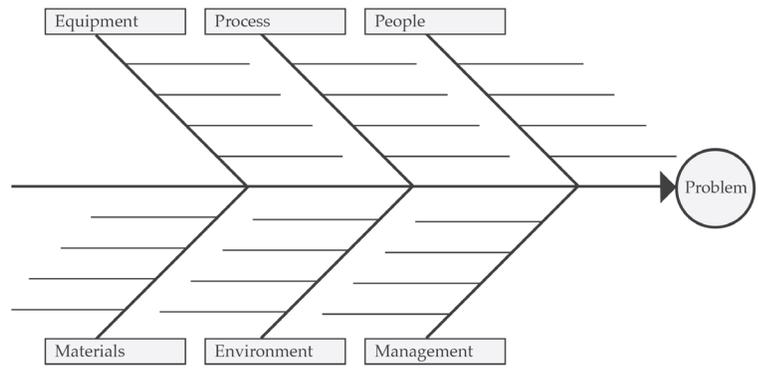


# What is a Root Cause Analysis?

Just as you would pull a weed out of your garden by its root to ensure that it doesn't grow back, getting to the root cause of a system's issue is important to prevent the problem from returning. There are many formalized root cause analysis tools. Two easy-to-use tools are the fishbone diagram and the Five Whys.

## Fishbone (Cause-and-Effect) Diagram

1. Begin the fishbone diagram by placing the problem at the head of the "fish."
2. Under each general category of the fishbone, answer the question, "Why?" for the identified problem. For example, "Why are people the cause of this problem?"
3. Once your team has completed the fishbone diagram, discuss the various causes to get to the root of the problem. It is from this discussion that the focus for the improvement plan can begin.



## Five Whys

The Five Whys tool aids in identifying the root cause(s) of a problem. Begin by identifying a specific problem, and ask why it is occurring.

Continue to ask "Why?" to identify causes until the underlying cause is determined. Each "Why?" should build on the previous response.

There is nothing magical about the number five. Sometimes a root cause may be reached after asking "Why?" just a few times; at other times, deeper questioning is needed.

1. Define a problem; be specific.
2. Ask why this problem occurs, and list the reasons in Box 1.
3. Select one of the reasons from Box 1 and ask, "Why does this occur?" List the reasons in Box 2.

The Problem: \_\_\_\_\_

Why does this occur?

1.  ← Why is that?

2.  ← Why is that?

3.  ← Why is that?

4.  ← Why is that?

5.  ← Why is that?

Continue this process of questioning until you have uncovered the root cause of the problem. If there are no identifiable answers or solutions, address a different problem or reason.

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