

ENTER THE ERA OF OMNI INVENTORY OPTIMIZATION

BECAUSE MULTI-ECHELON IS NO LONGER ENOUGH

A photograph of three men in a warehouse setting. They are standing in an aisle between tall metal shelving units filled with cardboard boxes. The man on the left is wearing a light blue shirt and jeans, holding a laptop. The man in the middle is wearing a light blue shirt and tan pants, gesturing with his hands. The man on the right is wearing a light blue shirt and tan pants, also holding a laptop. The background shows more shelving units and boxes, creating a sense of depth. The lighting is bright and even.

Omni Inventory Optimization (OIO)

is a first-of-its-kind approach to inventory optimization that takes full advantage of complete network inventory, channel demand patterns, and omni-fulfillment strategies to align inventory assets across the network and improve total return.

DELIVERING OPTIMAL FULFILLMENT EXPERIENCES IN A MULTI-CHANNEL, MULTI-ECHELON WORLD

The changing dynamics of the retail industry, driven by digital commerce, shifts in consumer buying preferences and competitive pressures from retail giants, have brought new ways of thinking about balancing inventory supply and demand.

Inventory consumed in an omnichannel enterprise on a real-time basis is driving the need for change that prevailing methodologies can't address. Traditional approaches to inventory optimization—including multi-echelon—aren't engineered to master the complexity of connected commerce.

The next generation of inventory optimization strategies, Manhattan Associates' Omni Inventory Optimization (OIO), recognizes the shortfalls of multi-echelon solutions in today's omnichannel environment. While leveraging the network approach to inventory optimization, OIO also accommodates all selling channels, accounts for modern demand patterns and enables the additional fulfillment experiences consumers look for. Now, retailers can maximize sales opportunities and customer satisfaction, while minimizing costs, in today's ultra-connected commerce world.

"Retailers continue to strive towards being more accurate at demand forecasting, yet in doing so, they're just trying to forecast as to how consumers pay and through which channel. This approach to demand forecasting provides little insight into where inventory needs to be to fulfill orders, and the majority of retailers simply can't forecast in any great detail as to how consumers wish to have their orders fulfilled."

TOM ENRIGHT
VICE PRESIDENT, GARTNER

The evolution of inventory optimization

How much inventory is needed to meet our customer service objectives? This is the fundamental question inventory optimization solutions have attempted to answer since the advent of advanced replenishment.

THEN

In the early days, buyers ordered inventory based on their best guess of upcoming demand at a single location. This approach often resulted in the 'bullwhip effect', where forecasts distorted—and orders inflated—as they moved up the supply chain. Managing inventory from the bottom up became increasingly costly and ineffective as retail organizations grew.

NOW

In the 2000s, as the retail environment became more complex, the multi-echelon methodology took hold. Replacing traditional systems, multi-echelon solutions enabled a bi-directional, network approach to inventory optimization that continually updates stock at every level in the supply chain, bringing transparency to the process.

NEXT

The next generation of inventory optimization is omnichannel, advancing multi-echelon concepts to fully embrace digital commerce and changing consumer fulfillment preferences. Omnichannel recognizes that inventory is consumed differently today, making it possible for retailers to better compete in the new era.

DISRUPTION ... FOR ALL THE RIGHT REASONS

Industry change represents opportunity or adversity, depending on your perspective. Retailers that embrace the digital era, complete with the need to fulfill demand any way the customer wants, stand on the precipice of growth and opportunity. Those that succeed will reap benefit, growing their digital sales and store traffic by offering unique fulfillment experiences, cost-effectively. These are the retailers able to compete with the handful of titans already ahead of the game.

“Forecasting demand for products and positioning inventory has never been a simple task for retailers, but it has become increasingly difficult in the digital age when shoppers’ purchasing behavior has become varied and unpredictable.”

COMPUTER WEEKLY.COM

Each fulfillment experience impacts demand and supply

Meeting the need for customers who want to buy-online-pickup-from-store, for example (see below, emerging fulfillment strategies), is important. Doing so in a way that keeps supply and demand in balance—and doesn’t add cost—is imperative. Given the complexities of a transaction where the point of demand is different than the point of fulfillment requires a solution designed from the ground up and engineered for omnichannel, for the way consumers shop and buy today. Using existing systems to execute new customer experiences will result in faulty forecasts and inventory levels that aren’t aligned with demand.

While the changes driving the need for Omni Inventory Optimization are far reaching, what’s still true today is the need to deliver the best experience to consumers at the lowest cost. Striking the right balance is based on different inputs driven by changes in the way customers behave.

What does OIO do that other approaches don’t?

Whether you’re supporting a walk-in purchase, click-and-collect, or both, *your inventory is precisely and proactively placed exactly where your customers expect it to be.*

The advent of omnichannel inventory

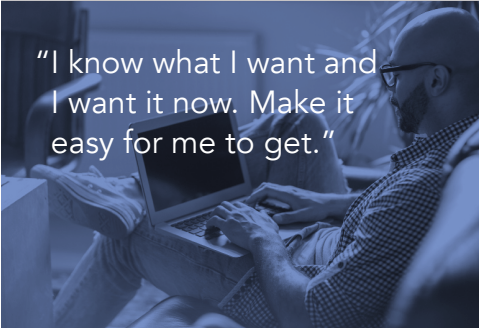


The new era gives retailers new ways to take advantage of available inventory. Now inventory can be leveraged and sold in ways not anticipated when purchased. With the right tools, it doesn’t matter where inventory resides. Machine learning monitors the network at every level, helping to better align inventory levels and lower costs. With Omni Inventory Optimization, the analytics are built in, giving retailers a scientific starting point to meet the needs of the new consumer (fulfillment experiences) and the needs of the business (profit). It’s a win-win value proposition for forward-thinking retail leaders.

Emerging fulfillment strategies

Buy-online-pickup-in-store
Reserve-online-buy-in-store
Buy-online-return-in-store
Buy-in-store-return-online
Buy-online-pickup-curbside
Buy-online-deliver-same-day/next-day
Buy-in-store-deliver-same-day/next-day



OMNICHANNEL INVENTORY OPTIMIZATION BEST PRACTICES

<p>Sell the network, not the shelf</p> <p>When a DC is out of an item displayed on the website, or the customer needs it today, it can be fulfilled from anywhere.</p>	<p>Know each shopper</p> <p>A single record of each customer's orders, their history and shopping preferences, regardless of channel, means associates can consistently deliver quality service.</p>	<p>Provide more experiences</p> <p>Engage customers by providing the personalized experiences that make doing business with you easier and more enjoyable.</p>
<p>How the shopper benefits</p>  <p>"I know what I want and I want it now. Make it easy for me to get."</p>	<p>"You show you care about me through relevance and personalization. I'll keep coming back to get that experience."</p>	 <p>"Give me flexibility, control ... and convenience."</p>
<p>How retailers benefit</p> <p>"Our inventory works harder, service is up, costs are down."</p>	 <p>"We anticipate customer needs, so they buy more and stay loyal."</p>	<p>"By providing all fulfillment options, we make shoppers happy, and we can compete."</p>

Optimizing demand by fulfillment experience

Omni Inventory Optimization forecasts both lift and shift, giving retailers full visibility into the impact of these corresponding dynamics: Forecasting demand lift alone would result in an inventory surplus at the point of demand origination. Understanding the dynamics of demand shift from the point of demand origination to the fulfillment location keeps inventory levels optimized.



Understanding demand in an omni environment

OIO realigns demand with current inventory strategy to avoid over-inflating store forecasts. For example, if a shipment is made from the store because the DC is out of stock, the demand location (the DC) and the fulfillment location (store) must be appropriately credited to keep inventory balance in check.



DOESN'T MULTI-ECHELON SOLVE FOR THIS?

Multi-echelon has been the gold standard approach to retail inventory optimization for the past 15 years. Taking the job of balancing inventory supply and demand from a bottom-up, individual store-point-of-view to a bi-directional, network level, the multi-echelon methodology has been instrumental in optimizing forecasting and replenishment across retail organizations.

Until now, multi-echelon solutions have done a good job optimizing inventory across the supply chain, taking a holistic view of inventory needs in all locations. They make sure the right levels of inventory are ordered for the national DC, regional DCs, stores—and for the consumers these entities serve. What they weren't designed to do, however, is deal with the level of granularity required to manage new fulfillment experiences. For example:

- How are in-store service levels affected when buy-online-pickup-in-store purchases increase 30%?
- What happens to in-store inventory levels when 40% of digital units are shipped from stores in order to provide one-day delivery?
- What's the impact on margin for each fulfillment option a retailer offers?

These are a few of the questions multi-echelon can't answer—and the reason why the time is right for Omni Inventory Optimization. Workarounds, lack of measures and inefficient processes put retailers in peril of losing to competitors who've already recognized that multi-echelon alone won't cut it in today's era of connected commerce.

Without the right technology and data insights to manage inventory for every SKU at the demand origination level and the store level, retailers risk having too little inventory in stores to support foot traffic, and too much in the regional warehouse—an imbalance that damages the shoppers' experience in the store, and comes at high cost to the bottom line.

CONSIDERATION FOR UNIQUE FULFILLMENT EXPERIENCES IS KEY

		Multi-echelon	OIO
Demand channels	Online Store	✓	✓
Supply channels	DCs Vendors 3PL Store	✓	✓
Traditional fulfillment experiences	Buy-online Buy-in-store	✓	✓
Omni fulfillment experiences	Buy-online-pickup-in-store Reserve-online-buy-in-store Buy-online-return-in-store Buy-in-store-return-online Buy-online-pickup-curb-side Buy-online-deliver-same-day/next-day Buy-in-store-deliver-same-day/next-day		✓

"Retailers are constantly facing a balancing act within their supply chain. The days of the store-only channel are gone, so retailers need a clear vision throughout their supply chain to cope with the multiple methods and combinations of ways consumers shop—all while building customer loyalty."

TOM ENRIGHT
VICE PRESIDENT, GARTNER

Question most retailers can answer now:

How many pairs of size 10 will sell in the Chicago store in next 4 weeks?

Question most retailers can't answer without an omni-inventory solution:

How will customers use the available shopping options to make these purchases?

GARTNER

HOW OMNI INVENTORY OPTIMIZATION WORKS

Scenario: You're piloting next-day delivery and plan to use your stores to fulfill this promise, using Omni Inventory Optimization.

STEP 1:

Prepare the network for a new fulfillment experience

- Model impact of experience on demand
- Analyze expected impact on network inventory
- Develop baseline expectations

"Based on industry best practices, here's the impact we anticipate."



STEP 2:

Learn from experience once the program is operational

- The system starts to learn as data is generated
- It watches the network
- Analyzes expected impact on inventory

"OIO analysis has suggested some forecast adjustments."



STEP 3:

Use learnings to continue and expand the pilot

- Solution continually learns and automatically adjusts
- Fulfillment programs are automatically refined
- Analytics provides insights needed to determine impact system-wide

"The pilot was a success—let's roll it out to more stores."



Omni Inventory Optimization enables retailers to introduce new shopping experiences and test success. OIO capabilities give retailers full visibility into the business impact of offering an array of consumer fulfillment options. Measuring demand and forecasting appropriate inventory levels in a connected commerce world keeps customers happy, costs down and the business competitive.

THE NEW STATUS QUO

Improve service levels, increase sales and reduce inventory. These goals have been the cornerstones of advanced inventory optimization for decades. The era of digital commerce and omnichannel fulfillment hasn't diminished their importance—but changed the way the game is played. New complexities and granular considerations mean prevailing inventory management approaches no longer cut it. Meeting the needs of consumers who want new ways to engage with your brand and additional options for interaction requires more.

Omni Inventory Optimization helps retailers:

- Understand demand by fulfillment experience to better align inventory and fulfillment needs.
- Reduce potential overstocks across the enterprise network resulting from optimizing sales.
- Reduce inventory cannibalization across fulfillment experiences.

OIO gives retailers the capabilities they need to address today's challenges, maximizing sales and customer service while achieving greater return on inventory assets. OIO's machine-based learning self-tunes inventory strategies to drive cost efficiency across the network while enabling the fulfillment options consumers demand.





AT THE FOREFRONT

Manhattan Associates is the first to enable comprehensive control over inventory investments across omnichannel fulfillment experiences. The leader in addressing evolving challenges related to inventory, supply chain and omnichannel commerce, Manhattan has introduced the industry's first omnichannel inventory optimization solution.

By constantly monitoring and automatically adjusting inventory strategies as omnichannel strategies mature, retailers can now accurately position inventory across the network to maximize sales opportunities and satisfy customers, while minimizing costs.

Leveraging its 25-year heritage, Manhattan's pioneering of these powerful, easy-to-use tools untangle the complexity of interconnected omnichannel programs in ways the multi-echelon approach no longer can. Omni Inventory Optimization solution helps retailers map out an effective strategy to control inventory cost while ensuring each fulfillment experience provides memorable and satisfying customer engagement.

A hand holding several colorful shopping bags (orange, yellow, black) against a bokeh background of warm lights. The text is overlaid on the left side of the image.

OMNI INVENTORY OPTIMIZATION IN REVIEW

Omni experiences begin with a holistic view of inventory, but retailers can't underestimate the new complexity of inventory availability.

New customer needs mandate new approaches to demand and supply planning: Omni Inventory Optimization aligns inventory and fulfillment strategies.

The more complex your shopper experiences, the greater the need to move beyond multi-echelon.

Success requires awareness and alignment between fulfillment and inventory planning in order to truly optimize your inventory.

For more information on Omni Inventory Optimization,
contact us today.

MANHATTAN ASSOCIATES, INC.
2300 Windy Ridge Parkway
10th Floor
Atlanta, GA 30339 USA
General Inquiries: +1 (770) 955-7070
Sales: +1 (877) 596-9208
Email: information@manh.com