

# MNUBO: AWS IoT CASE STUDY

## GSi PROTEIN PRODUCTION SYSTEMS



**ABOUT GSi.** GSi, one of the world's leading manufacturers of grain and protein agribusiness solutions, provides controllers that allow protein producers to manage all control applications from breeding to gestation, farrowing and finishing. Leveraging mnubo's IoT Data Analytics solution, GSi's EDGE™ controllers enable producers to benefit from real-time actionable intelligence such as on-demand visualizations of farm health, optimization of resources as well as predictive trends for proactive planning.

### THE CHALLENGE

As a leading grain and protein agribusiness solution GSi wanted to extend their IoT value proposition beyond remote monitoring and control to enable use cases such as equipment faults and diagnostics, resource efficiency and condition-based maintenance. To accelerate the adoption of their IoT strategy, GSi needed to address a number of key challenges:

1. Reducing the time-to-insight and providing greater R&D and business focus
2. Improving asset visibility to producers by leveraging asset health and performance data
3. Boosting productivity and efficiency by enabling real-time decision making to adapt farmhouse conditions
4. Identifying production issues and lowering the cost of operations, servicing and downtime

### THE SOLUTION

To enable predictive trends for proactive planning, mnubo's Session Analytics library clusters farm production metrics to analyze and compare batches over time. mnubo's Asset Diagnostics and Activity Analytics detect anomalies, varying conditions and inactive probes to help producers with proactive troubleshooting and issue resolution while also enabling a real-time visualizations of farm health.

1. AWS Services used to build this solution include:
2. AWS Key Management Service to ensure end-to-end encryption of persistence layer
3. AWS Route53 for programmatic and scalable DNS serving.
4. AWS EC2, Application Load Balancers for micro-services along with Elastic Block Storage and S3 for scalable storage handling

### THE BENEFITS

Using a data-first approach, GSi is leveraging mnubo's IoT data analytics and data expertise to accelerate the transformation of their standalone controllers into a connected, real-time business. With complete visibility on the production lifecycle, GSi is helping protein producers with cost efficiencies as well as enabling new value-add opportunities. Key benefits include:

- 1. Improved Operations**  
Understand how the farmhouse equipment is being used to characterize operations
- 2. Streamlined Production**  
Compare production output and use advanced data science tools to analyze and improve it
- 3. Boosted Productivity**  
Empower producers with valuable insights on their controllers to improve productivity

### ABOUT AMAZON AND AWS

mnubo helps product manufacturers extract actionable insights from their connected product data by providing automated reports and dashboards

Amazon Web services provides a broad platform of cost-effective, high performance infrastructure services that help you secure, manage and streamline complex workloads.

### NEXT STEPS

To learn more about how AWS and mnubo can help your business, visit [www.mnubo.com](http://www.mnubo.com)