

## The Advantages of Collaborative Inventory Management

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In today's highly demanding business environment, collaborative inventory management efficiently provides trading partners with real-time business information that would otherwise be unavailable or not available fast enough. It fosters a culture of responsiveness and proactivity.

After processes for data accuracy, shared views, and timeliness are implemented, collaborative inventory management offers a fully streamlined replenishment model while supporting high service levels. These solutions facilitate communication between companies and their suppliers in real time, and assure that production lines and business relationships are optimized at all time.



### **Challenge**

Many industries, like automotive and medical devices, do not tolerate late or missed shipments. At the same time, keeping high levels of inventory is not a feasible means of preventing a stock-out problem; space is limited and financial constraints related to high stock levels are considerable. Keeping the service level high and managing a lean inventory may seem to be conflicting goals.

From the supplier's perspective, awareness of quantities shipped and certain delivery patterns does not imply knowledge of the actual consumption patterns or inventory levels of products on the customer's (manufacturer's) sites, even if EDI or other connections exist. In order to improve service levels, additional insight into the manufacturer's operations is required.

On the opposite (manufacturer's) side, a need exists for further insight regarding the goods in transit. A company should see beyond the suppliers' operations and gain information, such as on-hand inventory still available at suppliers' sites, or quantities scheduled for production.

### **Solution**

Extending visibility beyond the intracompany supply chain and into each other's operations will create trust and improve collaboration. This does not mean divulging any confidential information or sharing of data beyond the single supplier-buyer relationship; the right software will ensure that data is not shared outside of specific relationships and will not be accessible to others in the Supply Chain. The advantages of increased visibility are obvious. There will be multiple parties reviewing the information shared between trading partners. Customers and suppliers located on different continents can make decisions with information that otherwise requires a phone call, e-mail, or other time-consuming method. This building of trust will eliminate the extra or precautionary inventories, reduce administrative effort necessary for clarifications, and provide all parties involved with the same real-time data needed.

Improved visibility also offers the opportunity for increased flexibility in identifying suppliers' shipping solutions and patterns, given that inventory levels are kept within appropriate boundaries. Instead of managing discrete orders, suppliers receive a "license to ship," expediting the order cycle. The key to these optimum inventory levels lies in the shared responsibility of suppliers and buyers to manage inventory boundaries, the short and longer term forecasted consumption, the in-transit shipment quantities, and other associated information. With these mechanics in place, collaborative inventory management will create results in the (express) transportation costs, inventory costs (up to 30 percent), number of inventory turnover, and relationship grades that will increasingly exceed the ones associated with single view vendor-managed inventory.

## **Platform**

Implementation of collaborative inventory management in a manufacturing environment entails a joint value creation including managers from Sourcing, Purchasing and Logistics, as well as IT/ERP developers for the interfacing. Where many teams and trading partners collaborate, a shared platform and easy access to it are a must. Leveraging the optimal infrastructure through a cloud-based application is a logical direction as the application can be opened up for both internal and external users. It allows defined roles and permissions, and specification of these from different departments and backgrounds. In such applications, best-in-class solutions use the single window into their trading partners' operations, eliminating the complexity attached to the use of multiple individual platforms.

For data to be shared, it is advisable to agree on a non-intrusive data feed mechanism that either extracts data from an ERP/WMS application for upload, or immediately transfers the critical inventory data into the collaborative tool. An option like electronic data interchanges (EDI) will help manage a large number of items with well-established security mechanisms.

As there will be a one-to-many relationship from the buyer's perspective (one buyer/manufacturer and many suppliers), consideration for the efficient on-boarding and possible uncoupling of suppliers is necessary. A simple administrative action, like adding new suppliers or closing out relationships with companies that will no longer supply, cannot be a burden and should not require multiple resources.

A Key Performance Indicator (KPI) for a successful roll-out to the supply base is the value of the annual spend managed with the new business process as compared to earlier statistics. The KPI for a successful implementation is the value pertaining to the working capital reduction tracking the value of the inventory on hand - or the inventory turns - as compared to earlier values.

The collaborative model also ensures that data quality is kept at a high level. When simple consolidation reports comparing actual consumption to the forecast show deviations, inconsistencies can be easily identified.

## **Conclusion**

As with most things in business, collaboration is preferable to a non-cooperative model. Using modern tools and staying focused on the end goal of reducing costs through reduced inventory levels and transportation costs, the collaborative inventory management applications provide both manufacturers and suppliers with an excellent opportunity to reach their goals and optimize their cash flow and business relationship.

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