MANHATTAN ACTIVE®
ALLOCATION

Inventory optimization for fashion retail

Inventory is often consumed in ways that planners and allocators could never have imagined a decade ago.

Historically, retail allocation solutions have taken a siloed view of inventory needs, often relying on out-of-date sales plans to determine where inventory will be needed once the short selling season begins. This perspective does not allow retailers to fully articulate not only the needs that encompass every shopping and fulfillment experience a consumer could choose but also potential demands on the store's inventory. As a result, allocators often make inventory disposition decisions that are not fully aligned with how the retail brand engages customers, which can negatively impact margins and profits.

To provide consumers a consistent, unified experience regardless of how or where they shop, retailers have turned to sophisticated solutions like Manhattan Active® Order Management for order promising and fulfillment accuracy. However, for most retailers, by the time an item has been purchased, inventory allocation placement decisions have already been made. If inventory disposition decisions are not continuously unified with omnichannel-fulfillment strategies, profits will be jeopardized before the selling season even begins.

Manhattan Active Allocation was developed for the sole purpose of bringing a fresh, innovative approach to the allocation of short-lifecycle inventory. For industries like fashion apparel and footwear, where brand loyalty grows through impactful consumer experiences, better alignment of inventory allocation with omnichannel fulfillment is a critical driver of predictable and profitable sales.

Manhattan Active Allocation is designed to enable inventory allocation across stores and distribution centers with full awareness of, and alignment with, how retailers expect their inventory to be consumed. This means stores that offer services such as buy online, pickup in-store (BOPIS), contactless curbside pickup and other modern fulfillment experiences, will be better positioned to accommodate consumer preferences and business disruption. This also means fewer situations where orders must be fulfilled in less than ideal or less cost-effective locations.

Manhattan Active Allocation constantly learns from order management, and inventory is better positioned across the network before the selling season even begins. Additionally, for Manhattan Active Order Management customers, no integration is required for allocators to benefit from the latest omnichannel-fulfillment strategies.

› **Engineered to increase the agility and responsiveness of the allocator.** Instead of relying on out-of-date or manual reports, uses embedded analytics and data visualizations to augment and even automate decision-making. Ensures that highly effective allocation plans can be reused where appropriate.

› **Cloud-native solution built entirely from microservices.** Consequently, it is always up to date with the latest innovations, provides extensibility at the data, services and user-interface levels, and offers automatic scaling to meet any demand.

With Manhattan Active Allocation, you can:

› Migrate away from stale, manual methods for pushing short-lifecycle inventory across the network

› Ensure allocation plans are fully aligned with omnichannel-fulfillment strategies

› Plan distinct allocation strategies for all phases of a selling season

› Automate routine allocation tasks

› Reduce reliance on cumbersome, external reports to manage the business

› Leverage deep, insightful analytics to improve and accelerate allocation decision-making

› Intelligently select the optimal prepack for a given store

› Reduce margin-eroding, end-of-season markdowns
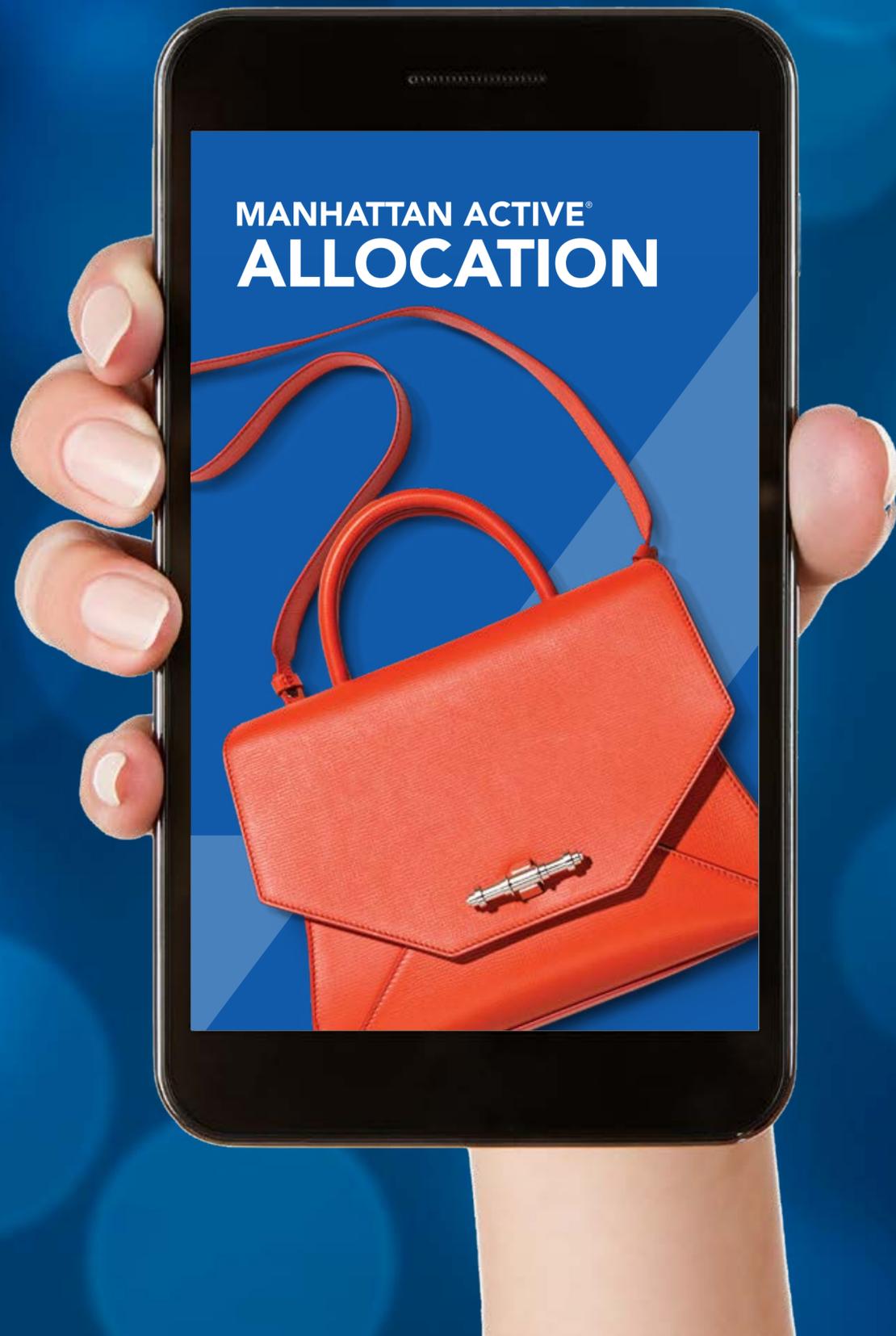
Features + Functions

› Embedded analytics and interactive, personalized dashboards ensure allocation users can respond dynamically to business conditions

› Intuitively configurable allocations help define, preserve, learn and reuse the highest-performing fulfillment strategies year over year

› Configurable allocation methods enable logic tuning to best fit any business model

› Ability to allocate based on any historic metrics, plan attributes or forecast demand

› Simulated inventory performance based on a selected allocation strategy provides insight and guidance regarding probable outcomes, before committing to the strategy

› Real-time inventory and sales insights ensure decisions are always relevant, current and responsive

› Real-time inventory sales performance monitoring by channel and fulfillment experience

› Quick and easy adjustments to allocation strategies as consumers engage your brand

› Batch-free, lights-out allocation

› Rules-based automatic submission of allocations for manager approval

› Rules-based automatic approval of allocations

Omni-Inventory Optimization

› Real-time integration, via web services to Manhattan Active Order Management, to align allocation strategies with store-fulfillment strategies

› Full visibility into omnichannel-fulfillment strategies, by store and product assortment

› Optimized inventory-distribution strategy, fully incorporating all store-based fulfillment of digital demand

› Flexibility for complete control of allocation optimization for each unique fulfillment experience, including stores

› Intuitive segmentation of the impact of each store-fulfillment experience on the inventory allocation

› Inventory sales performance automatically captured by channel and fulfillment type

Demand Forecasting

› Model distinctive demand patterns of short-lifecycle merchandise

› Leverage features and demand patterns of similar items when no demand history is available

› Leverage aggregate views of demand to "fill in the gaps" for items with little actual demand or history

› Directly input to the allocation calculations

› Engage with the demand forecast, using highly graphical and embedded analytics to track against plan and actual sales

Size Profile Optimization

› Generate size profiles at the style/color level

› Leverage features and demand patterns of similar items when no demand history is available

› Apply machine learning to cluster stores having similar size profiles

› Apply machine learning to auto-assign new stores to store clusterss

Applied intelligence for short-lifecycle inventory

**LEVERAGING ADVANCED SCIENCE
TO MODERNIZE INVENTORY ALLOCATION DECISIONS**

A key part of modernizing the way short-lifecycle inventory is positioned across the retail network is rethinking the entire planning process from the view of today's omnichannel retailer. We've reimagined the workflow, data inputs, analytics and decision-making, as well as the alignment needed to ensure that our customers' consumer-engagement strategies are completely in sync with their inventory positioning.

Next we apply new intelligence that makes the allocation process not only easier but also more accurate, responsive and able to self-learn. By strategically applying artificial intelligence and machine learning to various aspects of allocation, our customers achieve higher full-priced sales and fewer fulfillment redirects.

Examples of applied intelligence

Size Profile Optimization
Learns which sizes sell more aggressively than others for the various items in assortment. Includes a size-optimization capability that ensures allocation decisions are always aligned with consumer demand.

Store Clustering
Applies an advanced machine-learning-based clustering algorithm to intelligently group like-selling demand patterns down to the store/style level. Ensures size profiles are available to all stores, including new locations.

New Store Assignment to Store Clusters
Leverages a form of supervised machine learning that considers over a dozen store attributes to determine which store clusters best fit the a store. Enables the allocator to immediately make impactful decisions while the new store builds its own demand history.

Prepack Selection
Leverages the optimized size profiles to automatically determine which prepack best fits the expected demand patterns when multiple prepacks are available. Ensures the prepack with the greatest potential for consumption is selected when allocating inventory.

Demand Forecasting
Includes the ability to forecast demand for both new and reoccurring styles. Carefully measures the expected demand at each stage of the product's lifecycle.