

Root Cause Problem Solving

Background

In many cases, problems occur that need to be solved so they don't reoccur again. This calls for an organized method to get at the "Root Cause" of the problem so corrective action can be taken.

Listed below are some helpful steps that one can follow to do the analysis:

Plan

Phase:	
1. Define and Contain the Problem	
2. Measure the Problem	
3. Perform Root Cause Analysis	<p><i>Detailed Process Review</i> Careful walkthrough of the process step by step to determine the source, nature and frequency of the problem</p> <p><i>Process Mapping</i> Detailed process flow analysis to understand all the steps of the process, how the problem occurs and to document the process flow</p> <p><i>Visual Analysis</i> Visual examination of the problem and visual documentation such as digital photos and videos</p> <p><i>Cause and Effect (Event) Analysis</i> Examination of the potential relationship of factors and or event conditions on the problem</p> <p><i>Data Collection and Analysis</i> Measurement of performance from the product or process and an analysis of current data and associated factor effects</p> <p><i>Additional Tests and Experiments</i> Additional tests or experiments designed to understand the current situation and determine the root cause</p>
4. Plan and Implement Improvement	
5. Assess Effectiveness of Improvement	
6. Standardize and Control	
7. Realize and Reflect	

Shared Memory tutorial: root cause

Work Sheet

Steps	Activity	Assigned to:	Start Date:	End Date:	Status:	Review Date
1. Define & Contain the Problem						
2. Measure the Problem						
3. Perform Root Cause Analysis						
4. Plan & Implement Improvement						
5. Assess Effectiveness of Improvement						
6. Standardize & Control						
7. Realize & Reflect						

Data Collection Plan:

Define what to measure	Type of measurement Operational definition
Define how to measure	Measurement or test method Data tags needed Data collection method
Who will do it?	Person assign Who has the responsibility?
Sample Plan	What?, Where?, When?, How many?