



Problem Solving and Decision Making

Learning Outcomes and Course Outline

(8 - 24 Hours)

Problem solving and decision-making are basic managerial/supervisory skills. Every manager/supervisor makes many decisions in the course of each day. We would all like to think we make rational decisions, but that is often not the case. People must make all kinds of decisions where full data is not available and some degree of uncertainty exists. The decision-making process is one that identifies opportunities and options, weighs the options and chooses the option that maximizes the most important criteria.

The problem-solving and decision-making processes are interdependent. One cannot make decisions or solve problems without data. Part of the problem-solving process is collecting data, analyzing data, and providing options for the decisions. This involves a number of tools that can help supervisors and managers optimize their decisions through information.

Not all tools will be covered in the shorter classes. Tools covered will depend on each group and their needs.

This is an interactive course, participants are expected to participate and contribute to the class processes.

Learning outcomes

Participants will be able to:

- Describe the steps in the decision-making/problem solving process
- Identify pros and cons for different methods of decision-making
- Identify four decision-making styles
- Describe the advantages and disadvantages of group decisions
- Explain three techniques for improving group decision-making
- Demonstrate the use of 2 or more tools to solve count data problems
- Demonstrate and use 2 or more tools to solve language data problems

Introduction of topic (activity) and people

Defining the Problem Solving and Decision-Making Process

Decision-Making Process Steps
Defining a decision/problem
Identifying relevance and criteria
Weighting criteria



Creating options
Choosing options

Decision-Making Methods Summary
Individual Decision-Making Styles

- Advantages/Disadvantages
- Effectiveness

Decision-Making Activity

Common Problem Solving Tools
(Includes exercises for each tool except histograms and control charts)

Reactive Problem Solving-Count Data Focused

- Brainstorming
- Force Field Analysis
- Flow Charts
- Fishbone Diagrams
- Tally Sheets
- Pareto Diagrams
- Scatter Diagrams
- Histograms and Control Charts

Proactive Problem Solving-Language Data Focused

- Creative Brainstorming
- Affinity Diagrams
- Interrelationship Diagrams
- Activity Network/Pert Chart
- Tree Diagrams
- Matrices
- Process Diagram Program Chart

Summary, Actions Items, Evaluation