

Problem Solving & Decision Making Skills for Engineers and Technical Professionals

Date	Venues	(\$)Fees	Book your seat
28 Dec -01 Jan 2026	Kuala Lumpur	3300	Register Now

Introduction

The world around us is getting more and more complex than ever and so does our daily engineering & maintenance work. Every day we are confronted with a wide variety of problems and decisions that require a rational response. This is asking for solving problems in a clear and transparent decision making process, mitigating our risks and satisfying our stakeholders.

Applying a structured approach to problem solving and decision making enables you to realise creative and to-the-point solutions for your problems and improve the quality of your decision making process. That will mitigate your risks and save time and money significantly.

This training seminar will highlight:

- Problem solving in a broader asset management perspective why should you do it?
- Your current problem solving maturity
- An overview of problem finding & problem solving techniques, like Simplex, Risk analysis, PEST, FMECA, RCA and TRIZ
- Selling the idea by means of a business case
- How to fit it into an implementation plan and to implement the solution in an effective way

Objectives

Problem Solving and Decision Making skills for Engineers and Technical Professionals presents a structured and transparent methodology to help you to solve problems creatively and make crisp clear decisions. The training seminar is about proactively analyzing problems and making transparent decisions, that help you to solve complex problems to bring value to your company.

At the end of this training seminar, you will be able to:

- · Understand the broader perspective of problem solving and decision making
- · Identify problems to solve
- Find the real causes of the problem
- Generate the best to-the-point solutions in a structured way
- Prepare a clear decision making process based on a business case
- Implement the solution in an effective way and monitor the results

Training Methodology

We accelerate the learning process through interactive workshop principles and a variance of lectures and practical

exercises. Experiences from different areas will be discussed. There will be many opportunities for discussion and sharing experiences.

Organizational Impact

By attending this seminar your organization will get sustainable results:

- A comprehensive understanding of a creative problem solving approach which delivers to-the-point results
- · Be able to select and define problems and assess risks from different stakeholder perspectives
- · Identify creative and to-the-point solutions and weigh and prioritize them
- Determine the cost-benefit of the solution and prepare and lead a clear decision making process
- Implement, monitor and evaluate the solution successfully and contribute to the continuous improvement process of your organization
- · Saving time and money and manage the risks

Personal Impact

By attending the participants will:

- · Gain understanding and practical insight of effective problem solving and clear decision making
- Be able to present sound solutions based on a proper business case
- Improve their level of personal knowledge
- Work more effectively by applying a risk based problem solving approach in their daily work
- Be able to use the skills, processes and tools in other aspects of their life
- · Add value for themselves
- · Be able to plan and develop a future career

Who Should Attend?

You work at tactical or management level and want to increase your creativity in problem solving and to realise a more effective decision making process. You are looking for a structured and easy to apply approach to problems and as a result learn how to prepare a better and more successful decision making process by the management team.

This training seminar is suitable to a wide range of professionals but will greatly benefit:

- All professionals involved in problems solving within maintenance, engineering and production
- Anyone who wishes to update themselves on problem solving and decision making, judge the suitability of these technologies for their needs, and learn how to implement them for the benefit of their organizations

SEMINAR OUTLINE

DAY 1

Introduction

- · Introduction to the program
- What is problem solving?
- · Problem solving in the broader asset management perspective
- Simplex Problem Solving Model
- · How good are you at solving problems? assessment

DAY 2

Problem Finding

- Solving the problem starts with finding the problem
- An overview of problem finding techniques
- PEST analysis
- · Risk analysis
- FMECA

DAY 3

Define the Problem & Find Causes

- Multiple realities & subjective views
- Define the problem in a SMART way
- Brainstorming
- CATWOE
- Cause and effect relations 5 Why
- Apollo Root Cause Analysis

DAY 4

Enabling Inventive Problem Solving

- TRIZ the inventive problem solving methodology
- Problem analysis and contradictions
- · General TRIZ solutions
- The ideal final result
- Functional modeling, analysis and trimming
- · Zones of conflict
- 40 inventive principles of problem solving
- 76 standard solutions

DAY 5

Decision Making and Implementation

- · Decision making process
- Priority setting
- Selling the idea: The business case
- Implementation plan (PlanDoCheckAct)
- Managing the behaviour of people
- Wrap-up





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