ADVANCE CHEMICAL PRODUCTION AND BOOST ASSET RELIABILITY

READY TO UNLOCK YOUR POTENTIAL?

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Chemical producers face challenges delivering on-spec product while reducing wasted batches. It starts with multiple variables that influence quality. Costs concerns include raw materials, storage capacity, manufacturing output, order volume, and market value. Plant machinery, compliance, sustainability, and more contribute to challenges. All highlight the importance of unifying data and asset intelligence for optimization, performance, and reliability.
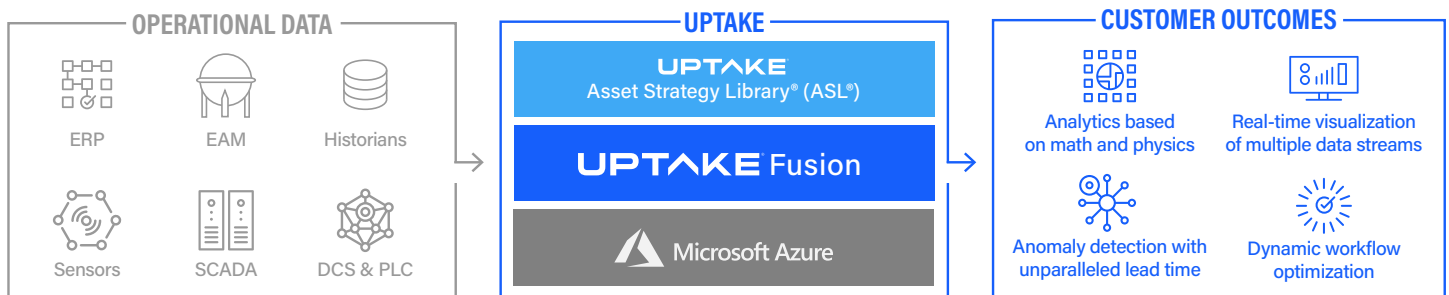
SOLUTIONS FOR CHEMICAL

UPTAKE OWNS 33 PATENTS FOR INDUSTRIAL DATA SCIENCE AND AI. UPTAKE'S ADVANTAGE IN ACCESSING INDUSTRIAL ASSET DATA AND COMBINING IT WITH RELEVANT HISTORICAL DATA ALLOWS US TO CREATE DATA SCIENCE MODELS THAT PRODUCE EARLIER ANOMALY DETECTION WITH GREATER ACCURACY.

UNIFIED DATA MANAGEMENT FOR ADVANCED ANALYTICS

To better manage all that goes into chemical production, you need advanced analytics. It first requires having your data unified in a cloud environment. Uptake can then apply its data science models to influence batch quality, maximize profitability, and reduce commodity pricing risk and waste.

However, there is a roadblock. There is no "single source of truth" for data because it's trapped in various OT systems: a DCS for production equipment, a LIMS for lab data, and custody transfer systems for your distribution network. It's expensive and a security risk to extract disparate data and transfer it to a cloud environment. Sensors alert but don't always offer the complete picture. Company-wide goals like compliance and sustainability are much harder.

Uptake liberates OT data from the strangleholds of proprietary technology and the high cost of tags fees and licensing requirements to provide the foundation for advanced analytics. We move data from its various locations to your Azure cloud. Setup and data migration are simple and secure. Centralized data in a data lake is automatically organized, unified, and contextualized for different stakeholders and use cases.

OPERATIONAL DATA

ERP EAM Historians

Sensors SCADA DCS & PLC

UPTAKE

UPTAKE Asset Strategy Library® (ASL®)

UPTAKE Fusion

Microsoft Azure

CUSTOMER OUTCOMES

Analytics based on math and physics

Real-time visualization of multiple data streams

Anomaly detection with unparalleled lead time

Dynamic workflow optimization

PLAY THE PERCENTAGES WITH UPTAKE

Up to

15%

in asset reliability

10-15%

decrease in maintenance expenses

6

months average time to value

Data in your data lake enables you to monitor and guide production in near real-time or use the data to build out your data lake for trends and predictions. Use Azure tools like Time Series Insights, Power BI, or outsource third-party apps. These tools analyze data and produce real-time insights into operations. You can improve product quality, address production scheduling, and reduce environmentally hazardous by-products.

ASSET INTELLIGENCE FOR PERFORMANCE MANAGEMENT

Maintenance plans work great until an asset breaks down. It then becomes reactionary. How quickly can the repair be made? How will the delay impact operations? Failures are unpredictable, and maintenance plans fall short. That's why you need asset intelligence.

Uptake's predictive analytics improve asset reliability and deliver lower costs. View and act on risk probabilities using data to support decisions. Review the probability and consequence of failure based on asset data, CMMS, engineering, AI/ML engines, as well as previous consequences of failure. Data-driven insights enable you to reduce unplanned downtime, optimize asset utilization, and enhance remote operations. Instead of fixing broken assets, you're performing preventative maintenance.

Uptake solutions are backed by deep subject matter expertise and our physics and math-based data science. We generate insights based on data from Uptake's Asset Strategy Library (ASL), the largest proprietary library of asset component failure modes. We also analyze work order history, production management, downtime/delay reporting, machine data (time series, transactional, unstructured, metadata).

Switch to performance and view insights based on the same kind of data analyzed. Gain a clearer understanding of maintenance costs, labor hours, and other key performance indicators. Visualizing insights connect the dots on work order priorities that impact asset reliability.

Asset intelligence, along with unified data management, opens doors. You can aim for goals like transforming the workforce, engaging customers in new ways, becoming more agile and resilient in operations, and unlocking innovation.

BRING IT TOGETHER WITH UPTAKE

For chemical producers, producing quality on-spec products with less waste while meeting compliance requirements and sustainability targets rule the day. With asset intelligence, you can deliver insights for predictive maintenance and improve reliability. We can also move, store, and curate your OT data in the cloud, making it available for asset monitoring, advanced analytics, and other use cases. Whether it's data access in the cloud or turning data into insights that impact asset reliability, Uptake brings it together.

To learn more about Uptake Fusion, contact fusion@uptake.com.