Delivery Performance Turnaround At Leading Industrial Goods Manufacturer: Rapid Reduction In Delivery Backlog

The Challenge: WidgetCo, a leading producer of industrial goods, had implemented a new ERP system. Poor implementation had led to a large delivery backlog and poor on-time delivery performance despite carrying excessive amounts of inventory. There were numerous customer complaints about inaccurate delivery dates and some customers were lost with other accounts at risk. Gotham was called in by the CEO with a mandate to return delivery on-time performance to "acceptable" levels and reduce backlog within 3 months.
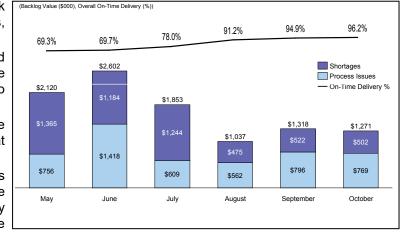
The Partnership:

Analysis: A quick analysis revealed that although 65% of the backlog was due to shortages, the remaining 35% had inventory available and was held up by problems in the order-to-shipment process. More detailed analysis revealed that "process issues" could be categorized as: (1) orders awaiting shipment with incorrect promise dates; (2) orders on hold due to customer credit issues, order entry errors, or price quote errors; and (3) orders where inventory was available but at the wrong warehouse.

Strategy: We adopted a two-pronged strategy to attack the problem. To address "process issues", we worked directly with WidgetCo functional managers responsible for the specific order-to-shipment activity (e.g. Planning Manager for inventory at the wrong location) to identify quick tactical fixes. To address the shortage issues, we created a "backlog prioritization tool" to identify and value all component shortages that were holding up production of backlogged orders. We initially focused our attention on the top-selling items that accounted for 80% of the total sales and then progressed to low-volume items.

Execution: The joint efforts of Gotham and WidgetCo managers led to a set of quick tactical fixes to address the process issues, including:

(Backlog Value ($000), Overall On-Time Delivery (%))

- Changing the algorithm that calculated the customer promise date to ensure that accurate lead times were taken into consideration

- Identifying and shipping orders with future ship dates that had inventory available at the warehouses

- Cross-checking the credit-hold orders against the hold list to confirm that the customers were on hold, and manually releasing the inventory committed to these orders so that it could be allocated to other backlogged orders with no credit issues

- Creating manual transfers to move misplaced inventory to the correct locations.

We worked closely with client members to address component shortages that were driving the backlog. By using the "backlog prioritization tool", we were able to prioritize all the open work orders (at each work center) and purchase orders, on a daily basis. These reports were distributed to the shop floor and to purchasing managers and were used to schedule work at each machine and expedite purchase orders if necessary. The backlog reports, while tactical in nature, also uncovered several strategic sourcing issues, e.g., the chronic shortage of some critical imported purchased items.

The Results: Our efforts quickly stabilized delivery performance, allowing the senior management team to focus on strategic issues. WidgetCo was able to improve on-time delivery from 68% to 90% within 3 months of our involvement, and achieved a 96% performance over the subsequent 2 months. During this time frame, the number of short finished goods was reduced by more than two-thirds and the shortage backlog decreased