

# Industrial Intelligence Data & AI Platform

Real-Time. Contextualized. AI-Ready.  
Edge-to-Cloud.

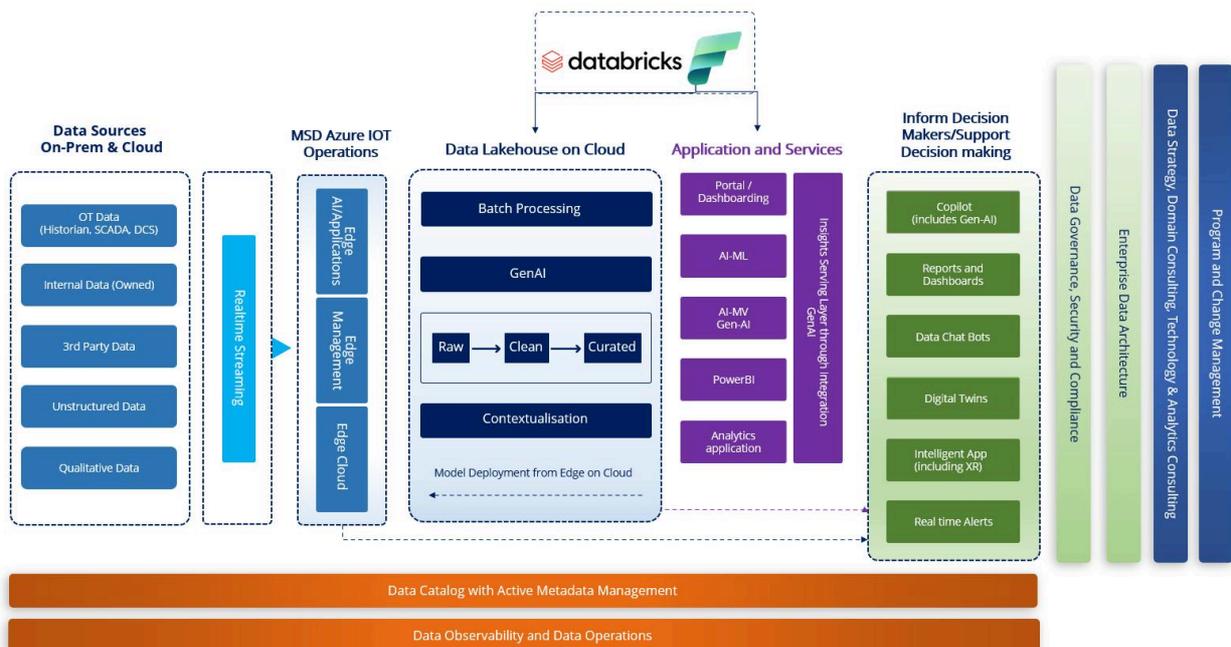
Designed to fit the way your enterprise operates



AcuPrism is Acuvate's Industrial Intelligence Data & AI Platform designed to handle ever-increasing data volumes, support real-time streaming and batch processing, and enable AI/ML, Machine Vision, and GenAI/Agentic AI—with governance, observability, and operational readiness built in.

## Built for Industrial Complexity

Industrial environments generate data across multiple systems, formats, and speeds. AcuPrism unifies them into a single, contextualized foundation.



## It integrates:

- Operational technology data from historians, SCADA, DCS, MES, and QMS systems.
- Enterprise IT data including ERP platforms such as SAP and Maximo, along with asset and maintenance records.
- Third-party, unstructured, and qualitative data sources.
- Edge-originated streams from IoT sensors, cameras, robotics, and drones.
- Instead of isolated silos, AcuPrism creates a unified intelligence layer across operations.

# Deployment Options (“Different Flavours”)

## Option 1: AcuPrism on Databricks

Best for large-scale, complex, enterprise-wide deployments with high real-time requirements.

- Prebuilt release for Azure, AWS, GCP
- Installed in the customer cloud subscription
- Kafka configured for high-speed streaming
- Energy extensions supporting PI time-series scenarios (with streaming/storage accelerators)
- Unity Catalog support for governed data + AI
- Flexible industrial data models: PPDM (Energy) and Manufacturing standard models
- Built for enterprise-scale AI: ML/MV + GenAI

## Option 2: AcuPrism on Microsoft Fabric

Best for Microsoft-aligned organizations and sites that need a unified SaaS analytics platform.

- Runs on Azure as SaaS under customer subscription
- End-to-end capabilities spanning data movement, engineering, real-time analytics, warehouse, and reporting
- OneLake-centered data foundation
- Kafka streaming supported
- Designed for faster adoption where Databricks is not yet the standard

## Option 3: Hybrid (Databricks + Microsoft Fabric)

Best for global enterprises needing an enterprise core + regional agility.

- Databricks for enterprise-level data + advanced workloads
- Fabric for regional/country implementations and Power BI accessibility
- Fabric links to enterprise data without copying (governed access, minimal duplication)
- Consistent security alignment across both platforms

## CORE CAPABILITIES

A platform engineered for real-time + AI



Direct streaming support for industrial file types (incl. time-series)



Enterprise-scale historical + real-time time-series storage



Kafka-based streaming for high-speed ingestion



Raw → Clean → Curated data lifecycle (lakehouse pattern)



Full AI support: ML, MV, GenAI, and Agentic AI—including model training and MLOps



Data governance, security, compliance



Data catalog + active metadata management



Data observability and data operations



Support for Industry Data Models such as ISA95



Edge-to-cloud deployment support (including AcuNow Edge linkage)



Data contextualization across P&ID, time-series, and ERP asset data to enable integrated operational views (e.g., Digital Twin)



Insights serving layer through integration with dashboards, copilots, chatbots, and intelligent apps

# BUSINESS SOLUTIONS

## Comprehensive Asset Performance Management (APM)

AcuPrism Enables APM Programs Across:

1. **Production Optimization**
2. **Predictive Maintenance**
3. **Staff Efficiency**
4. **Health, Safety, Security & Environment (HSSE)**

Use AcuPrism To Unify Data, Deploy Models, And Operationalize Insights Through Dashboards, Copilots, Real-Time Alerts, And Digital Twins.



### Production Optimization (Oil & Gas / Energy)

**Challenge:** Operators must maximize throughput and energy efficiency while preventing disruptions across pipelines, pumps, compressors, and storage.

#### What AcuPrism enables:

- High-frequency ingestion from IoT + OT systems
- Contextualization of operational + asset + engineering data
- Advanced analytics + AI models to optimize flow, energy use, and bottlenecks
- Digital Twin views for faster diagnosis and action

#### Typical benefits

- Increased production and reduced downtime through better operational efficiency
- Faster insights using Digital Twin experiences
- Reduced bottlenecks, quicker response times, and shorter turnaround windows

### Predictive Maintenance (Oil & Gas / Energy)

**Challenge:** Unplanned failures increase cost and risk. Predictive maintenance requires aligning sensor, usage, maintenance, and incident data at scale.

#### What AcuPrism enables:

- Real-time condition monitoring from sensors and historian/OT sources
- AI/ML models trained on historical failures + maintenance records
- Early failure prediction to optimize maintenance schedules and prevent outages
- Optional advisory setpoints to support operational tuning

#### Typical benefits

- Fewer unexpected breakdowns and improved continuity
- Shorter turnarounds by focusing on assets with early warning signals
- Better facility oversight via Digital Twin + governed data access



## Staff Efficiency + HSSE (Oil & Gas / Energy)

**Challenge:** Labor-intensive inspections and delayed hazard detection increase risk, cost, and compliance burden.

### What AcuPrism enables:

- Ingest data from sensors, environmental monitors, drones/robots, and safety systems
- Real-time hazard detection + compliance monitoring
- Automated/remote inspections with streaming + machine vision
- Analytics to improve workforce safety adherence and environmental performance

### Typical benefits

- Stronger HSSE compliance through continuous monitoring and reporting
- Faster identification and mitigation of hazards (e.g., leaks, spill risk)
- Data-driven continuous improvement across safety and operations



## Manufacturing Quick Value: Point Solutions

Start fast with AcuPrism + Databricks for quick wins:

- **Yield Optimization**
- **Overall Equipment Effectiveness (OEE)**

### Yield Optimization (Example: Coffee Manufacturing)

**Challenge:** Variability in raw materials and process parameters causes waste and yield loss.

### What AcuPrism enables:

- Quality + process + sensor data unification across roasting/grinding
- Real-time monitoring to reduce waste and improve throughput
- Predictive maintenance for critical equipment to reduce downtime
- Better resource efficiency (energy + materials) tied to quality outcomes



## OEE Improvement (CPG Manufacturing)

**Challenge:** Frequent equipment failures and inefficient workflows reduce uptime, throughput, and profitability.

### What AcuPrism enables:

- Real-time tracking of OEE drivers with early warning alerts
- Analytics to identify inefficiencies and resolve bottlenecks
- Predictive signals to reduce unplanned downtime
- Energy + waste insights to reduce cost and improve margins





## How We Deliver

Digital Transformation: Start with an MVP

### AcuPrism supports a pragmatic approach:

- Define the business problem and target immediate value
- Start with a Minimum Viable Product (MVP) that delivers a working operational service
- Scale out in steps using existing components plus Acuvate/partner building blocks
- Acuvate provides ongoing operational support based on agreed SLAs

## Why AcuPrism (by Acuvate)

- Industrial-first data + contextualization (OT + IT + engineering alignment)
- Real-time ready with Kafka streaming and time-series focus
- AI-ready foundation for ML, MV, GenAI, and Agentic AI
- Edge-to-cloud continuity, including AcuNow integration for edge storage and compute
- Flexible deployment: Databricks, Fabric, or Hybrid
- Operationally prepared: governance, observability, cataloging, and support model included



# ACUPRISM

ENTERPRISE DATA PLATFORM



## About Acuvate

Acuvate is a global leader in end-to-end digital transformation services, helping enterprises reimagine their operations through Cloud, Data and AI. With over 19 years of experience driving digital excellence for organizations across the world, Acuvate partners with Energy, Manufacturing, and other industries to deliver measurable value and sustainable outcomes.

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