

Developing Leaner Supply Chain Operations



Now, more than ever, supply chains need to be both responsive and efficient. Retail companies must satisfy ever-growing customer expectations in increasingly competitive markets while working in the most challenging macro-economic environment they've faced in years. Of course, the retail supply chain is essential to supporting these goals and addressing these challenges. Supply chain leaders must meet these needs while controlling—and often reducing—costs.

Some of the most common ways to increase efficiency and minimize expenses are often right under many supply chain executives' noses. Correcting these six common Lean sins will help cut through inefficiencies and waste in supply chain operations and unlock new value.

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1. Wasted time

Wasted time can plague every aspect of the supply chain, making it one of the biggest Lean supply chain sins.

Think of a shipment that misses the cargo cutoff time at the port of origin. The product must now be scheduled for the next vessel, perhaps a full week later, and extra effort may be required to expedite the product to get it to its destination on time.

Or, at the other end of the supply chain, think of a delivery truck that shows up at the store dock only to find that the proper labor was not scheduled, meaning the delivery takes longer than planned and adds confusion to the store's back room.

Wasted time in the supply chain is often caused by the failure to clearly define, communicate and measure performance against supply chain events, deadlines and key milestones. To attack this Lean sin, leading retailers are focusing on optimizing product flow across the entire supply chain—from manufacturing through store fixture or delivery to the customer—and not just in isolated silos, such as from the port to the distribution center.

To do this effectively, organizations must overcome physical and organizational separations in buying, warehousing and transportation functions to collaborate as one group. Each function within the organization—and even across organizations—must be connected to provide the necessary information and visibility into timing and scheduling of activities.

2. Wasted motion

Wasted motion occurs anytime an activity is completed in an inefficient manner or at multiple points along the supply chain, yet doesn't add value or benefit to the customer.

For example, product is often quality checked in detail at one point in the supply chain only to be checked again at the same detailed level at another point in the supply chain due to a lack of trust or clear communication between groups.

Wasted motion also occurs when sales associates head to a store's back room looking for a specific item but can't find it because of poor organization or lack of accurate back stock inventory information.

To overcome wasted motion, start by defining, documenting and understanding the processes that occur along each step of the supply chain through value stream mapping. Eliminate redundant activities by ensuring that each task is completed only once and only at the most efficient point along the supply chain. For example, quality assurance checks should happen during the manufacturing process instead of when the product is delivered to the distribution center, as it is often too late to easily fix any defects at that point.

It's also important that up-to-date information is shared across the supply chain to increase efficiency. Leading retailers are using RFID tags to enhance the inventory accuracy of both their selling floors and back rooms. This creates an accurate picture of the inventory available throughout the retailer's supply chain and can enable omnichannel retailing, ultimately leading to increased inventory productivity and profits.

Addressing issues related to wasted motion can really pay off. For example, consider one Kurt Salmon client, a \$2.7 billion-dollar book wholesaler and retailer. Their facility operated with a manual batch pick process that required extensive associate travel to the picking locations. After evaluating many different picking methods, the company selected an auto-pick solution for its ROI and its fit in supporting the SKU velocity, SKU characteristics and storage requirements. Picking rates increased 35% once the solution was implemented.

3. Wasted transportation

The cost of transportation and distribution is a significant contributor to the final cost of many retail products, often as much as 20%. With the constant pressure to drive down these costs, it is critical to eliminate transportation

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waste. This waste can take many forms: underutilization, improper mode selection, misaligned distribution networks and lack of reverse logistics capability.

Inbound underutilization can be caused by the inability to consolidate freight across product lines or manufacturers. To address this sort of waste, it is important to regularly evaluate sourcing and transportation patterns. Consistently undertaking such flow path analysis can help uncover opportunities for inbound consolidation that increase container utilization. In addition, the output of the analysis is helpful when negotiating lane and global transportation rates.

For outbound freight, the inability to effectively plan delivery trailers or schedules leads to underutilization. In addition, we have found that companies often have a single or very limited number of delivery modes from which to select. While this may simplify the shipping department's tasks, it leads to a mismatch between the mode selected and the service required. Much of this waste can be eliminated by taking a broad view of outbound flow and incorporating customer (internal or external) needs into the carrier scheduling and selection process.

The final—and most often overlooked—step is developing a strategy and plan for reverse logistics. Be it customer returns, inventory rebalancing or defective items, having an effective and efficient method for getting products to the right place in the supply chain is critical. The strategy should include determining ways to minimize reverse logistics occurrences, streamlining processes within stores and DCs, and selecting the best method or service provider to manage the process.

For example, one multibrand specialty retailer recently focused on aligning its delivery network to meet the needs of a new operating model and speed-to-market vision. The critical component of the supply chain vision was a redesigned transportation network, capable of accommodating unique product flow paths while still capturing cost savings and speed-to-market improvements.

The effort included review of global transportation flows, carriers and outbound functions. The recommended network and transportation optimization efforts resulted in a 35% reduction of annual ocean transportation spend, a 10% reduction in annual domestic outbound transportation spend and a 33% improvement in transportation speed to market.

4. Excess inventory, overprocessing and overproduction

Product or SKU proliferation continues to be a challenge made even more difficult by shortening product lifecycles. Lengthening consumer product supply chains confound the problem, as contract manufacturers chasing the best labor rates move to countries that are further and further afield. All these factors contribute to a situation in which there is too much inventory in the supply chain and often at the wrong place.

To combat this problem, retailers and consumer products companies must create a robust, collaborative demand planning process across the supply chain—from customer to supplier—to ensure that everyone involved is working toward the same inventory goal.

This collaborative approach to demand planning will also provide better visibility into customers' "true" demand while enabling safety stocks along the supply chain to be trimmed in support of an optimal flow of goods throughout the supply chain.

And as more and more customers demand a customized product, from specific labeling or packaging in wholesale apparel to customer-designed footwear, consider postponing the customization until the latest, most economical point in the supply chain. Waiting as long as possible until customization enables the broadest base of customers to be served from the largest common pool of inventory, thus simplifying inventory management.

The same idea can also be applied to manufacturing efforts where customers and contract manufacturers work

together to clearly define the last point at which final product or SKU decisions must be made. For example, implementing a tiered set of dates for decision-making on fabric, silhouette, style, size and customer-specific packaging requirements is more time- and cost-efficient than placing buys at the lowest level at the beginning of the process.

Inventory optimization can also help eliminate excess. Holding more product at near-shore sourcing locations instead of in-country distribution centers will often enable an organization to more quickly respond to demand while reducing waste.

Leading retailers are already reaping the rewards of reducing this Lean sin. For example, one broadline mass retailer developed a multi-echelon inventory model with centralized placement of safety stock and a vendor-to-store flow option that resulted in a 22% inventory reduction network-wide.

5. Defects

As a defective product moves along the supply chain, corrective costs continue to increase. As a result, it is critical to eliminate defects at the product's origin or as early as possible in the supply chain.

Defects and errors can occur anywhere along the supply chain, including product defects in manufacturing, picking errors in distribution, missed deliveries in transportation, and incorrect stocking or pricing at retail shelf. The key is to catch and correct these errors when they occur and not pass them along the supply chain.

Achieving this goal requires cross-functional and often cross-organizational collaboration to highlight commonly occurring types of defects and errors along the entire supply chain.

Of course, identifying how and where defects occur is only half the battle. Quality assurance procedures and metrics should be clearly defined and continuously evaluated, and defect rates must be measured and communicated across the supply chain.

6. Knowledge disconnect

As the supply chain networks of modern organizations become more and more complex and include an increasing number of diverse contract manufacturers, third-

party logistics providers and a global customer base, sharing information across all partners becomes very complicated—but extremely important.

Technology can help address this disconnect and facilitate smooth communication across the organization and the broader supply chain. For example, product lifecycle management systems enable product definition and development across broad supply networks. Enterprise resource management systems facilitate sharing and synchronizing information within an organization, while electronic data exchange systems allow the same sharing across systems and partners. Joint planning applications will help foster collaborative demand planning both within a retail organization and among its partners.

Beyond technological tools, investing in strategic relationships with key suppliers and customers will also help improve collaboration. Creating these relationships is an investment. It's important to develop integrated processes, supporting technology and Kaizen teams (cross-functional, cross-organizational teams focused on process innovation and improvement) to help eliminate waste and improve efficiency across the network.

Technological advancements, changing consumer behavior and globalization allow less room for error or excess in the retail supply chain than ever before. By addressing these six common Lean sins, organizations will be able to ensure their supply chains are efficient, responsive and well-positioned to enable their organization's future success. ❖

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