

Problem Determination and Root Cause Analysis (RCA)

2 Day Workshop – Course BA14

Course ID: BA14

Credits: 14 PDUs

Course Level: Basic/Intermediate

Prerequisites:

This course is aimed experienced people or who have had previous Business Analysis training who need to have a systematic approach to determining the root cause of both business and technical problems.

Course Abstract:

Business success is dependent on effective resolution of the problems that present themselves every day. Often the same or similar problems continue causing repeated losses in time or money and your staff become experts at fixing rather than preventing the problems. Learn to find and fix root causes and develop corrective actions that will effectively eliminate or control these problems.

Course Overview:

Excellent problem determination skills cannot be acquired simply by reading a book. They mostly come from experience as well as discipline. After this course, you should have a general understanding of a structured problem determination approach, which you can then apply in your daily work to gain more experience.

Included:

- Full Student Guide
- Problem Determination and Root Cause Analysis templates

Course Duration: 2 days

Intended Audience:

Executives, Project Managers, Business Analysts, Business and IT stakeholders working with analysts, Quality and process engineers, technicians, corrective action coordinators or managers; supervisors, team leaders, and process operators; anyone who wants to improve their ability to solve recurring problems.

Learning Objectives:

At the completion of this course, you should be able to:

- Identify the different types of problems

- Prepare for problem determination
- Demonstrate how to collect data through interviews and analysis
- Adopt a systematic and thorough approach to dealing with problems
- Develop a process to identify systemic problem areas

Course Outline:

Section 1: Introduction and Objectives

- What is a "Problem?"
- Why Problems Persist
- What is A Root Cause?
- What is Problem Determination?

Section 2: How to Organize for Problem Determination

- Roles and Responsibilities – Problem Ownership
- Determining availability of resources
- Assemble your Team
- Modes of Communication
- How to Resolve Conflict
- Case Study Exercise

Section 3: Select the Problem to Analyze

- Define the processes that will be used different situations
- Plan and estimate tasks for the team
- Finalize the plan and gain agreement among your stakeholders
- Case Study Exercise

Section 4: Problem Determination / Root Cause Analysis Steps

- Identify the problem - Developing your problem statement
- How was the problem detected and reported? – Gather and review existing information to determine contributing factors
- Document the problem - Refining the problem specification
- Create and execute a diagnostic data capture plan
- Reach an agreed understanding
- Organize problem resolution
- Analyze the problem and determine problem severity – Level 1, 2, 3 and 4
- Further Diagnostics necessary? - Other elements to consider
- Case Study Exercise

Section 5: Decision analysis approach and other techniques available

- Decision Analysis approach using the Kepner-Tregoe matrix
- Discuss other appropriate analysis techniques to determine the problem source
 - Process Diagram
 - Forms & Checklists
 - Statistical Sampling
 - Fishbone Diagram
 - Surveys
 - Charts - Line, Scatter, Bar, & Pie
- Analyze the results and iterate if necessary
- Identify Root Cause
- Case Study Exercise

Section 6: Solution Options Analysis and Selecting the “Best Fit” for problem resolution

- How to approach different solution options
 - Brainstorming
 - Weighted Evaluation
- Fix the problem
 - Translate diagnostic data
 - Determine and implement fix to resolve the problem
- Selecting the appropriate option – Interim and permanent solutions
 - Confirm Root Cause addressed
- Close the problem
- Hold an Retrospective on your approach
- Steps taken to prevent reoccurrence
- Start time / End Time – How long did it take to detect engage, diagnose and recover
- Case Study Exercise

Section 7: Putting Problem Determination and Root Cause Analysis into practice

- Create a Problem Determination program within your organization
- Planning the proposal
- How to develop appropriate recommendations to address root causes at various levels to avoid future incidents