Customer Issue Resolution

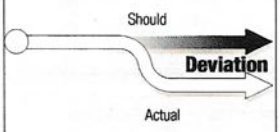
KT

Definitions

Concern
A feeling that we need to do something....

Problem
We have a problem when:
- There is a deviation between what should be happening and the actual situation.
- Cause is unknown.
- We need to know cause to take effective action.

Fix
Action to remove the cause.



Situation Appraisal *(Recognize a Problem)*

Identify Concerns
List Threats and Opportunities
to make them visible.
- What deviations do we have?
- What choices do we face?
- What do we have to do?
- What bothers us about...?

Separate and Clarify Concerns
to allow further analysis and resolution.
- What do we mean by...?
- What specific thing...?
- How do we know...?
- Say more about...?

Consider Current Impact, Future Impact, Time Frame
to know where to use resources for the greatest gain.
- What is the current impact on people, safety, cost, customers, productivity, reputation, etc.?
- What evidence is there that the seriousness will change?
- When would resolution become difficult, expensive, or impossible?

Determine Analysis Needed
to ensure effective and efficient use of analysis.
- Do we have a deviation?
- Is cause unknown?
- Do we need to know cause?
- Do we face a choice?
- Do we have an action or plan to protect?

If still unclear, separate and clarify further.

Determine Help Needed
to ensure appropriate involvement and commitment.
- What needs to be done?
- When does it need to be done?
- Who should be involved for...
  Approval? Training?
  Information? Creativity?
  Commitment? Implementation?

Problem Analysis *(Find True Cause)*

Describe the Problem

State the Problem
to help stay on track.
- What object (or group of objects) has the deviation?
- What deviation does it have?
- What do we see, feel, hear, taste, or smell that tells us there is a deviation?

Specify the Problem
to increase understanding of the deviation.
Ask questions in four areas:
- WHAT—Identity
- WHERE—Location
- WHEN—Timing
- EXTENT—Size

	IS	IS NOT
WHAT	What specific object(s) has the deviation?	What similar object(s) could reasonably have the deviation, but does not?
	What is the specific deviation?	What other deviations could reasonably be observed, but are not?
WHERE	Where is the object when the deviation is observed (geographically)?	Where else could the object be when the deviation is observed, but is not?
	Where is the deviation on the object?	Where else could the deviation be located on the object, but is not?
WHEN	When was the deviation first observed? (in clock and calendar time)?	When else could the deviation have been observed first, but was not?
	When since that time has the deviation been observed? Any pattern?	When since that time could the deviation have been observed, but was not?
	When, in the object's history or life cycle, was the deviation first observed?	When else, in the object's history or life cycle, could the deviation have been observed first, but was not?
EXTENT	How many objects have the deviation?	How many objects could have the deviation, but do not?
	What is the size of a single deviation?	What other size could the deviation be, but is not?
	How many deviations are on each object?	How many deviations could there be on each object, but are not?
	What is the trend? (...in the object?) (...in the number of occurrences of the deviation?) (...in the size of the deviation?)	What could be the trend, but is not? (...in the object?) (...in the number of occurrences of the deviation?) (...in the size of the deviation?)

Identify Possible Causes
Use Knowledge and Experience, or...
from Distinctions and Changes
to create statements you can test against the facts.
- What could cause this deviation?
- What would experts say?
- What was your initial hunch?

Evaluate Possible Causes
Test Possible Causes
to get rid of causes that do not make sense.
- If ___ is the cause of ___, how does it explain both the IS and the IS NOT?

Determine the Most Probable Cause
to pick the possible cause to verify first.
- Which of the possible causes makes the most sense?

Confirm True Cause
Verify Assumptions, Observe, Experiment, or Try a Fix and Monitor
to avoid wasting resources.
Ways to verify:
- Facts—Check assumptions
- Observe—Go look
- Research—Experiment
- Results—Try a Fix and Monitor

Decision Analysis *(Select a Fix)*

Clarify Purpose
State the Decision
to keep decision makers on track.
- What do we need to decide?
- What are we trying to do? (Include choice word, result, and key modifiers.)

Develop Objectives
to help evaluate alternatives fairly.
- What results do we want?
- What resources should we use or save (people, equipment, money, time, space...)?
- What law, regulation, or policy restrictions do we have?

Classify Objectives into MUSTs and WANTs
to be clear about what is mandatory and what is desired.
- Is this objective:
  Mandatory (required)?
  Measurable (set limit)?
  Realistic (can the limit be met)?

Yes to all three equals a MUST. All others are WANTs.

Weigh the WANTs
To show how much each WANT will influence the choice.
- What is the relative importance of each WANT?

Evaluate Alternatives
Generate Alternatives
to expand the number of choices and increase the chances of picking a winner.
- What choices do we have?

Screen Alternatives through the MUSTs
to eliminate choices that do not meet minimum requirements.
- Which alternatives don't satisfy the MUST limit(s)?

Compare Alternatives against the WANTs
to determine which alternatives create the most benefit.
- Which alternative(s) best satisfies the objectives?

Assess Risks
Identify Adverse Consequences
to understand the risk of choosing an alternative.
- If we choose this alternative, what could go wrong?
- What disadvantages are associated with this alternative?
- Is any information vague or uncertain?

Make Decision
Make the Best Balanced Choice
to commit to a choice.
- Are we willing to accept the risk(s) to gain the benefit of this choice?

Potential Problem Analysis (Avoid Future Problems)

Identify Potential Problems
State the Action
to focus on protecting a specific task.
- What do we need to do?
- What else...?

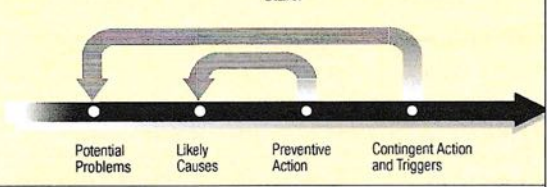
List Potential Problems
to anticipate and prepare for future problems.
- When we do this, what could go wrong?
- What problems could this action cause?

Identify Likely Causes
to help prevent or reduce the threat.
- What could cause this potential problem?
- What else could cause...?

Take Preventive Action
to reduce the probability that a future problem will occur.
- What can we do to prevent this likely cause from happening?
- What can we do to reduce the chances this likely cause happening?
- How can we keep this likely cause from creating the potential problem?

Plan Contingent Action and Set Triggers
Prepare Actions to Reduce Likely Effects
to limit the damage if something does go wrong.
- What will we do if this happens?
- What will minimize the effects if this happens?

Set Triggers for Contingent Actions
to start the contingent action at the proper time.
- How will we know the potential problem has occurred?
- What will cause the contingent action to start?



Think Beyond the Fix

Extend the Cause
- What other damage could this cause create?
- Where else could the cause create problems?
- What caused the cause?

Extend the Fix
- What identical things need the same fix?
- What problems could this fix cause?