

Using Problem Analysis to Find Cause for a Recurring Problem

Purpose

To apply the concepts of Problem Analysis to one of your cause-unknown problems that has resisted prior attempts at correction.

Introduction

Many of the problems you face have surfaced previously and been fixed, only to reappear again and again.

- The oil seal has failed three times in the last four months.
- Financial data has been corrupted four of the last seven quarters.
- Two of the last eight shipments to customer X have been delayed.

Since these concerns represent deviations of what actually is happening from what should be happening, you can resolve them using Problem Analysis. However, since these deviations have resisted previous attempts to correct them, you must carefully re-focus your analysis.

Two scenarios are possible.

- Either you correctly understand the cause of the deviation, but something causes the cause to return after you have removed it; or
- You never really understood the cause and it comes and goes with the appearance and disappearance of the deviation.

In either case, gathering precise information on the timing of the problem is critical.

Instructions

Review your list of job concerns for any recurring problems.

1. Use a Problem Analysis worksheet to develop a Problem Specification. If working in a group, use a method that keeps the analysis visible. Pay particular attention to when exactly (in clock and calendar time) the problem first appeared. Refer to repair records, run charts, memos, documents, etc., to be as precise as possible.

2. When exactly did the problem first stop?

3. Exactly what time did the problem start and stop since then?

4. What did you think the cause was? How does it explain why the problem started and stopped when it did?

5. If your cause can explain the facts in the specification, what caused the cause (the root cause)? How can your cause of the cause explain the timing of the problem?

6. If you do not have a cause that can explain the facts in the specification, look for recurring events (changes) with the same frequency as the problem. Look at events in the environment and in the life cycles of the object with the deviation.

7. How could these recurring events cause the problem?

8. Test the possible causes against the facts in the specification. What will you do to confirm and remove the cause?
