

Success Story

From Data to Dollars: Unveiling the Magic of IoT for Real-Time Profits

Prominent biofuel plant operations optimizer scales its efficiency with IoT

A prominent turnkey solutions provider for ethanol producers, specializing in Clean in Place (CIP) systems, the client has an advanced PLC-driven automated dosing and reporting system for precise and dependable deposit control and CIP cleaning formulations.

Challenges

The client wanted to scale its IoT architecture to monitor and manage over 100 processing plants to monitor chemical usage and CIP expenses in real time.

There were limitations in real-time quality and pricing control

Big data processing and real-time analytics were crucial to gather valuable insights

There was limited visibility on actual dosage and usage of chemicals

Delivered

The Xoriant team delivered a highly scalable enterprise solution capable of handling the payload and the chemical usage and overall CIP costs in real time of 100 processing plants.

Implemented

Real-time rule-based analytics for raising anomaly alerts

Deployed

Power BI reports to cover daily, weekly, monthly, quarterly and yearly aggregation

Delivered

A Big Data analytics capability to provide more business insights

Simplified

Generating contextual and dynamic BI reports

Improved

Visibility into pricing calculation through BI reports based on product usage

Integrated

The client's native cloud with Microsoft Azure

Business Value



Enhanced

Control on quality and cost



Slashed

Turnaround and integration time



Achieved

Real-time anomaly detection and alerting, minimizing downtime and improving overall efficiency

Technology Stack

.NET, Digital Twin Definition Language, IoT Central, Event Hub, Function App, Cosmos DB, Synapse Analytics, Power BI, Microsoft Power Automate, Microsoft Dynamics 365

Xoriant provides advanced technology solutions and software development services for global banks, software product companies and F500 market leaders. Based in the U.S. with 17 global offices and 5000+ engineering professionals, Xoriant demonstrates exceptional experience in banking and finance infrastructure modernization and cloud migration. We deliver expert digital engineering, as well as offsite and offshore services, across high tech, healthcare, pharma, industrial manufacturing, telecom, and automotive sectors. Customers credit technological innovation and delivery excellence for our shared success over three decades.