



**Root cause analysis
means digging deeper**

We've written [previously](#) about root cause analysis and just how important it is for your quality system.

Root cause analysis (RCA) is about problem solving - sort of like CSI for your quality system.

As you get better at performing RCA, your process will be less reactive and more proactive, leading to improvements in your business.

There are different approaches to RCA. The 5 Whys technique, Failure Mode and Effects Analysis (FMEA) and the Cause and Effect or Fishbone Diagram are three of the most popular.

The 5 Whys technique relies on the person carrying out the RCA to ask at least those five questions of "why" to drill down into an issue. This technique seems to be the most popular since its implementation doesn't require specialised knowledge or resources to be effective.

Let's look at the 5 Whys technique in a little more detail.

It's a team sport

You will reach a consensus very quickly if you're working on your own. But to carry out an effective RCA, you'll should assemble a team.

These need to be the relevant people to ensure you get different viewpoints on the problem. In our previous article we used the example of a customer complaint about late delivery results. The team in this case should comprise those who had direct involvement with the process plus a moderator or facilitator.

This moderator or facilitator role is an important one in the process. It needs someone experienced enough to steer the team and ask the right 'why' questions plus maintain gentle control over the process.

Before beginning the RCA process, it's essential that the problem statement is correct and that the team agrees on it. The question in our example was 'Why weren't the results delivered on time?' and NOT 'Whose fault was it that the results were delivered on time?' As with any systems issue, depersonalising the problem will go a long way to getting to the bottom of it.

And of course, this technique doesn't mean just asking a series of random questions. The answer to each question should lead to the next.

Don't stop 'til you get enough

The moderator may begin by asking each of the members to consider the problem statement then define what they believe is the issue and list their responses. For a moderator, the key here is sorting through the responses and concentrating on those backed by facts, not emotions.

It may also mean that the team doesn't stop at 5 Whys. In the case of a complex issue, it could take many more questions to break down the problem.

This is where the skills and abilities of the moderator is important. As well as keeping the team on track, they may see other issues that need to be raised separately or require further investigation.

Team building

This process of asking questions and drilling down to find a solution encourages a collaborative workplace.

Consider and respect the opinions and viewpoints of each team member. In addition, this openness within the team should aim to build consensus on how to deal with the issue. This is not about finding fault or blaming individuals, it's about discovering flaws in the process and providing solutions.

The next step

Once the team has agreed on the root cause, it's time to take action – corrective action. Decide on the best actions that will protect your process from recurring problems.

Document a summary of the root cause analysis process and circulate this across the organisation. Delegate team members tasks to apply the agreed actions and give them a timeframe for both implementing the action and assessing the results of the changes determined.

Bringing the team back together to examine the results of the actions will reinforce the importance of the process and consolidate their teamwork.

How can we help?

We run an excellent training course on [Root cause analysis](#) and places are still available for the next session on 16 June. If this date doesn't suit you, we're also taking Expressions of Interest for training from July to December. Email info@masmanagementsystems.com.au and let us know your preferred dates.

On a more practical level, if you need support with running a Root Cause Analysis in your organisation, Maree would be pleased to help. She has extensive experience as a facilitator and can guide your team to the best outcomes.

To arrange a confidential discussion on how we can help, phone Maree on 0411 540 709 or email info@masmanagementsystems.com.au

Remember you don't have to do this alone!

How did **THAT** happen??





There are some things you never want to hear.

Words like “uh oh” from your hairdresser when they’re standing behind you during a haircut.

Or “I’ve never seen THAT before” when your doctor is looking at an x-ray.

Or perhaps a guilty-looking family member asking, “How much did you like that (extremely valuable fragile item) really??”

In a lab setting, any issues that arise will be the result of something going wrong in your system. This means that you’ll need to launch an investigation. And if it is a significant issue, that means root cause analysis.

For labs holding accreditation with NATA or certification, this could be anxiety inducing. NATA or your certifier needs you to adequately undertake a root cause analysis. But what does that mean for your lab?

To err is human

We all make mistakes, that’s a given. However, in a lab it’s not enough to say that Dave did the wrong thing. We need to backtrack and work out just why Dave got it wrong. And that’s precisely what a root cause analysis does.

Human error isn’t a cause. It’s a symptom of a breakdown in the system.

Perhaps Dave simply forgot a step in the process of the test he was carrying out because he’s a new father and was tired.

Perhaps he was using an older process because he didn’t know that the process had been updated recently.

Or perhaps he just doesn’t know how to do the test properly.

Regardless of the reason, the lab needs to drill down into the process and work out the WHY of what happened. That will make it much easier to explain where the process fell down and how it can be fixed.

As well as pointing to a possibly serious flaw in your system, a root cause analysis will allow you to prevent it happening again.

Be honest and upfront

Everyone loves sweet treats, but an assessment is no place for fudge (unless it’s part of morning tea).

Be clear and honest when doing your root cause analysis. Keep it simple and don’t try to sidestep the issue.

If you forgot to update your system when a new requirement came out from a regulator, say so. Did you overlook Dave when sending out a new testing procedure? Say that too.



And then say how you'll go about fixing the cause, so it minimises the possibility of it happening again.

Document everything so that you can demonstrate to NATA or your external assessment body that you're on the right track.

Doing this analysis isn't just about maintaining accreditation. It's helpful to you, your lab, and your system.

Don't play the blame game

It's extremely unhelpful to start pointing fingers during a root cause analysis. If the cause turns out to be an individual, it's important to look at their role, not their personality.

By using the 5 whys technique, we should be able to get to the source of the problem. For example, perhaps a client complained because their test results weren't delivered on time. Our analysis could look like this:

Why weren't the results delivered on time?

Because one of the chemicals needed had expired so testing was delayed

Why was the chemical expired?

Because the order didn't get shipped so we could begin on time

Why wasn't the order shipped in time?

Because the order wasn't placed with the supplier

Why wasn't the order placed with the supplier?

Because the person who does the ordering is on leave and nobody was delegated to carry out their role

Why was nobody delegated to do the ordering while the normal person is away?

Because we don't build redundancies into our system when it comes to resourcing - we run a lean ship!

Now there's a clear path forward to capture the issue and ensure this doesn't occur again. In this instance, perhaps the ship is running too lean and the allocation of resources is not quite right. So, management should look more carefully at its resourcing within the lab. There may be areas where there is wastage from which resources can be borrowed, or there may simply be a need to add additional resources to cover people being away.

The 5 whys method is just one technique. Other popular ones include the fishbone (or Ishikawa) diagram, flowcharts, or a cause map. Any thoughtful, systematic review process can be used.

Do it quickly

When something happens that shouldn't it's best to begin the root cause analysis as quickly as possible. Specific details can be missed because of memory lapses if the process is delayed. This is particularly true if there are several people involved in the process that led to an incident.



Everyone involved in the process should be involved in a root cause analysis.

This doesn't only mean employees involved in the incident but may also include members of the leadership team or perhaps sometimes customers and other interested parties.

Although employees involved in the work will usually be highly motivated to find a solution, leadership team involvement should ensure prompt and appropriate actions are taken.

It's not just about what went wrong...

Although a root cause analysis is generally used when an issue arises, a similar process can be used when things are going right.

For example, if a business has an unexpectedly good sales event, unpacking the reasons why this happened means that the process could be replicated.

By listing the possible causes leading up to the event, the business could categorise each touch point and determine whether this was something they could control or not control.

For example, the possible causes could be a new sales team member starting, the first day of Spring, new promotional material being launched or the end of the month.

Those events could be categorised by how much influence the business has over them – perhaps calling them internal or external.

Each of those events could then be investigated to determine if it was an unrelated, correlated or contributing factor or a root cause to the successful sales event.

Analysing why things are going well can help to protect the crucial factors in your business success.

Need help?

MAS Management Systems can support your lab's quality system. We can carry out internal audits, reviewing your document and yes, even do a root cause analysis!

We also have a training course that can show you how to carry out an effective root cause analysis and defend your findings at your next assessment.

Email us info@masmanagementsystems.com.au and we can discuss how we can support your business becoming better and smarter.

Remember, you don't have to do this alone!