

Our point of view

Inventory Optimization

Inventory: Supply Chain Insurance

We insure our health, our home, our car. We sleep easy knowing we're protected in the face of disaster. Meanwhile, insurers earn their living by absorbing our risk. Inventory is our supply chain insurance policy. It keeps the supply chain running in the face of disruptions. Good supply chain behaviors reduce inventory as well as the cost of our "premiums."

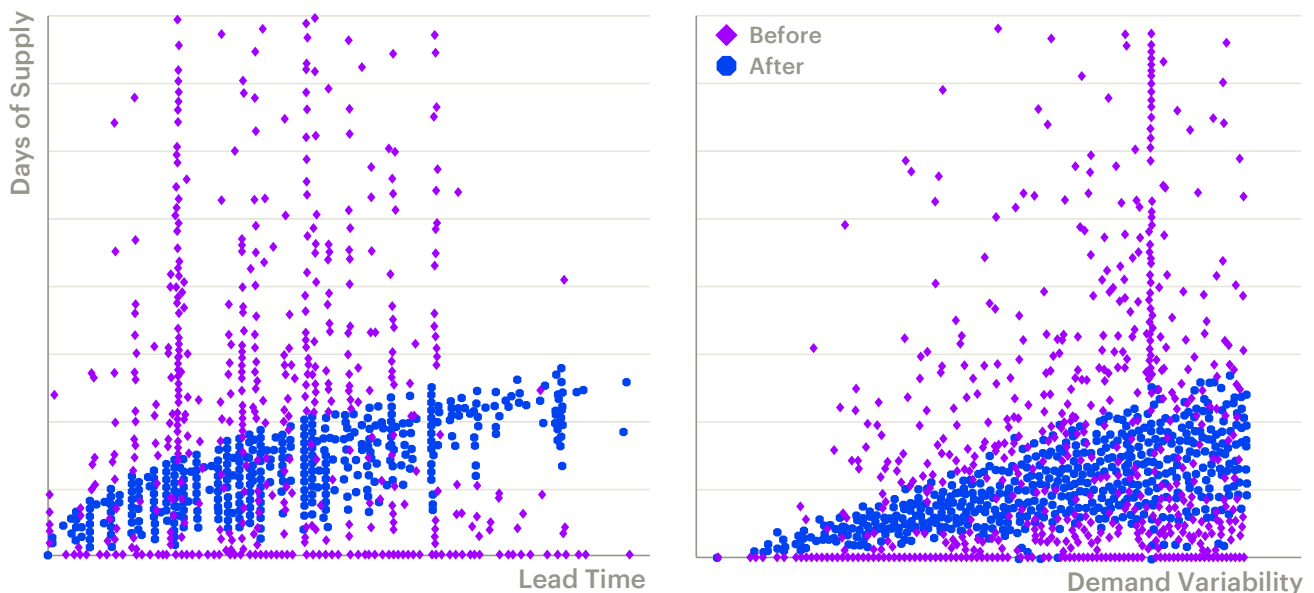
Case Study

A CPG firm swung from one inventory challenge to another—too much of some items, too little of others. The root cause? A haphazard mix of stock targets based on system defaults and out-of-date values, as well as poor training.

Setting targets with a science-based approach led to higher service and lower inventory.

Figure 1 shows the new targets better aligning with expectations: items with long lead times and high variability command more safety stock.

Figure 1 - Aligning Safety Stock with Key Drivers



Lower Your Inventory Premiums

We consider the following elements when addressing inventory management, aiming for the highest possible customer service for each inventory dollar invested.

Network Inventory

Local inventory levels depend on the structure of the entire network. Postponing product differentiation enables risk pooling for common components, reducing inventory levels.

Part-Level Management

Success depends on good targets being set for each item at each location. Techniques vary for factory components, items on store shelves, and post-sales service.

Inventory-Driven Costs

We analyze the real expenses of inventory. This weighs inventory investment against the financing cost as well as costs like warehousing, shrinkage, returns, and obsolescence.

Lot Sizing

The concept of the economic order quantity (EOQ) dates back a century, but it should still be part of every inventory management toolkit. Many firms make expensive errors here.

Service Levels

Inventory service problems include lost sales, penalties, backorders, and ill will. Knowing the true cost of running out enables rational decisions about how much inventory to hold.

Safety Stock

We set inventory levels using analytics and real data, not just gut feel. Forecast error typically drives the result. We also look at the lead time and reliability of the supply process.

Transaction Systems

Transaction systems trigger replenishment to maintain stock targets. Most ERP systems have adequate built-in capabilities, but we often find them poorly configured to local business needs.

Processes and Metrics

Real success depends on more than just better science. It takes discipline to align KPIs and to maintain material master data, supplier data, and planning parameters over the product life cycle.

These different points of focus for better managing supply chain inventory can be applied alone or together. Figure 2 reflects a service parts business' tenacious effort to improve overall performance.

Figure 2 - Simultaneously Managing Inventory Down and Service Up

