

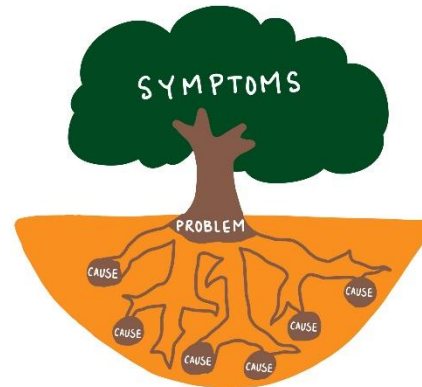


Root Cause Analysis

Root cause analysis helps us identify the **right problem to solve** by moving past symptoms of a problem and identifying the true cause. When we know the true cause of a problem, we can apply the right solution.

The BRIDGE Academy toolkit includes two tools for root cause analysis:

- 5 Whys
- Fishbone Diagram

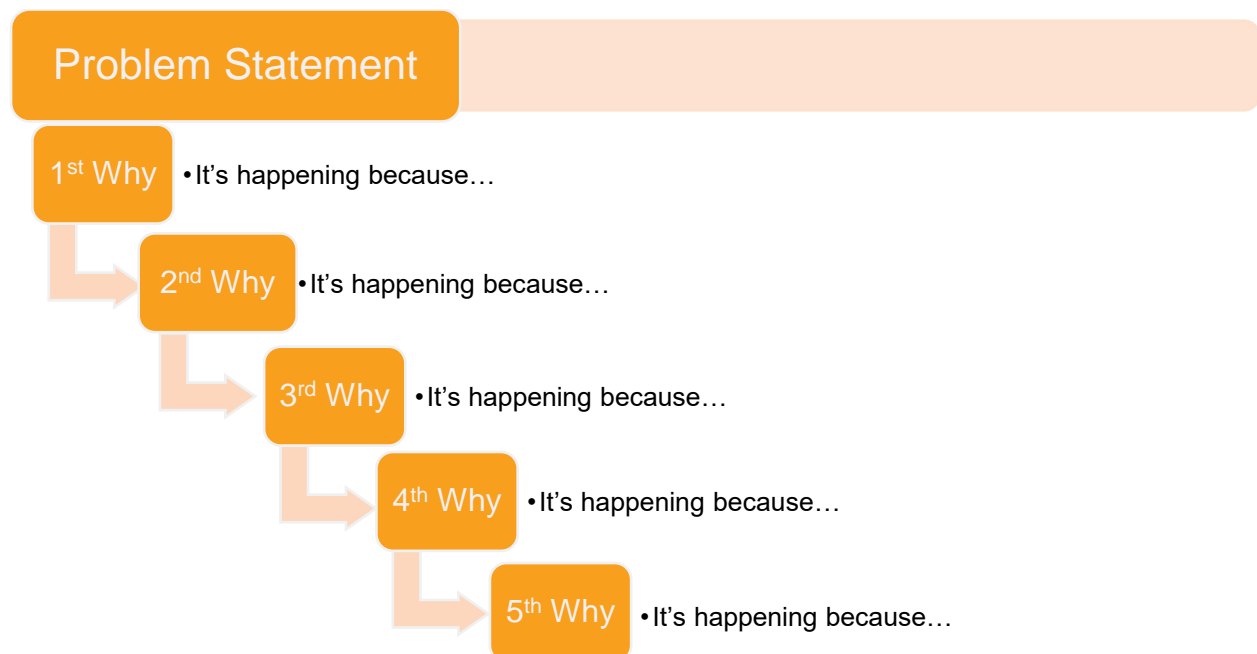


5 Whys

The 5 Whys is a question-asking technique that is aimed at helping teams identify the root cause(s) of an issue. By intentionally digging deeply and asking “why” at least five times about the problem, you are likely to arrive at the root cause of a problem.

5 Whys should be used when:

- Teams need to move beyond assumptions about why a problem is occurring
- Prior solutions to the problem have not been effective
- Stakeholders are blaming *people* rather than the *process*
- When the process has been in place, with few changes, for a long period of time
- When the organization has experienced turnover and lost institutional memory





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How to Use this Tool:

1. Write down the Problem Statement at the top of a large sheet of paper.
2. Ask the question, "Why is this problem happening?" and write down the answer to this question.
3. Ask your team "why" about the previous answer and write down the response. Repeat this step until you have asked "why" at least five times.
4. Evaluate your responses. Is it reasonable to assume that a solution that addresses the fifth (or final) "why" would also solve the original problem?

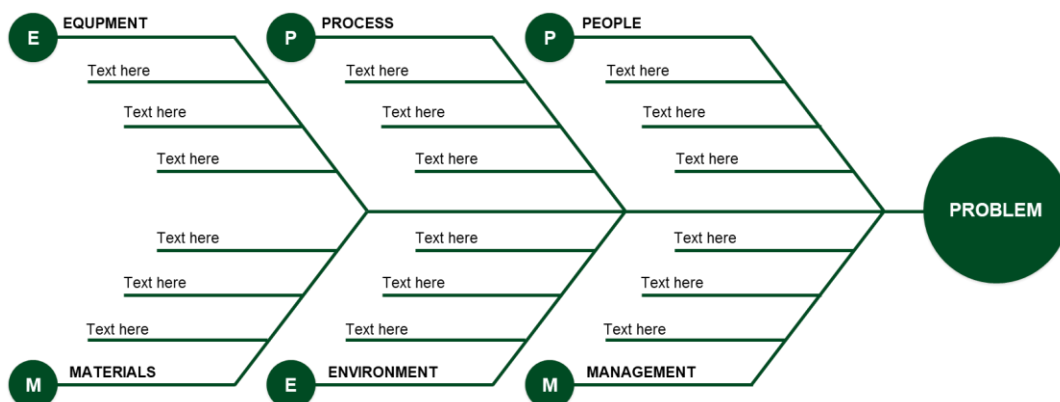
Facilitation Tips

- If the root cause identified in the 5 Whys blames *people* and not the *process*, continue asking why until the cause for the human issue is identified.
- Some problems are the result of numerous root causes. Focus your attention on the issues that you and your team have the capability and authority to address.
- When there are multiple root causes to a problem, a Fishbone Diagram is helpful to visualize and analyze the issues.

Fishbone Diagram

The Fishbone Diagram can be used to identify and categorize multiple root causes of a problem. The problem is shown as the head of the fish, and the branches of the diagram (or fishbones) represent different categories of causes. Although they can be adjusted to meet the specific problem, these categories frequently include:

- **Equipment:** Machines or technology involved in the process
- **Process:** The steps taken to complete the transaction or create the product
- **People:** The groups of staff, customers, and stakeholders that are involved in the process
- **Materials:** The consumable supplies or raw materials used in a process
- **Environment:** The nature, noises, or setting of the process
- **Management:** The decisions and direction set by those that are responsible for a process





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How to Use this Tool:

1. Using a large piece of paper, sketch the body of a fish. The “bones” of the fish should be labeled with the categories of issues (equipment, process, etc.).
2. Label the “head” of the fish with the problem statement that you are working to solve.
3. Brainstorm potential causes to the problem. Ask the question, “What are all the issues that might contribute to this problem?”
4. Sort the potential causes into the issue categories on the diagram.
5. Evaluate the potential causes. Ask the questions, “Which of these are actually symptoms of the root cause?” “What is at the root of these issues?”
6. Circle the root cause(s) identified on the diagram.

Facilitation Tips

- Causes identified in the Fishbone Diagram can be prioritized using an Impact/Effort Matrix to determine which should be addressed.
- Teams may not always reach consensus on a single root cause. It is important to consider and note all potential causes identified by a team.