

5 Why's

Introduction

Unpredicted problems may occur in any team or process. However, problems are just symptoms of deeper issues. Fixing a problem quickly may be a convenient solution, however, it doesn't protect your work process from recurring mistakes. The 5 Whys technique is one of the most effective tools for root cause analysis in the Lean management arsenal. The 5 Whys will help you find the root cause of any problem and protect the process from recurring mistakes and failures. The 5 Whys method was part of the Toyota Production System and was developed by Sakichi Toyoda.

Definition

Five whys (5 whys) is a problem-solving method that explores the underlying cause-and-effect of particular problems.

When to Use it

- When you want to identify the root cause for simple to moderately difficult problems
- When problems involve human factors or interactions. So if any time human error is involved in the process use 5 Why's.
- Understand how one process can cause a chain of problems
- Determine the relationship between different root causes
- When you want to be highly effective without using any complicated evaluation techniques

Details

Keep in mind the following steps when assessing a problem using 5 Whys

1. Empower one person to facilitate the whole process. This team leader will ask the questions and try to keep the team focused. The answers should be based on facts and real data, rather than on emotional opinions.
2. Begin with a specific problem. What is it that you are having an issue with. This can also help the team focus on the same problem.
3. Ask why the problem happened and write the answer down below the specific problem you listed in step one.
4. Keep asking "why" to each of the successive answers you write down until you reach the root cause of the problem.
5. Again, this may take more or less than five "why"s. Make sure your team sees eye-to-eye with each of the questions being answered as well as the final root cause.

Advice 1. Don't ask too many Whys. If you keep going, you may end up receiving tons of unreasonable suggestions and complaints, which is not the purpose. Focus on finding the root cause.

Advice 2. Sometimes there could be more than one root cause. In these cases, the 5 Whys analysis will look more like a matrix with different branches. This may even help you detect and eliminate organizational issues that have permanent negative effects on the overall performance.

Example:

Here's an example of how this works:

Problem: There is a puddle of water on the floor.

Why?

The overhead pipe is leaking.

Why?

There is too much water pressure in the pipe.

Why?

There is a faulty control valve.

Why?

Control valves have not been tested.

Why?

Control valves are not on the maintenance schedule.

The Root Cause reveals the source of the problem. By coming up with a solution for the root cause, there is a high chance that all the whys leading up to the final answer will naturally get resolved.

