Executive Summary

Cycle Stock Availability Optimization – United States & Canada

---

Objective

Assess and materially improve cycle stock availability across US and Canadian distribution operations by replacing static, Excel-based reporting with SLA-driven, reproducible analytics, while stabilizing planning and execution in the absence of a fully functional system solution.

Scope

This analysis covers **January 2023 through March 2025** and focuses exclusively on **cycle stock (Move Codes 1–3)**.
Non-stock, exception, and irregular items were excluded to prevent distortion of service performance metrics.

The timeframe captures:

- Pre-intervention instability
- Interim corrective actions
- Sustained, measurable performance improvement

Operating Context

At the outset of the analysis:

- The **D365 demand planning function was not operationally usable**
- **Poor master data quality** (item attributes, planning parameters, lead times) prevented reliable system-driven forecasting
- Replenishment execution from the **European Global Distribution Center (GDC)** lacked consistent performance accountability
- Service performance was tracked primarily through static Excel summaries, limiting visibility and control

To restore operational stability:

- An **interim Excel-based demand planning and forecasting model** was implemented to support replenishment and inventory decisions
- A structured **master data cleanup and governance process** was established and maintained

- **Delivery performance metrics were formalized and actively enforced** with the European GDC

These actions created the foundation for the availability improvements observed across both regions.

SLA Definitions

Shared Operational Rules (US and Canada)

To reflect real operating conditions, the following rules were applied consistently:

- Orders placed **after 2:00 p.m. on Thursday** may still be considered on time if shipped on **Monday**
- Orders placed on **Friday** may still be considered on time if shipped on **Monday**
- **Weekend** orders receive their SLA clock starting **Monday morning**

This prevents artificial penalties caused by non-working days and dispatch cutoffs.

United States

- Baseline SLA: **ship within 24 hours** of sales order creation for in-stock items

Canada

- Baseline SLA: **ship within 2 calendar days** from sales order creation to warehouse dispatch

---

Key Metric

Supply Chain Availability

Defined as:

Shipped-on-time order lines ÷ total demand lines

Availability was calculated monthly and segmented by **move code** to preserve service-class integrity and prevent misleading blended averages.

Results Summary

United States

- By **March 2025**, cycle stock availability exceeded **86% across all move codes**
- **Priority items (Move Code 1)** were consistently above **90% availability**

- From 2023 to 2025, **deseasonalized average dispatch time improved by approximately 53% overall**, with:
    - ~58% improvement for Move Code 2
    - ~67% improvement for Move Code 3
- Early 2024 performance deterioration confirmed the limits of the initial planning approach
- A second, more disciplined iteration of the interim planning model, combined with stronger master data governance and GDC enforcement, drove materially stronger and more stable results in 2025

Canada

- Canada achieved strong availability under a **stricter baseline SLA**, with lower volatility throughout the period
- From 2023 to 2025:
    - **Deseasonalized dispatch performance improved by approximately 39%**
    - **January–February seasonal dispatch delays improved by approximately 58%**
- Earlier stabilization reflects:
    - Lower order volume
    - Single-warehouse execution
    - Reduced exposure to upstream replenishment disruption

Seasonal Findings

- **January–February seasonality** was the primary driver of inflated annual averages in both regions
- Canada demonstrated a steady, uninterrupted seasonal recovery from 2023 to 2025
- The US experienced its weakest seasonal performance in early 2024 due to:
    - Poor replenishment execution from the European GDC
    - Limited effectiveness of the initial planning solution
- Post-intervention enforcement of delivery metrics and improved demand visibility materially reduced seasonal volatility in 2025

Key Takeaways

- Availability gains were driven by **planning maturity, master data governance, and execution discipline**, not inventory inflation
- Interim planning solutions can outperform nominal system capabilities when supported by strong process control
- SLA-aware segmentation by move code prevented misleading conclusions
- Structural network differences materially influence service stability and recovery profiles

---

Why This Matters

This analysis demonstrates how disciplined, SLA-driven supply chain leadership can restore control in degraded system environments and convert operational instability into **sustained, defensible performance improvements**, even before enterprise systems are fully functional.