Why Your Reliability Program Failed Before It Even Got Started

reliamag.com/articles/why-your-reliability-program-failed-before-it-even-got-started

Ricky Smith, CMRP, CMRT April 15, 2026

The Problem Starts Before Day One

You've seen it happen. A plant launches a reliability program with real momentum, solid tools, and a sharp reliability engineer leading the charge. Leadership even approved a budget (no small feat). And still, the whole thing unraveled within a year.

The autopsy almost always reveals the same thing: the failure happened before anyone installed a sensor or opened a work order.

The program was built on assumptions nobody ever tested. It was sold to stakeholders who nodded along in meetings but never actually committed resources. And it launched without a single clear definition of what winning looks like.

Nobody Agreed on What 'Reliability' Means

Ask five people at your plant what reliability means. You'll get five different answers. The maintenance manager thinks it means fewer breakdowns. The plant manager thinks it means lower costs. Operations thinks it means higher throughput. The reliability engineer thinks it means a world-class PdM program with vibration analysis, oil analysis, thermography, and ultrasound.

> The autopsy almost always reveals the same thing: the failure happened before anyone installed a sensor or opened a work order.

They're all partially right. But when nobody sits down to align those definitions before launch, you end up with a program trying to serve four masters and satisfying none of them.

This alignment conversation takes about two hours. Two hours in a conference room with the right people, a whiteboard, and an honest discussion about priorities. Most plants skip it because it feels unnecessary. They assume everyone's on the same page. They're almost never right about that.

Five Killers That Strike Before Launch

1. The Business Case Was Built on Hope

A real business case includes specific, measurable targets. "Reduce unplanned downtime by 15% in 12 months" is a business case. "Improve reliability" is a bumper sticker.

According to industry surveys, roughly 6 in 10 facilities that launched reliability initiatives couldn't point to a formal business case with quantified targets. They had PowerPoint decks. They had enthusiasm. They had vague promises about ROI.

What they didn't have was a number that leadership could track on a dashboard every month.

A good business case does three things. It quantifies the current cost of unreliability (in downtime hours, emergency spend, and production losses). It sets specific improvement targets with timelines. And it defines who's responsible for hitting those targets. If your business case doesn't do all three, it's a wish list.

2. The Org Chart Buried the Program

Where does your reliability engineer report? If the answer is "the maintenance manager," you've already limited the program's ceiling. Reliability programs that report into maintenance tend to stay in maintenance. They become PM optimization projects at best.

> Reliability programs that report into maintenance tend to stay in maintenance. They become PM optimization projects at best.

The programs that actually transform plants have reliability reporting to the plant manager or operations director, with a dotted line to corporate engineering. That org chart placement signals that reliability is a business strategy with teeth behind it.

3. Nobody Trained the Operators

You can have the best reliability engineer on the planet. If your operators don't understand basic machine care, don't know how to spot early warning signs, and aren't expected to participate in the reliability process, you've capped your program at about 40% of its potential.

Operator-driven reliability programs that include daily inspections, lubrication tasks, and basic condition checks have been shown to reduce reactive maintenance by 20–30% within six months. But that only works when operators are set up to succeed from day one. Here's what they need:

- Clear, visual inspection routes with specific acceptance criteria for each checkpoint
- Basic training on what abnormal sounds, vibrations, and temperatures actually mean in the context of their equipment
- A simple, fast reporting mechanism (a 12-field CMMS work request form will kill participation in a week)
- Visible feedback showing that their observations lead to real corrective action, so they know it matters

4. The CMMS Was Treated as the Strategy

Here's a pattern that repeats everywhere. A plant buys a CMMS (or upgrades to a new one), loads it with thousands of PMs copied from OEM manuals, and calls that a reliability program.

The CMMS is a tool. A powerful one, sure. But filling it with generic time-based PMs at OEM-recommended intervals and expecting world-class reliability is like buying a gym membership and expecting six-pack abs. The membership gives you access. The results come from showing up and doing the work.

The real value of a CMMS shows up when it's fed quality data from condition monitoring, failure analysis, and operator inspections. When it's used to track asset health trends over time, optimize PM intervals based on actual failure modes, and prioritize work based on criticality. That takes strategy. That takes thinking. The software just holds the information.

5. Leadership Signed Off but Never Showed Up

The most common killer. Leadership approved the budget. They gave a speech about how reliability is a priority. And then they never asked about it again.

Programs without visible, sustained leadership support have a failure rate above 70%. When leadership doesn't review reliability metrics in staff meetings, doesn't walk the floor asking about program progress, and doesn't hold managers accountable for reliability KPIs, the entire organization reads the signal loud and clear: this can wait.

And once the workforce decides it can wait, it's over. You can't un-ring that bell with a memo.

What a Solid Foundation Actually Looks Like

The Pre-Launch Checklist That Matters

Before you spend a dollar on sensors, software, or consultants, you need alignment on a few critical items. These are the load-bearing walls of any reliability program.

- A written business case with quantified targets tied directly to plant financial metrics
- A reporting structure that gives the reliability leader direct access to plant leadership, ideally reporting outside the maintenance department
- An operator involvement plan with training timelines and accountability measures baked in from week one
- A defined set of KPIs that leadership will review monthly, with real consequences attached to the numbers
- A communication plan that tells every level of the organization what's changing, why it's changing, and what's expected of them
- A 90-day milestone map so the program can show early wins before skeptics and budget hawks start circling

Early Wins Are Everything

The first 90 days determine whether your reliability program builds momentum or bleeds out quietly. You need quick, visible victories that demonstrate value to skeptics and give your team confidence that the effort is worth it.

Find the machine that breaks down every month. The one everybody hates. Fix it properly. Use condition monitoring to catch something before it fails, and make sure everyone hears about it. Quantify the save in dollars and hours. Put it in an email to the plant manager.

> Find the machine that breaks down every month. The one everybody hates. Fix it properly. Make sure everyone hears about it.

One facility reduced emergency maintenance calls by 22% in the first quarter simply by implementing basic operator inspection routes on their top 10 bad actors. That result was specific, measurable, and impossible for leadership to ignore. That's the kind of proof that keeps budgets alive.

Document every win, no matter how small. A bearing replacement that prevented a $40,000 failure. A leaking seal caught during an operator walkdown. A vibration spike that led to a planned outage instead of an emergency shutdown at 2 a.m. on a Saturday. These stories are ammunition. You'll need them when someone inevitably asks why the program deserves continued funding.

If you can’t show tangible value in the first 90 days, you’re already playing defense. And defense is where reliability programs go to die.

The Hard Truth About Culture

You can have perfect tools, perfect training, and a perfect org chart. If the culture punishes people for reporting problems, rewards firefighting over prevention, and treats maintenance as a cost center to be squeezed, your reliability program will stall.

Culture change takes 18 to 36 months of consistent leadership behavior. There are no shortcuts. And you can’t delegate it to the reliability engineer, no matter how talented they are. Culture is a leadership output.

Watch what happens when someone reports a near-miss or a developing problem. If the response is gratitude and action, the culture is healthy. If the response is blame, paperwork, or silence, every person on the floor just learned the real rules. They’ll stop reporting. They’ll stop caring. And your reliability program will become background noise.

The programs that survive year one are the ones where leadership decided, before launch, that reliability was going to change how the plant operates, how people are evaluated, and how success gets defined. They committed to being visible, being consistent, and being patient. Everything else, the tools, the technology, the techniques, falls into place once that commitment exists.

So before you launch your next reliability initiative, ask yourself one honest question: did you build the foundation, or did you just buy the materials and hope somebody else would pour it?

Author

Ricky Smith, CMRP, CMRT
Ricky Smith, CMRP, CMRT is the Vice President of World Class Maintenance and a leading Maintenance Reliability Consultant with over 35 years of experience. He holds certifications such as Certified Maintenance and Reliability Professional (CMRP) and Certified Maintenance and Reliability Technician (CMRT). Ricky has worked with global companies like Coca-Cola, Honda, and Georgia Pacific, delivering expert maintenance solutions across 30 countries. His career began in the U.S. Army, advancing to leadership roles, including a position at the Pentagon as Facility Investigator for the Secretary of Defense. Ricky is also the co-author of *Rules of Thumb for Maintenance and Reliability Engineers* and *Lean Maintenance: Reduce Costs, Improve Quality, and Increase Market Share*.

View all posts