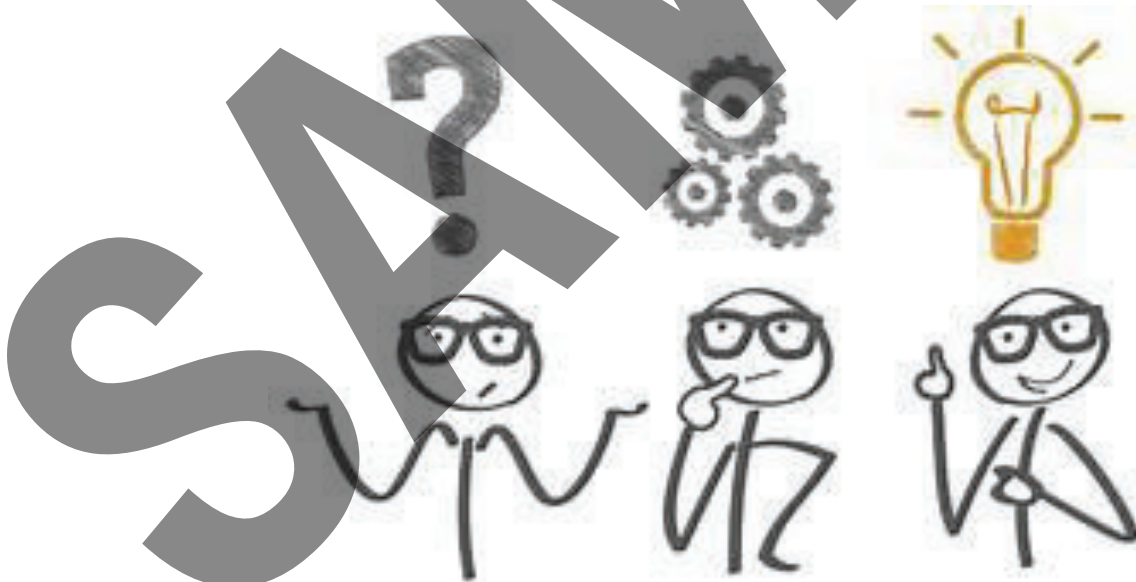


Information Pack
Unit 300
Solving Problems and Making Decisions



INTRODUCTION

The aim of this unit is to enable you to examine the tools and techniques required and present opportunities for you to practice the necessary skills in your workplace.

As a first-line manager, you will be actively involved in the processes of making decisions and solving problems. Certainly, becoming adept in the processes is a sure way to increase efficiency and effectiveness of both yourself and of your organisation. What is for certain is that in organisations, people that solve problems and consistently make good decisions do well! Much of your success in solving problems and making decisions is about the proper application of tools and techniques.

Through your reading and application of the concepts in this unit, you will become familiar with the processes of making decisions and solving problems.

Becoming adept in the processes is a sure way to increase efficiency and effectiveness of both yourself and of your workplace. Solving problems and making decisions are essential skills that with the insight you now have will become easier and easier with practice.

SAMPLE

GUIDANCE

This document is prepared to break the unit material down into bite size chunks. You will see the learning outcomes above treated in their own sections. Therein you will encounter the following structures;

Purpose

Explains *why* you need to study the current section of material. Quite often learners are put off by material which does not initially seem to be relevant to a topic or profession. Once you understand the importance of new learning or theory you will embrace the concepts more readily.

Theory

Conveys new material to you in a straightforward fashion. To support the treatments in this section you are strongly advised to follow the given hyperlinks, which may be useful documents or applications on the web.

Example

The examples/worked examples are presented in a knowledge-building order. Make sure you follow them all through. If you are feeling confident then you might like to treat an example as a question, in which case cover it up and have a go yourself. Many of the examples given resemble assignment questions which will come your way, so follow them through diligently.

Question

Questions should not be avoided if you are determined to learn. Please do take the time to tackle each of the given questions, in the order in which they are presented. The order is important, as further knowledge and confidence is built upon previous knowledge and confidence. As an Online Learner it is important that the answers to questions are immediately available to you. Contact your Unit Tutor if you need help.

Challenge

You can really cement your new knowledge by undertaking the challenges. A challenge could be to download software and perform an exercise. An alternative challenge might involve a practical activity or other form of research.

Video

Videos on the web can be very useful supplements to your distance learning efforts. Wherever an online video(s) will help you then it will be hyperlinked at the appropriate point.

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Root Cause Analysis – Rational Problem Solving

Root Cause Analysis (RCA) is an approach to understanding fully why something has occurred or why there has been a problem. Things do go wrong, and unwanted incidents and outcomes can occur. If we understand the 'root causes' of an incident or outcome, corrective measures can be put in place to prevent recurrence of the problem. By directing corrective measures at the *root cause* of a problem as opposed to the 'symptom' of the problem, the likelihood of the problem recurring will be reduced. In this way we can get sustainable improvements in output or performance. There are many different methods and ways to undertake RCA. At its simplest, it is a process for examining an outcome in a systematic way to find out why the situation occurred, and to put in place measures to prevent it from happening again. By considering a range of possible contributory factors in a systematic way with a logical, analytical and enquiring approach, all the relevant root causes of an incident can be identified.

General Principles of Root Cause Analysis

These principles provide a mechanism to ensure that you have sufficient information to make effective decisions. General principles of RCA include:

- RCA is based on the belief that problems are best solved by attempting to correct or eliminate root causes.
- To be effective, RCA must be performed systematically, with conclusions and causes backed up by evidence.
- There is usually more than one potential root cause for a problem.
- RCA can transform an old culture that reacts to problems with a new culture that looks to understand and learn from problems. This leads to a culture that is open and seeks to identify and solve problems before they escalate.

Root Cause Analysis – Processes

The process for getting to the root of issues is outlined in the following model:

Problem Definition-What is happening

Data Collection-Evidence the problem exists and for how long and with what impact?

Identify Possible Causes-What led to the problem? What other problems are related to the main problem

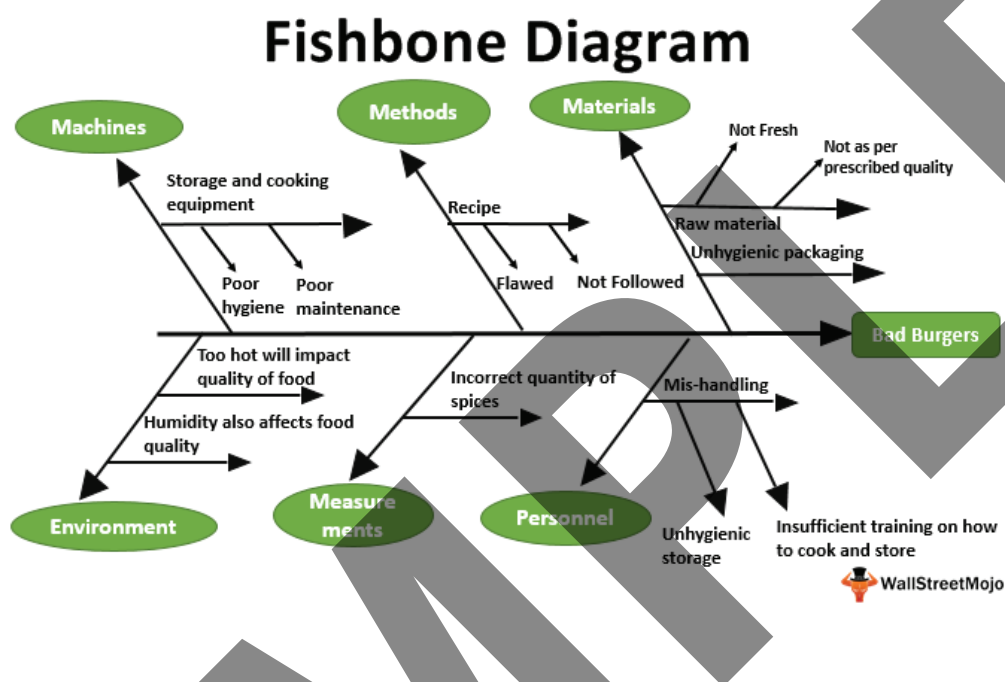
Identify Root Causes-Why do the root causes exist?

Recommend and Implement Solutions-What, how, who, and by when?

Diagramming

Root cause or 'fishbone' diagrams are a useful tool for working through the causes of a problem typified by an unexpected or unwanted effect or outcome: poor performance, for example. The diagram below is an example of a fishbone diagram.

The effect or issue would be defined; the main causes would feature at the head of each 'bone' and the sub-causes within each category would be placed on the 'bones'.



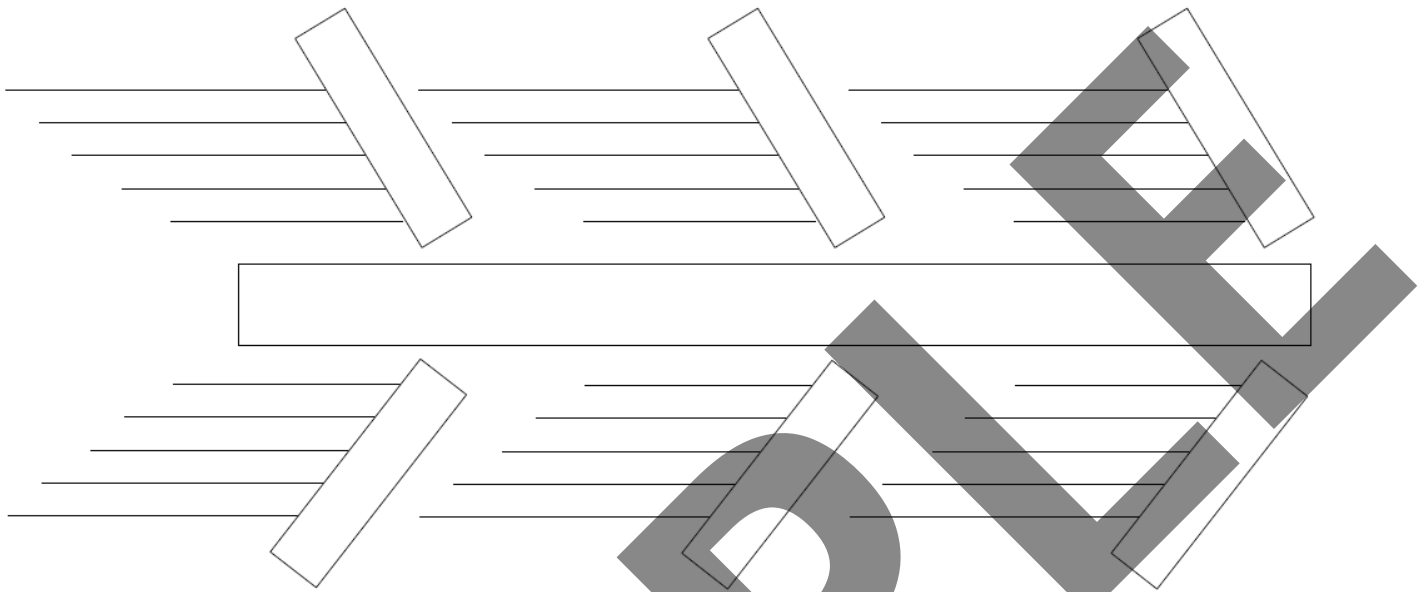
Challenge

Consider a problem at work. Define the effect of the issue in the diagram below. Then undertake an analysis of the root causes. Use the following headings to classify the causes:

- Methods
- Materials
- Environment
- People
- Equipment
- Managerial issues.

Identify the causes as branches of each of the headings. As you do so, think about why these causes influence and exacerbate the problem. Are there any sub-causes of the causes that turn into other branches?

Fishbone Analysis



Challenge

Observe and review your observations from the previous challenge, consider how you might resolve the identified issues:

Issues relating to: Options for resolution Implications of proposed resolution-

Issues related to:	Options for resolution	Implications of proposed resolution
Methods:		
Materials:		
Environment:		
People:		
Equipment:		
Managerial issues:		