

CASE STUDY



Synchronizing Manufacturing and Distribution with Blue Yonder WMS Cloud



The Challenge

A global automotive manufacturer launched a modernization initiative to standardize production plants and warehouse operations across sites.

The company moved from on-premise systems to Blue Yonder WMS 2023 in the cloud to create a more scalable and connected operating model.

Key Objectives

- Standardize processes across facilities
- Reduce internal IT infrastructure dependency
- Improve real-time visibility between production and warehousing
- Create a repeatable deployment template for future sites

The Complexity

Automotive manufacturing introduces unique operational challenges, including serialized production and strict quality workflows, sequenced material delivery to production lines, and tight coordination with automated manufacturing equipment.

As a result, the organization needed more than a WMS upgrade. It required real-time synchronization between production, warehouse, and ERP systems.

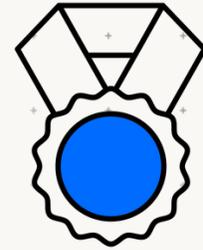
Why Longbow Advantage

The manufacturer selected Longbow Advantage for its deep Blue Yonder expertise and experience in complex manufacturing environments. Specifically,

- Proven integration expertise connecting WMS with ERP and MES platforms
- Deep understanding of automotive manufacturing operations
- Ability to design solutions beyond standard out-of-the-box functionality

The objective was not simply a cloud migration. The goal was to modernize operations while reducing complexity and improving scalability.

The Solution



Real-Time Production Integration

Longbow implemented Blue Yonder Cloud WMS 2023 and integrated it with Oracle ERP and Apriso MES.

Today, **370+ production workstations generate inventory transactions** that flow directly into WMS in real time.

As production events occur:

- Inventory becomes immediately visible in WMS
- Transactions are simultaneously sent to ERP
- Component inventory is automatically consumed upon work order completion

Operational Impact

- ASNs generated while products are still on the production line
- LPN data transmitted to warehouse locations before product arrival
- Faster receiving processes
- Elimination of manual reconciliation between systems

Longbow engineered a streamlined integration model that reduces manual effort and improves operational efficiency.

Intelligent Replenishment for Complex Picking

Automotive components created complex warehouse requirements. Longbow addressed this with intelligent replenishment and real-time visibility.

- **Demand-based pallet scoring** prioritizes pallets based on active order demand
- **Order-line optimization** selects pallets that fulfill the greatest number of order lines
- **Automated replenishment tasks** reduce manual decision-making
- **Real-time visibility dashboard** highlights pallets with no future order demand
- **Operational actions** allow teams to consolidate pallets, return inventory to racking, and reduce pick tunnel congestion

These capabilities improve picking efficiency and ensure reliable, sequenced delivery to production lines.

The Results

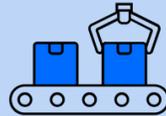
Five sites are now live on Blue Yonder Cloud, including multiple warehouses and production facilities.

The transformation delivered measurable scale and operational impact:



5 standardized sites

Operating on a single cloud WMS platform



370+ workstations

Integrated across MES, WMS, and ERP systems



Production Warehouse Sync

Enabling ASN generation directly from the production line

The organization now operates with real-time visibility, reduced manual touchpoints, and a scalable template ready to support future expansion.

The Impact

By modernizing its production-to-warehouse model in the cloud, this global automotive manufacturer created a **connected, scalable operational foundation**.

With Longbow Advantage, the company aligned manufacturing and distribution in real time, simplified production execution, and built a repeatable framework for continued growth.