



CASE STUDY 02

Building Digital Products That Move Business Forward

AI-powered condition monitoring, engineered for enterprise scale.

CLIENT MultiSensor AI

PROJECT AI-Powered Condition-Monitoring Platform

SERVICES Software Engineering • Application Development • Integrations



Where the Product Started

MultiSensor AI was an emerging technology company focused on transforming industrial monitoring through AI and multi-sensor technology. Its condition-monitoring platform combines sensor data, AI, edge computing, and cloud technologies.

Codeinity Solutions became involved to provide software engineering support, working alongside MultiSensor AI's product and engineering teams to develop and enhance the digital platform as it evolved.

The platform was being designed for enterprise-scale operations. That meant software able to handle diverse sensor types and connect with the enterprise systems industrial customers already rely on.

HOW THE PLATFORM COMES TOGETHER



The Challenge Wasn't Just Building It.

The key challenge was handling diverse sensor data at scale while maintaining reliable, real-time monitoring. Industrial customers depend on continuous data availability, so the platform had to keep pace with both the scale and the complexity of what it monitored.

THE LOGIC OF THE ENGAGEMENT



01

Diverse Sensor Data

Thermal, visual, acoustic, and vibration sensors, all feeding one platform.

02

Enterprise Scale

A platform designed for enterprise-scale operations, now deployed across 100+ sites.

03

Real-Time Reliability

Monitoring that stays reliable and real-time, with continuous data availability.

04

System Integration

Connecting sensors with enterprise systems including PLC, DCS, SCADA, CMMS, BMS, and EAM.

05

Continuous Evolution

A platform that keeps developing, with enhancements delivered alongside MultiSensor AI's teams.

How We Approached It

Codeinity worked alongside MultiSensor AI's product and engineering teams, providing software engineering expertise across application development, integrations, and platform enhancements.

The central problem was handling diverse sensor data at scale without losing real-time reliability. The focus was on scalable integrations and software capabilities that support continuous data processing and deliver actionable insights.

WHAT CODEINITY CONTRIBUTED

- Application development
- Integrations
- Platform enhancements



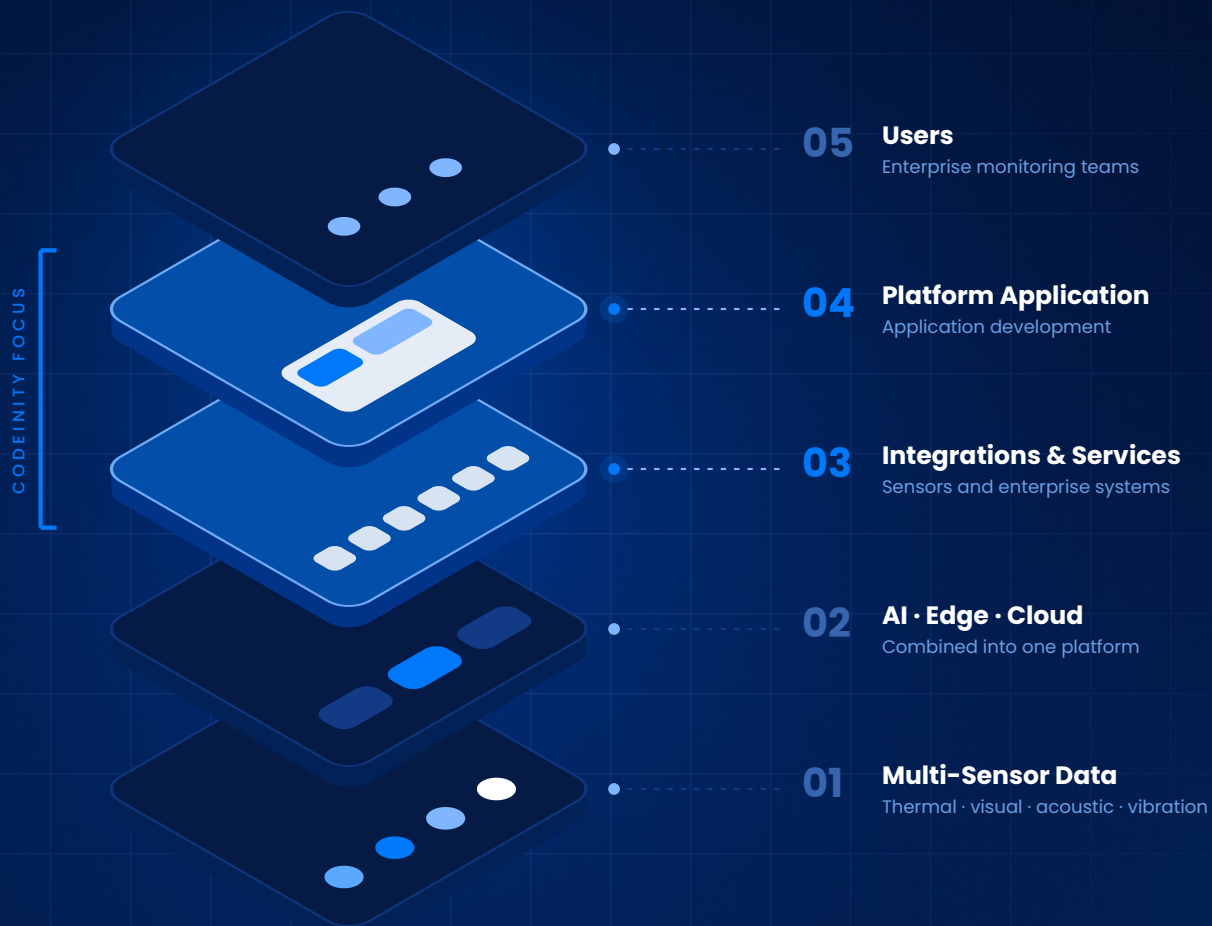
Inside the Solution

An illustrative view of the monitoring experience: sensor data, integrations, and insights working together in one platform.



Illustrative interface. Not a depiction of the production product.

The Engineering Behind the Experience



TECHNOLOGY

- Sensor data
- AI
- Edge computing
- Cloud technologies

ENGINEERING FOCUS

- Application development
- Integrations
- Platform enhancements
- Continuous data processing

INTEGRATION

- Thermal, visual, acoustic & vibration sensors
- PLC · DCS · SCADA
- CMMS · BMS · EAM

SCALE & RELIABILITY

- Diverse sensor data at scale
- Reliable, real-time monitoring
- Continuous data availability

Illustrative architecture based on supplied engagement details.

What Changed

UP TO

8×

return on investment over five years

As reported by MultiSensor AI for its deployments

MULTISENSOR AI · CONDITION MONITORING

100+ sites

Deployed across 100+ sites

The platform, designed for enterprise-scale operations, integrates multiple sensor types and supports large-scale industrial monitoring.

2 months

Payback in as little as two months

Reported by MultiSensor AI across its deployments.

6–8 weeks

Typical platform implementation

From kickoff to full deployment.

THE BUSINESS GOAL

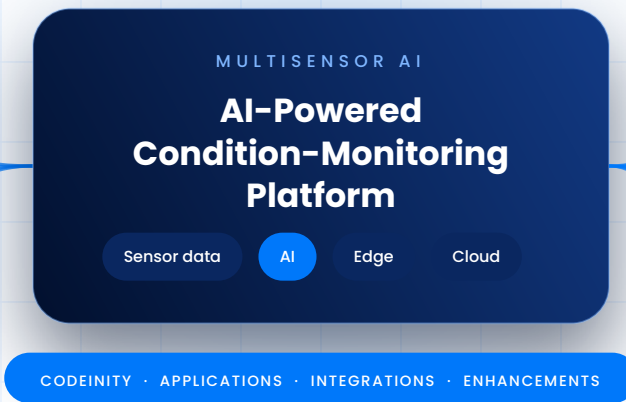
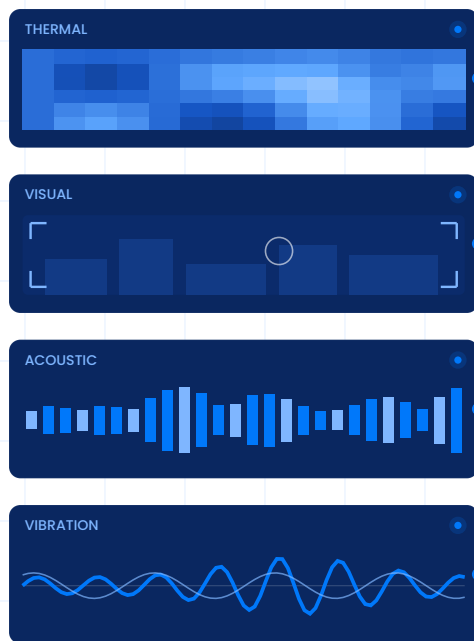
Reducing unplanned downtime and improving asset reliability.

Payback and ROI figures are reported by MultiSensor AI and describe platform-level outcomes across its deployments, not results attributable to a single scope of work.

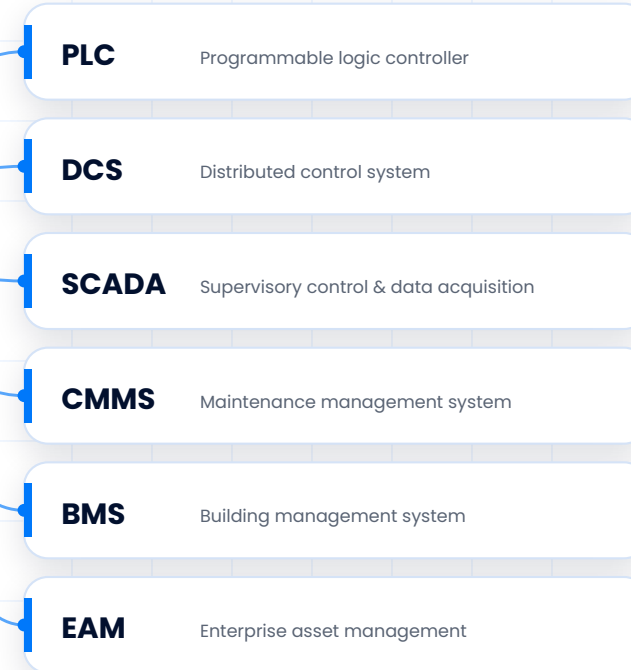
Connected to the Industrial Stack

Multiple sensor technologies and enterprise systems, brought together on one platform.

SENSORS



ENTERPRISE SYSTEMS



DATA HANDLED

Sensor data

Asset data

Operational data

Primarily industrial sensor, asset, and operational data rather than payment information.

Built for enterprise monitoring environments where reliability, security, and continuous data availability are critical.



Codeinity Solutions has been a reliable technology partner throughout our development journey. Their technical expertise, responsiveness, and ability to deliver scalable solutions helped us move faster and continuously improve our platform.”

MultiSensor AI Client feedback

100+

sites

6–8 weeks

typical implementation

Up to 8×

ROI over five years

Deployment figures as reported by MultiSensor AI



**Let's build what moves
your business forward.**

Software engineering, application development, and integrations for products built to scale.

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