

Inventory Management as a Shipping Strategy for Logistics and Shipper Companies

A Glance at Clean Freight Strategies

REDUCED SHIPMENTS

Pick up and delivery of a single less-than-truckload (LTL) shipment accounts for roughly 30% of the CO₂ generated by an LTL shipment. Good inventory management can help reduce LTL shipments and significantly reduce carbon emissions.






Third-party logistics providers (3PLs) can work with customers to consolidate orders into larger, less frequent shipments. This strategy is most applicable to 3PLs that are involved in shippers' long-term transportation decision-making.

WHAT IS THE CHALLENGE?

Shippers generally determine load size and frequency according to customer requests, but the frequency requested may not always be the most efficient. For instance, a shoe store may request shipments three times per week, when a larger load twice per week would be sufficient. Adjusting shipment schedules can create time and cost savings for shippers, their customers, and 3PLs. 3PLs can work with shippers to determine the optimal size and frequencies of loads.

WHAT IS THE SOLUTION?

Products that are best suited for this strategy are characterized by:

-  **Predictable demand.** If a product has predictable demand, it is easier to schedule large shipments in advance.
-  **Minimal storage requirements.** Products with long shelf lives, minimal security, and low storage costs are suited for this strategy.
-  **Minimal change from year to year.** This strategy is ideal for goods with a history of stable production. For example, white undershirts and office supplies might fit this strategy well.

A 3PL can work with a shipper to identify products that can be shipped less often in larger quantity. One 3PL helped a customer reduce the number of truck trips containing dynamite for its blasting operations from 10 shipments per year to one.

Even for industries with shorter shelf lives and higher costs of storage, such as food and technology, this strategy can still be useful. Adjusting the frequency of shipments of cereal or smartphones from daily to a few times per week, for example, can yield large benefits in the long term.

Maintaining long-term relationships with customers also facilitates this strategy. Working for a customer over time makes it possible for a 3PL to analyze past trends to predict and plan future shipments.

COSTS

The primary costs of this strategy are carrying costs, such as the warehouse storage fees, security, insurance, utilities, and other maintenance expenses. Because of this, products that are easy and cheap to store work best for this strategy. There may also be environmental costs from longer storage time because orders that require larger storage facilities use more land and energy and products in storage may require refrigeration and other energy-intensive measures.

A potential impact of this strategy that may be more difficult to quantify is a reduction in the ability to respond quickly to change in demand.



A dynamite supplier cut the number of trips by 90%.



A pork rind producer cut LTL shipments by two-thirds and saved \$10,000 a month in transportation costs.

SAVINGS AND BENEFITS



Shipping. Reduced frequency of orders can reduce shipping costs.



Strategic planning. Coordinating orders further in advance gives 3PLs the opportunity to engage in longer-term planning. If 3PLs can choose which days to ship orders, they can ship on off-peak days.



Longer lead time. By increasing delivery lead time, this strategy can reduce time spent waiting and idling. Pickup, staging, and loading can be planned more precisely.



Processing costs. Fewer orders translates to fewer forms to fill out, fewer invoices to print, and less time spent processing orders. Both the customer and the 3PL can reduce administrative costs through this strategy.



Better reliability. The customer can gain more certainty about order arrival time, and the 3PL can rely on a steadier stream of business. Larger inventories can benefit customers by reducing the risk that they will run out of stock.



Emissions reduction. Reducing frequent LTL deliveries and converting to full truckload can be faster, cheaper, more reliable and can also help reduce CO₂ emissions. LTL pick up and delivery operations account for roughly 30% of the CO₂ generated by an individual LTL shipment.

NEXT STEPS

1

Consult with customers to assess their priorities. Some customers may care more about reliability than frequency.

2

Examine the costs of transportation and storage, the predictability of demand, and the lifespan of the product to calculate the optimal order size.

3

Set up policies and design customer service agreements that incentivize larger orders at reduced frequency. For instance, 3PLs can offer discounts for larger orders or charge a processing fee for smaller orders.