

MANHATTAN ACTIVE™
SUPPLY CHAIN
SUITE OVERVIEW



MANHATTAN ACTIVE™

SUPPLY CHAIN SUITE

Agile and Adaptive for a Fast-Moving World



Manhattan Active™ Supply Chain suite of solutions allows enterprises to optimize large and complex operations, adapt to market and demand changes, and iterate and innovate at speed.

ROBOTICS, THE INTERNET

of things, autonomous vehicles, same-day delivery, millennials in the workforce and a host of other trends have a direct effect on supply chains. While it's a time of exciting innovation, it's also a time of uncertainty about how to stay nimble while keeping costs contained. The Manhattan Active Supply Chain suite addresses this dichotomy.

The Manhattan Active Supply Chain suite of solutions allows enterprises to optimize large and complex operations, adapt to market and demand changes, and iterate and innovate at speed. By using our active solutions, an enterprise has technology that is always current, seamlessly interconnected, runs anywhere and is easily adaptable.

Flexible Solutions that Stay Current

Staying Active requires a flexible approach where enterprises can take advantage of the newest innovations, quickly. To achieve a faster pace and support constant innovation, Manhattan Active Supply Chain suite solutions are designed with adaptation in mind.

Solutions are available across a variety of deployment options (public cloud, private cloud, managed/hosted, multi-tenant or on premise) to serve a broad range of needs, capabilities and budgets. With options to receive annual upgrades, you can implement the next version of an application each year so you can take advantage of new features and functions.

Why Manhattan Active?

We help you compete in today's dynamic, constantly-evolving marketplace by helping you stay cohesively adaptive. We clear barriers in the way so you can innovate to meet ever-changing customer expectations while maintaining integration and control to perform profitably.

Seamlessly Interconnected for All-Around Optimization

The Manhattan Active Supply Chain suite allows you to innovate and optimize complex distribution and transportation operations with actionable visibility across the entire supply chain. Purpose-built features and functionality are tailored for a range of industries, including food distribution and grocery, retail, life sciences, apparel and footwear, high-tech electronics, third-party logistics and others. The suite consists of:

MANHATTAN ACTIVE™ Distribution

Manhattan Active Distribution allows you to boost warehouse productivity, equipment efficiency and employee engagement. It also provides responsiveness to adapt to expected or unexpected demand increases and decreases. With distribution center technology that's as easy to use and as flexible as an app on a smartphone, you can get employees up to speed faster and empower managers and supervisors be more effective.

MANHATTAN ACTIVE™ Transportation

The Manhattan Active Transportation suite provides a single, comprehensive logistics solution set designed to support the entirety of an organization's shipping needs, regardless of mode, geography or channel. The solution allows transportation modeling, enables fleet optimization and dispatch, provides deep parcel and courier support, gives visibility and merges transportation and distribution operations in a single logistics system.

In addition, **Supply Chain Convergence** solutions help bridge functional gaps between warehousing, transportation and the extended enterprise which allows for a more responsive operation and opens the door to increased profitability. **Supply Chain Visibility** solutions offer 360-degree visibility to help you make the right operational and cost decisions.



Supply Chains are the Backbone of Commerce

Supply chains take on the heavy lifting to ensure the enterprise can respond to change.

The Consumerization of B2B and Wholesale

Digital advancements in our everyday lives are upping expectations in business-to-business, meaning finished goods manufacturers and wholesale distributors are under pressure to offer more convenience, better service and competitive prices. B2B e-commerce will be a \$1.13 trillion market by 2020 in the U.S. alone¹, and brand manufacturers are seeing 20 to 30 percent annual growth in their direct-to-consumer channels. This has created a renewed interest in modernizing supply chain management (SCM) technologies. Keeping a competitive edge takes agility, an enterprise approach and customer centricity.

The Need to Quickly Adapt to Consumer Fulfillment Demands

Rapid technology advancement has given rise to new types of competition. Smaller, disruptive companies are entering the market and established companies are expanding into adjacent markets. For instance, increasing the speed of fulfillment is an area drawing unprecedented attention from Silicon Valley. According to a report by Accenture, "venture capital funding of supply chain and logistics startups performing delivery services has increased from \$266 million in 2013 to \$2.78 billion in 2016." It takes an interconnected supply chain that's adaptable to change to stay out ahead.

Manhattan Active™ Supply Chain solutions enable you to keep a customer-centric, competitive edge by making you agile so you can stay adaptive.

Innovation to Keep Up with E-Commerce Growth

While nearly nine percent of sales are through e-commerce today,² McKinsey predicts that number will rise to 15 percent by 2025, when one out of every six sales will be via online and mobile channels.³ What this means is, while direct-to-consumer sales volume is rising, the store will hold the top spot for where most customers make purchases for the foreseeable future. The Manhattan Active Supply Chain suite infuses flexibility in distribution so distribution centers can address order profiles ranging from a pallet to a single item, while keeping equipment and employees more productive.

Rising Returns Volume

Product returns continue to grow as a significant share of warehouse work, particularly for online purchases. It's estimated that 30 percent of all online purchase are returned, compared to 8.9 percent of brick-and-mortar purchases.⁴ While processing returns can be time consuming, a top-line opportunity exists in getting merchandise in sellable condition as quickly as possible. Rapid inventory disposition, faster inventory recovery and more rapid customer credits are essential capabilities for active enterprises, and Manhattan offers a purpose-built solution that's seamlessly interconnected with inventory and omni-channel solutions.

A Changing, Growing Workforce

The number of employees needed on a per-warehouse basis is rising, outpacing overall job growth.⁵ This is because fulfillment centers for smaller, direct-to-consumer orders require double to triple the number of workers compared to a typical warehouse.⁶ Getting new and seasonal employees up to speed faster, keeping the workforce engaged and making supervisors more effective are essential for driving productivity. Many of our Manhattan Active Supply Chain tools borrow from usability advances in consumer mobile apps to reduce training time and improve productivity.

Suite Components

Our agile, adaptable Manhattan Active Supply Chain Solutions have been architected to break down silos and allow the supply chain to serve top-line growth without sacrificing bottom-line performance.

MANHATTAN ACTIVE™ Distribution

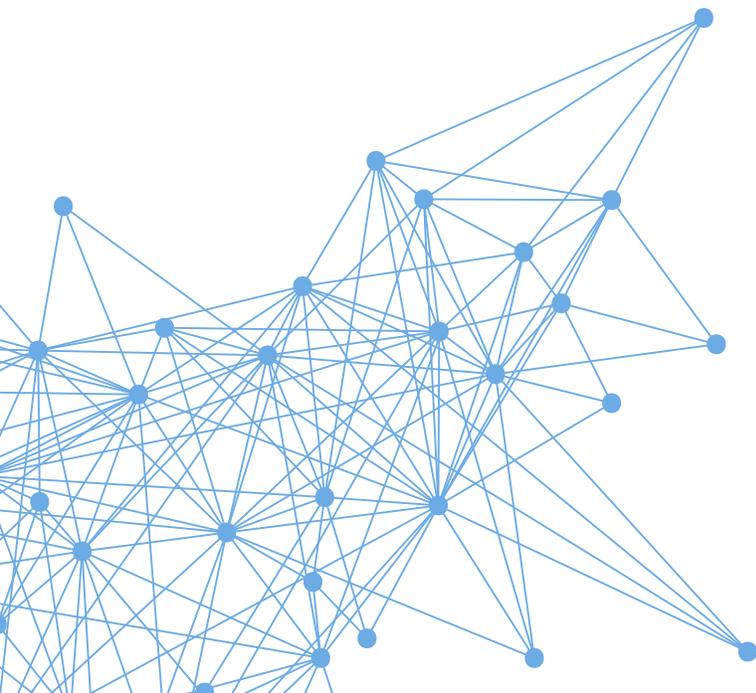
- **Warehouse Management**
Optimize omni-channel fulfillment with flawless execution across inventory, labor and space, while complying with regulations and standards.
- **Labor Management**
Increase employee engagement, forecast workforce requirements, track productivity and calculate incentive pay.
- **DM Mobile**
Managers and associates gain real-time access to warehouse, labor and slotting information via intuitive mobile apps.
- **Slotting Optimization**
Strategically position item locations based on seasonality, sales trends and product variations to increase workforce efficiency, shorten order fulfillment cycles and maximize throughput.
- **Billing Management**
Streamline cost calculations and invoicing across all facilities with a flexible, activity-based solution for 3PLs.

MANHATTAN ACTIVE™ Transportation

- **Transportation Procurement**
Secure better capacity and rates with comprehensive contract sourcing.
- **Transportation Planning & Execution**
Optimize the plan for all modes and routes and work with fleet operators to execute both domestically and internationally with real-time visibility.
- **Transportation Modeling**
Continuously simulate scenarios, evaluate network changes, test routing options and measure the impact on service and cost.
- **Fleet Management**
Manage dedicated and private fleet resources by creating routes that minimize miles while optimizing hours of service, availability, compliance and service needs.
- **Freight Audit, Payment & Claims**
Automate reconciliation and payment and manage by exception to streamline freight settlement.
- **Extended Enterprise Management**
Enable collaboration and connectivity with all upstream and downstream trading partners via order management, visibility and event management.
- **Carrier Management**
Optimize and automate dispatch with comprehensive driver-to-load assignment, en-route swapping, profitability analysis and fuel optimization, along with bid analysis and response.

Endnotes:

- 1 Forrester Research
- 2 U.S. Dept. of Commerce
- 3 McKinsey
- 4 Invesp, E-Commerce Product Return Rate
- 5 The Houston Chronicle, April 17, 2017
- 6 CBRE Group via the Wall Street Journal, April 9, 2017



Supply Chain Convergence

- **Supplier Enablement**
Enable real-time communication between distribution staff and suppliers.
- **Hub Enablement**
Provide visibility into receipts and shipments from hubs and 3PLs.
- **Appointment Scheduling**
Enable carriers and suppliers to 'self-schedule' warehouse delivery and pickups.
- **Yard Management**
Gain granular visibility and ability for task-based control of yard operations.

Visibility

- **Supply Chain Event Management**
Automate monitoring of supply chain events with real-time notifications.
- **Supply Chain Visibility**
Enable roles-based access to inventory, orders and shipments across the network.
- **Supply Chain Intelligence**
Supply business intelligence for end-to-end supply chain operations.
- **Total Cost to Serve**
Analyze product costs from point of purchase to the point of sale.

Manhattan **ACTIVE™** Supply Chain Suite for Active Enterprises

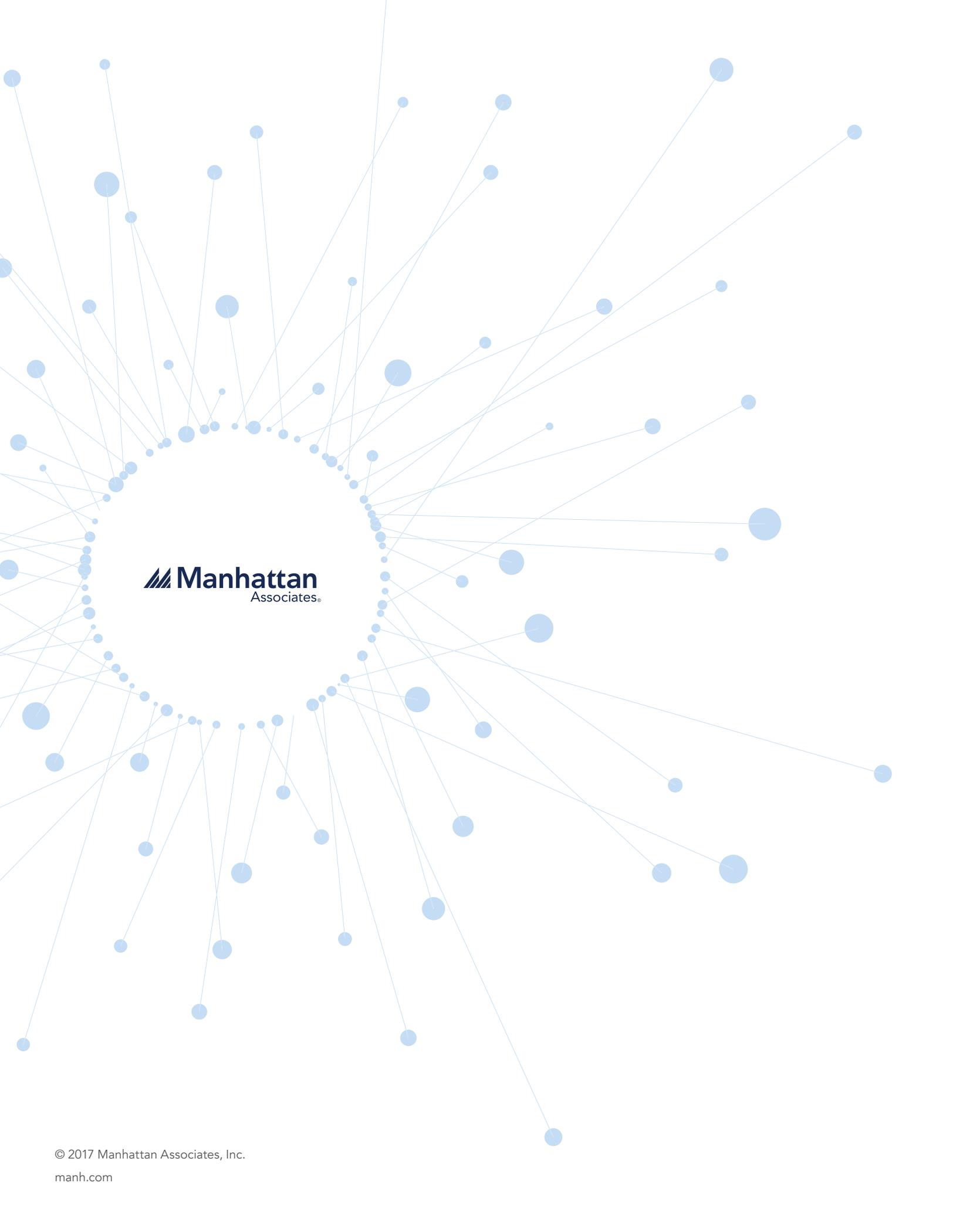
As a key component of our Manhattan Active Solutions portfolio, our Manhattan Active Supply Chain suite allows you to operate faster, move with agility and respond to market and industry shifts.

Manhattan Active Solutions allow enterprises to optimize large and complex operations, adapt to market and demand changes, and iterate and innovate at speed. By using our solutions, an enterprise has technology that is always current, seamlessly interconnected and runs anywhere.

With Manhattan, everyone across the organization can leverage the same actionable information, giving organizations a single version of the truth: whether it be supply chain intelligence, inventory positions or customer orders.

That way, you can stay out ahead and capitalize on every opportunity.

Ready to get Active? Manhattan Active™
Learn more at manh.com



 **Manhattan**
Associates®