

# Root Cause Analysis Study Guide

## How to Use This Study Guide

The Study Guide for this course is designed to help you take notes as you're taking the online course "Root Cause Analysis". It is organized in sections that mirror the elements of the course, with plenty of room to make notes and capture your learning.

The use of the Study Guide is optional. Research shows that different people learn differently, and for many, the act of writing something down as you are learning helps to solidify the information in your brain. If you find the Study Guide helpful, use it. If not, feel free to omit it from your learning process.

## **Course Overview – Root Cause Analysis**

In this course you will learn about a problem-solving methodology called root cause analysis. We will look at what root cause analysis is and in what kinds of situations it can be useful. You will explore and practice methods for carrying out a root cause analysis and think about how it could be applied in your day-to-day work. You will come to understand what factors contribute to an effective root cause analysis and what the limitations of this tool might be.

#### Learning Objectives - Root Cause Analysis

By the end of this course, you will understand the following:

- To understand what root cause analysis is and in what situations it can be useful
- To explore and understand methodologies for carrying out a root cause analysis
- To know what factors contribute to an effective RCA (root cause analysis) and the limitations of this particular tool
- To reflect on situations in the workplace where RCA might be effectively applied
- To practice using RCA in simple real life situations



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## What is Root Cause Analysis?

### Definition

Root cause analysis (RCA) is a way of \_\_\_\_\_\_ about and solving a problem by \_\_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_ the root cause or causes behind it.

### Example

### Origins



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### **Applications**

## Benefits

## Journaling Activity - What is Root Cause Analysis?



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## **RCA Tools and Methodologies**

#### **The Basic Method**

### "The Five Whys"

#### **Video Notes**



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## **Types of Causes**

#	Туре	Notes
1	Causal factors	
2	Root causes	

### **Three Categories of Causes**

#	Category	Notes
1	Physical cause	
2	Human cause	
3	Organizational cause	

## **Mapping Causes**

### Fishbone Diagram / Ishikawa Diagram



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#### **Video Notes**

## Journaling Activity – Mapping Causes



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## **Key Success Factors**

#	10 tips for a successful root cause analysis
1	
2	
3	
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5	
6	
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8	
9	
10	



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## **Limitations of Root Cause Analysis**

#### **Discussion Questions**

Discussion questions are used by workgroups who are taking courses concurrently and want to engage in a conversation about the course content. The use of discussion questions is optional.

- 1. What are the methods currently used for solving problems in our workplace? How effective are they?
- 2. Where might root cause analysis be useful in our day to day work?
- 3. How can we embed a practice of using root cause analysis in our organization?
- 4. How can we work as a team to make root cause analysis work effectively for us?
- 5. What are the advantages and disadvantages that we can see of this way of working?