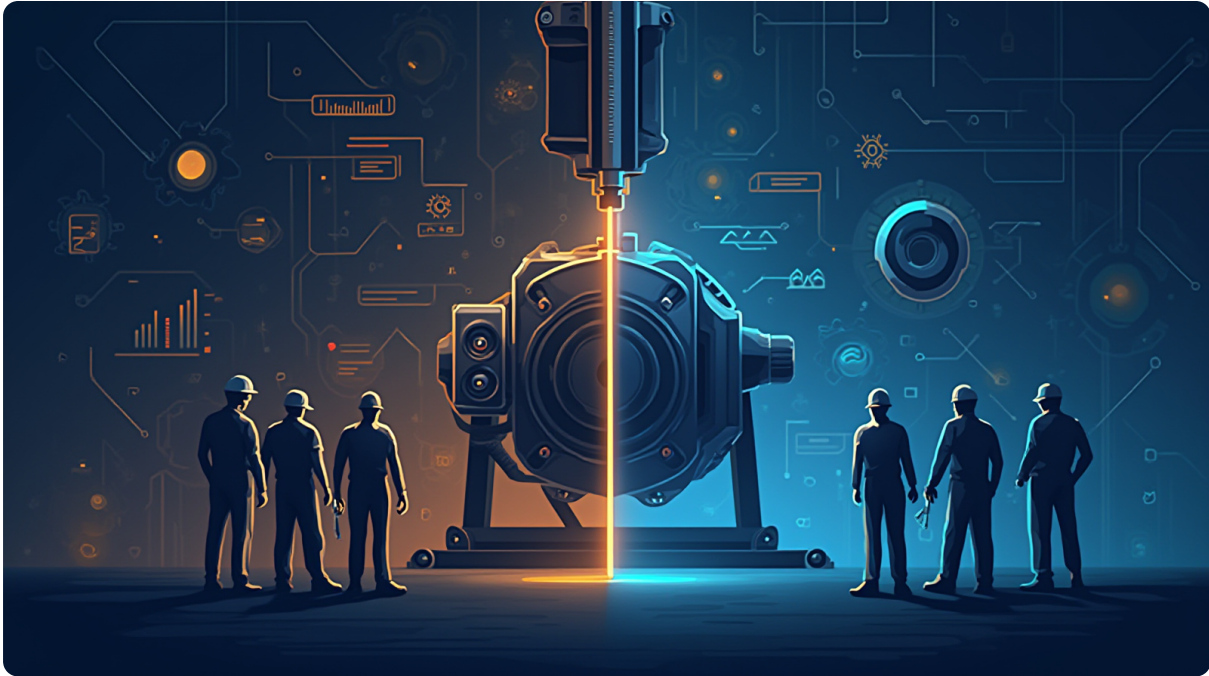


When 'Human Error' is a Stop Sign for Investigation.

Why the first fault identified is almost never the real root cause.

operational risk · system failure · process control · investigation

The newsletter for leaders who prefer deep system diagnosis over comfortable individual blame.



Anatomy of the Blame Game

When something goes wrong on the floor—a part is machined out of spec, a label is applied upside down, or a machine nearly creates a safety hazard—the immediate reaction from management is almost always to find the person responsible. You see it every day. A supervisor finds an error and says, "They weren't paying attention," or "The operator didn't follow the work instruction."

In many ways, this is a convenient exit. It's easy to point at a person, issue a warning, and close the file. We call this **The Human Error Dead-End**.

When we blame an individual for a mistake, we are essentially deciding that the investigation is over. We are saying that the problem lies entirely within the employee's head—their lack of focus, their fatigue, or their lack of "care." But on the shop floor, this isn't just bad leadership; it's poor engineering. If an operator has the opportunity to make a mistake and succeeds in doing so, it means your process allowed that mistake to happen.

A human error is not a training gap. It is a design failure. When we stop at "human error," we aren't solving anything; we are just deciding who to blame for the next time it happens to someone else. We have to move past the easy answer to find the real reason the line failed to catch the mistake before it reached the shipping dock.

The System Failure Trap: What is Actually Happening?

The most dangerous thing about "human error" as a diagnosis is that it masks the reality of how your work actually flows. When we accept the first excuse—the one that blames people—we ignore the underlying flaws in our controls, our tools, and our layout.

In my experience, what looks like an individual's lack of focus is usually just a person trying to navigate a flawed process as efficiently as possible. If an operator has to choose between following a clunky, three-step verification process or skipping it to meet a production quota, they will skip it every single time.

To see the difference clearly, look at what we say versus what is actually happening on the floor:

The Convenient Rationalization (The "Why" We Say)	The Underlying Reality (What Is Actually Happening)
"The operator was distracted."	The workstation layout requires them to walk too far to reach a tool, causing their focus to drift.
"They didn't follow the procedure."	The written instruction is ambiguous or buried in a binder that no one wants to open.
"It was an honest mistake."	The visual cues (labels/colors) are nearly identical for two different parts.
"They weren't trained well enough."	They were trained on the <i>ideal</i> process, not the reality of how the machine actually behaves.

When we blame a person, we leave the broken tool in the hand of the next worker. The problem doesn't go away; it just moves to a different name on a badge.

What Happens When You Only Fix People?

If you decide that "human error" is your final diagnosis, you are choosing a path of high cost and low return. There are three major costs to this approach:

1. The Cost of Re-occurrence. When you "fix" the problem by retrying the employee or issuing a warning, nothing changes in the process. Next month, another operator will face the same confusing label, the same faulty sensor, and the same ambiguous instruction. They too will make the same mistake because the conditions that made the error easy to commit are still there.

2. The Erosion of Trust. When operators see their colleagues being reprimanded for mistakes caused by poor tools or bad processes, they stop reporting issues. They learn that "making a mistake" is a liability. Instead of flagging a confusing step during a Gemba walk, they will hide it to avoid becoming the next person in the hot seat.

3. The Waste of Resources. Retraining and disciplinary actions take time and energy. If you spend three weeks retraining an operator on "paying attention," but don't spend one hour redesigning the jig so that a part can only be loaded correctly, you have wasted your most valuable resource: management's time.

We need to stop treating people as the primary point of failure. A person is not a variable; they are a component in your system. If the system produces a bad result, it is the system's design that must be interrogated first.

Finding the True Root Cause: The 3-Layered Audit

To move beyond "human error," we have to change how we investigate every incident. We need to peel back the layers of what happened until we find the structural flaw. I recommend using a **3-Layered Audit** for every non-conformance report. This ensures you don't stop at the surface level.

Layer 1: The Action (The "What")

This is the basic fact of what occurred. Did they skip a step? Did they use the wrong torque? We document this clearly, but we do not let it be the end of the story. This layer tells us *where* the process broke, but not *why*.

Layer 2: The Context (The "Why")

This is where we look at why the error was possible. Why did the operator feel they could skip a step? Was there no physical gate to stop them? Were they rushed by an unrealistic cycle time? This layer identifies the **procedural flaws**. If the answer is "they just forgot," then Layer 3 tells us how to make it impossible for anyone else to forget.

Layer 3: The Barrier (The "How")

This is the most important step and where many managers stop short. We must ask: *How can we redesign this so that a human mistake cannot result in a bad part?* This means moving from "telling" people what to do to "forcing" the process to work correctly through:

- **Poka-Yokes:** Physical stops or sensors that prevent the next step if the current one is wrong.
- **Visual Management:** High-contrast colors and clear icons so there is no ambiguity.
- **Standardized Work:** Simplifying instructions until they are impossible to misunderstand.

Quick Check: Three Questions Before Closing an Incident Report

Before you sign off on a corrective action report or close the loop on an investigation, walk out onto the floor and ask these three questions of your team. If any of these answers involve "the operator needs to

be more careful," the investigation is not finished.

1. **Was there a physical barrier that would have prevented this error from reaching the next station?** (If no, we need better tooling or sensors.)
2. **Could an untrained person—someone who has never worked on this line before—have made the exact same mistake today?** (If yes, our standard work and visual cues are insufficient.)
3. **Did the "fix" require a change in human behavior, or did it involve a change to the equipment or the process design?** (A real fix should always lean toward a process change; if it's only a behavioral change, you haven't solved the problem—you've just moved it.)

If your answer is that we simply need "better focus," go back and look at why the system allowed a lack of focus to result in a failure. Stop trying to fix people and start fixing the process.

Call to Action

What is one investigation at your plant you are currently resisting because it feels too hard? Share this diagnosis with a colleague who needs to think bigger than finger-pointing.

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Stay curious, stay improving,

David Rodgers

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References: The systemic failures revealed when 'human error' becomes the root cause.