

# Streamlining Distribution Processes with Automated Pick Carts



CASE STUDY



# Innovating Supply Chains

## Automated Pick Cart Top Benefits

- Workforce Empowerment
- Reduces Employee On-board Training Time
- Streamlines Picking Process
- Agile, Quick Fulfillment
- Quality Improvement
- Multi-Order Picking
- User-Friendly, Intuitive Design

## How Balancing Labor & Technology Helps Leading Giftware Provider Maintain Service During Peaks

Overcoming today's increasing complexity of customer demand and [e-commerce challenges](#) during peak season has become a difficult task throughout the retail industry. As more retailers are adopting an omnichannel approach, the ability to support the demand and customization of orders will be key to the success of their supply chains. This can be especially challenging with tightening labor markets and seasonal onboarding of new employees. To overcome these industry challenges, NFI and its customer advanced their long-time partnership with a best-in-class collaborative mobile robot solution developed by 6 River Systems. This robot enhances productivity to meet evolving consumer demands.



## Advancing Operations to Accommodate Growth

NFI's customer specializes in the sales and distribution of giftware all over the world. Since 2004, NFI has managed a fulfillment center for its customer in Lebanon, IN. As the company continued to add more brands and licenses to their product lines, NFI had to advance the order fulfillment process. As demand grew for the customer's products, so did the challenge to pick a customizable order across hundreds of SKUs and meet customers' delivery expectations.

To support the customer's growth, NFI reconsidered the tasks that are involved in picking and packing products. Along with being a labor-intensive activity, onboarding for this process required several weeks of on-the-job training to ensure accuracy. During the customer's peak season, this training requirement became more difficult to complete as a larger labor force was essential to support the manufacturer's high demand.

NFI had an opportunity to offer a flexible and scalable solution that increases picking efficiency, improves order accuracy, and lowers labor costs while ensuring safety remained a top priority.



## Elevating Performance and the Partnership

NFI worked closely with its customer to understand their challenges and provide insight on the best solutions. NFI proposed to implement an Automated Pick Cart solution which identifies what product needed to be picked and where in the warehouse it should be picked from. The robot uses machine learning and artificial intelligence to help warehouse associates work more efficiently by grouping similar tasks together. This grouping of tasks enables the employees to navigate through the work zone faster and minimize the amount of time spent traveling throughout the warehouse.

The robot creates a seamless picking process with its directed lights, modernized display, two-step confirmation feature, and hands-free technology. Requiring two steps in the confirmation process increases assurance that the product being picked is the correct product. After the task is completed, the robot travels alone to the packing area as the associate engages a nearby robot to continue picking. NFI and its customer currently operate eight of these collaborative robots that are built with the same technology and sensors as autonomous vehicles.

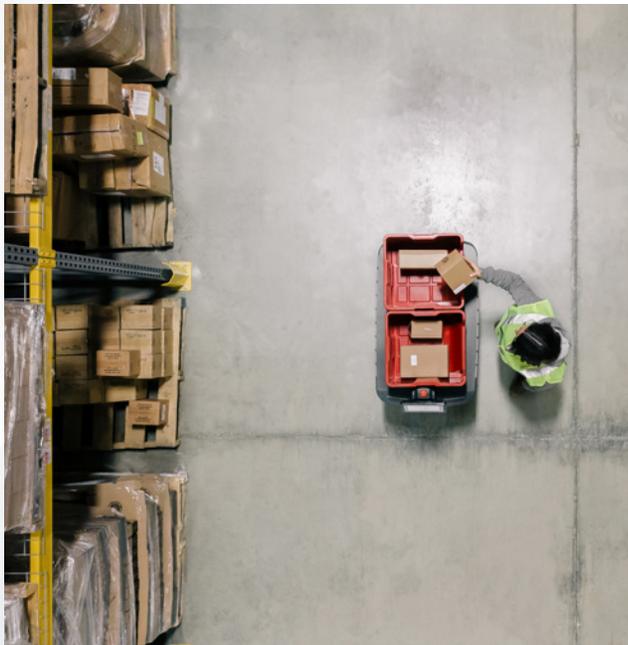
## Delivering Successful and Efficient Results

Undergoing a substantial supply chain by integrating Automated Pick Carts with the workforce, NFI was able to provide an automated solution that allowed its customer to experience improved operations and a streamlined picking process. NFI delivers an increased picking accuracy of 99.6%. Since introducing the collaborative robots, the number of units picked in an hour also increased to 85, doubling productivity in the warehouse operations.

The employee experience was also redefined, empowering the workforce to do their jobs more efficiently. Due to its user-friendly capabilities, the robot reduced employee onboarding time from 72 hours to six hours, helping to navigate the tightening labor market and better accommodate labor needs during surges.



# Automated Pick Cart Results



**99.6%** Picking accuracy

**100%** Increase in hourly picking productivity

**92%** Decrease in onboarding time, from 72 hours to 6 hours

# Automated Distribution Solutions at NFI

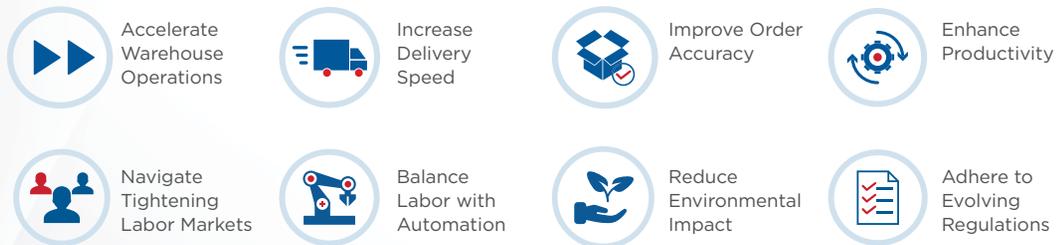
*NFI's state-of-the-art facilities are highly customized with solutions tailored to your business needs.*

## Customized Solutions for a Modern Supply Chain

As an NFI customer, you'll work with a team that understands your operation inside and out. Through our innovation delivery method, we partner and learn with you in real-time to consistently explore, engineer, and implement high-fit continuous improvement programs that ensure your supply chain is evolving to stay ahead of consumer trends.

## Grow Your Business

NFI's end-to-end expertise across the supply chain creates the flexibility needed to design and engineer customized solutions, while our applied innovation strategy ensures these solutions are tested and tailored specifically for your operation. From automation to predictive analytics, NFI's innovative solutions have helped customers:



**Collaborate with our team to design practical solutions for real-life applications today →**



## End-to-End Supply Chain Solutions

NFI is a fully integrated North American supply chain solutions provider headquartered in Camden, N.J. Privately held by the Brown family since its inception in 1932, NFI generates more than \$2.6 billion in annual revenue and employs over 14,500 associates. NFI owns facilities globally and operates more than 53 million square feet of warehouse and distribution space. Its dedicated fleet consists of over 4,500 tractors and 12,500 trailers operated by 3,900 company drivers and leveraging partnerships with 500 owner operators. NFI has a significant drayage presence at nearly every major U.S. port, leveraging the services of an additional 1,500 owner operators. The company's business lines include dedicated transportation, distribution, brokerage, transportation management, port drayage, intermodal, global logistics, and real estate. For more information about NFI, [visit www.nfiindustries.com](http://www.nfiindustries.com) or call 1-877-NFI-3777.