

## Operational Due Diligence Of Medical Products Ecommerce Retailer: Deciphering And Controlling Outsourced Distribution Cost Structure

**The Challenge:** ApparelOnline was an entrepreneurial e-commerce retailer growing at 35-40% per year. A leading middle-market private equity firm had won a recent auction of the company and was conducting its final due diligence prior to deal closure. The principal area of concern was ApparelOnline's outsourced distribution cost structure, as the company's third-party provider was in the process of moving ApparelOnline's warehouse operations to a new facility, with new cost-plus contract terms coming into play. Additionally, the outbound freight contract included several time-phased price increases of 15%. To better understand potential costs moving forward, the PE firm asked Gotham to assess the competitiveness of the warehouse and freight cost structures, as well as to identify opportunities for reducing warehouse operations, outbound freight, inventory, and inbound freight costs.

### The Partnership:

**Analysis:** For each of the 4 cost buckets, we developed analytical models and filled in gaps in the limited available data using our on-site observations, interviews with key personnel, and our previous experience with similar operations:

- **Warehouse:** To get a handle on the risk involved in the new cost-plus contract, we estimated minimum and maximum annual costs from analysis of old and new contracts, management projections of the number of customer orders and number of items ordered, and other operational requirements. We also interviewed senior management and key supervisors in the old and new warehouse facilities to understand current staffing requirements and productivity levels, management-projected costs, and potential capabilities in the future.
- **Outbound Freight:** Assessing outbound freight costs required solid benchmarking of costs against reasonable alternatives. After extrapolating key cost levers (weight, volume, distance, and destination) from 2 months of shipment data, we applied contracted rates and rate increases to model the costs going forward. Finally, we benchmarked ApparelOnline's freight cost against competitive costs for a similar freight profile.
- **Inventory:** To identify potential inventory management improvements, we used inventory data, the product master, and sales history by SKU to establish both inventory turns by SKU (for all 36,000 SKUs) and current inventory age by product group.
- **Inbound Freight:** As ApparelOnline did not track inbound freight cost, we created a model to approximate freight paid by product group and international vs. domestic inbound freight based on management interviews, P&L statements, and a sampling of vendor invoices.

**Findings:** Our analysis underscored the potential for some significant cost exposure moving forward and identified several cost reduction opportunities to help mitigate this exposure:

- **Warehouse:** Our initial analysis identified \$1.3MM in exposed cost. However, the transition to the new warehouse proved very problematic, delaying deal closure until operations stabilized, and pushing the third-party provider to alter the terms of the new contract significantly. We revisited the warehouse once operations stabilized and identified \$1-2MM in potential cost reduction opportunities relative to current labor productivity levels.
- **Outbound Freight:** Our analysis found that the current contract would become uncompetitive in 1 year and we recommended re-bidding freight contracts in 6-months time.
- **Inventory:** We identified approximately \$0.2MM in obsolete inventory and an additional \$1.2MM that was moving very slowly, indicating savings opportunities from SKU rationalization and more robust inventory management.
- **Inbound Freight:** We established that inbound freight costs were increasing with sourcing of products from China and strongly recommended tracking inbound freight in their financials moving forward.

**The Results:** With issues with the new warehouse leading to an increase in warehouse costs relative to management projections and a delay in closing the deal, the PE firm was able to renegotiate the purchase price at 22% lower than the original price and closed the transaction successfully. The PE firm then asked for Gotham's help to help in putting together a profit improvement plan to capture the opportunities identified.

