous Improvement
- c. Lean
- d. Continuous Process Improvement



**QUIZ**  
**3**

**Which BPM methodology is a continuous improvement method that focuses on eliminating variations in the outcome of a process?**

- a. Six Sigma
- b. Continuous Improvement
- c. Lean
- d. Continuous Process Improvement



The correct answer is

**a**

**Explanation: Six Sigma is a continuous improvement methodology that focuses on eliminating variations in the outcome of a process.**

**QUIZ****4**

**In which BPM framework are the current state models mapped to the conceptual models?**

- a. PCF
- b. MIPI
- c. ACORD
- d. ACCORD



**QUIZ****4**

**In which BPM framework are the current state models mapped to the conceptual models?**

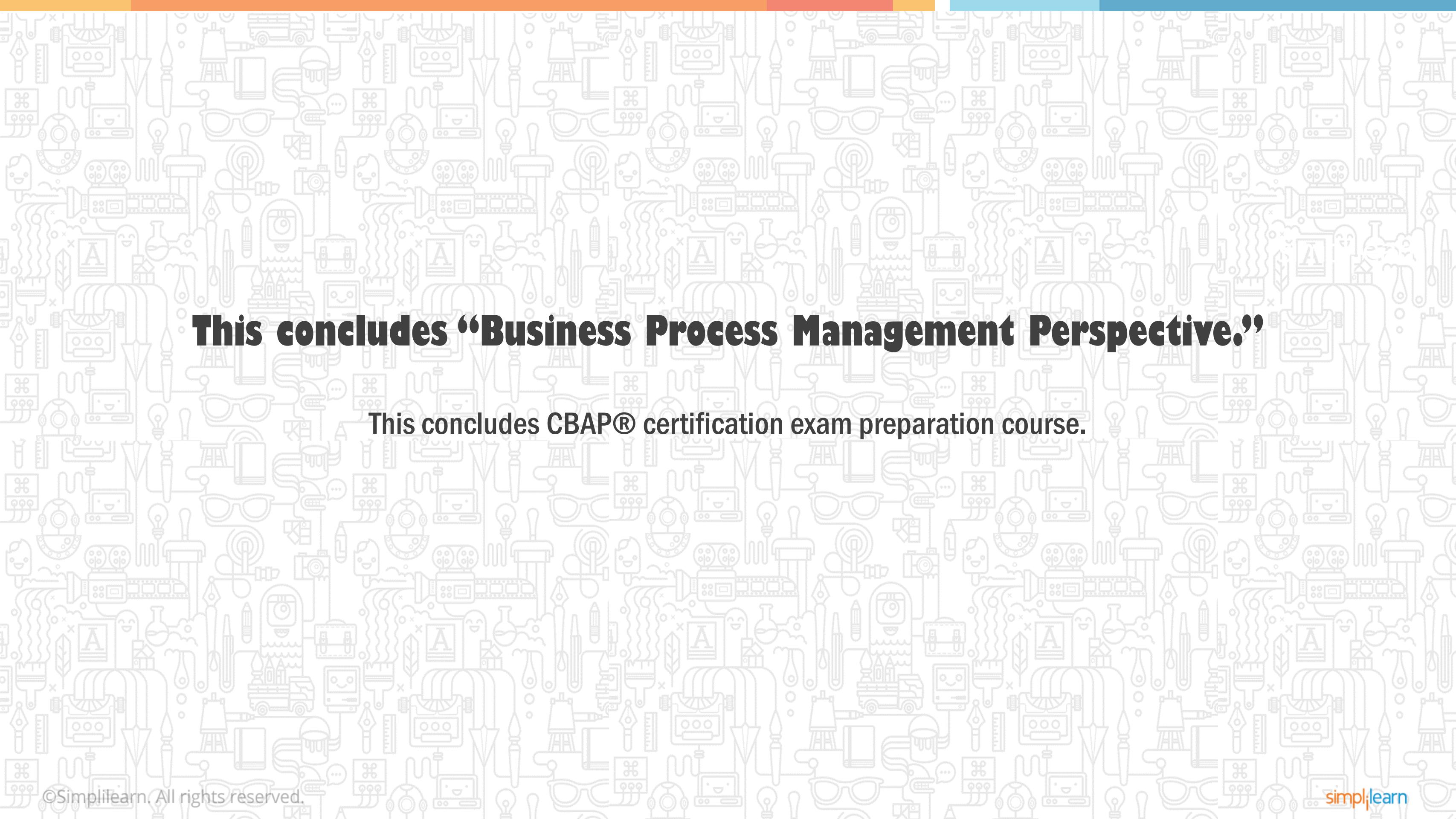
- a. PCF
- b. MIPI
- c. ACORD
- d. ACCORD



The correct answer is

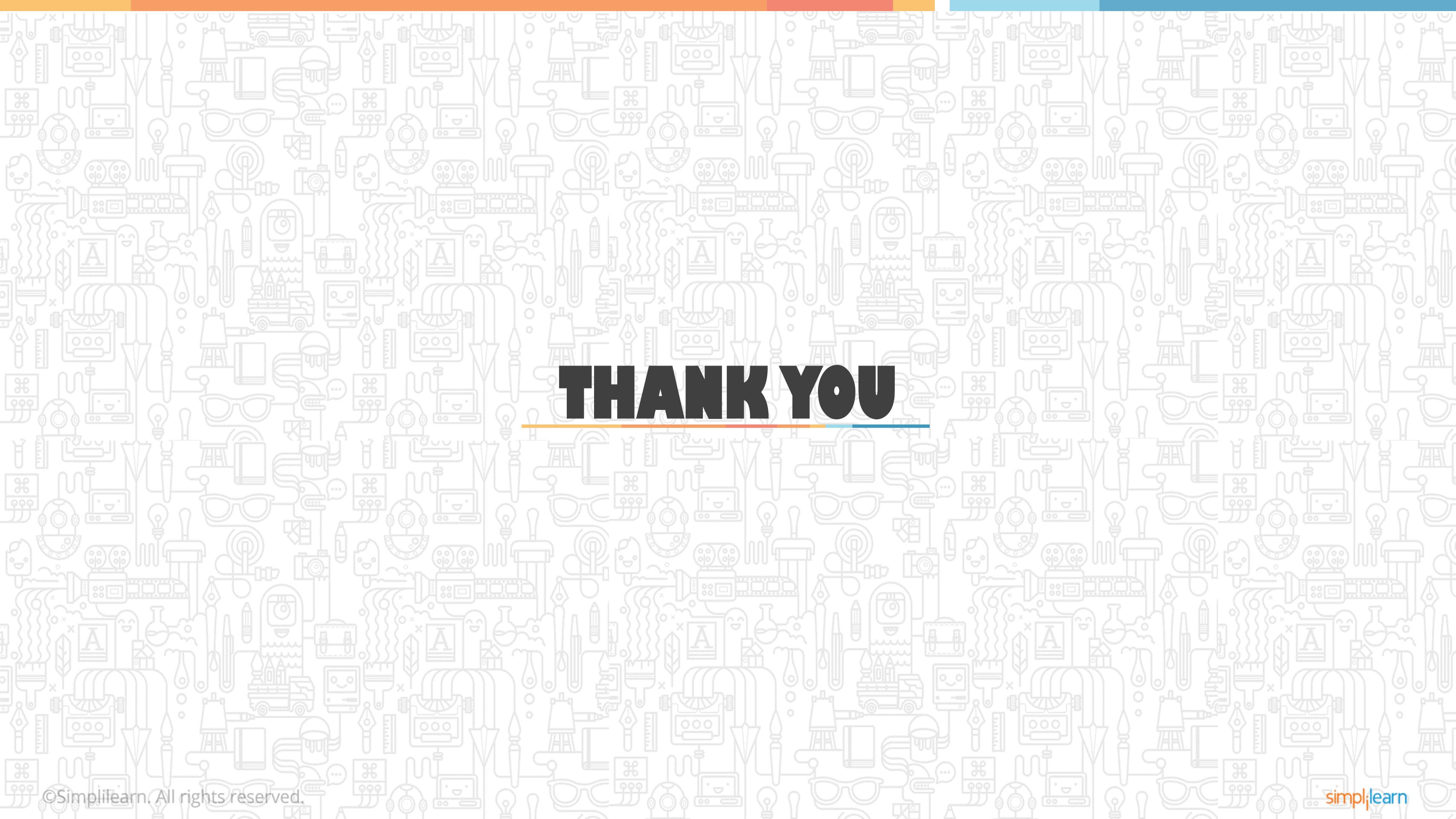
**d**

**Explanation: ACCORD is a methodological framework that maps current state models, as well as unstructured data, to conceptual models.**



**This concludes “Business Process Management Perspective.”**

**This concludes CBAP® certification exam preparation course.**



# THANK YOU