



AIA Best Practices:

Why ask why? The power of simplicity

Contributed by Gregg Kirkendall, AIA

Summary

When facing a problem, it's easier to address the first perceived cause, but this instinctive response may lead to further problems. Instead, a disciplined 5-Why approach will push teams to reach the root cause of a problem, instead of mere symptoms. While it has its limitations, this approach helps firm leaders and teams thoroughly assess a problem the first time.

Introduction

Repetitively asking “why” may seem like your child’s way of driving you crazy, but it’s also a useful technique for uncovering the root cause of a problem without using extensive data gathering and statistical tools. Its simplicity belies its power. It’s a tool that everybody can use to avoid jumping into action before determining the real cause of a problem, which often is not the perceived cause. Repeatedly asking the question “why” can remove the layers of symptoms that hide a problem’s root cause. This technique is called “5 Whys” because it usually requires asking “why” five times to find the basic issue that caused a problem.

Benefits of the 5 Whys Tool

- It helps identify a problem’s root cause, with the ultimate goal of developing corrective actions to prevent the problem from arising again
- It reveals the often unseen relationships between multiple causes of a problem.
- It’s easy to use.

How to Use the 5 Whys

The 5-Whys tool can be used by individuals, but it’s more effective when used by teams of people who know the details of the problem. Here are the steps to follow:

1. Clearly state the apparent problem to be solved. Write it on a marker board.
2. Does everyone agree that this is the problem?
3. Are there data that illustrate the problem?
4. Write the first “why” question on the board. For example, “Why is this happening?”

5. Write the answers on the board, and get consensus on which is the best answer.
6. Write the second “why” and repeat Step 5.
7. Repeat Step 6 three times. After the third time, and the fifth “Why,” the real cause of the problem should be apparent.
8. Once the team has identified the real cause of the problem, an appropriate course of action to correct the problem can be devised.

Summarize and clarify throughout the process to ensure that each intermediate “reason” is understood. Identify other information that could confirm or eliminate the assumed cause of the problem. Fact-based information is far more useful than opinions or guesses as to what might be happening.

An example of the 5-Whys approach: Suppose we received more comments during permitting than average for a similar project.

1. Why? The permit reviewer couldn't find our fire-rated penetration details.
2. Why? The details were not on the sheet referenced by the life safety notes.
3. Why? They were moved to allow adding another detail sheet.
4. Why? We didn't anticipate needing that detail sheet.
5. Why? We didn't do a cartoon set of the drawings before we started.

After the fifth Why is answered, the team has revealed that the problem wasn't that the plan reviewer couldn't find some details, but that a routine step in the documentation process wasn't followed: creating a cartoon set of the drawing package before documentation began. A possible action might be to increase training to reinforce the requirement to do a cartoon set.

The limitations of the 5 Whys

It's best to use the 5-Whys technique with a range of other approaches, particularly those which allow you to verify possible causes with evidence and data.

The technique does have a few limitations:

- Participants may not go deep enough to identify true root causes.
- The process is limited by the knowledge of those using it.
- Different people may get different answers, raising questions about bias or a predisposition to validate their assumptions.
- It's most effective for solving simple process-oriented problems with a limited number of causes.

Teams will sometimes stop before the fifth Why, thinking they have found the real reason. Even in those cases, proceeding to the fifth Why may unearth an even deeper and more fundamental cause of the problem.

A disciplined 5-Why approach will push teams to reach the root cause of a problem, instead of mere symptoms.

Conclusion

A 5-Why analysis is more than just an iterative process or a simple question-asking activity. Its value is getting the right people together discussing all of the possible causes of a given issue. So the next time your team is stuck at an impasse, consider using a little word that holds big power. Why try it? Why not?

About the contributor

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