

Determine the Root Cause: 5 Whys

Asking "Why?" may be a favorite technique of your three year old child in driving you crazy, but it could teach you a valuable Six Sigma quality lesson. The 5 Whys is a technique used in the Analyze phase of the Six Sigma DMAIC methodology. It's a great Six Sigma tool that doesn't involve data segmentation, hypothesis testing, regression or other advanced statistical tools, and in many cases can be completed without a data collection plan.

By repeatedly asking the question "Why" (five is a good rule of thumb), you can peel away the layers of symptoms which can lead to the root cause of a problem. Very often the ostensible reason for a problem will lead you to another question. Although this technique is called "5 Whys," you may find that you will need to ask the question fewer or more times than five before you find the issue related to a problem.

Benefits of the 5 Whys

- Help identify the root cause of a problem.
- Determine the relationship between different root causes of a problem.
- One of the simplest tools; easy to complete without statistical analysis.

When Is 5 Whys Most Useful?

- When problems involve human factors or interactions.
- In day-to-day business life; can be used within or without a Six Sigma project.

How to Complete the 5 Whys

- 1.** Write down the specific problem. Writing the issue helps you formalize the problem and describe it completely. It also helps a team focus on the same problem.
- 2.** Ask Why the problem happens and write the answer down below the problem.
- 3.** If the answer you just provided doesn't identify the root cause of the problem that you wrote down in step 1, ask Why again and write that answer down.
- 4.** Loop back to step 3 until the team is in agreement that the problem's root cause is identified. Again, this may take fewer or more times than five Whys.