



Dealing with the ever-present need for savings

It would be great if the only thing that management wanted was for buyers to always have the shelves full. But that's not reality. In addition to providing a high level of customer service, purchasing managers are under constant pressure to reduce costs and provide consumers with real value. How can the total supply-chain cost be reduced?

With more than 40% and often as high as 60-65% of all volume coming into the supply chain being collect or CPU (customer pickup), wouldn't it be great if freight costs could be reduced without increasing inventory? Unfortunately, we all know that, driven by increases in the cost of oil and a shortage of trucks, transportation costs are rising.

The cost of operating warehouses has also come under pressure over the past years. Every transaction, whether it is receiving a truck, putting product away, or picking it for a store order, takes both time and cost. Wouldn't it be great if there was a way of reducing the number of transactions and eliminating at least, some cost from this node in the supply chain?

Just as the warehouse incurs cost every time a transaction occurs, your purchasing group would benefit from less "touches" in the process of getting products from vendors. Wouldn't it be great if we could reduce the manual effort required in placing orders?

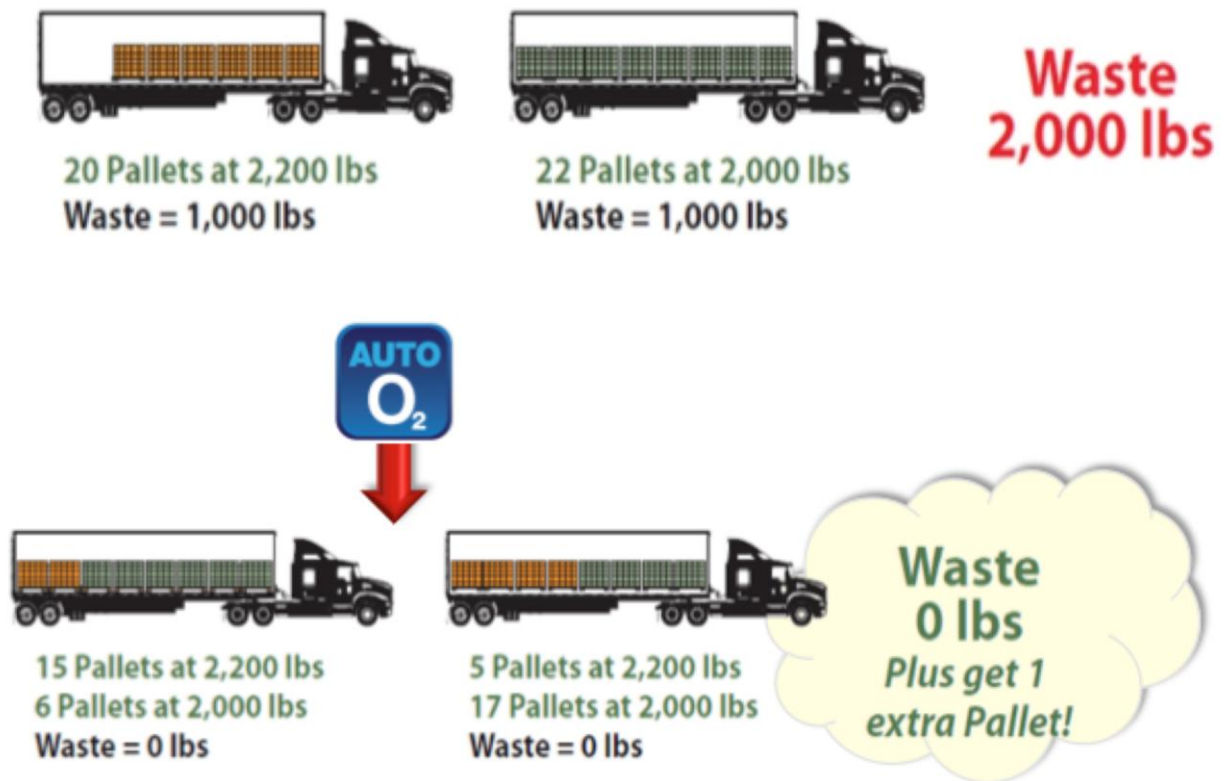
Order optimization – using a tool called AutoO₂ (Automatic Order Optimization) – can generate the kind of savings needed to keep management happy by:

- Creating orders that are more effective at filling trucks and hence requiring fewer loads over the year and doing this all without impacting inventory
- Eliminating the number of trucks received at the warehouse as well as cutting the number of put-away transactions
- Supporting hands-off product ordering

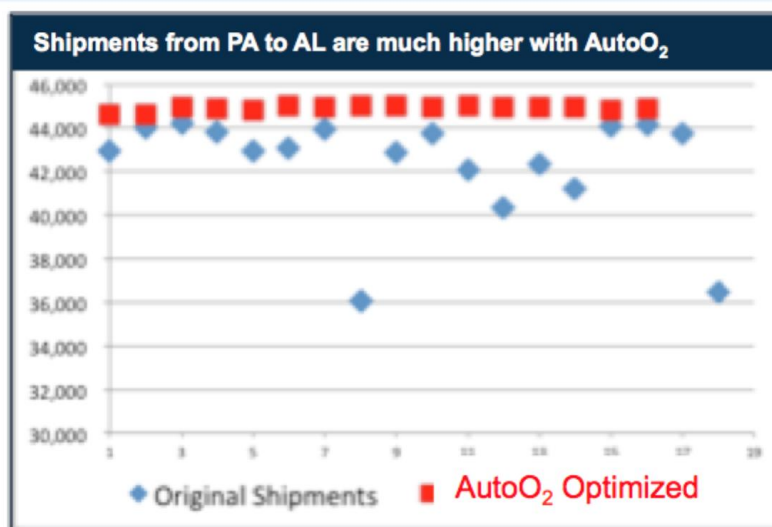
Creating orders that are more effective at filling trucks saving 4-8% of inbound freight

Most purchasing systems are effective at capturing the price break, for example for full truckload shipments, but to determine how much fills up a truckload is often unsophisticated-rules-of-thumb: "Is the shipment more than 40,000 lbs or does it have more than 2000 cube." Worse, the information on the shipment is far from complete as nearly all purchasing systems fail to take into consideration such important things as the weight of the pallets in the load or what states are the shipments traversing.

Many people would consider these loads “full”

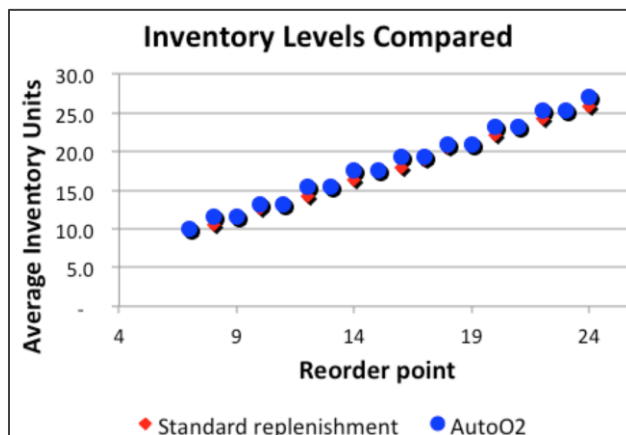


AutoO₂ uses a variety of information including time-phased demand, product dimensions and weight, as well as how it is palletized, and it’s “stack ability” to determine how to best use the valuable lane-specific truck capacity. AutoO₂ cautiously uses requirements from subsequent days to ensure that the load is truly full. In the real world, loads are 4-8% bigger, meaning that over the course of time, 4-8% of all shipments can be eliminated.



Surprisingly, putting more product on trucks does not increase the amount of inventory. The following diagram shows how increasing shipment size does not make much difference to

inventory levels. What has been found from experience – which is totally counterintuitive – is that inventory levels seldom change. We can speculate the only reason is because the shipments are being optimized and rather than have an analyst fill out of the truck with product that may not be immediately needed, the system is much more disciplined about selecting the right product – product that's needed soon – on the truck.



Eliminating the number of trucks received at the warehouse as well as cutting the number of put-away transactions

The impact of AutoO₂ on the warehouse is also positive. Not only is there a savings of 4-8% of transportation costs but there are 4-8% fewer trailers coming into the dock and purchase orders to be reconciled. But it does not stop there. In a world where multiple analysts may order the same product from the same vendor, AutoO₂ can enable purchase orders to be consolidated so that the product can be received and put away just once rather than having it encountered on multiple orders.

Cutting Analysts time by up to a third

With a good requirements forecast, companies have seen up to 33% of their orders created without human intervention. Relying on AutoO₂ to build the loads that are lane specific has actually enabled loads to be larger and increased total benefits.

Sidebar – a funny story

Order optimization was implemented inside the IBM continuous replenishment (Vendor Managed Inventory) system that acts as the intermediary between many grocers and their vendors. When one major vendor implemented AutoO₂, they watched and waited to see what would happen to inventory and if their customers would notice. The results were remarkable. They saved on average 6% in freight cost and nobody, but nobody from their customers noticed or commented.

Kraft was quite open about using AutoO₂ in VMI. In a session at the annual combined supply chain conference of the Food Marketing Institute and the Grocery Manufacturers Association, grocers reviewed Kraft's findings that they too had saved 6%.

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