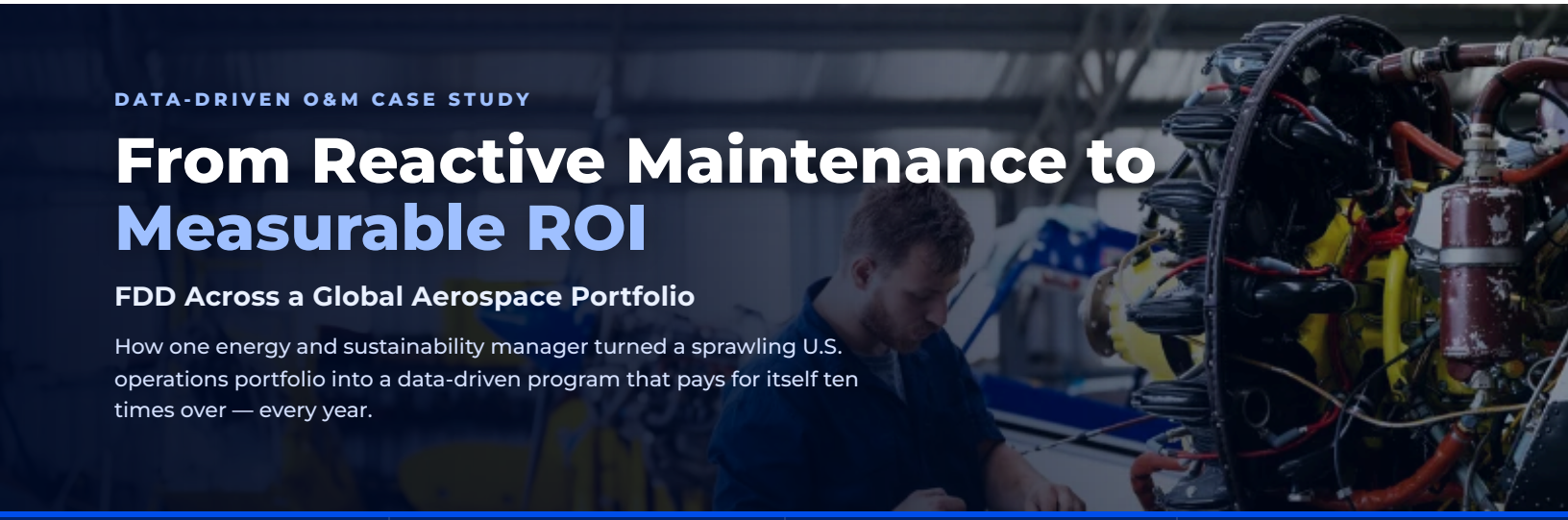


DATA-DRIVEN O&M CASE STUDY

From Reactive Maintenance to Measurable ROI

FDD Across a Global Aerospace Portfolio

How one energy and sustainability manager turned a sprawling U.S. operations portfolio into a data-driven program that pays for itself ten times over — every year.

CLIENT	PORTFOLIO	DISCIPLINE	FDD SOFTWARE
Global Aerospace Manufacturer	U.S. Manufacturing & Office	Energy & Sustainability	Clockworks Analytics

10× Program ROI delivered every single year

6 mo To surface system-wide faults invisible to traditional monitoring

5 fans Throttled after one heat wave — from a single email

24/7 Process temperature held — even on unoccupied shifts

The Reality Check

When an energy and sustainability manager inherited a sprawling U.S. operations portfolio, she faced a familiar problem: distributed buildings, limited visibility, and mounting pressure to deliver on both energy savings and sustainability targets.

The manufacturing operations are especially demanding, with processes that require exact temperature control around the clock, even during off shifts. At first she relied on the building management system (BMS) provided by the HVAC equipment manufacturer. As with many traditional BMS, it generated alarms but not the actionable intelligence to prevent problems. "It didn't have analytics at all."

The turning point came when she began using Clockworks fault detection and diagnostics (FDD) — already implemented within the organization — to continuously analyze equipment data and surface the highest-impact issues with root-cause diagnostics and recommended action.

> *"The manufacturing processes are very sensitive to temperature. Even though the space may not be occupied 24 hours a day, the parts still must maintain that temperature."*
>
> - ENERGY & SUSTAINABILITY MANAGER

The Discovery Phase

Within the first six months on the platform, she surfaced system-wide issues that had been invisible to traditional monitoring approaches.

The discovery illustrates the central advantage of FDD: the ability to identify problems before they become expensive failures — not simply alarm on them after the fact.

> *"We had a lot of VAV boxes with hot water reheating coils, and the platform showed the hot water valves were all failing. Stuck open and leaking by, allowing uncontrolled heating. It was a big remediation project."*

FROM DATA TO DOLLARS

Making the business case for FDD

Diagnostics turned professional judgment into hard numbers executives could fund.

Making the Business Case

For facility managers struggling to secure capital, this offers a proven blueprint. Building a case used to mean relying on estimates and hoping executives would trust professional judgment over hard numbers. Clockworks FDD changed that dynamic by providing clear cost calculations tied to every issue. **“It was easier to get funding because we could put a package together that clearly showed: here’s what’s happening in your buildings, here’s how much these issues are costing you, here’s what it costs to fix them. So, here’s your return on investment.”**

Beyond the headline returns, it’s the immediate, real-time wins that demonstrate value. During a recent heat wave, she noticed through the FDD platform that fans were still running at full capacity long after conditions had cooled.

5 fans flagged by analytics and throttled

“These are still 100%. It’s cooled off now, can we adjust them down?” FDD alert + one email to the technician. Reduced the speed on five units, driving significant energy savings.

Beyond Energy — Operational Excellence

01

Condition-Based Maintenance

Ultrasonic sensors on fan bearings — single points of failure that can shut down whole air handlers — let the team grease only when needed. Differential-pressure readings drive filter changes by performance, not schedule.

02

Streamlined Executive Reporting

Custom dashboards turn technical data into executive-ready insight. Monthly reports show completed tasks and quantified savings, with specialized views for each stakeholder group.

03

A Strategic Partnership

She treats Clockworks as a partner, not just software. Recurring optimization calls with site technicians and the service team work through aging tasks and surface overlooked opportunities.

> *“In an industry where energy and sustainability professionals face mounting pressure to achieve outcomes while controlling costs, fault detection and diagnostics isn’t optional — it’s a competitive necessity.”*
>
> THE COMPETITIVE ADVANTAGE

THE PATH FORWARD

A clear roadmap for facilities leaders

The transition from reactive to proactive building operations isn't just possible — it's profitable.

Four Moves That Made It Work

01 Invest in true diagnostics

Choose analytics that explain and prioritize faults, not tools that merely detect and alarm after the fact.

02 Establish an optimization cadence

Set a recurring rhythm with your technicians and provider to work through aging tasks and new findings.

03 Treat analytics as a partner

Lean on the support relationship to surface opportunities you'd otherwise miss across the portfolio.

04 Focus on measurable results

Prioritize functionality that converts raw building data into quantified, fundable business outcomes.

> *"The platform is working. It does an amazing job. We look at it as a partner, not just a tool, to help us achieve our goals."*

Energy & Sustainability Manager
Global Aerospace Client

10×

The program pays itself ten times over, every year



Energy & Sustainability Manager
Global Aerospace Client · U.S. Operations

See what FDD reveals in your buildings.
clockworksanalytics.com

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