

A decorative graphic on the left side of the page, featuring a curved, semi-circular shape filled with a dense pattern of small red and white dots, resembling a signal or data visualization.

BROCHURE

First-Level Equipment Diagnostics

From Signals to Certainty
for Critical Rotating Assets



When Alarms Rise, Certainty Must Follow

In high throughput industrial environments, alarms are constant, but certainty is rare.

When compressors and rotating equipment deviate, teams lose time correlating data across systems, relying on tribal knowledge, and deciding what to check first.

LTM's First Principles Equipment Diagnostics delivers structured, domain-led reasoning to enable fast, explainable first-level diagnostics when minutes matter most.

Why Equipment Diagnostics Break Down

Equipment diagnostics often break down due to:

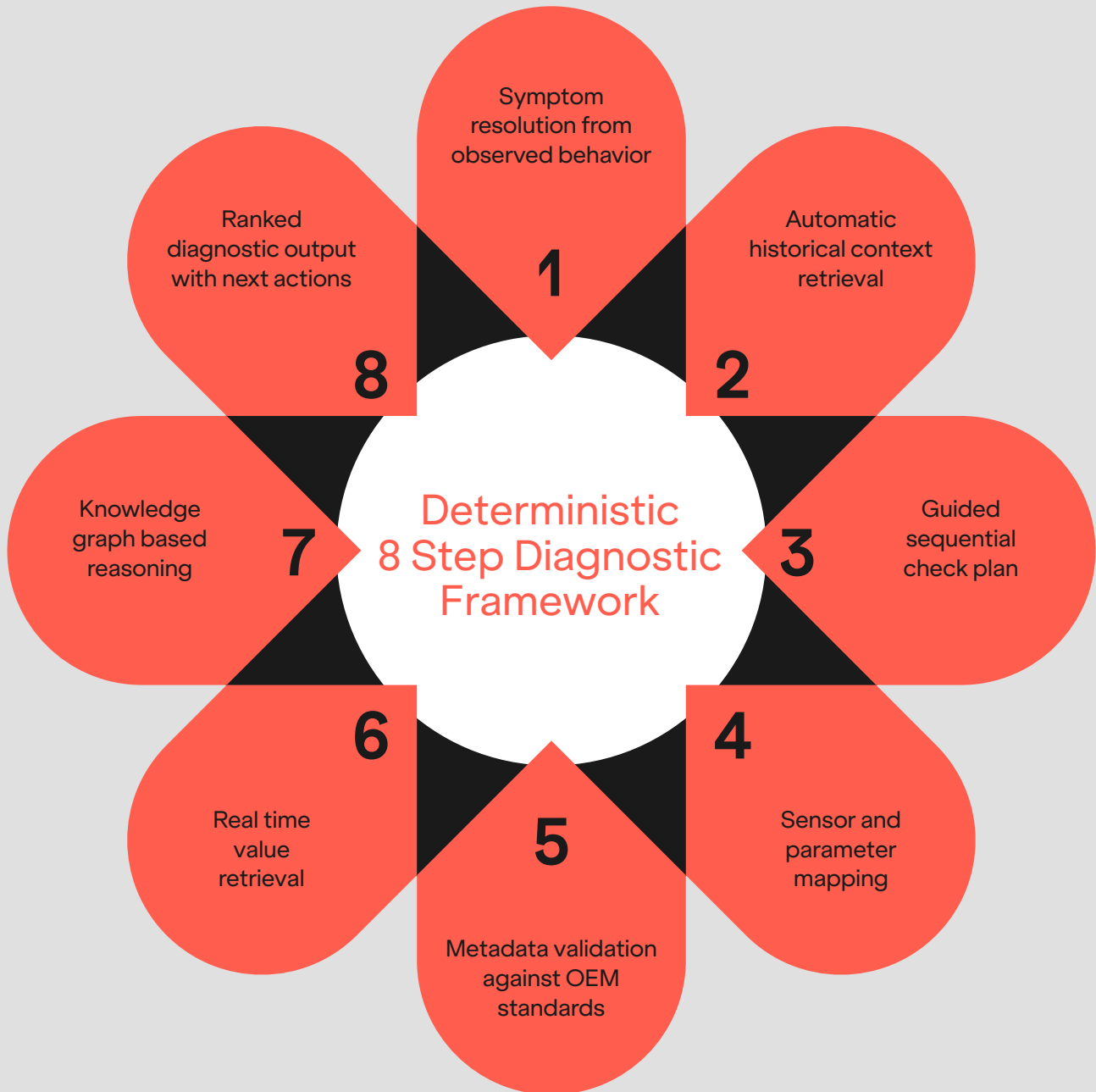
- ✓ Alarms without context that delay response
- ✓ Manual correlation across historian, alarms, maintenance, and P&IDs
- ✓ Inconsistent troubleshooting paths across shifts
- ✓ Delayed root cause clarity during critical events

Result: Longer recovery times, higher unplanned outage risk, and avoidable losses.

Our Solution

LTM applies deterministic, ISO aligned logic to convert signals into clear diagnostic actions. This approach helps enterprises Outcreate equipment reliability, moving beyond reactive troubleshooting to structured, repeatable diagnostics.

Key Capabilities



Built on Domain–Technology Convergence

The diagnostic framework is built on a combination of domain standards and advanced technologies:

- ✓ ISO 14224 aligned failure logic
- ✓ Real time operational data
- ✓ Knowledge graphs for cause effect reasoning
- ✓ Explainable, auditable diagnostics



Quick Facts

Unlike traditional diagnostic methods, this solution ensures it is:

- ✓ **Not alert driven:** Moves beyond threshold alarms to structured reasoning
- ✓ **Not black box AI:** Deterministic logic with traceable evidence trails
- ✓ **Not expert dependent:** Consistent diagnostics across operators, shifts, and sites

High Impact Points

This approach delivers measurable impact during first-level diagnostics:

- Zero guesswork during first level troubleshooting
- Faster decisions in minutes, not hours
- Repeatable outcomes independent of individual expertise
- Designed for critical compressors and rotating equipment
- Enterprise ready, auditable, and standards aligned

Why LTM

We combine domain expertise, engineering precision, and AI to help enterprises Outcreate equipment reliability with consistent, explainable diagnostics at scale.

Business Impact

\$1–3 million

in annual avoided losses per critical asset train

Faster containment

of abnormal events

Reduced

SME dependency

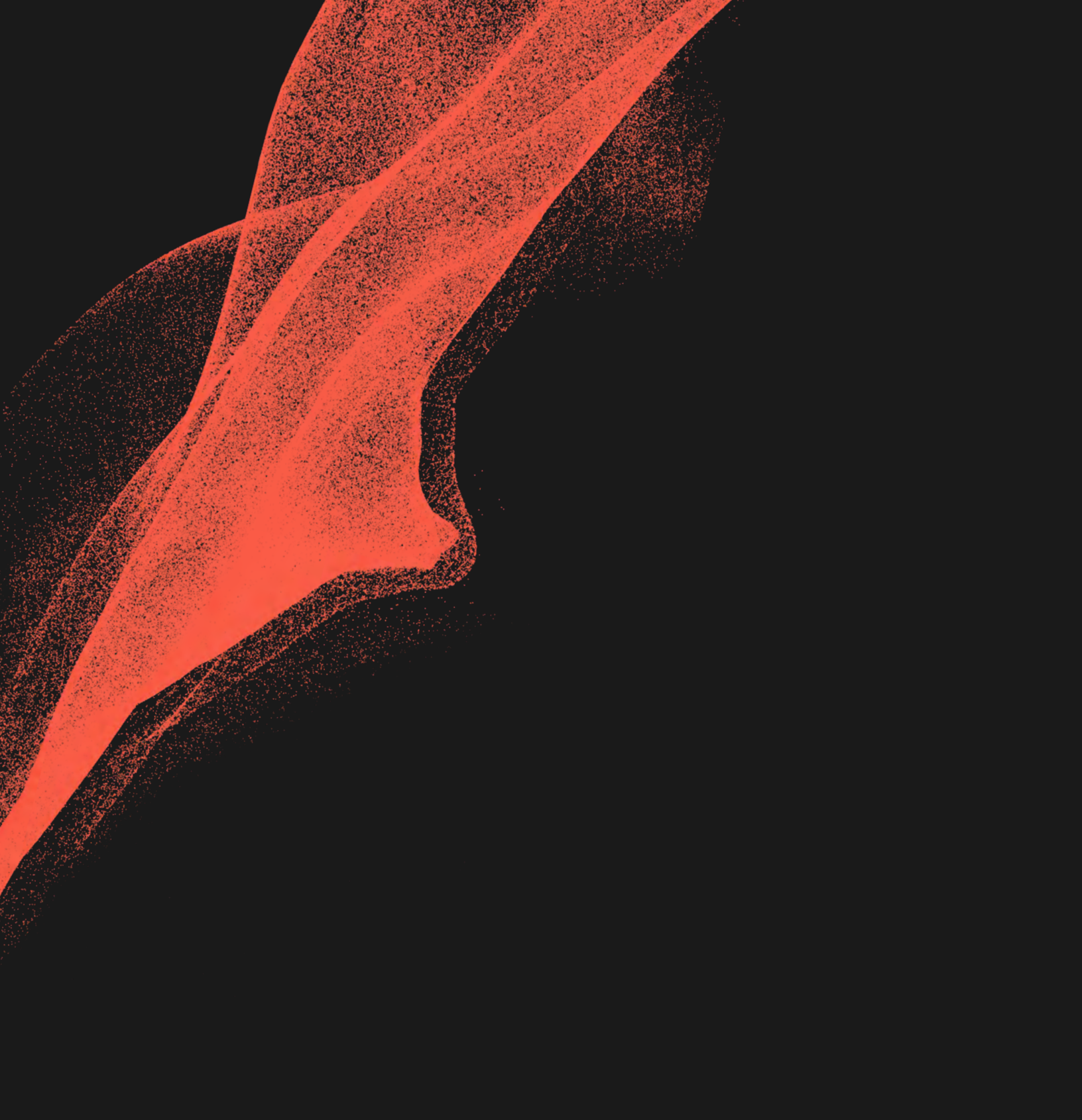
Improved

reliability, availability, and safety

Call to Action

Turn signals into certainty with structured diagnostics.

Meet us at **AVEVA World 2026, Booth B26**, to learn more



LTM is a global technology services and consulting company and the business creativity partner to the world's largest and most disruptive companies. We bring human insights and intelligent systems together to help enterprises across industries rewire their business models, accelerate innovation, and drive AI-centric growth. With our integrated operations, transformation, and business AI services, we design and deliver solutions that create new productivity paradigms and new roads to value. Together with 87,000 employees across 40 countries and our global network of hyperscaler partners, LTM - A Larsen & Toubro company - shapes business outcomes for over 700 clients, helping them to not simply outperform the market, but to Outcreate it.