

ROOT CAUSE ANALYSIS TOOL:

5 WHYS





This resource was developed by the New Zealand Lean Academy where we're on a mission to make Lean Thinking a part of the way Kiwis do business!

This eBook about the 5 Whys root cause analysis tool is just a tiny piece of the puzzle. We're building New Zealand's one-stop shop for Lean Thinking tools, templates, and ideas over at www.nzla.nz

Come and join us as we bring Lean Thinking to the people, and help make New Zealand the best place in the world to live and work.





Kate Horton Co-Founder & CEO of New Zealand Lean Academy

Good on you for getting curious about problem solving.

We're thrilled to share this 5 Whys guide as part of our collection of resources, designed to help you kickstart your Lean journey.

As absolute geeks of Lean Thinking, we've worked hard to make these resources accessible and practical for our amazing clients and the wider business community. We love it when you share your Lean journey far and wide, just do us a solid and acknowledge the source when sharing these materials or using them for training purposes.

When you have questions or need guidance on implementing Lean methodologies, don't hesitate to reach out. Together, we can make New Zealand the best place in the world to do business.

Let's go!

Kate Horton





When a mistake happens, the easiest and most common reaction is to look around and point the blame at someone. They'll probably end up panicking and either point the finger at someone else, or make a quick assumption about what went wrong and begin to fix what they <u>think</u> is the main cause.

Another typical scenario is when the team spots an error and needs to drop what they are doing and scramble to fix the issue or quality problem ASAP, so your client is happy. Once they do that, they pat themselves on the back for a job well done and get back to whatever they were doing before the firefighting alarm went off.

More often than not, these solutions are just a band-aid that just covers up a bigger problem.

When it comes to firefighting, most workplaces start to accept this as a normal course of action, even celebrating those who put on their superhero capes and regularly put out the fire. Other team members begin to expect it, and see it as just part of what happens in the workplace.

Root cause problem solving is a key element of Lean Thinking. It enables teams and individuals to firstly slow down, and then problem-solve individually and, more importantly, as a team.

The 5 Whys is a process that is simple, yet allows teams to dig a bit deeper than the 'first idea' and explore what truly is the main cause of a quality issue. By taking a bit more time, more accurate and sustainable fixes can be identified and implemented.

This is how we reduce the need for a firefighter in the first place!



THE 5 WHYS

How to use it:

"If I had an hour to solve a problem and my life depended on it, I would spend the first 55 minutes determining the proper question to ask, for once I know the proper question, I could solve the problem in less than five minutes."

- Albert Einstein

The process of the 5 Whys is quite simple. It is all about asking 'why?' five times (ish) to get to the real cause of a quality issue or problem in the workplace.

Just like an annoying preschooler: your job here is to ask why? why? why? to understand as much as you possibly can:

Example One:

The store room lights are out...

Why are they out? The light fuse has blown.....

Why did the fuse blow? Water got into the light switch.....

Why did water get in there? Condensation is running down the wall....

Why is there so much condensation? The humidity is too high for this cool room

Root cause solution:

- 1. Fit an extractor fan
- 2. Improve / fix thermostat



Many people would have just changed the fuse and moved on.

But by taking a few extra moments, we've gotten the the root cause of why the light went out and can now deal with the <u>actual</u> issue.

5 WHYS

When to use it:

The Five Whys is a great tool to explore 'in the moment' issues at the Gemba. It is relatively quick and low-cost to complete. In general, teams shouldn't need permission to take time out and complete a 5 Whys process. This root cause analysis tool is something they should be encouraged to just do whenever its needed. Once a team member completes a 5 Whys process, they can document the outcomes and add the actions or tasks to the team's continuous improvement board for accountability and follow-through.

"The wise man doesn't give the right answers, he asks the right questions."

Claude Lévi-Strauss (He's an old-timey philosopher, not the jeans guy)

Example Two:

The patient was late to theatre...

Why were they late?

There was a longer wait for a trolley.....

Why was there a wait?

A replacement trolley had to be found.....

Why?

The main ward trolley safety rail was worn and broken...

Why hasn't it been fixed?

It hadn't been checked for wear and tear

Why hasn't it been checked?

There is no equipment maintenance program in place



Root cause solution:

Replace broken trolley
Design and start a
maintenance program for all
the ward equipment



DON'T JUST FIX THE PROBLEM; FIX THE PROCESS



Keeping track of how you're using

THE 5 WHYS

The 5 Whys should be one of the most commonly used tools in the Lean Thinking toolbox, hence, monitoring the use and outcomes of the tool should be a priority for you and your team.

There a a few ways a Lean Leader can keep track of the team and how they are using the Five Whys:

- The number (or frequency) of times that it's used
- Training and updates on the 5 Whys
- Staff satisfaction feedback (indirect measure)
- Continuous improvement actions added to the teams' performance board as a result of using the tool
- Observation of the process being completed in real time.

Make sure you DO something with your 5 Whys discoveries

We recommend that you develop a way of keeping track of the outcomes of a 5 Whys process. This will make sure the countermeasures identified are recorded, and then team members have the accountability to follow through.

Maybe you'll add a section for 5 Whys analysis to your <u>team board</u>, or create a 5 Whys folder using a tracking sheet that's something like this one on the next page:

5 WHYS

Recording Sheet



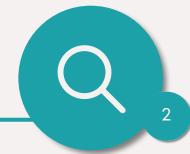
Initial Problem

Explain what's happening & who is impacted:



Outcomes

What actions are needed to fix the problem for good? (what, who, when):



5 whys analysis:

Scribble any ah-ha's or further questions to ask the team here:



www.nzla.nz

FINAL THOUGHTS



The 5 Whys is one of the most widely used Lean tools throughout the world because it's easy to get started, and can lead to huge improvements across all areas of a business.

But just because it seems simple, it certainly doesn't mean it's easy. Like everything, implementing the 5 Whys tool well is all about discipline and communication. But don't worry, we've got you.

Any time you need support with your Lean journey, we're right here to help, so don't be a stranger.

We recommend checking out these NZLA resources next:

Gemba Walks

<u>Daily Stand Up Meetings</u>

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