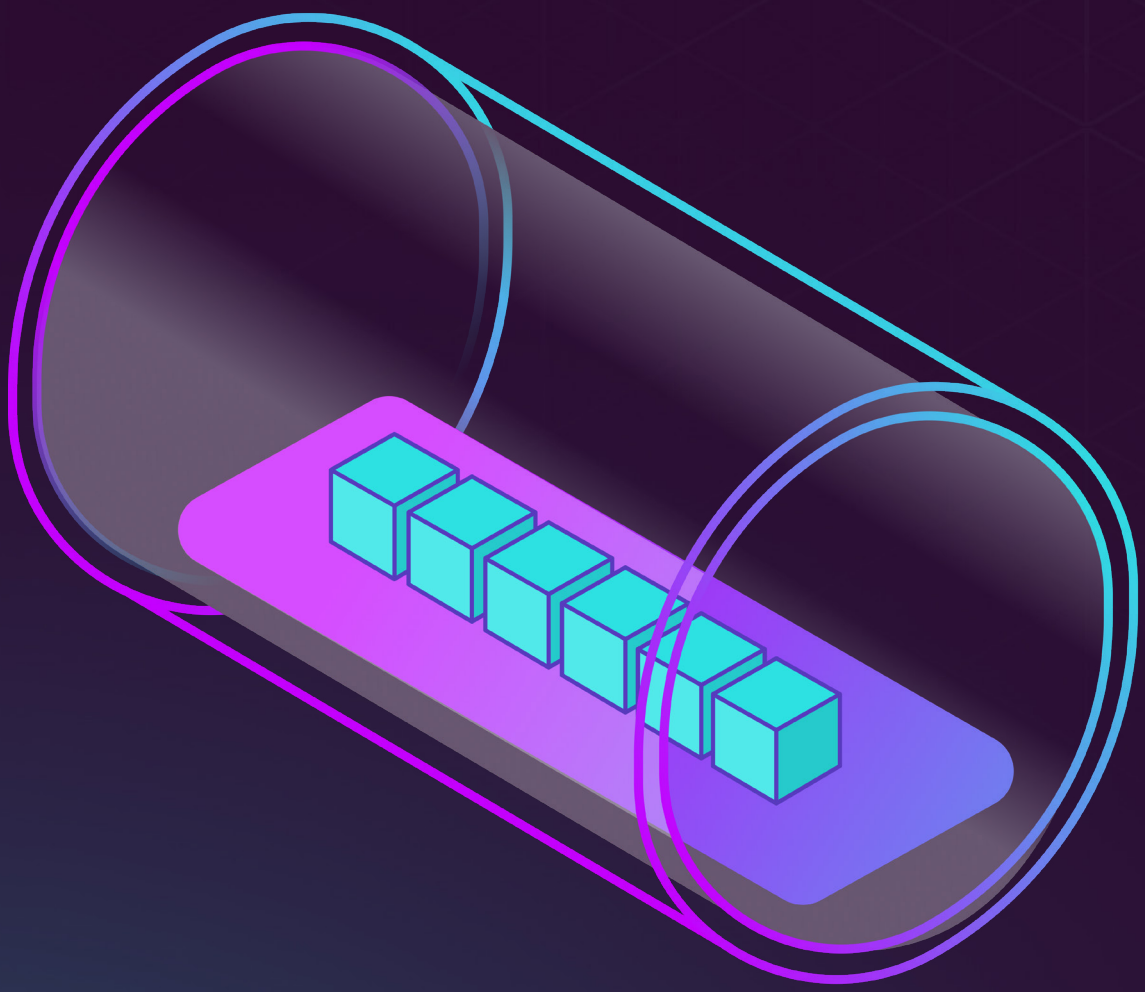
Beamup

Solution Brief

Split Shipments: **Eliminating** the Margin-Killer



Mastering Omnichannel Excellence by **Minimizing Split Shipments**

In the high-stakes world of omnichannel retail, the "Split Shipment" is often a symptom of a deeper systemic failure. While customers demand fast, free, and consolidated deliveries, internal execution gaps, ranging from phantom inventory to rigid OMS logic, force orders into multiple boxes. This not only erodes net margins through redundant freight and labor costs but significantly damages the customer experience.

Beamup introduces a paradigm shift in fulfillment: Agentic AI.

Unlike traditional visibility tools that merely report on splits after they occur, Beamup's AI Agents continuously ingest execution signals to identify root causes in real-time and execute corrective actions autonomously. This solution brief outlines how Beamup addresses the multiple sub-root causes of split shipments to protect your bottom line.

The Real Cost of Fragmentation

For a modern retailer, a split shipment isn't just an extra box; it is a compounding financial penalty:

Freight Inefficiency: Doubling the "last-mile" cost, which is the most expensive leg of the supply chain.

Labor Strain: Multiple "pick-pack-ship" cycles for a single revenue event.

Sustainability Impact: Increased carbon footprint and packaging waste.

Customer Friction: "Where is the rest of my order?" remains the #1 query for customer service teams.

Bridging the "Execution Gap" with Beamup

Traditional WMS (Warehouse Management Systems) and OMS (Order Management Systems) operate in silos. They follow pre-set rules but lack the "contextual intelligence" to understand why an order is splitting.

Beamup acts as a connective tissue, unifying signals from your stores, DCs, and suppliers. Our Split Shipment Agent targets three primary failure domains:

Inventory Integrity & Availability

Problem

"Zero-Pick" rates (inventory exists in the system but isn't on the shelf) and "Inventory Quarantine" are leading causes of splits. If an item isn't found, the system "bounces" it to another node, triggering a split.

Beamup Solution

Beamup detects "Phantom Inventory" and safety anomalies pre-order. By diagnosing root causes (e.g., damage or stowing bottlenecks), the agent triggers real-time audits to ensure the OMS allocates based on "Truth," not system data.

Operational & Batching Logic

Problem

Warehouse batching logic, label delays, and missed cut-off times often force partial releases of orders to meet SLAs.

Beamup Solution

Our AI monitors "Goods Ready vs. Shipped" time gaps. If a labeling delay or batching error is detected, Beamup identifies the specific bottleneck, such as a printer failure or a labor shortage in a specific zone and alerts floor leadership or adjusts the prioritization logic to ensure order completeness before the carrier pickup.

Vendor & Inbound Resilience

Problem

Vendor short-ships and late deliveries disrupt Order Consolidation Rates. If a SKU is missing from an inbound shipment, it triggers a backorder split.

Beamup Solution

Beamup tracks Supplier Fill Rates and Quality Defect signals in real-time. By predicting a shortfall before the customer orders the item, the AI can adjust allocation thresholds, preventing the system from promising a consolidated shipment that the supply chain cannot support.

Mapping Beamup to Your Root Causes

Based on your specific operational data, here is how Beamup automates the resolution of your most frequent split drivers:

SPLIT DRIVER	SUB-ROOT CAUSE	BEAMUP AI INTERVENTION
Inventory Gaps	Item not picked / Inventory >1	**Real-time Anomaly Detection:** Triggers immediate "Hotspot" audits to fix phantom inventory.
Network Allocation	Multi-Node Allocation Rate	**Orchestration Agent:** Re-optimizes node selection based on real-time labor and inventory health, not just proximity.
Warehouse Execution	DC Batching / Label Delays	**Process Monitoring:** Identifies dwell-time spikes in specific zones and alerts supervisors to prevent partial releases.
Constraint Management	Weight / HazMat / Crush Logic	**Continuous Learning:** Analyzes "Excess Carton Counts" to suggest packaging and routing adjustments that satisfy carrier constraints without splitting.
Supply Chain Flow	Late Vendor Delivery	**Predictive Adjustments:** Flags "Supplier On-Time" risks to the OMS, shifting demand to nodes with healthy stock to avoid backorder splits.

Why Fulfillment Leaders Choose Beamup

From Visibility to Action

We don't just provide a dashboard; our AI agents take the "next step": escalating vendor issues, triggering audits, or adjusting system thresholds.

No Added Headcount

Beamup scales across your entire network (DCs, 3PLs, and SFS stores) without requiring a large team of analysts to monitor the data.

Rapid ROI

By reducing split shipments by even 10-15%, most retailers see millions in annual freight savings and a significant lift in customer lifetime value (CLV).

The Path Forward

The "Split Shipment" is a choice made by your systems in response to operational failure. Beamup eliminates those failures at the source. By moving from reactive firefighting to autonomous execution, retail leaders can finally deliver on the promise of a seamless, consolidated, and profitable omnichannel experience.

Are you ready to stop the margin bleed?

Schedule a custom Split Shipment Diagnostic with the Beamup team today: sales@beamup.ai