



# COMPLEX PROBLEM SOLVING & ANALYTICAL THINKING

## PROGRAM OVERVIEW

### PERSONA



Initiator

### COMPETENCY



Demonstrating  
Intellectual Insight

### SKILL



Problem Solving and  
Analytical Thinking

In today's dynamic and interconnected world, leaders often face multifaceted challenges that require a systematic and creative approach to problem-solving. This 2 day program equips participants with the tools and techniques to break down complex issues, analyze them effectively, and develop innovative solutions. By focusing on both analytical thinking and collaborative problem-solving, this program empowers leaders to make sound decisions, even in uncertain and ambiguous situations.

## PROGRAM OBJECTIVE

By the end of this program, participants will:

- Understand the characteristics and dynamics of complex problems.
- Learn analytical frameworks and tools to approach challenges systematically.
- Enhance their ability to make data-driven decisions.
- Build confidence in tackling ambiguity and risk in problem-solving.
- Develop collaborative strategies to align teams toward effective solutions.



## PROGRAM OUTLINE

### MODULE 1:

#### UNDERSTANDING

- Characteristics of complexity in problems and challenges.
- Differentiating between simple, complicated, and complex problems.
- Systems thinking: Identifying interdependencies and unseen impacts.

### MODULE 2:

#### ANALYTICAL THINKING FUNDAMENTALS

- Foundations of logical reasoning and critical thinking.
- Deconstructing problems into manageable components.
- Identifying assumptions and testing their validity.

### MODULE 3:

#### STRUCTURED PROBLEM-SOLVING FRAMEWORKS

- Tools like Root Cause Analysis, Fishbone Diagrams, and the 5 Whys.
- Applying frameworks like SWOT analysis and the PDCA cycle.
- Integrating design thinking for innovative solutions.



### MODULE 4:

#### DECISION-MAKING IN AMBIGUITY

- Strategies for making decisions with incomplete information.
- Balancing short-term actions with long-term implications.
- Risk analysis: Assessing trade-offs and prioritizing solutions.

### MODULE 5:

#### DATA-DRIVEN PROBLEM SOLVING

- Interpreting and visualizing data for insights.
- Tools for prioritizing actions, such as Pareto
- Analysis and Decision Matrices.
- Translating data insights into actionable plans.



Period

2  
Days

Program designed for:

Specialist, Analyst,  
Team Member