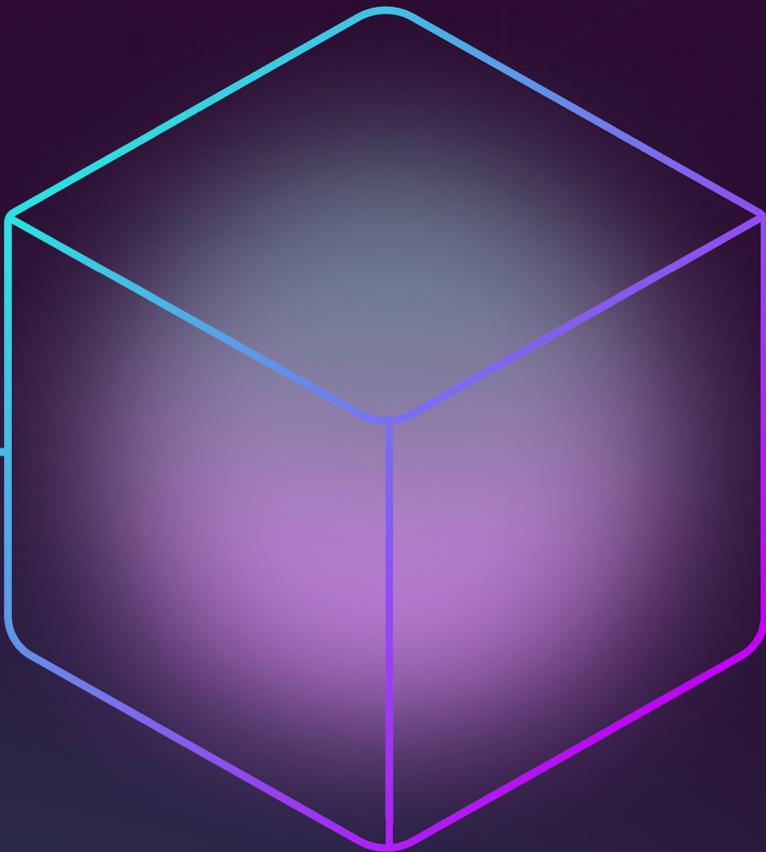




Solution Brief

Beamup Inventory Health Intelligence

AI-Driven for End-to-End
Inventory Excellence



Modern supply chains operate under extreme volatility. Demand shifts, supplier inconsistencies, transportation delays, and complex multi-DC networks create continuous blind spots.

Beamup closes these gaps with intelligent, real-time Inventory Health monitoring powered by predictive AI.

Beamup embeds itself across your planning, ordering, production, and fulfillment ecosystems, leveraging sales forecasts, supplier reliability, inbound/outbound logistics, work-in-process, and core system master data—to detect risk earlier, automate decisions, and optimize inventory outcomes.

Why Beamup for Inventory Health?

● Predict Stockouts Before They Happen

Beamup analyzes planned bookings, actual demand, supplier lead times, DC inventory, and forecast deviation to detect stockout risk at the SKU level, weeks before traditional systems would notice.

AI capabilities include:

- ⚡ Forecast deviation detection by SKU.
- ⚡ Automated comparison of planned vs. booked vs. anticipated orders.
- ⚡ Supplier reliability and lead-time variance modeling.
- ⚡ Stockout probability scoring.



Decrease of missed delivery dates



Decrease of backorder aging



Increase of customer satisfaction & service levels

● Intelligent Backorder Management

Beamup recognizes that not all backorders are equal, continuously monitoring aging, expected SLA violations, and risk factors tied to supply delays.

AI capabilities include:

- ⚡ Aged backorders likely to exceed customer expectations.
- ⚡ Orders impacted by transportation or lead-time mismatch.
- ⚡ Required communication and customer-experience prioritization steps.



Faster backorder resolution



Improved SLA adherence



Proactive customer communication and expectation management

Supplier Performance & Risk Prediction

Beamup unifies supplier timeliness, quality defects, location variability, and historical reliability to anticipate supply-side disruptions.

AI capabilities include:

- ⚡ Supplier on-time delivery prediction.
- ⚡ Quality-defect risk scoring at SKU level.
- ⚡ Detection of inbound delays before they impact orders.
- ⚡ Identification of SKUs missing supplier assignments.



Increase supplier on-time delivery %



Earlier risk detection



Improved quality claims resolution



Reduced canceled orders and inbound surprises

Multi-DC Network Planning & Inventory Balancing

Beamup continuously identifies where excess inventory in one node can be used to solve a shortage in another – across your network and third-party DCs.

AI capabilities include:

- ⚡ DC inventory balancing recommendations.
- ⚡ Inventory reallocation rate monitoring.
- ⚡ Global cost-to-serve optimization.



Reduced stockouts across the network



Reduced excess inventory transfers



Lower working capital tied in the wrong locations

Production & Packaging Readiness Intelligence

Beamup assesses readiness in manufacturing and aftermarket packaging flows before triggering orders.

AI capabilities include:

- ⚡ Clear-to-Build component validation.
- ⚡ Packaging optimization based on demand, changeover, & available stock.
- ⚡ Manufacturing order validation with risk flags.



Fewer customer-impacting production delays



Reduced unnecessary production triggers



Higher % of validated vs. adjusted orders

Planning System Validation & Exception Monitoring Layer

Beamup enhances your existing planning environment by acting as an intelligent exception-monitoring and validation layer – detecting parameter inconsistencies, preventing inaccurate replenishment recommendations, and ensuring planning decisions reflect real operational conditions.

AI capabilities include:

- ⚡ Inadequate safety stock settings.
- ⚡ Incorrect or outdated lot sizes and order policy settings.
- ⚡ Risk-based overrides when system-generated recommendations deviate from reality.



Reduced excess inventory through improved parameter accuracy and fewer overinflated orders



Increased planning reliability as Beamup catches configuration errors before they distort replenishment



Greater automation over time, as validated exceptions and corrected parameters feed back into rules-based or AI-based decision-making

Inventory Accuracy & Shrink Prevention

Beamup uses behavioral patterns and historical variance data to identify discrepancies between system inventory records and physical stock.

AI capabilities include:

- ⚡ Automated detection of likely misplacements.
- ⚡ Shrink prediction signals.
- ⚡ Alerts on inventory not available though "in the building".



Higher inventory accuracy rate



Faster cycle count prioritization



Loss prevention

Inventory Health Intelligence

Beamup's Inventory Health Intelligence provides continuous, AI-powered visibility into current stock status, optimal targets, and financial impact.

Optimal Lot Size & Purchasing Intelligence

AI capabilities:

Beamup calculates the **optimal minimum lot size** to balance:

- ⚡ Service levels
- ⚡ Carrying costs
- ⚡ SKU velocity
- ⚡ Forecast variability



Lower excess & obsolete inventory



Improved cost-to-serve



Higher availability of slow-moving parts

Inventory Segmentation (ABC-XYZ, Profitability, Lifecycle)

AI capabilities:

Beamup automatically classifies inventory into **strategic health segments** such as:

- ⚡ Healthy
- ⚡ Excess
- ⚡ At-risk
- ⚡ End-of-life
- ⚡ Strategic vs. non-strategic
- ⚡ Profit-tier segmentation



**Better targeted
replenishment**



**Improved capital
allocation**



**Faster decision-making
for slow movers and
critical SKUs**

Target Inventory Levels & Compliance

AI capabilities:

Beamup computes **optimal target inventory levels** for each segment using AI models informed by:

- ⚡ Forecast accuracy
- ⚡ Supplier reliability
- ⚡ Customer service goals
- ⚡ Financial constraints



**Greater alignment
between operations &
finance**



**Reduced working
capital**



**Higher target compliance
across SKUs**

Beamup AI Advantage



Predictive, Not Reactive

Beamup identifies deviations and risks weeks earlier than traditional ERP/IBP systems.



Context-Aware AI Models

Models combine sales forecasts, real-time stock, inbound shipments, supplier data, DC WIP, and historical behavior – producing far more accurate insights than any single system.



Human-in-the-Loop & Automation-Ready

Planners can validate, adjust, or fully automate decisions when confidence reaches proven levels.



Rapid Deployment with Minimal IT Lift

Beamup integrates with existing systems such as SAP, IBP, and other supply chain solutions without heavy customization.



Clear ROI

Customers report improvements, including:

- ⚡ 15–40% reduction in stockouts
- ⚡ 20–30% reduction in excess inventory
- ⚡ 25–50% faster backorder resolution
- ⚡ **Measurable lift** in customer service levels

Summary: Beamup Delivers Complete Inventory Health Transformation

Beamup gives companies the ability to anticipate, act, and optimize across their entire inventory ecosystem. From supplier performance to production readiness to network balancing, Beamup provides unified, AI-driven Inventory Health intelligence that generates real financial and operational outcomes.

Ready to transform your supply chain?

Please contact us at sales@beamup.ai