Getting Started On Your First 90 Days As a Reliability Leader

10 Steps to Set a Foundation for Long-Term Success

For more information, contact us:
800-290-6458 x1
Cutsforth.com/Contact
info@cutsforth.com

Contents

Executive Summary

Stepping into a new reliability leadership role is both exciting and daunting. As a Plant Manager or Fleetwide Reliability Manager, the first 90 days set the tone for your tenure. This period is not about solving every problem—it is about establishing credibility, building trust, and charting a path toward long-term success.

In today's industrial environment, downtime costs are higher, assets are aging, and skilled maintenance professionals are retiring. At the same time, new technologies—wireless sensors, cloud analytics, and AI diagnostics—are making advanced reliability practices more accessible. Leaders who take a structured approach in their first 90 days can leverage these trends to transform reliability from a maintenance expense into a driver of business value.

This paper provides a practical framework for navigating the first 90 days: from assessing historical performance, to engaging with culture and leadership, to delivering early wins that build momentum. Along the way, we highlight how Cutsforth partners with new leaders to accelerate their success.

Introduction: Why the First 90 Days Matter

The first 90 days are a test of leadership. Your executive peers will look for early signs that you can take control of reliability challenges. Your frontline teams will judge whether you understand their realities. And your organization will expect you to chart a course that prevents costly surprises.

Consider a utility that suffers a forced outage every summer during peak demand. Or a pulp and paper mill where unplanned pump failures drive costly rush shipments. In both cases, the new reliability leader inherits not just equipment issues, but organizational fatigue from years of firefighting. Without a clear plan, it is easy to get swept into reactive mode and lose the opportunity to lead strategically.

By contrast, leaders who spend their first 90 days listening, assessing, and prioritizing build credibility quickly. They create momentum by delivering quick wins and lay the foundation for a culture of reliability that drives measurable business results.

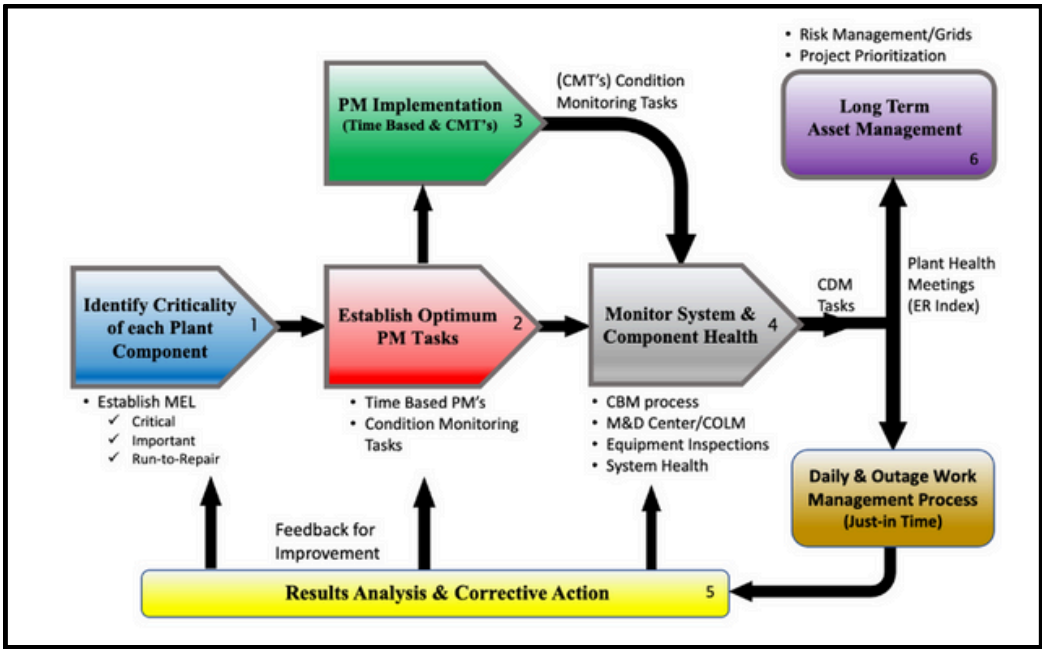


Figure 1. Condition Monitoring is only one step in an overall Asset Management Strategy that requires continuous assessment, prioritization, and investments over time.

Step 1: Assess Historical Performance

Your first task is to understand the reliability story of your plant or fleet. Outage history provides insight into where the organization has been vulnerable. How many unplanned outages occurred in the last three years? Were they driven by chronic mechanical issues, human error, or gaps in monitoring? The answers reveal patterns you must address.

Budget analysis is equally telling. If 70% of maintenance spend has historically gone to emergency work orders, rush shipments, and overtime labor, then the plant is operating reactively. Such patterns highlight opportunities to shift resources toward preventive and predictive practices.

Finally, look at how maintenance labor is being used. In many plants, technicians spend half their time walking routes and writing down numbers. That effort could be redeployed to higher-value tasks if monitoring were automated. This historical assessment gives you the evidence you need to prioritize where reliability improvement will yield the greatest impact.

Step 2: Understand the Culture and Leadership Perspective

No matter how advanced your reliability tools, culture will determine success or failure. Early in your role, gauge how reliability is perceived inside the organization. Do executives view it as an engineering initiative that consumes budget, or as a strategic enabler of safety and uptime? This distinction shapes how you must frame your case for change.

Equally important is frontline perception. Spend time with operators, engineers, and technicians. Ask them what frustrates them about maintenance today. Do they feel their concerns are heard, or do they believe reliability is just another program that will fade away? In organizations where past initiatives have been abandoned, you may need to rebuild trust by showing consistency and persistence.

Understanding both executive priorities and cultural readiness allows you to bridge the two, creating alignment around shared goals.

Step 3: Evaluate Maturity Against a Maintenance and Reliability Model

Every organization exists at different points along the reliability maturity curve. At the reactive end, failures are addressed as they happen with minimal planning. Preventive organizations schedule maintenance at calendar intervals, which reduces surprises but can waste resources. Predictive organizations use condition monitoring to identify problems before they cause failure, while prescriptive and automated organizations use advanced analytics and AI to not only predict but prescribe actions, with workflows integrated directly into work management systems.

In practice, plants often exist at multiple maturity levels at once. A turbine may be continuously monitored with vibration systems, while pumps rely on manual inspections. Wireless monitoring has become a cost-effective way to move more assets up the maturity curve, providing data frequency and accuracy that manual routes cannot match.

By benchmarking your current maturity, you create a roadmap for where to focus improvements first.

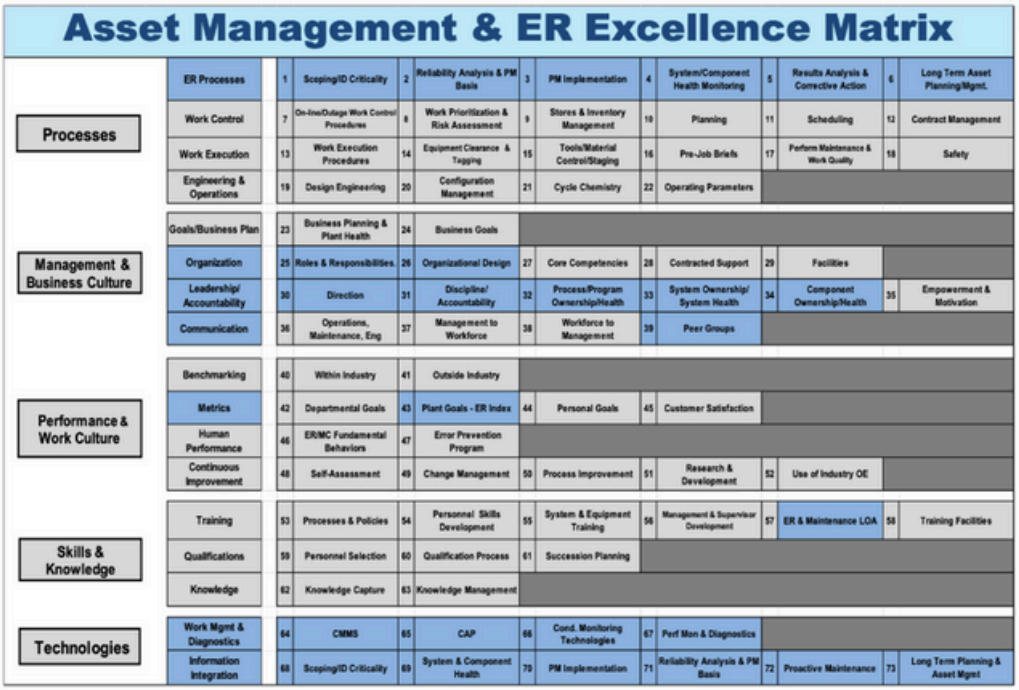


Figure 2: Using a maturity model to assess and capabilities across people, process, and technology provides a guidepost for planning and investments. Equipment reliability experts at Cutsforth have worked with our customers for more than 20 years to develop a full maturity model that we apply in strategic consulting engagements.

Step 4: Assess Your Current Asset Portfolio

Reliability leadership begins with knowing exactly what you are responsible for. This starts with a Master Equipment List (MEL), a complete inventory of every asset in your plant or fleet. A strong MEL includes asset identifiers, manufacturer, model, serial numbers, installation dates, and associated maintenance records. It is the backbone of any reliability program.

Unfortunately, many organizations struggle with MEL accuracy. Equipment lists may be outdated, incomplete, or split across multiple systems. In some cases, a true MEL does not exist at all. Without it, leaders are forced to make decisions based on incomplete information, which often leads to misplaced resources and hidden risks.

Once your MEL is validated, develop an Asset Criticality Ranking to identify which assets matter most to business performance. This ranking should consider safety, environmental, financial, and production factors. For example, a transformer at a power plant represents a vastly different risk profile than a small fan motor.

From here, compile an Equipment Condition Status Report and build an Equipment Health Scorecard. These tools give you and leadership a clear picture of current risks. Paired with a Risk Grid—plotting the likelihood and consequence of failure—you can prioritize resources where they matter most. Finally, define a Reliability Index as your baseline metric, allowing you to measure progress over time.

By taking this structured approach, you transform an overwhelming equipment landscape into a clear map for action.

Criticality	Reliability	Flexibility	Regulatory	Safety	Cost of Failure	Efficiency	Asset Probability Factor
9	Full generation loss of multiple units	Loss of ability to start multiple units	Major regulatory/environmental event - fines/public news	Possible fatality	Major O&M/Capital Cost > $1,000,000		Corrective maintenance is performed weekly
8	Long term full load loss (>1 week)	Loss of ability to start unit for > 1 week	Immediate environmental permit exceedance/violation or immediate NERC non compliance		$500,000 - $1,000,000		
7	Short term full load loss (<1 week)	Loss of ability to start unit for < 1 week		Possible lost time injuries occur to personnel	$350,000 - $500,000		
6	Long term major derating ≥ 40% (>1 week)				$200,000 - $350,000		Corrective maintenance is perfmormed monthly or several times per year
5	Short term major derating ≥ 40% (<1 week)	Prevents unit to be able to start within dispatch time	Operation can be adjusted to meet regulatory requirements or potential violation	Possible doctor attended injuries	$100,000 - $200,000	Major efficiency loss (> 100 BTUs) - feedwater heater	
4	Long term minor derating < 40% (>1 week)				$50,000 - $ 100,000		
3	Short term minor derating < 40% (<1 week)	Inability to meet ramp rate commitment of the unit		Action taken to secure area	$25,000 - $50,000	Minor efficiency loss (< 100 BTUs and > 25 BTUs) - drain valves, inlet filters	Corrective maintenance is performed yearly
2	No immediate derate but possible generation loss due to extended asset failure	Inability to meet turn down commitment of the unit	Close Call (Non-Reportable)		$5,000 - $25,000		
1	no effect	no effect	no effect	No Safety Concern	No Effect - $5,000	No effect	Corrective maintenance is performed every few years or less

Critical Important Run-to-Failure

Figure 3: Using a structured approach to assess the criticality of plant equipment is a foundational step in your asset management strategy. Cutsforth uses a rigorous assessment process with our customers to establish a baseline understanding of your asset portfolio.

Step 5: Review Data Governance and Analytics Capabilities

Modern reliability depends on strong data governance. Start by identifying where data is stored. Is it spread across spreadsheets, a CMMS, and a historian system—or is it centralized? Evaluate data quality: are asset names consistent, readings reliable, and timestamps synchronized? Poor data governance leads to unreliable insights.

Automation is another critical factor. Plants still relying on manual data collection face inherent limitations. Wireless sensors can capture more frequent and accurate data while freeing technicians for higher-value work. Finally, assess your use of analytics. Are you simply trending values, or are you using pattern recognition and AI to identify emerging faults? The maturity of your data practices directly impacts your ability to prevent failures.

Step 6: Build Leadership Alignment and Support

Even the most technically sound reliability plan will fail without executive and organizational buy-in. Your role as a reliability leader is not just to manage assets but to translate reliability into business value.

Executives typically don't think in terms of MTBF (mean time between failures) or vibration spectra. They think in terms of production uptime, safety risk, regulatory exposure, and profitability. If you want support for your initiatives, you need to reframe reliability metrics in business terms.

For example, instead of reporting that MTTR has improved by 20%, explain that the plant gained an additional 40 hours of production last quarter, equating to $1.2 million in revenue. Rather than asking for budget to purchase "more sensors," show how adding monitoring on a particular asset class could prevent a failure with a potential $5 million cost.

Equally important is building trust across levels of leadership. Senior executives must see that reliability initiatives align with company goals, while frontline supervisors must believe that changes will make their teams more effective—not add burdensome processes. Quick wins (covered in Step 8) are powerful tools for building this alignment, because they prove results in real-world terms.

The outcome of this step should be clear leadership alignment: executives understand reliability as a value driver, not a cost center, and supervisors feel confident that reliability practices will help them meet their objectives.

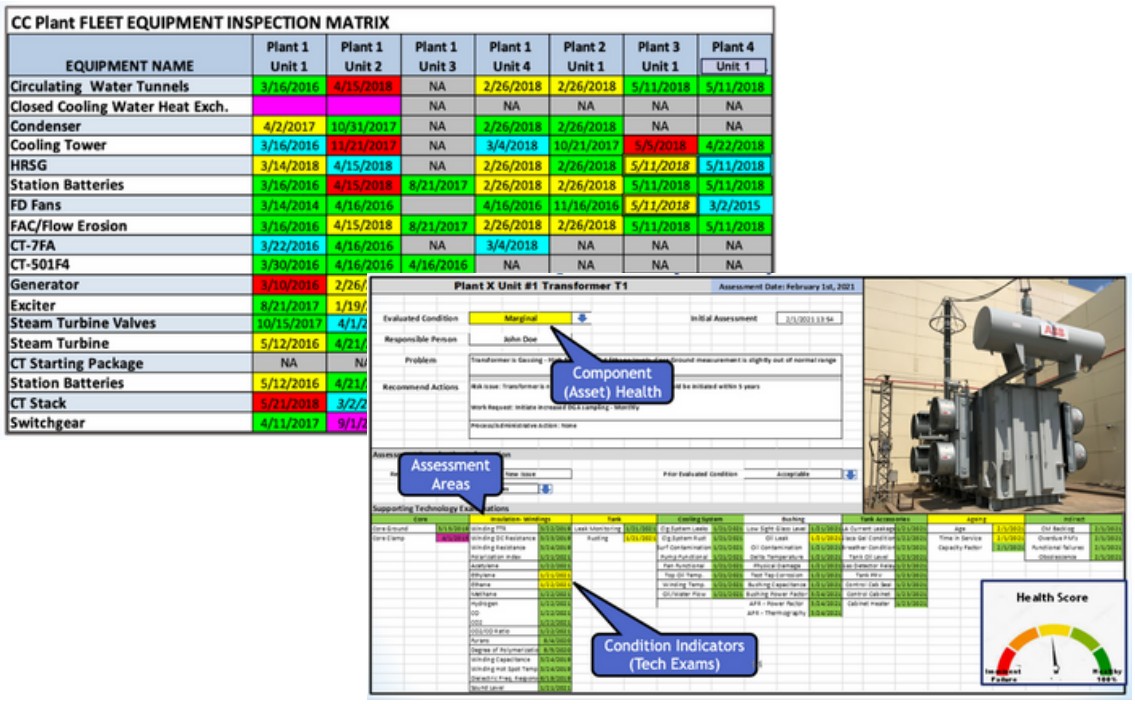


Figure 4: A disciplined reporting and maintenance history process is critical for laying the groundwork for future investments. Assessing and categorizing inspection outcomes and overall asset health into simple Green-Yellow-Red indicators streamlines communication.

Step 7: Identify and Prioritize Investments

With leadership support in place, the next challenge is deciding where to invest. Budgets and resources are finite, so prioritization is essential.

Start with expanding fault coverage. Many organizations rely heavily on vibration analysis, which is excellent for identifying bearing and imbalance issues but blind to other critical fault modes. By incorporating oil analysis, you can catch lubrication and wear problems; with infrared thermography, you detect overheating in electrical systems; with EMI monitoring, you uncover insulation breakdowns or arcing. Each measurement type covers a different layer of risk, and together they provide a more complete picture of asset health.

Next, evaluate analytics and AI tools. Even with good data, many organizations struggle to extract value because insights are buried in spreadsheets or siloed systems. AI-driven platforms can analyze thousands of signals simultaneously, flagging anomalies and providing diagnostics that human teams may miss. This is particularly important for fleetwide managers who must oversee hundreds or thousands of assets across multiple plants.

Time frame	Risk	Impact	Assets				
Less Than 1 Year	5	Very High	Unit 1 Feedwater Heater Replacement		Unit 2 Wall Inlet Value Nipple Replacement	Unit 3 Lower Slope Tubes Stress Corrosion Cracking	
	4	High	1) Unit 2 Recycle Pump Replacement 2) Coal Feeder EOL	Unit 2 Generator and Transformer Relays	Unit 1 System Isolation Valve Maintenance	Dry Ash Heaters Shorted or Failing	Unit 2 Absorber Pitted
Less Than 3 Years	3	Moderate		Control Valves Part Availability	Unit 2 Mill Bowl Vane Wheels Failing	1) FD Fan Bearing Replacement 2) Unit 3 FRD Rebuild	1) Mist Eliminator Failure 2) Unit 2 4KV Relay System Obsolete
Less Than 4 Years	2	Low		Replace ABH Baskets	1) Booster Fan Leak 2) Crossover Fan Malfunction		Unit 1 Absorber Repair
Less Than 5 Years	1	Very Low	1) Unit 1 Recycle Pump Replacement 2) Unit 3 Mill Feeder EOL				1) Unit 2 APH Bearing Replacement 2) Unit 1 Air Preheater Rotors EOL
		Effort	Very Low	Low	Moderate	High	Very High
			1	2	3	4	5
			<= 12 Hours	13-24 Hours	25-48 Hours	49-96 Hours	>97 Hours

Figure 5: An Asset Risk Grid that maps future maintenance and repair investments in a criticality vs. effort matrix is a critical tool to communicate budget priorities and react when opportunities arise.

Finally, prioritize training and change management. It's tempting to focus on technology alone, but the reality is that success depends on people. Your team must understand not only how to collect data, but how to interpret it, make decisions, and act quickly. Without this capability, new technology risks becoming underutilized.

The best investment strategy balances quick, visible improvements (like adding wireless sensors to high-risk pumps) with long-term enablers (like integrating monitoring into your CMMS and investing in team training). This dual approach ensures immediate results while positioning your organization for scalable reliability.

Step 8: Deliver Early Wins

The first 90 days are a proving ground, and nothing proves your value like a quick, visible success. Early wins establish credibility, generate momentum, and build trust with leadership and frontline teams alike.

Look for opportunities where a relatively small intervention can prevent a high-impact failure. For example, one utility implemented wireless monitoring on a set of critical cooling fans within its first 90 days. Within weeks, the sensors detected a bearing defect. Because the fault was identified early, maintenance could be scheduled at a convenient time—avoiding a forced outage that would have cost millions.

Another case comes from a pulp and paper mill where pump seal failures were consuming significant resources. By targeting this single recurring issue—introducing improved monitoring and addressing root-cause conditions—the new reliability leader reduced emergency work orders by 40% in that system. The result wasn't just cost savings; it boosted morale among operators who no longer had to deal with constant breakdowns.

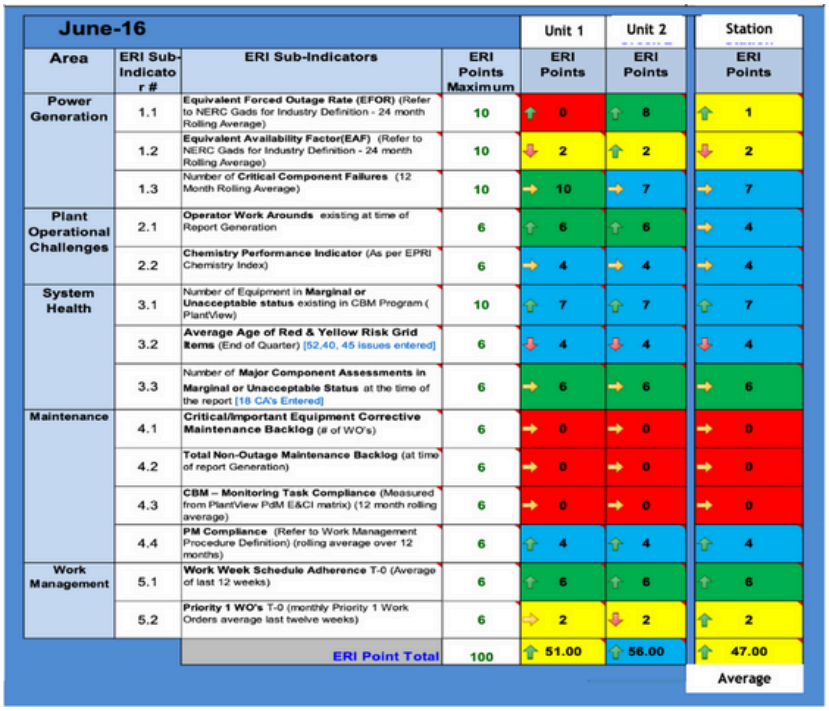
These types of wins have outsized influence. They demonstrate to executives that reliability investments deliver measurable financial benefits. They show frontline teams that leadership is addressing their pain points. And they create the momentum you need to secure additional support and resources for larger initiatives.

The key is to choose early wins strategically—pick problems that matter to the business, can be solved quickly, and will be visible across the organization. By the end of your first 90 days, you want leaders and teams to look back and say, "We're already better off with this new reliability approach."

Step 9: Establish Reporting and Metrics for Ongoing Success

Reporting transforms reliability from a technical function into a visible business driver. Build dashboards that show downtime reduction, fault detection coverage, and cost savings from avoided failures. Ensure reports are clear and aligned to business priorities.

Transparency is key. Share results with leadership and frontline teams alike, reinforcing a culture of accountability. Consistency matters too: monthly or quarterly reviews should highlight progress and areas for improvement.



June-16				Unit 1	Unit 2	Station
Area	ERI Sub-Indicator #	ERI Sub-Indicators	ERI Points Maximum	ERI Points	ERI Points	ERI Points
Power Generation	1.1	Equivalent Forced Outage Rate (EFOR) (Refer to NERC Gads for Industry Definition - 24 month Rolling Average)	10	0	8	1
	1.2	Equivalent Availability Factor(EAF) (Refer to NERC Gads for Industry Definition - 24 month Rolling Average)	10	2	2	2
	1.3	Number of Critical Component Failures (12 Month Rolling Average)	10	10	7	7
Plant Operational Challenges	2.1	Operator Work Arounds existing at time of Report Generation	6	6	6	4
	2.2	Chemistry Performance Indicator (As per EPRI Chemistry Index)	6	4	4	4
System Health	3.1	Number of Equipment in Marginal or Unacceptable status existing in CBM Program (PlantView)	10	7	7	7
	3.2	Average Age of Red & Yellow Risk Grid Items (End of Quarter) [52,40, 45 issues entered]	6	4	4	4
	3.3	Number of Major Component Assessments in Marginal or Unacceptable Status at the time of the report [18 CA's Entered]	6	6	6	6
Maintenance	4.1	Critical/Important Equipment Corrective Maintenance Backlog (# of WO's)	6	0	0	0
	4.2	Total Non-Outage Maintenance Backlog (at time of report Generation)	6	0	0	0
	4.3	CBM – Monitoring Task Compliance (Measured from PlantView PdM E&CI matrix) (12 month rolling average)	6	0	0	0
	4.4	PM Compliance (Refer to Work Management Procedure Definition) (rolling average over 12 months)	6	4	4	4
Work Management	5.1	Work Week Schedule Adherence T-0 (Average of last 12 weeks)	6	6	6	6
	5.2	Priority 1 WO's T-0 (monthly Priority 1 Work Orders average last twelve weeks)	6	2	2	2
		ERI Point Total	100	51.00	56.00	47.00
						Average

Figure 5: An overall health scoreboard communicates status and performance to leadership and across the organization.

Step 10: Build a Roadmap Beyond 90 Days

Your first 90 days lay the foundation. Beyond that, create a roadmap for sustainable growth:

- 0–90 days: Assess, align, and deliver quick wins.
- 6 months: Standardize monitoring practices and expand coverage.
- 1 year: Integrate condition monitoring with maintenance workflows and CMMS.
- 3 years: Achieve predictive and prescriptive maturity, embedding reliability into culture.

How Cutsforth Helps Reliability Leaders in the First 90 Days

Cutsforth partners with new reliability leaders to accelerate impact in their critical first 90 days. Our Reliability Services team brings deep expertise in assessing programs and benchmarking against best practices. We help you map out a plan to expand fault coverage, reduce risk, and align reliability with business priorities. Whether you manage a single plant or an entire fleet, we can help you assess your current state, design a tailored roadmap, and implement technical and cultural changes to deliver results.

Beyond strategy, we provide hands-on implementation: deploying multi-modal condition monitoring hardware, integrating data into our InsightCM™ platform, and training your team to leverage analytics effectively. With Cutsforth, you gain both a trusted advisor and a practical partner in execution.

Contact Cutsforth today to learn more about our Asset Management and Equipment Reliability Workshop to get started.

Conclusion

The first 90 days of reliability leadership are about laying a foundation for long-term success. By combining cultural alignment, structured assessment, and early wins, you build momentum that transforms reliability from firefighting into a business value driver. With the right framework—and the right partner—you can achieve lasting change.