WORKSHEET 3.9

Root Cause, and the Answer That Is Not a Component

Subchapter 3.9 · case in the book: Thessaloniki

Take your last unexplained rise and, before asking anybody why, plot the daily consumption and decide which of three shapes it is. A step, which happened on a date. A slope, which has been happening for months. Or a level that was always there and that nobody ever questioned because it never changed. If you cannot say which of the three you are looking at, every explanation you are about to be offered will fit, and you will accept the first one that does.

This worksheet turns the tools of the subchapter into a form you can fill in. The texts come from the book; the empty columns are for your own property. Adapt it before use: an unadapted checklist is exactly what the book warns against.

Practical application: what to do in your property

Step (from the book)	Done?	What we found / owner
Plot two years of daily consumption and name the shape before asking anybody anything.		
For a step, find the date and then find every record of that week.		
For a slope, go to the maintenance history and to any interval that was changed.		
For a stable level, go to the original schedule or specification, not to the plant.		
Say aloud that the true statements offered are accepted, and then ask what was decided.		
Apply the test: could anybody have decided otherwise.		
Take one step past the decision and ask why it was reasonable at the time.		
Once a year, ask of the three largest loads when their schedules were last set, and against what.		
Read any investigation record and underline the cause sentence: component, person, abstraction, or decision.		

These steps are the book's method, not requirements of ISO 50001. Evidence can take whatever form suits the property; a separate document is needed only where an applicable requirement, or the property's own system, makes it necessary.

Verification Pact: what is believed, tested against the standard

What is commonly believed	What actually holds	Our position
«The chillers are old, the summer was hot and the house was full.»	All three are true and all three are conditions. A cause is something somebody decided and could have decided otherwise.	

What is commonly believed	What actually holds	Our position
«We found the cause: the heat exchanger was fouled.»	That is the component. The cause is the decision that lengthened the interval and the absence of anything that checked it.	
«The commissioning engineer never came back.»	Stopping at a person is stopping one question early. What made his absence consequential and invisible for ten months?	
«The five whys took us to management commitment.»	An abstraction is where an investigation goes when it has run out of specifics. It cannot be tested and its corrective action cannot fail.	
«There has been no deviation on that circuit, so there is nothing to investigate.»	A load that has always been wrong produces no deviation for ever. Nothing in the system will ever raise it.	
«We asked the people who know, and they told us.»	Ask the data first. A shape constrains the explanations; without one, every true statement fits.	

Common mistakes: a self-check

Mistake (from the book)	Present here?	Action / owner
Asking people before looking at the shape of the data.		
Accepting age, weather and occupancy as causes rather than as conditions.		
Stopping at a component, which produces a component remedy and a recurrence.		
Stopping at a person, which produces a name and no change.		
Running the method to an abstraction, which produces a corrective action that cannot fail.		
Omitting the step that asks why the decision was reasonable at the time.		
Investigating only what moved, and never what was always wrong.		
Turning every cause into a governance finding and never replacing anything.		

Operative synthesis

› **An investigation in this discipline starts with a shape, not with a question. A step has a date and the date is worth more than any interview. A slope points at maintenance and at intervals somebody changed. A level that has never moved points at a schedule or a specification older than the data, and it is the shape that nothing in an ordinary management system will ever raise, because the whole apparatus of deviation and threshold is built to detect movement.**

- **The test that does the work is a single question asked of every explanation offered: could anybody have decided otherwise. Age, weather and occupancy fail it and are conditions. What passes it is a decision, and a decision has an owner, a date and an alternative, which is why it can be corrected and a condition cannot.**
- **The stopping rule is what keeps the method honest at both ends. Stop at the first decision that could have gone the other way, then take one step more and ask why it was reasonable at the time, because a reasonable decision will be made again by whoever holds the post next, unless what made it reasonable is addressed. Never stop at a person, and never continue into an abstraction.**
- **In Thessaloniki the three explanations were true, the three causes were decisions, and the largest of the three had never moved in seven years. The next subchapter takes the same data and asks a question that sits underneath all of this: whether the instruments that produced it can be relied upon at all, and what a result verified with an uncalibrated meter is actually worth.**

Action plan for our property

Action	Owner	Due	How we will know it worked

Source: Francesco Dore, The Helm and the Lens, Volume 4b «The Lens», subchapter 3.9. Edizioni Effedore, 2026. Clause references are paraphrased; this sheet does not reproduce the text of ISO 50001, ISO 50003 or ISO/IEC 17021-1. It is not legal advice: energy law is that of the place where the property operates.