

ROOT CAUSE ANALYSIS

A 2-DAY INTENSIVE LEARNING EXPERIENCE DURING WHICH YOU WILL LEARN HOW TO USE A DISCIPLINED, RESULTS-ORIENTED PROCESS TO FIND ROOT CAUSE.

Understand what truly constitutes a Problem: *often, people use the word problem to indicate a wide range of issues needing their attention. Effective Root Cause Analysis requires you to:*

- Understand the difference between expected and actual performance
- Assess whether both are being measured in a factual, consistent way
- Be able to move to other actions or activities if cause is already known
- Consider prior cause identification efforts so as to avoid wasting time

Describe the Problem: *create a clear and factual understanding of the problem to guide analysis.*

- Create a high-level statement of the problem for which you want to know the cause
- Document a factual description of four critical dimensions of the problem: what, where, when, extent
- Compare similar things that do not have the problem as a way to better understand the problem itself

Identify Possible Causes: *create hypothetical statements about cause that can be tested.*

- Engage with knowledgeable experts and leverage their experience
- Use the comparison of things without the problem to find unique distinct features
- Leverage these features to look for critical changes that could create the problem
- Brainstorm hypothesis using *all* the information you have

Evaluate Possible Causes: *test hypotheses using structured information about the problem.*

- Methodically examine each hypothesis
- Eliminate any hypothesis not clearly supported by known facts
- Record all assumptions or questions
- Separate most promising causes for additional verification

Confirm True (Root) Cause: *ensure confidence in the root cause before taking action to fix it.*

- Verify (or dispel) all assumptions
- Identify methods for observing the cause at work
- Design experiments to validate cause-and-effect
- Plan monitoring to confirm that this is the root cause and that all effects are mitigated

Additional topics: *covered if time and learner interest are available.*

- Understand the use of complementary approaches like 5 Whys and Fishbone (Ishikawa) Diagrams
- Ask the right questions to uncover critical data required
- Identify where else the root cause may be causing problems
- Ensure that the fix does not create unintended problems
- Learn how to use this process for many kinds of problems