
INVENTORY ANALYSIS



Every company can derive benefit from the reduction or re-balancing of the inventories in its network. Addressing the surface opportunities is easy, however getting at the underlying levers that can have a positive, sustained impact on inventory requires a far more significant undertaking.

Inventory Optimization is a core competency of the Expeditors Supply Chain Solutions team. Equipped with the knowledge, experience and sophisticated analytical tools, our experts apply a rigorous process for assessing inventories:

1. Thorough assessment of critical factors:

- a. Service level commitments
- b. Stocking levels
- c. Consumption levels (production)
- d. Sell-through levels (finished goods)
- e. Lead times used in planning
- f. Tolerance for risk

This data-based view is supplemented by analysis of the business processes that are linked to inventory. These typically cut across multiple functional teams and reflect a great many interdependencies.

2. Develop a digital representation (a model) of the supply chain

This baseline view allows us not only to gain consensus from stakeholders as to the current state, but it serves as the basis against which any change is measured.

3. Conduct exhaustive analysis and develop multiple options

The customer's business objectives should directly link to their inventory strategy. Once we understand them, various options are developed that will support the strategy while simultaneously optimizing the inventory levels. These might reflect a mix of re-sizing, re-balancing across nodes or setting adjusted levels using segmentation (by product and/or channel).

4. Simulate scenarios using advanced software tools

The simulations not only produce specific calculations of the financial benefits (inventory carrying costs, physical handling / storage, insurance, etc.), but they illustrate how sensitive the model is to changes in lead times, service levels or risk tolerance.

The resulting analyses enable our customers to make informed, data based decisions that deliver compelling benefits in the areas of cost and working capital. Additionally, having a detailed understanding of the processes that impact inventory will allow customers to make more permanent changes that can ensure that the inventory improvements are sustainable.