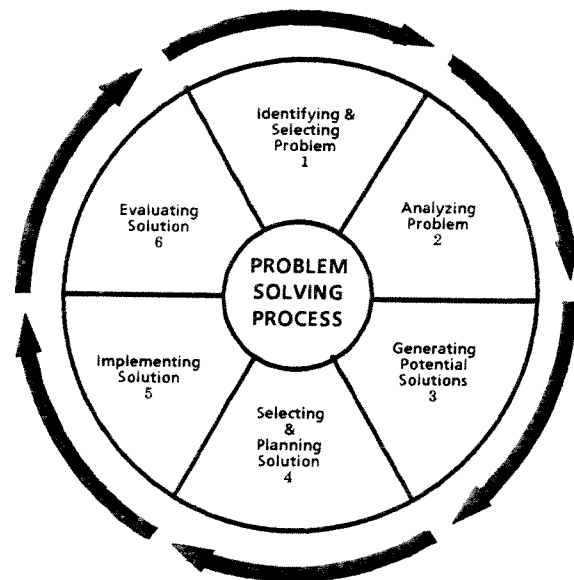


2. Problem Solving Process (PSP)

PSP

In the effort toward continuous quality improvement, the Problem Solving Process is probably the most used tool. Integral parts of the Leadership Through Quality concept are the Problem Solving Process (PSP) and Employee Involvement (EI). Employee involvement efforts typically require group problem solving. The PSP is simple, easy to apply and useful in a variety of situations.



1. Identifying and Selecting the Problem

In this step, the team develops a statement of the problem that is clearly understood by all its members. In addition, the team may develop a statement of the "desired state" to be achieved by solving the problem. This step involves exploring, clarifying, describing, and developing an understanding of the problem.

Potential Tools*: Brainstorming, weighted voting, criterion rating, brainwriting, interviewing, surveying, list reduction, and paired comparisons

** To learn more about the tools listed, refer to your Leadership Through Quality Training material (Problem Solving Process User's Manual).*

2. Analyzing the Problem

Having specified and collected the data necessary to analyze the problem, the team identifies the key cause(s). This step involves assembling and evaluating information, gathering facts, and diagraming data.

Potential Tools: Histogram, pareto analysis, check sheet, control chart, statistics, process flow diagram, cause and effect diagram, pie chart, time chart, force field analysis

3. Generating Potential Solutions

In this step, the team produces as many ways as possible—including some wild ideas—to solve the problem. This step involves non-evaluative thinking, elaborating, creating, and idea production from the team.

Potential Tools: Brainstorming, brainwriting, interviewing, and surveying

4. Selecting and Planning the Solution

In this step, the team decides on the optimum solution and plans its implementation. This step involves evaluating, combining, selecting, testing, planning, developing consensus, and getting a solution accepted.

Potential Tools: List reduction, weighted voting, criteria rating form, balance sheet, cost/benefit analysis, and paired comparisons (for Selecting a Solution), Gantt chart, PERT chart, flowchart, and force field analysis (for Planning to Implement a Solution)

5. Implementing the Solution

In this step, team members and others now involved implement and monitor the solution according to the plan developed in Step 4. This step involves coordinating, assigning, monitoring, measuring, and developing action commitments.

Potential Tools: control system to monitor progress, data collection, and contingency plans

6. Evaluating the Solution

In this step, the team learns how effectively its solution solved the identified problem. This step involves reporting on what has been accomplished, tracking, and asking such questions as: Will it stay solved? Are there any new problems?

Potential Tools: data collection (e.g. check sheets, interviewing, surveying); analysis (e.g. cause and effect analysis, force field analysis, cost/benefit analysis); and data display techniques (e.g. histogram, pareto diagram, pie chart, time chart, etc.)