Top 8 guidelines to improve inventory management

Our panel—representing a combined 80 years of inventory experience—gets back to the basics, reviewing critical strategies that some organizations have been neglecting over the past several years.

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March 01, 2013

Let's keep it simple: Inventory is the lifeblood of the supply chain. It's what flows from node to node. And at each node it's critical to figure out that perfect balance of supply and demand, or else suffer dire consequences. If you have too little inventory you risk lost sales and customers from “out of stocks.” If you have too much inventory, you’ll need more of everything—more space, more transportation, more handling, more labor and more money.

Even after figuring out the correct amount to keep in stock, you'll still need to execute the proper flow. But it's not only about the timely movement of the physical goods from your suppliers in, say, Asia to your stores all over the United States. It's also about managing the vast amount of information associated with those goods to keep it moving to the next node—even before it gets there.

Over the next few pages, our inventory experts—who bring a combined 80 years of experience to the table—present eight guidelines for managing inventory in the supply chain. Our panel approaches this exercise from both planning and execution perspectives and investigates the latest in leading-edge technologies that can be used to put these guidelines into action. And, the panel gets back to the basics, reviewing critical strategies that some companies have been neglecting in the past several years.

1 Consider inventory optimization tools

Inventory optimization tools have been gaining ground as companies seek to evaluate their entire network and determine the best inventory policies for each product at each node in their supply chain. These are typically stand-alone software tools that use data from WMS and ERP systems.

“These optimization tools take into account demand variability, supply variability, and replenishment parameters to determine how much inventory to hold in order to guard against that variability,” says Dave Wheeler, principal of supply chain services for consulting firm St. Onge.

Aman Sapra, senior project manager of inventory and supply chain strategy at St. Onge, attributes the increasing popularity of these tools to the realization by more companies that the transactional systems running their DCs do not provide enough cutting-edge optimization capabilities.

However, Sapra cautions against optimization tools that are simply “great analysis, smart math monsters.”

“You want something that when the results come out, and with minimal human intervention, it can execute on those results. It may seek approval for a few items, but will work seamlessly with business systems on most recommendations.”

2 Employ business solutions that use real-time analytics under one platform

According to Michael Wohlwend, vice president of SAP Americas and this year’s vice president of the Warehousing Education and Research Council, “the days of managing inventory using Excel spreadsheets are passé.”

Powerful sales and operations planning solutions are now using real-time analytics that take a unified data model of demand, supply chain, and financial data, analyze them at any level of granularity, and
instantly provide responses. “You can even perform rapid, interactive scenario planning and simulation with this data to support inventory and other planning decisions,” says Wohlwend.

Operating on one platform where data is shared is key, says Jennifer Sherman, senior director for fulfillment applications strategy for Oracle. “You have one picture of inventory, one picture of costs, and one platform to plan against. This allows you to have real-time inventory within that one model and even track who owns that inventory—even if I’ve got a product that has been consigned to me from my supplier, it’s still in the same inventory model.”

With all of these systems providing users so much real-time information at their fingertips, managers can capitalize on unique opportunities for moving inventory, such as completely bypassing the DC. Chris Jones, external vice president marketing and services for Descartes, explains that companies can now treat ocean carriers as mobile warehouses, allocating inventory before it even gets to the port.

From the port, it typically goes to a deconsolidator who then sends it to the DC, who then decides to send it from there to a retail store. “The latest software cuts out one big step from the process,” says Jones. “So, because you know what’s coming and you have it labeled with accurate electronic information, when it gets to the deconsolidator you can process it to go directly to the retail store.”

3 Don’t treat all SKUs the same

There is no such thing as a one-size-fits-all solution. “Each and every product does not have the same supply and demand variability pattern,” says Sapra. “Focus on those 20% that statistically make up 80% of the volume and manage that inventory really well, so you maximize sales and profits.”

“Some companies will not only plan for items differently, but they might also have different targeted fill rates for each item category,” explains Wheeler. “My fast-moving A items should be filled at a rate of 99%, B items at 98%, and C items at 95%. It’s called service-level differentiation.” The goal, he adds, is to maximize resources on the more profitable A products, while minimizing the resources used on the less profitable C items. Each segment will then have different forecasting and stocking policies.

4 Keep an eye on your suppliers

There are suppliers that don’t necessarily stick to their schedule or deliver on their commitments. “It’s not only in terms of timing, but also fill rate,” says Wheeler. “If you ordered 1,000 cases of pencils and the order shows up at the door with only 900, then that’s a problem.”

Our experts suggest closely monitoring supplier activity. Most systems track the inbound receipt of an item: There is a promise date, an actual receipt date, quantity ordered, quantity received, and the condition in which it was received. These are metrics that can be tracked and analyzed to determine a supplier’s reliability. “All of that data is typically available in a WMS,” says Sapra, “but has anybody really looked at it to determine unreliable suppliers?”

After identifying unreliable suppliers, you can deal with them and resolve any issues and work toward improving a supplier’s performance—or hold more of their inventory to guard against their variability.

5 Track essential attributes

Over the past few years, tracking product genealogy and traceability are at the top of inventory managers’ must-have lists.

“It’s not enough to just track your lot number,” says Curt Sardeson, managing principal of the Open Sky Group, a consulting firm specializing in supply chain management solutions. “If you used subcomponents and subassemblies that you mix into your product, you also need to know those lot numbers in case your product has a recall.”
The key is how to efficiently capture these attributes without increasing labor or handling costs. Sardeson recommends electronically capturing data such as country of origin (COO), serial numbers, and vendor lot number then automatically sending that information via EDI/ASN to the next node on the supply chain. “Without it, manual intervention, space utilization, and labor can get out of control quickly.”

The increased tracking also affords trading partners with increased visibility and the ability to make more timely decisions.

**6 Leverage mobile devices**

Mobile technologies and mobile user interfaces are now ubiquitous for capturing data on inventory. “It’s time for even businesses that don’t see themselves as complex to demand mobility solutions for accuracy,” says Oracle’s Sherman.

SAP’s Wohlwend points out how most sales associates on the store floor now have mobile devices with real-time inventory of the store. “Not only are they able to improve customer service, but when inventory is low, they’re able to generate a replenishment from the DC down to the store.”

Mobile devices allow quick access to accurate information and data so that managers can act quickly on their inventory decisions, especially in the DC. It also eliminates the errors and delays associated with a paper-based operation, improving accuracy, efficiency, and the general speed of your business.

**7 Be smart about your slow-moving and obsolete items**

While it makes sense to focus on your more profitable fast movers, you can’t ignore your slower-moving merchandise. Every day that these items are not used or sold, they occupy space, utilize labor and resources, run the risk of obsolescence, and in many cases actually get in the way of your more popular items.

“It begs the question: Do I even need these slow movers in all of my warehouses?” says Sapra.

“The more DCs that you store an item in, the more inventory you’re going to have,” says Wheeler. “If you pull that inventory back into a single DC, you’re able to aggregate your demand variability, which allows you to reduce your required safety stock.”

It doesn’t matter where you put slow movers; many DCs will need to deal with them. “Control your SLOB—slow moving and obsolete items,” adds Sapra. “These are products that everyone conveniently forgets about. Well-managed operations are going to put it on sale or send it to thrift channels and off-price retailers.”

**8 Lastly, don’t neglect slotting**

Proper slotting not only delivers much needed space, but appropriately locates the fastest-moving items closer to docks and more accessible locations, minimizing travel distance and maximizing overall throughput and productivity. Unfortunately many companies tend to neglect their slotting.

“In the best companies, slotting is a daily activity not a quarterly or annual activity,” says Open Sky’s Sardeson. “As a daily activity, you can stay on top of it because it’s only a little bit of work and completely manageable. If you slot annually it becomes a major undertaking.”

St. Onge’s Wheeler also suggests investigating if two items have a high probability of being ordered on the same order. “If so, you want them close to each other in the picking area so that your travel distance is minimized, reducing your labor costs.”
More expert inventory management advice from our panel:

“Model your inventory and fully understand where it comes from, what attributes are critical, where your safety stock will come from, and what levels you must have to keep costs down. Don’t let yourself be surprised by stock outs. Think down the road so that you can be flexible and do better than your competitors.”

—Curt Sardeson, Managing Principal, The Open Sky Group

“Perform continuous and appropriate periodic review of inventory. It shouldn’t be a one-time activity. Promotions don’t happen only once. The nature of the supply chain is that things can happen all the time.”

—Aman Sapra, Sr. Project Manager, Inventory & Supply Chain Strategy and Analytics, St. Onge Company

“Maintain open communication with your sales and operations planning team so you know what’s coming down the pike in terms of additional volume. Is there a big promotion that inventory planners need to know about and plan for? Is there a new contract with a customer that will drive demand to increase two-fold?”

—Dave Wheeler, Principal, Supply Chain Services, St. Onge Company

“Ask your vendors if they have a solution that can be mobile-enabled and at your level of sophistication. Do they have something that will allow you to crawl, then walk, and then run? Do they have an inventory solution that will meet all of your future business growth, not just warehousing, but perhaps reverse logistics and repair or manufacturing? Do they have a solution that will give you the granularity of information that you require to make better planning decisions?”

—Jennifer Sherman, Senior Director for Fulfillment, Applications Strategy, Oracle

“Ensure speed to value. The quicker you have the information the more valuable and pertinent your decisions are going to be—and the more agile and flexible your company will be.”

—Michael Wohlwend, Vice President of SAP Americas, Vice President of the Warehousing Education and Research Council (WERC)

“Standardize the data so that everybody can see the same information and standardize the process so they know what to do with that information.”

—Chris Jones, External Vice President, Marketing and Services, Descartes

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