



PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: info@pebblesinstitute.org

Advanced Problem-Solving and Decision-Making Skills

Duration: 5 days

On-Site

01 Who Should Attend

- Business analysts and consultants
- Operations and administrative professionals
- Customer service professionals
- Risk and compliance professionals
- Quality assurance professionals
- Human resource professionals
- Policy and strategy professionals
- Entrepreneurs and business owners
- Public-sector and NGO professionals
- Professionals involved in decision-making and organizational improvement

02 About the Course

The **Problem-Solving and Critical Thinking Training Course** equips participants with practical techniques for analyzing complex situations, identifying root causes, evaluating information, making sound judgments, and developing effective solutions. The course is designed to strengthen analytical thinking and decision-making skills that can be applied across professional and organizational environments. Participants will learn how to approach problems systematically, challenge assumptions, distinguish facts from opinions, assess alternatives, manage uncertainty, and make evidence-based decisions. Through practical exercises and real-world scenarios, participants will develop a structured approach to solving problems and handling complex challenges.



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03 Workshop Objectives

- Understand the principles of critical thinking and problem-solving.
- Identify and define problems clearly and accurately.
- Analyze situations and gather relevant information.
- Develop and evaluate potential solutions.
- Utilize problem-solving frameworks and techniques.
- Make informed decisions based on logical reasoning.
- Implement solutions and monitor their effectiveness.
- Identify and overcome cognitive biases.
- Develop creative problem-solving approaches.
- Improve their ability to think strategically and analytically.
- Enhance their ability to adapt to changing circumstances.
- Improve their decision making skills.
- Contribute to improved problem resolution within their organization.
- Stay up-to-date with the latest trends and best practices in problem-solving.
- Become a more confident and effective problem-solver.
- Understand ethical considerations in problem-solving and decision-making.
- Learn how to use problem-solving tools and techniques effectively.

04 Module Topics

Module 1: Foundations of Problem-Solving and Critical Thinking

- Understanding the importance of problem-solving and critical thinking in the workplace.
- Defining critical thinking and its core components.
- Identifying common barriers to effective problem-solving.
- Understanding the problem-solving process and its stages.
- Developing a problem-solving mindset.



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Module 2: Problem Identification and Definition

- Techniques for identifying and clarifying problems.
- Distinguishing between symptoms and root causes.
- Using problem definition tools (e.g., problem statements, Ishikawa diagrams).
- Gathering and analyzing relevant information.
- Clearly defining problem boundaries and scope.

Module 3: Analytical Thinking and Information Gathering

- Developing analytical thinking skills.
- Utilizing data analysis techniques (e.g., data visualization, trend analysis).
- Evaluating the reliability and validity of information.
- Identifying patterns and trends in data.
- Using research and inquiry to gather information.

Module 4: Generating and Evaluating Potential Solutions

- Brainstorming and ideation techniques.
- Developing creative problem-solving approaches.
- Evaluating potential solutions using criteria and frameworks.
- Conducting risk assessments and cost-benefit analyses.
- Prioritizing solutions based on feasibility and impact.

Module 5: Decision-Making and Solution Selection

- Understanding decision-making models and frameworks.
- Making informed decisions based on logical reasoning and evidence.
- Considering ethical implications of decisions.
- Utilizing decision-making tools (e.g., decision matrices).
- Communicating decisions effectively.

Module 6: Implementation and Monitoring



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- Developing action plans and implementation strategies.
- Assigning responsibilities and setting deadlines.
- Monitoring progress and measuring results.
- Adapting solutions based on feedback and evaluation.
- Implementing feedback loops for continuous improvement.

Module 7: Cognitive Biases and Critical Thinking Traps

- Understanding common cognitive biases and their impact on decision-making.
- Identifying and overcoming critical thinking traps (e.g., confirmation bias, groupthink).
- Developing strategies for mitigating bias in problem-solving.
- Promoting objective and unbiased thinking.
- Understanding the importance of diverse perspectives.

Module 8: Creative Problem-Solving and Innovation

- Developing creative thinking skills and techniques.
- Encouraging innovation and experimentation.
- Utilizing design thinking and other creative problem-solving frameworks.
- Fostering a culture of creativity and innovation.
- Overcoming mental blocks and fostering originality.

Module 9: Strategic Thinking and Continuous Improvement

- Developing strategic thinking skills and applying them to problem-solving.
- Understanding the relationship between problem-solving and organizational goals.
- Implementing continuous improvement processes.
- Developing a personal action plan for improving problem-solving skills.
- The future of problem solving and critical thinking in a rapidly changing world.