

ROOT CAUSE ANALYSIS (RCA)

“Uncovering the Causes of Failures to Drive Continuous Improvement”

Schedule

Date	Venue	Fees (Face-to-Face)
04 – 08 Aug 2025	London - UK	USD 3495 per delegate

► Available delivery methods: In-House Training

Introduction

Root Cause Analysis (RCA) is a systematic process used to identify the underlying causes of problems and failures in an organization. By focusing on the root cause rather than just addressing symptoms, organizations can implement long-term solutions that prevent recurrence and improve overall performance. This 5-day intensive course equips participants with the knowledge and skills required to effectively conduct RCA, using both traditional and modern problem-solving techniques.

Participants will explore various RCA methodologies, such as the “5 Whys,” fishbone diagrams, failure mode effects analysis (FMEA), and more, and gain hands-on experience in applying these tools to real-world scenarios. Through workshops, case studies, and practical exercises, the course ensures participants leave with actionable skills that can be applied immediately to reduce operational inefficiencies and enhance organizational reliability.

Objectives

By the end of this course, participants will be able to:

- Understand the fundamental principles and methodologies of Root Cause Analysis
- Use different RCA tools (5 Whys, Fishbone Diagram, FMEA, etc.) to identify and solve problems
- Implement RCA techniques to drive continuous improvement in maintenance and operations
- Develop corrective actions that eliminate root causes and prevent recurrence
- Understand the role of RCA in risk management, safety, and quality control
- Foster a culture of problem-solving and continuous improvement within the organization

Why Attend

- Learn how to identify and address the root causes of failures to prevent recurring issues
- Gain in-depth knowledge of the key RCA tools and techniques used by industry leaders
- Develop practical skills for conducting root cause investigations and implementing effective corrective actions
- Improve safety, quality, and operational efficiency by resolving problems at their core
- Network with professionals from various industries to share and learn from best practices

Target Audience

This program is designed for:

- Maintenance managers and reliability engineers responsible for root cause investigations
- Quality assurance and safety professionals working to improve processes and prevent defects
- Operations managers who need to solve performance-related issues and ensure efficiency
- Engineers, technicians, and supervisors involved in troubleshooting and process optimization
- Continuous improvement specialists looking to enhance problem-solving techniques within their teams

Individual Benefits

Key competencies that will be developed include:

- Enhanced problem-solving skills and critical thinking
- The ability to apply RCA tools effectively in a variety of organizational settings
- Knowledge of corrective actions that can prevent recurring issues
- Proficiency in managing root cause investigations from start to finish
- Ability to foster a culture of continuous improvement and proactive problem-solving

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- The ability to address and eliminate recurring problems, improving operational efficiency
- Enhanced capability in conducting RCA and implementing solutions that reduce downtime and costs
- Better risk management and safety practices through proactive problem-solving
- Improved decision-making and more effective maintenance planning
- A deeper understanding of process optimization and quality control

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – Introduction to the principles and frameworks of Root Cause Analysis
- Case Studies – Real-world examples of RCA in various industries, focusing on successful problem-solving
- Workshops – Interactive sessions where participants conduct RCA on simulated problems
- Peer Exchange – Group discussions and sharing of best practices and experiences from different sectors
- Tools – Templates and tools for conducting RCA, including fishbone diagrams, 5 Whys, and FMEA

Course Outline

Detailed 5-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Introduction to Root Cause Analysis (RCA)

- Module 1: Overview of RCA Principles (07:30 – 09:30)
 - The importance of identifying root causes, not just symptoms
 - RCA process and methodology overview
 - Key benefits of RCA in reducing costs, downtime, and improving safety
- Module 2: RCA Tools and Techniques (09:45 – 11:15)
 - Introduction to popular RCA tools (5 Whys, Fishbone Diagram, Failure Modes and Effects Analysis)
 - When to use each RCA tool based on the issue at hand
 - Steps for successful application of these techniques
- Module 3: Preparing for an RCA Investigation (11:30 – 01:00)
 - Planning and organizing the investigation process
 - Setting objectives and defining the scope of the analysis
 - Engaging the right stakeholders and collecting data

Day 2: Conducting Root Cause Analysis – Tools and Techniques

- Module 4: The 5 Whys Technique (07:30 – 09:30)
 - How to apply the 5 Whys method to uncover root causes
 - Practical exercises on identifying root causes using the 5 Whys
 - Benefits and limitations of the 5 Whys method
- Module 5: Fishbone Diagram (Ishikawa) (09:45 – 11:15)
 - Understanding the Fishbone diagram and its applications
 - Creating a Fishbone diagram to visually represent potential causes
 - Identifying key categories (people, processes, equipment, materials)
- Module 6: FMEA – Failure Mode Effects Analysis (11:30 – 01:00)
 - Overview of FMEA as a tool for identifying potential failures
 - Using FMEA to prioritize risks and failures based on their severity and likelihood
 - Hands-on practice with FMEA

Day 3: Implementing Corrective Actions and Solutions

- Module 7: Developing Corrective Actions (07:30 – 09:30)
 - Identifying effective corrective actions to eliminate root causes
 - Ensuring that corrective actions are sustainable and prevent recurrence
 - Evaluating the effectiveness of implemented solutions
- Module 8: Implementing Solutions and Measuring Effectiveness (09:45 – 11:15)
 - Strategies for implementing corrective actions across teams and departments
 - How to measure the success of corrective actions and track improvements
 - Monitoring and adjusting solutions as needed
- Module 9: Communication and Documentation in RCA (11:30 – 01:00)
 - Best practices for documenting RCA findings and actions
 - Communicating results effectively to stakeholders
 -

Ensuring ongoing communication and feedback loops

Day 4: Advanced RCA Concepts and Techniques

- Module 10: Advanced RCA Tools and Techniques (07:30 – 09:30)
- Introduction to advanced RCA methods: Fault Tree Analysis (FTA), Pareto Analysis, and others
- When and how to apply advanced tools for complex problems
- Hands-on practice with advanced RCA tools
- Module 11: Organizational Culture and RCA (09:45 – 11:15)
- Creating a culture of problem-solving and continuous improvement
- Engaging employees in root cause investigations and ensuring buy-in
- Overcoming resistance to change and fostering collaboration
- Module 12: RCA in Risk Management (11:30 – 01:00)
- How RCA helps in managing risks and preventing future issues
- Aligning RCA with organizational risk management strategies
- Case studies of successful risk management through RCA

Day 5: Case Studies, Workshops, and Final RCA Projects

- Module 13: RCA in Action – Case Studies (07:30 – 09:30)
- Analysis of real-world case studies where RCA was used to solve critical problems
- Discussion of the challenges, tools, and results of each case study
- Lessons learned from failures and successes
- Module 14: Practical RCA Workshop (09:45 – 11:15)
- Participants will work in groups to conduct RCA on a simulated problem
- Present findings and recommended corrective actions to the class
- Peer feedback and discussion
- Module 15: Final Review and Wrap-Up (11:30 – 01:00)
- Review of key learnings and best practices from the course
- Final Q&A session to address remaining questions
- Certification distribution and course closure

Certification

Participants will receive a Certificate of Completion in Root Cause Analysis (RCA), validating their ability to effectively conduct RCA investigations and implement corrective actions to improve organizational performance.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

Follow us:  Facebook  Twitter  YouTube  LinkedIn  Instagram

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.