

The 5 Whys

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. Most often the apparent or perceived reason for a problem will lead you to another question. Although this technique is called "5 Whys," you may find that you need to ask "why" fewer or more than five times to uncover 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 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 you get agreement from others that the problem's root cause is identified. Again, this may take fewer or more times than five Whys.

5 Whys Examples

Problem Statement: Customers are unhappy because they are being shipped products that don't meet their specifications.

1. Why are customers being shipped bad products?

Because manufacturing built the products to a specification that is different from what the customer and the sales person agreed to.

2. Why did manufacturing build the products to a different specification than that of sales?

Because the sales person expedites work on the shop floor by calling the head of manufacturing directly to begin work. An error happened when the specifications were being communicated or written down.

3. Why does the sales person call the head of manufacturing directly to start work instead of following the procedure established in the company?

Because the "start work" form requires the sales director's approval before work can begin and slows the manufacturing process (or stops it when the director is out of the office).

4. Why does the form contain an approval for the sales director?

Because the sales director needs to be continually updated on sales for discussions with the CEO.

In this case only four Whys were required to find out that a non-value added signature authority is helping to cause a process breakdown.

Let's take a look at a slightly more humorous example of 5 Whys taken from the iSixSigma Dictionary.

Problem Statement: You are on your way home from work and your car stops in the middle of the road.

1. **Why** did your car stop?
Because it ran out of gas.
2. **Why** did it run out of gas?
Because I didn't buy any gas on my way to work.
3. **Why** didn't you buy any gas this morning?
Because I didn't have any money.
4. **Why** didn't you have any money?
Because I lost it all last night in a poker game.
5. **Why** did you lose your money in last night's poker game?
Because I'm not very good at "bluffing" when I don't have a good hand.

As you can see, in both examples the final Why leads you to a statement (root cause) that can be acted upon. It is much quicker to come up with a system that keeps the sales director updated on recent sales or teach a person to "bluff" a hand than it is to try to directly solve the stated problems above without further investigation.

5 Whys And The Fishbone Diagram

The 5 Whys can be used individually or as a part of the fishbone (also known as the cause and effect) diagram. The fishbone diagram helps you explore all potential or real causes that result in a single problem, defect or failure. Once all inputs are established on the fishbone, you can use the 5 Whys technique to drill down the root causes that have the greatest impact of results.

Take-Away Quotation

"If you don't ask the right questions, you don't get the right answers. A question asked in the right way often points to its own answer. **Only the inquiring mind solves problems.**" -- Edward Hodnett

Here's another example.

The Washington Monument was disintegrating

Why? Use of harsh chemicals

Why? To clean pigeon poop

Why so many pigeons? They eat spiders and there are a lot of spiders at monument

Why so many spiders? They eat gnats and lots of gnats at monument

Why so many gnats? They are attracted to the light at dusk.

Solution: Turn on the lights at a later time.