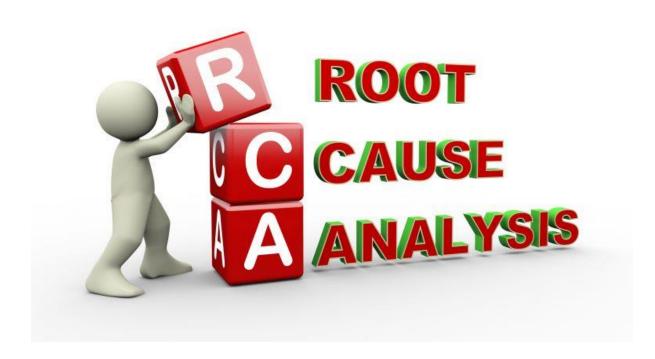


# ROOT CAUSE ANALYSIS – PROBLEM SOLVING METHODOLOGY

DURATION: 2 DAYS TIME SCHEDULE

Time: 9:00am to 5:00pm Lunch Break: 1:00pm to 2:00pm



## INTRODUCTION

Which approach is more reliable: a doctor that routinely uses a thermometer and prescribes aspirin to a patient with repeat fevers, or a doctor that uses a combination of diagnostic techniques to uncover the true cause of a patient's fever? Like a clinical diagnosis, effective root cause failure analysis requires correct application of the right tools to make accurate conclusions.

Many organizations spend valuable resources addressing recurring issues but fail to obtain solutions that prevent recurrences, and this is because they were not able to identify the fundamental root causes to the problems. Root cause analysis (RCA) is a method of problem solving that looks at the root cause of events rather than focusing on the initial 'symptom'. By focusing on the root cause, it will reduce or eliminate the likelihood of problem recurrence.

Root cause analysis is a series of tools and measurements rather than a single approach in itself. Due attention is given on the tools/techniques applied in the root cause analysis, with extensive exercises on the associated tools/techniques.

## **BENEFITS**

Upon completion of this program, participants will be able to:

• Understand the fundamental principles of Root Cause Analysis



- Understand how to apply the Root Cause Analysis tools (Ishikawa fishbone diagram, 5 WHY, FTA) in the workplace
- Comment critically on corrective actions raised as a result of applying the tools
- Take ownership of applying Root Cause Analysis Tools as a corrective and preventive measure to avoid mistakes and improve product / process quality

## **KEY CONTENT**

## MODULE 1 – OVERVIEW OF ROOT CAUSE ANALYSIS CONCEPTS AND PRACTICES

- Introduction to Root Cause Analysis (RCA)
- The need and the practice

#### **MODULE 2 – PRACTICAL PROBLEM SOLVING**

- Defining a Problem
- Strategies to Solve Problems
- Understanding Causes and Its Levels
- Finding Root Causes
- Eliminating Root Causes
- Proactive Problem Solving

#### **MODULE 3 – TOOLS FOR PROBLEM UNDERSTANDING**

- Problem Understanding
- The Purpose and Applications of Flowcharts
- Using Flowcharts
- Checklists
- Using Critical Incidents

## **MODULE 4 – TOOLS FOR PROBLEM CAUSE DATA ANALYSIS**

- Understanding Problem Cause Data Analysis
- The Purpose and Application of Histograms
- Using and Interpreting Histograms

#### **MODULE 5 – TOOLS FOR ROOT CAUSE IDENTIFICATION**

- Fundamentals of Root Cause Identification
- Using Ishikawa Fishbone Diagrams
- Using the Five Whys Method
- Using the Fault Tree Analysis (FTA) Technique

# **AUDIENCE**

Top and middle management, Quality Manager, Operational/ Production Manager, Logistics, Operations, Process and Quality executives and Supervisors who are in involved in quality and productivity improvement program

## **METHODOLOGY**



An interactive and practical approach incorporating group discussions / exercises, presentations and simulation activities.