



Advanced forecasting and planning methodologies improve inventory management in critical, high-volume repair business, dramatically reducing costs and fulfillment cycles while improving customer satisfaction.

Challenge:

- Difficulties forecasting demand in high-volume repair environment caused inventory costs to skyrocket
- Inadequate planning and execution resulted in excess and obsolete inventory and poor utilization of warehouse space
- Variability of hardware and component sourcing affected production efficiency causing fulfillment delays and lower customer satisfaction

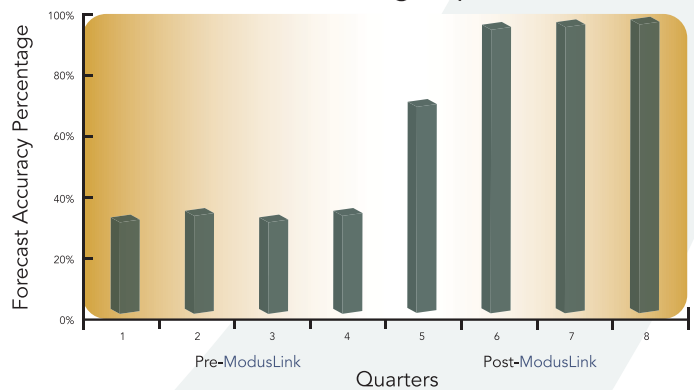
Solution:

- Implemented world-class forecasting model to improve inventory management and asset utilization while reducing costs
- Utilized advanced sourcing and materials planning to speed fulfillment cycles and improve service levels for increased customer satisfaction
- Configured a highly-structured and efficient reverse logistics program to supplement demand inventory and reduce sourcing costs

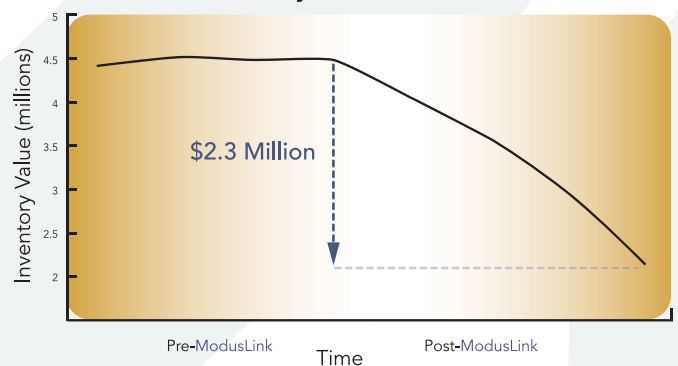
Results:

- Immediately improved demand forecast accuracy from 35% to 99%
- Reduced spare parts inventory levels by 52% or \$2.3 Million in the first year
- Reduced cycle time by 70% from 3.35 to 1.10 days
- Improved on-time, same day ship rates from 84% to 99%
- Reduced obsolescence by 75%
- Improved efficiencies in supply chain related processes by approximately 15%

Demand Planning Improvement



Inventory Value Reduction



Case Study Overview:

When one of the world's leading manufacturers of personal computers set new goals for its European operations, ModusLink was there to help. The OEM turned over management of one of the most critical, high-volume segments of their reverse logistics program — the processor business — saving the manufacturer millions of dollars each year; reducing excess inventory; increasing same day, on-time ship rates; and improving customer satisfaction.

The difficulties of forecasting demand in a service repair environment caused a major PC Manufacturer to keep large amounts of spare parts on hand, resulting in skyrocketing inventory costs and poor utilization of warehouse and factory space.

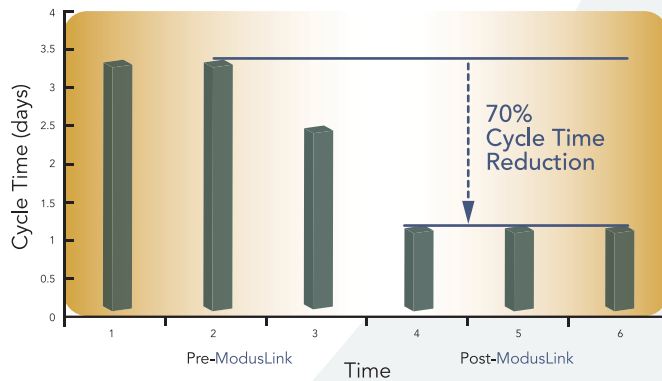
ModusLink immediately tackled the forecasting and demand challenges by implementing its proven demand planning methodology. This solution uses sophisticated rules and procedures to create a feasible demand-driven execution plan that reduces inventory risk by minimizing the amount of time, product and cash a company has tied up in inventory. The plan considers variability of demand while allowing for rapid changes characteristic of the service repair environment. The new model yielded a dramatic improvement in forecast accuracy which quickly rose from 35% to 99% accuracy. Additionally, the client's inventory levels were reduced by 52% or \$2.3 Million in just the first year.

Once a forecasting model was set up, ModusLink needed to round out the solution with more efficient and cost-effective sourcing for the hardware elements. ModusLink's primary source for processors was the returns management program, which required it to conduct rigorous testing to identify units that could be put back into forward logistics inventory — providing the OEM with significant cost savings given the exorbitant price tag for processors. When supply levels are low ModusLink taps the open market to purchase processors, leveraging its local market expertise worldwide to obtain the right product, at the right price, at the right time.

ModusLink also handles shipments of spare modems, heat sinks, quick restore CDs (which ModusLink presses in-house) and product documentation. ModusLink continuously monitors the supply levels of all these elements at the PC Manufacturer's central European hub and replenishes stock



Cycle Time Reduction



on a daily basis to ensure that consistent inventory levels are always on hand to meet the forecasted demand. This efficiency has improved on-time, same day ship rates from 84% to 99%.

ModusLink was able to reduce product excess and obsolescence by 75% resulting

driving process-efficiency and distribution improvements. Within one year, ModusLink reduced cycle time by 70% excellerating fulfillment from 3.35 to 1.10 days.

"This has been an excellent example of how ModusLink can deliver measurable value for our computing and hardware clients," explains ModusLink's Vice President of Global Client Development.

"The benefits achieved by this PC Manufacturer are a direct reflection of the strength of our demand planning services and our commitment to finding the most efficient and cost effective way to deliver solutions that provide measurable value for our clients and their customers. At the end of the day this is how we measure our success."

[Highly efficient planning and execution makes all the difference]

in significant cost savings and improved asset utilization for the manufacturer. In addition, overall efficiency for supply chain-related processes was improved by approximately 15%.

With a new demand planning and sourcing infrastructure in place, ModusLink focused on improving customer service levels within the client's after market repair service business by

