8 Actions Wholesale Distributors Can Take To Right-Size Inventory During An Economic Slowdown

Surplus inventory is a big drag on the finances of wholesale distributors as they grapple with high inflation and a slowing economy. To avoid overstocking, distributors need to have a real-time view of orders and stock holdings and then apply AI-powered dynamic planning tools for forecasting and inventory optimization.

In the face of a slowing economy and persistent inflation, wholesale distributors must right-size their inventory holdings to meet customer orders while avoiding tying up working capital in excess stock. Not only must distributors have a real-time view of inventory and demand, they need to use dynamic planning, adjusting inventory in response to ever-changing market conditions, to avoid surplus stock.

By using always-on inventory analytics, a distributor gets a complete real-time picture of on-hand stock holdings and incoming demand. A data platform for always-on analytics captures inventory events as they occur and provides insights into inventory needs and performance. Once distributors have this view of their enterprise, they can leverage AI-powered dynamic planning tools to match the right amount and mix of on-hand inventory with customer demand.

The Problem: Buffer Inventory Pileup

When the Covid pandemic resulted in supply chain disruptions, wholesale distributors increased inventory as a buffer against unreliable deliveries and uncertain supply sources. Although companies considered other inventory management strategies – such as supply base diversification and regionalization – the most common practice was to increase inventories, according to the global consulting firm, McKinsey & Company.[1]

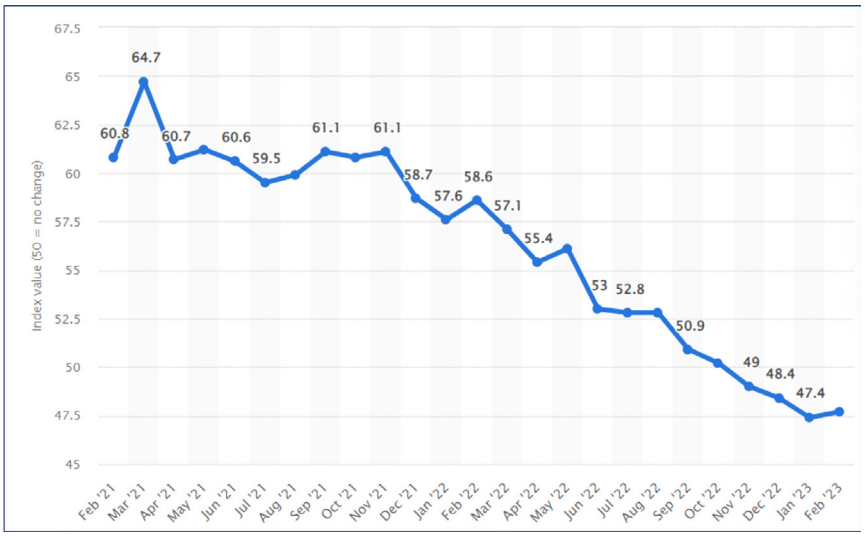
The inventory buildup has put distributors in a difficult position going into 2023. According to Lora Cecere, the founder of the research firm Supply Chain Insights, companies are entering this year with inventory levels at an all-time high.[2]

[1] *Gartner: How COVID-19 Is Reshaping Supply Chains. Published 23 November 2021.*

[2] *Lora Cecere: No Time Like the Present. Published 13 October 2022.*

The latest data from the US Commerce Department showed wholesale inventories — the stock of unsold goods held by wholesalers — edged higher in February 2023, the last date for which data is available. Wholesale inventories in February totaled $919.2 billion, an increase from the previous month.[3]

In addition to an overabundance of inventory, distributors face the perennial challenge of assessing demand variability to determine inventory needs. They have to determine how much inventory to carry for fast-moving, slow-moving, and seasonal items — never mind creating a forecast for a new product introduction.



Source ISM

This year, distributors face the dual challenge of getting out from under a pile of excess stock while trying to discern how best to meet demand in a volatile marketplace and cooling economy. As this Purchasing Managers Index (PMI) from the Institute of Supply Management shows, manufacturing is experiencing a sharp slowdown as a result of slower orders, high inventory levels, and faster ship times from suppliers. If distributors don't right-size their stock holdings, they could find themselves left holding the inventory bag in a downturn.

The Need for a Single Source of Truth

The challenge of inventory management in the current economic environment is further complicated by distributors having a fractured, piecemeal picture of demand and inventory. That's because the data needed to create a full picture is siloed in disparate applications.

Separate systems – such as enterprise resource planning, order management, warehouse management, inventory management, and supply planning – are not well integrated. Because of that, the distributor

[3] *US Department of Commerce: Monthly Wholesale Trade: Sales And Inventories, February 2023. Published 10 April 2023.*

lacks a real-time picture of on-hand inventory and changing demand. Without a clear picture of the changes occurring to demand and supply, they're not in any position to make meaningful decisions about their inventory needs.

Distributors need a dynamic data unification platform to give a valid real-time picture that can be used as a single source of truth. That way, all managers and planners in the enterprise have the same information for determining inventory needs. Moreover, that picture has to give an up-to-the-minute view of inventory and demand events as they happen across the enterprise. Not only should this platform track demand and inventory events in real-time, it should provide a single, central unified view.

The Need For AI-Powered Demand and Inventory Planning

Once distributors have a clear picture of current demand and inventory holdings, they need to be able use that information as the basis for looking ahead and creating a more accurate forecast of future inventory needs.

Unfortunately, traditional forecasting methods and business intelligence tools weren't built to handle demand variability.

Most forecasting tools are "deterministic," meaning they give a single-number forecast and, if that single-number is wrong, distributors will end up with excess inventory.

For a more precise assessment of inventory needs, distributors should use the statistical method of probabilistic forecasting. This method gives a range of forecast outcomes with the probability of each occurrence. When applied to an inventory needs assessment, it takes into account order size and frequency along with quantities.

When probabilistic forecasting is combined with machine learning (ML), a type of self-learning artificial intelligence, demand planning rises to the next level by including an analysis of real-time data in the calculations. The ML engine takes the baseline probabilistic forecast and then adjusts the forecast for such factors as promotions, seasonal buying, product life cycles, new product introductions, and external events like weather. Because it takes into account numerous variables, this hybrid approach to forecasting is more accurate at identifying possible demand outcomes.

When that forecast is regularly revised using real-time data, in combination with information on the frequency of orders and order size, it enables dynamic planning. resulting in more accurate forecasts, especially for slower moving items. This capability allows distributors to pivot in response to market changes so they can better balance inventory levels and mix with customer orders to avoid unnecessary stock.

8 Actions To Control Inventory

By combining a real-time view of demand and on-hand supply with AI-powered tools for dynamic planning, distributors are equipped to take the following eight actions to avoid overstocking as well as understocking.

1 ***Gain a clear picture of demand for slow-moving or intermittent stock keeping units (SKUs) to prevent surplus inventory.***

Probabilistic demand planning assesses the likelihood of a sales occurrence from a range of possibilities to set inventory based on desired service targets. Machine learning can revise the forecast based on demand signal inputs (such as sales orders, point-of-sale data, etc.) to create an updated picture.

2 ***Model the tradeoffs between safety stock and customer service levels.***

AI-powered modeling of inventory holding scenarios lets distributors weigh the impact of different safety stock levels on customer service and financial performance. With modeling, distributors can assess the impact of different scenarios for replenishment frequency. They can also evaluate the risks and benefits of working capital investment to find the optimal balance between stock and service targets.

3 ***Apply "stock mix optimization" to minimize safety stock holdings.***

With stock mix optimization, a distributor can set an overall service target for a service class or product family, but vary the service level settings for individual items within those categories. Optimization software automatically calculates a service level for every SKU-location that aggregates to the total service level target for the overall service class, thus achieving "service level optimization." By fine-tuning inventory with "stock mix optimization," a distributor reduces surplus stock, while safeguarding service levels.

4 ***Enable closer supplier collaboration with more accurate replenishment plans.***

By sharing with their suppliers more realistic plans for future orders, based on AI-powered demand analysis and inventory management, distributors can better collaborate with their trading partners on forward buying arrangements and replenishment frequency.

5 ***Make smarter purchasing decisions by accounting for lead times and forward buying.***

Dynamic planning lets a distributor factor in such variables as supplier lead times for replenishment, price breaks from forward buying, and transportation charges for replenishment. The end result is an optimal inventory flow to keep stock holdings at just the right levels.

6 ***Undertake multi-echelon inventory optimization and replenishment.***

An AI-powered inventory management tool can determine the optimal levels of inventory and placement across the whole network of warehouses. By viewing inventory at all locations as part of a common pool from which to serve orders, the distributor holds less stock overall for orders in a multi-level network.

7 ***Use real-time forecasts for real-time planning to make course corrections.***

To avoid getting caught holding too little or too much inventory, AI-powered dynamic planning solutions incorporate orders as they happen into probabilistic forecasts to determine future demand. This results in more accurate short- and medium-term accuracy in forecasts to avoid overstocking.

8 ***Speed up replenishment times.***

By having faith in the forecast, distributors can up the frequency of replenishment shipments. This allows them to work with their suppliers to keep lower overall stock levels as they have a clearer picture of demand.

Act Now To Reduce Excess Stock

In a cooling economy with high inflation, smart inventory management becomes essential for distributors. Not only does excess stock tie up working capital, it increases holding costs, resulting in higher expenses for storage space, insurance, and labor, and a greater risk of spoilage, damage, and obsolescence. Having more stock on hand than needed can clog up a smooth-running distribution operation, even increasing the operational safety risks to workers from the clutter.

By using a real-time data platform along with AI-driven dynamic planning, distributors can avoid unnecessary stock,precisely balancing supply with demand to keep inventories at just the right amounts to profitably meet customers orders.

How **North America's Largest Tire Distributor** Benefits from Clearer Forecasting

American Tire Distributors (ATD), based in Huntersville, N.C., is North America's largest tire distributor, supplying dealers, repair shops,and automotive performance shops with a variety of automotive products. To advance its in-house operations, the company decided to undertake a digital transformation of its supply chain.

The first step on its digital journey was improving forecast accuracy. The company chose ToolsGroup Service Optimizer 99+ (SO99+) to get a clearer view into demand, inventory optimization, and replenishment planning for its automotive products.

SO99+ provides automatic, self-adaptive forecasting and modeling of demand. By leveraging this powerful AI-driven solution, ATD was able to move from monthly, backwards-looking forecasts to forward-looking dynamic planning, enabling the company to respond to and anticipate market changes.

ATD also discovered it could use this improved forecast to make commitments with suppliers farther in advance via future dated orders and purchase order forecasts. In doing so, it neutralized issues like unreliable and inconsistent supplier delivery.

In addition to working with its suppliers, ATD has begun sharing those forecasts with its end retailer customers through ATD's subsidiary, Torqata. By feeding Torqata's POS data into SO99+, ATD is now working with its retailers to create forecasts to help them better understand and meet their customer demand.

Because of the improvements to its forecasting, ATD has been able to lower inventory levels, boost profit margins, and reduce working capital while simultaneously delivering better customer service.

Want to learn more about how ToolsGroup can protect your business from profit-eroding excess inventory? Check out how distributors are experiencing real-world benefits in inventory reduction below:

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RAJA

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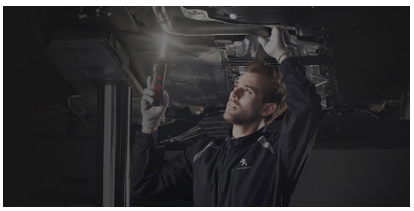

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Reduced stock by 25%

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