

How A Local Manufacturer Cut Downtime

Sierra Experts helped improve operational efficiency and reduce production interruptions with smart technology.

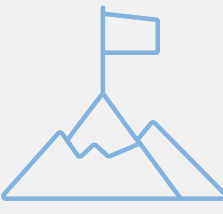
Project Overview



The Challenge

A regional manufacturer was experiencing frequent unplanned equipment failures that disrupted production schedules, delayed customer deliveries, and drove up maintenance costs. Their maintenance team relied primarily on scheduled inspections and reactive repairs, making it difficult to identify developing issues before they became costly breakdowns.

As production demands increased, the company recognized that its traditional maintenance approach was no longer sustainable. Leadership needed greater visibility into equipment health, earlier warning of potential failures, and better data to make informed maintenance decisions without disrupting day-to-day operations.



The Goal

Reduce costly unplanned equipment failures that were disrupting production, delaying customer deliveries, and increasing maintenance costs. The company wanted to move beyond scheduled inspections and reactive repairs by gaining real-time visibility into equipment health, identifying potential failures earlier, and making more informed maintenance decisions without disrupting daily operations.

The Approach

1

Evaluate & Plan

Sierra Experts assessed the manufacturer's maintenance processes and production environment to design a predictive maintenance solution that integrated with existing workflows.

2

Monitoring

Wireless Industrial IoT sensors and cloud-based analytics were implemented to continuously monitor equipment performance and provide real-time visibility into asset health.

3

Maintenance

AI-powered analytics identified patterns of wear and potential failures, while automated alerts and CMMS integration allowed maintenance teams to address issues before they caused downtime.

4

Optimize & Refine

Sierra Experts worked alongside plant leadership and maintenance teams to fine tune the system, improve maintenance planning, optimize spare parts management, and support long-term adoption.

The Solution

Sierra Experts delivered a predictive maintenance platform that continuously monitored critical production assets and provided actionable insights before equipment failures occurred. By combining real-time sensor data, AI-driven analytics, and seamless integration with existing maintenance workflows, the manufacturer was able to shift from reactive repairs to proactive maintenance planning. The solution improved asset visibility, streamlined maintenance scheduling, and optimized spare parts management while minimizing operational disruption.

The Results

Within six months of implementation, the manufacturer experienced measurable improvements across multiple operational metrics.

40%

reduction in unplanned downtime

18%

improvement to Overall Equipment Effectiveness

27%

reduction in maintenance costs

0

major unplanned equipment outages

Additional improvements: improved maintenance scheduling that reduced emergency repairs and overtime | greater visibility into equipment performance, allowing maintenance teams to prioritize work based on actual asset condition instead of fixed schedules | more efficient spare parts management, reducing unnecessary inventory while avoiding delays caused by unavailable components

We do IT differently.

At Sierra Experts, we help manufacturers move beyond traditional break-fix maintenance by combining deep manufacturing expertise with Industrial IoT, AI-driven analytics, cloud technologies, and secure IT/OT integration. Our solutions provide the real-time visibility and predictive insights manufacturers need to reduce downtime, improve operational efficiency, and support long-term reliability initiatives.

If your facility still relies on scheduled maintenance or run-to-fail strategies, Sierra Experts can help you build a smarter, more resilient operation that keeps production running and maximizes equipment performance.