

Finding the Root Cause

A guide to identifying what is really driving a problem

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Many decisions are fundamentally about risk, and the steps taken to manage a risk can themselves introduce new risks. The cause of a risk is not always obvious, and those that appear obvious are often not the root cause of the problem. Decisions that address symptoms rather than causes produce temporary relief and often make the underlying problem worse. Root cause analysis is the process of working back from what you can observe (the presenting problem) to the real source of it. This guide covers a practical method, when to use it, how to carry it out, and the most common mistakes. It can be used at any stage of the Decision Cycle, most commonly alongside Step 1 (Frame the Decision), Step 5 (Assess the Risks), or Step 9 (Reflect and Learn).

PART 1 Why the presenting problem is rarely the root cause

The problem as it first appears is often a symptom. You are repeatedly late for work. Your savings keep falling. A home project has gone over budget. These are observable effects. They describe what is happening, but they do not explain why. Treating them as if they were explanations leads to solutions that address surface behaviour without touching the conditions that produced it.

Root cause analysis is the discipline of moving from symptoms to causes. It asks: what sequence of events, decisions, or structural conditions produced this outcome? The goal is not to find someone to blame. It's to understand what needs to change so that the same problem does not recur.

There's a simple test. If you fix the problem in front of you now, could the same problem appear again through a different route? If the answer is yes, you have addressed a symptom, not the cause.

PART 2 The 5 Whys

The 5 Whys is the simplest and most widely used root cause technique. It was developed by Sakichi Toyoda and became central to the Toyota Production System. The method works by repeatedly asking 'why' in response to each answer, tracing a chain of causes back to the root. The number five is a guide, not a rule. You stop when you reach a cause you can act on.

HOW TO CARRY OUT A 5 WHYS ANALYSIS

1. Write down the symptom (the observable problem) in one clear sentence. Do not yet attempt to explain it.
2. Ask: why is this happening? Write down the obvious answer.
3. Treat that answer as the new problem and ask why again. Resist the temptation to stop at the first plausible-sounding cause.
4. Continue until you reach a cause that is actionable; something you can change, fix, or decide about.
5. Check the chain by reading it forward. Does each cause plausibly lead to the next? If any link feels weak, revisit it.

WORKED EXAMPLE

Symptom	I am overdrawn at the end of most months. Observable problem. Not yet a cause.
Why 1	Why am I overdrawn? Because more money leaves my account in the last week of the month than I expect.
Why 2	Why does more leave than I expect? Because several subscriptions and direct debits are taken in that week.
Why 3	Why don't I allow for them? Because I do not have a clear picture of what they all are.
Why 4	Why don't I have a clear picture? Because they were set up at different times over several years, and some renew automatically at higher prices.
Why 5	Why have they not been checked? Because I never set aside time to review what goes out of my account.
Root cause	Why is there no time set aside? Because there is no regular routine for reviewing my finances. It has been left to chance.

In this example, the solution is not 'spend less' or 'cancel everything'. It is to list the regular payments, cancel the ones no longer needed, and set a monthly review. That is the actionable root cause.

WHEN TO USE THE 5 WHYS

- The problem has a clear, observable effect and a likely single chain of causes.
- You need a quick analysis - it can be done on your own in 30 minutes.
- You are working in Step 1 (Frame the Decision) or Step 9 (Reflect and Learn) and want to establish whether the problem is correctly defined.

WHEN NOT TO USE THE 5 WHYS

- Multiple independent causes are contributing simultaneously. The chain breaks down when causes branch.
- The people involved disagree about the cause. The technique can anchor you around the first credible answer and stop the inquiry too early.

PART 3 Two other methods, mainly for organisations

Two other methods, the fishbone diagram and fault tree analysis, are designed mainly for groups and high-stakes settings. Working alone, the 5 Whys and a simple list of possible causes will give you most of the benefit.

PART 4 Common mistakes in root cause analysis

STOPPING AT THE FIRST PLAUSIBLE CAUSE

The first answer is usually a symptom or an intermediate cause. Stopping early produces solutions that address behaviour rather than structure. Keep asking why until you reach something actionable. Something that, if changed, would prevent the same problem recurring through different routes.

CONFUSING CORRELATION WITH CAUSE

Two things that occurred together or in sequence are not necessarily cause and effect. Starting a new job just before you began sleeping badly does not make the job the cause. Test each causal link actively. Look for evidence that challenges it, not just evidence that supports it.

ATTRIBUTING THE CAUSE TO A PERSON RATHER THAN A SYSTEM

When a problem is attributed to an individual's error or attitude, the analysis typically stops there. In most cases, the more useful question is: what conditions made the error possible, likely, or inevitable? Individual errors are usually symptoms of gaps in information, routine, time, or support.

SELECTING THE CAUSE YOU CAN MOST EASILY ACT ON

There is a strong pull towards causes that sit within your immediate control or that require the least resource to address. This is confirmation bias applied to causation. The real root cause may require a harder or more expensive fix. The discipline is to identify the real cause first, then decide what to do about it, rather than let the ease of a solution determine the diagnosis.

PART 5 Where this helps in the Decision Cycle

This is reference material rather than a tool belonging to a step. You consult it when you need it, rather than working through it in order. Diagnosis is often needed at three points:

- Step 1 (Frame the Decision), to establish whether the problem you are framing is the real one or a symptom of something beneath it. Get this wrong and the rest of the cycle answers the wrong question. If the cause you find changes what needs deciding, go back to Step 1 and reframe.
- Step 5 (Assess the Risks), at the Causes and Prevention subheading, to work out what could cause the leading option to fail before it does, and what would prevent each cause from operating.
- Step 9 (Reflect and Learn), to establish why an outcome happened, so that the lesson you record is the right one.

Root cause analysis is not part of any single step because problem diagnosis runs beneath the entire cycle. A well-diagnosed problem produces better information (Step 2), better challenge (Step 3), better options (Step 4), and more realistic risk assessment (Step 5).

The 5 Whys works backwards from something that has already gone wrong. At Step 5 nothing has gone wrong yet, so use the Pre-Mortem to generate possible causes using your imagination, and the Causes and Prevention questions to work out what would prevent each one.

Reference material for use with the Decision Cycle questions

Sources

Ohno, T. (1988). Toyota production system: Beyond large-scale production. Productivity Press.

The foundational account of the Toyota Production System, including the 5 Whys technique developed by Sakichi Toyoda and refined by Taiichi Ohno.

Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175-220.

Documents how confirmation bias operates in diagnostic and analytical contexts - directly relevant to the tendency to select a root cause that confirms an existing suspicion or is easiest to act on.