

CASE STUDY

Modernizing Manufacturing Data and Analytics for a Leading Agricultural & Logistics Company

Client Profile

A prominent agricultural and logistics company, delivering sugarcane, fresh vegetables, and citrus products through vertically integrated operations and regional rail transportation.



ITHENA's expertise in modernizing our data architecture has transformed how we access and trust our production data. With faster insights, reliable OEE metrics, and a scalable reporting foundation, our teams can make confident, data-driven decisions across operations

– Director of Operations



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CHALLENGES



The client struggled with:

- Legacy Wonderware infrastructure limiting scalability and long-term performance.
- Difficulty bridging high-speed historian data with business reporting requirements.
- Risk of data discontinuity while migrating to a modern technology stack.
- Complex, compressed time-series data that was difficult to consume for management insights.
- Limited access to long-term historical trends and advanced analytics for operations and leadership teams.

SOLUTIONS



ITHENA empowered the client with

1

Legacy Infrastructure Modernization:

Migrated the Savannah Plant from a legacy Wonderware setup to a scalable Rockwell Automation environment.

2

Data Continuity & System Re-Wiring:

Re-engineered existing applications, including SugmanOEE, to integrate with Microsoft SQL Server 2025 without loss of historical logic.

3

Historian-to-SQL Processing Pipeline:

Built a processing pipeline to convert high-speed historian data into structured SQL tables for reporting.

4

Advanced Analytics & KPI Enablement:

Developed SQL logic to generate KPIs such as Daily Yield, OEE, and cost-per-ton metrics.

5

Visualization & Reporting Enablement:

Enabled PI Vision with persona based dashboards for high-speed trending, centralized reporting via PBIRS/SSRS, and live Excel analysis using DataLink.

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OPPORTUNITY FOR IMPACT



30%

Faster access to
production insights

36%

Reduction in manual
reporting effort

42%

Higher reliability of
OEE

32%

Faster onboarding of
new data sources