

Root Cause Analysis Template

One form for one repeat failure. Pick the tool, find the cause, prove it, then close every action. Built from the RCA method in Fix the System, Chapters 13 and 16.

Companion to: *Fix the System*, Chapters 13 and 16.

Who uses it: the RCA owner. Usually the planner for a Fishbone session, the technician who did the repair for a 5 Whys.

When: the same week the asset lands on your repeat-failure watch list.

Filed where: the asset's CMMS record, with the session notes and the work orders it opens.

1. Header

RCA ID: _____ Date opened: _____

Asset tag: _____ Asset description: _____

Failure code: _____ Work orders for the failures: _____

RCA owner: _____ Facilitator: _____

2. The failure

One sentence. Specific equipment. Specific symptom.

Occurrences in the last 12 months (dates): _____

Why this failure gets an RCA (check all that apply):

- ☐ Three or more failures under the same failure code in the last 12 months.
 - ☐ A technician flagged it as a recurrence at work order close-out.
 - ☐ It failed in less than half of the expected time between failures for this asset class.
 - ☐ It was costly, unexpected or safety-adjacent.
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3. Pick the tool

Pick by the problem, not by the tool you know.

- ☐ **5 Whys.** One event, one straight line of causes you can walk backwards in your head. About 20 minutes. Use the 5 Whys worksheet and copy the root cause into section 6.

- ☐ **Fishbone.** Several conditions came together. A team of five to seven, a 60 to 90 minute session, then two to three weeks of evidence. Use section 5.
- ☐ **FMEA.** The asset is new or modified and has not failed yet. Engineering-led. This form does not fit; start an FMEA instead.

4. The team

Check that each role is in the room.

- ☐ Technician who has done the repair most often
- ☐ Operator who runs the asset
- ☐ Planner who schedules the work
- ☐ Reliability engineer, if the plant has one
- ☐ Area supervisor

Names: _____

5. Causes (Fishbone)

Write the failure at the head. For each category ask what **actually** contributed, in your observation. Not what could have. Collect first, rank later.

Category	What actually contributed
People	
Method	
Machine	
Material	
Measurement	
Environment	

Rank and investigate

Rank by confidence and impact. The top three to five become investigation targets. Each one gets evidence, an owner and a due date.

Cause	Evidence to collect (inspection, history, test, interview)	Owner	Due	Confirmed?

1.				
2.				
3.				
4.				
5.				

6. Root cause and the confirmation test

Confirmed root cause(s), one sentence each:

Root cause 1: _____

Root cause 2: _____

Root cause 3: _____

If we fix these, does the failure stop on this asset, and on similar assets with similar conditions?

☐ **Yes.** Continue to section 7.

☐ **No, or not sure.** The analysis is not done. Keep investigating.

Answers that mean you have not found the root: "operator error", "part failure", "wear and tear", "we don't know".

7. Corrective actions

Every root cause gets at least one action, opened as a work order or a change request, with an owner and a date.

Action	Channel (PM, CBM, SOP, Design)	WO or change #	Owner	Due
1.				
2.				
3.				
4.				
5.				

Channel key: PM, a PM task added or changed. CBM, a sensor, threshold or alert. SOP, an operating or maintenance procedure, or training. Design, a spec, material or part change.

Similar assets with the same conditions (open a tracking work order for each):

- _____
- _____

8. Verification

60-day check (date: _____): actions implemented _____ of _____. Blocked actions and why:

6-month check (date: _____): has the failure recurred on this asset? No Yes

If yes, one of three things is true:

- The root cause was right, but an action never closed. Audit the work orders.
- The root cause was right, but the change did not hold. Redesign the action.
- The root cause was wrong. Reopen the analysis.

9. Sign-off

RCA owner: _____ Date: _____

Facilitator: _____ Date: _____

Area supervisor: _____ Date: _____

File location

- ☐ This form attached to the CMMS record for asset tag _____.
- ☐ Every action in section 7 opened and referenced on this form.
- ☐ 60-day and 6-month checks scheduled with an owner.

Free toolkit downloads and updates: getov.xyz/toolkit/fix-the-system/ch13