

Managing Zero Inventory

Zero inventory stock management is a key strategy for a warehouse to utilise because it significantly benefits cash flow and actually facilitates new business models. Just about every internet-based retailer has behind them a zero inventory model, whereby they 'back to back' the customer order with a PO and ship end product directly to the customer. Amazon's Marketplace and many other discounted retailing models would be impossible without zero inventory stock management.

This way of working is effectively opening up new trading opportunities for any company with a trusted B2C brand. For instance, a number of energy suppliers are now offering replacement boilers and frequently create special offers based on advance weather forecasts and the knowledge that consumers don't want to run the risk of an old boiler breaking down during a cold spell. So they create a special offer online and publicise it heavily for a fixed time period. Customers sign up to the special deal, pay for their new boiler upfront and select a delivery and installation date.

At this point the zero inventory process swings into action. The equipment itself is provided under contract by the boiler manufacturer, usually via a builders merchants, who deliver the item directly to the customer ready for the engineer to fit onsite. The arrangement works well for all parties involved, each of whom benefits financially. The energy company owns the customer relationship and has the trust to recommend boiler products, which benefits their manufacturing partner and fitter, who secure a dedicated sales channel. It's a great merry go round that suits all the stakeholders involved.

These developments are leading, leading to what some warehouse specialists describe as a shift away from the supply chain as we know it, to a demand chain and a completely 'pull' system. According to this model, the customer purchases items and these are shipped individually to order. Although forecasting is still important, the critical success factor is agility, responding and having the ability to respond to customer demand ultra fast.

In the zero inventory model, stock is effectively pushed back up the supply chain by the retailer who does not want the risk or cost of holding inventory.

However beneficial it is for cash flow purposes, this is a relatively 'adventurous' way of working from a warehouse management perspective, because it places the onus for stock management on the manufacturer, who is required to fulfill orders individually and ship straight to the customer. It is the manufacturer that bears all the risks, from forecasting how much stock availability is required, to managing returns of unwanted or faulty items.

The end result for a manufacturer is the need to become directly involved with B2C orders. Manufacturers who typically never intended to involve themselves in the ordering process are now required to deal with end users. This means having a B2C ordering process or delivering direct to homes rather to a central depot, which requires a change in thinking. Customer service policies, serial number capture to record the distribution of goods, warranty issues and packaging are all new issues to contend with which, in a previous world, the manufacturer would not have to be concerned about.

It's important for the manufacturer to have B2B and B2C processes that are well aligned and able to satisfy all customer stakeholders. Returning to the earlier boiler example, their existing major retailers or distributors could become annoyed if they adopt a B2C process that sees them losing £300 on the sale of every boiler because they are also selling direct to the consumer via an energy supplier. Finding a way to keep all selling stakeholders happy, potentially by offering distributors an ever better margin, is therefore essential.

Operating a zero inventory model places greater pressure on the warehouse and increases the manufacturer's reliance on a WMS in new ways. For example, whereas in the past finished goods would have been shipped in bulk to a distributor, they now need to be stored and a high volume of smaller orders shipped individually, directly to an end consumer. This requires agile WMS capabilities and a well organised logistics operation, with relationships in place with logistics service providers who are able to deliver products to the customer site. Manufacturers also need to scale their operations quickly, from making say 5-10 large deliveries a week to 50 or 60 much smaller ones.



The increasing incidences of zero stock supply chain management puts pressure right through the supply chain, because companies have to make smaller more frequent production runs, fine tune their operations and work smarter. All manufacturers have the capacity to operate some zero inventory stock management, although it is clearly better suited to some market sectors than others. Ultimately, even the food industry can benefit, although this is operationally more difficult because of product lifespan and the need to manage best before dates.

4 essential actions for manufacturers considering a zero inventory model:

1. Use a WMS to manage warehouse operations efficiently and estimate resourcing costs
2. Change the business emphasis from making small numbers of bulk deliveries into distributors to a more customer focused B2C process, delivering a high volume of individualised orders.
3. Foster relationships with logistics providers and couriers e.g. two-man delivery companies who have the capability to deliver a high level of customer service to end consumers.
4. Expect to hold a level of just-in-case stocks if sourcing products from China with a 7 - 12 week lead time and understand the minimum level of stock the business must hold to accommodate lead times and sudden peaks in demand - especially with cash cow products.

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