Modernizing a Supply Chain

BEST BUY ANSWERS THE CALL FOR NEXT DAY DELIVERY WITH URBAN DISTRIBUTION CENTERS

To compete in today's fast-paced ecommerce environment, Best Buy, a worldwide omnichannel electronics retailer, needed to revolutionize its supply chain network. Working with Bastian Solutions, Best Buy re-designed its retail distribution centers and designed metro ecommerce centers, creating logistical efficiencies that seemed impossible in the past.

BEST BUY



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Before this program, everyone wanted to know what we were going to do to compete in the ecommerce space. People don't ask that anymore, and we can focus on other things.

-Wes Whalberg, Senior Director, Innovation and Field Operations, Best Buy

> Best Buy RDC in Dinuba, California

Supply chain network redesign drives superior customer service

A few years ago, Best Buy was faced with historic corporate challenges as the company met growing competition from ecommerce giants. In response to a changing consumer market and an ever-evolving retail landscape, Best Buy overhauled its omnichannel operations, including changes to its supply chain network.

Bastian

After an extensive search into the right software and automation provider to best serve each facility, Best Buy chose Bastian Solutions to assist with the revamp. The result is better inventory management, increased order accuracy, improved lead times for superior customer service and an overall reduction in supply chain costs. Best Buy is currently re-designing each of its regional distribution centers (RDCs) and creating metropolitan ecommerce centers (MECs) to better serve customer demands in densely populated areas. These RDCs allowed for large inbound shimpments to be broken into smaller induvidual items and picked on an as-needed basis for both store replenishment or direct to customer through a MEC. The project started with integrating automated storage and retrieval technology, conveyor, and warehouse execution software to best serve each facility. With these technologies, Best Buy's logisitics network offers free next-day delivery to more than 50 million people.

Interested in learning more about Bastian Solutions or Best Buy's successes? Check out our case study at bastiansolutions.com/bby.







Material Handling System Walk-Through:

DYNAMIC SUPPLY CHAIN SOFTWARE WITH GOODS-TO-PERSON AUTOMATION

An AutoStore with 150,000 bins and 195 robots is at the core of Best Buy's RDCs. This allows large, inbound shipments to be broken down into individual items, stored within AutoStore and then strategically picked and shipped to Best Buy stores for efficient re-stocking. Items leaving the AutoStore that aren't destined for store shelves or home delivery are fed to Best Buy's MECs. These MECs allow Best Buy to better serve its large number of customers in major cities such as L.A., Chicago and New York City. At about 50,000 square feet, these facilities are one fifteenth the size of Best Buy's MECs. An AutoStore with 30,000 bins and 73 robots gives Best Buy's MECs the ability to reach over 50 million people with free nextday delivery. Beyond the hardware, Best Buy invested in the right software to control its new facilities and add visibility throughout its supply chain. Bastian Solutions' Exacta Warehouse Execution System has given Best Buy a single platform to monitor system operations at RDCs and MECs, not only in California, but across all new facilities in the U.S.

In addition to AutoStore, Best Buy utilizes technology to precisely trim cardboard used to create shipping containers. This reduces cardboard waste by 40%, frees valuable floor space and maximizes the cube utilization of its shipping carriers.



It's very user friendly, very intuitive. What I love about it is, it's web based. So, a team member can come in first day, and if they've ever operated the Internet, it's pretty intuitive to be able to operate the WMS.

Rhett Briggs, General Manager of Compton MEC, Best Buy





With the MECs, we've brought our products closer to our customers, it allows them to have later cut offs and quicker next day deliveries.

-Duane Scarboro, VP of Supply Chain Operations and Automation, Best Buy

> Best Buy RDC in Dinuba, California

System Snapshot

OBJECTIVES

- Modernizing the supply chain network
- · Analyzing the right data with consulting experts
- · Selecting & implementing the best technology
- Allow for more next-day delivery
- Increased order accuracy
- · Overall reduction in costs

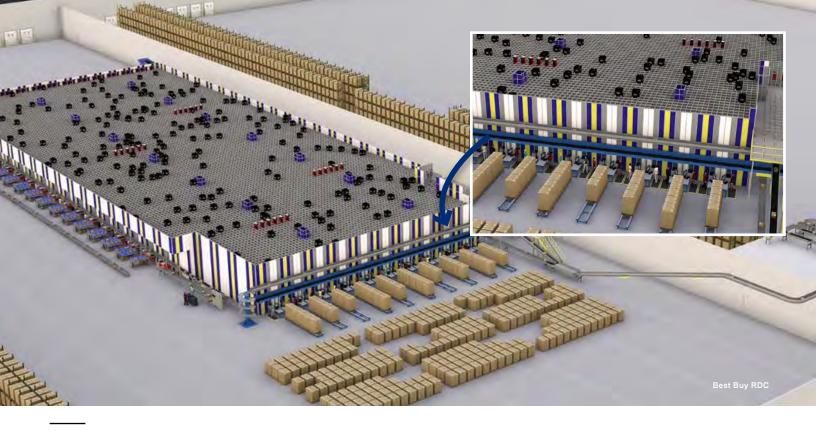
RESULTS

- Next-day shipping to more than 50 million people
- · Increased supply chain effeciencies
- Segregated tote delivery allows for easy store replenishment while saving time.

KEY SERVICES & TECHNOLOGIES

- In-depth engineering consulting study to redesign logistics network
- 8 locations
 - 5 Regional Distribution Centers (RDC)
 - 3 Metro Ecommerce Centers (MEC)
- · AutoStore goods-to-person order picking system
 - RDC 195 Robots | 150,000 bin locations
 - MEC 73 Robots | 30,000 bin locations
- AutoStore pick stations with touch screen monitors
- · Exacta warehouse execution system
- Manhattan warehouse management system
- · Put-to-light devices at picking stations
- 18,800 feet of Bastian Solutions Conveyor
- Automated tote labeling and banding





Regional Distribution Center Snapshot



Metropolitan E-commerce Center Snapshot



Does the Future of Supply Chain Mean Micro-Fulfillment?

Imagine a retail space within an urban environment that contains an in-store AutoStore. Such a system would not only serve as a unique showpiece, but would also enable features and offerings that are focused on enhancing end customer experience, such as:

- **Flexibility:** Customers can pre-order what they want and have it ready for them when they want it, either in-store, curbside, or delivered to their home
- **Same-Day-Delivery:** Speedy order fulfillment and last-mile delivery become simpler and more reliable with strategically-located order fulfillment systems in urban environments
- **24/7 Service:** Retail spaces enhanced with AutoStore can enable 24/7 order pickup from a designated, self-service pickup area
- **One-Stop-Shop:** In a shopping mall setting, one AutoStore grid can be used across multiple retailers to give shoppers access to a wider variety of products with a single transaction.

In addition to these customer-facing benefits, retailers would also benefit from the typical strengths of the AutoStore system, including:

- **Modularity:** Retailers can take advantage of AutoStore's 'building block' structure and custom-fit the system to their exact space requirements
- **Storage Density:** Use less floorspace for storage and allow the retail space to focus on a fully-optimized customer experience
- **Reliability:** AutoStore offers one of the most reliable automated storage and retrieval systems on the market, with no single point of failure and first-rate uptimes
- **Go Green:** With AutoStore, distributors and retailers are investing in a high-efficiency, low-energy solution; ten robots use the same amount of energy as a vacuum cleaner

In recent years, selling points such as same-day delivery, in-store pickup, and 24/7 availability have been differentiators for retailers to excel in their markets. However, these offerings are becoming the standard expectation across all industries, especially within densely-populated areas and city centers. AutoStore has succeeded as one of the most flexible and modular, yet highly-automated, technologies to support order fulfillment. As such, it is well-suited to be the cornerstone of micro-fulfillment operations for companies looking to support market demands with an enhanced customer experience.







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