

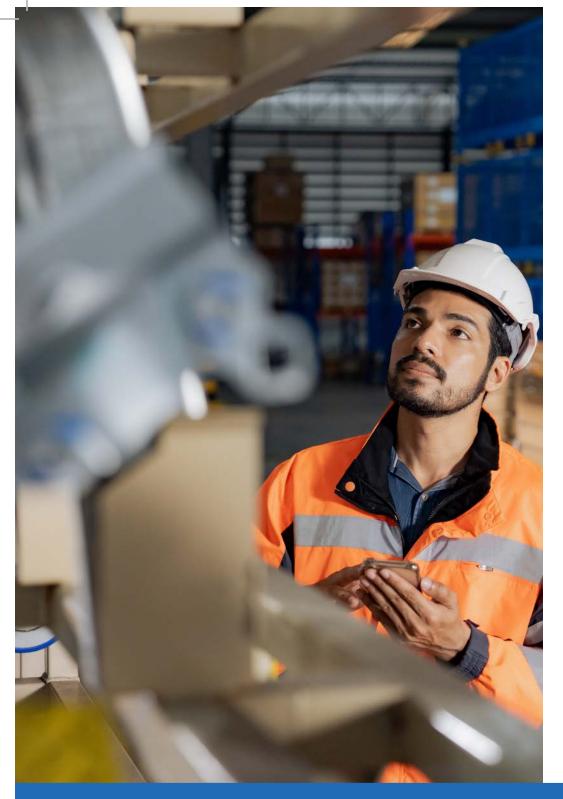


Platform solutions take center stage as organizations shift from using disparate, point software applications to unified platforms to run their increasingly automated warehouse and distribution center operations.

There's increasing demand for warehouse automation in today's fast-paced fulfillment environment, where companies must deliver orders quickly and accurately while minimizing costs. Automation is a crucial component of most fulfillment strategies that promise increased efficiency and reduced reliance on manual labor. The proof is in the numbers: The global warehouse automation market is on track to reach \$91 billion by 2033 — more than four times its current size of \$21 billion — with robotics, artificial intelligence (AI) and machine learning (ML) deployed to streamline various warehouse processes.

While these technologies improve efficiency, accuracy and productivity, they also present unique challenges for companies that lack the necessary connective tissue to tie them all together. This gap is especially prevalent on the software side of the equation, where warehouse management systems (WMS), warehouse execution systems (WES) and warehouse control systems (WCS) are usually siloed, developed and supported by different software vendors and working independently of one another. Add automated storage and retrieval systems (AS/RS), autonomous mobile robots (AMRs) and other advanced technologies to the warehouse floor, and integration becomes more critical and complex.

This playbook illustrates the key challenges that these disparate warehouse systems present. It explores how a comprehensive, integrated warehouse management systems (WMS), warehouse execution systems (WES) and warehouse control systems (WCS) help companies streamline their operations, improve productivity, save money and operate more efficiently in a dynamic supply chain environment.



## Siloed technology won't cut it in dynamic supply chains

Distribution center (DC) and fulfillment center (FC) operators have a lot on their plates. Along with rising e-commerce volumes and a persistent labor shortage, they face higher real estate costs; the need to maximize existing space; rising business costs and tariffs; an ongoing push to do more with less; the growing need for increased automation and the integration of robotics into their operations. They're also managing a much higher volume of smaller orders and constantly adapting to customers' ever-changing demands.

If your organization started adopting new technologies to help offset some or all of these challenges only to learn that many of those tools don't play well with one another, you're not alone. Businesses across all industry sectors face the same dilemma: While the siloed hardware and software do what they say they will do, companies have to "fix" the integration based on the new software version when the older software is no longer supported.

This presents major roadblocks in the interconnected fulfillment world, where the efficient flow of goods depends heavily on effective collaboration, connectivity and integration. In most cases, the smooth flow of goods also requires the following software applications:

- Warehouse management systems that orchestrate receiving, put-away, picking, packing and shipping.
- Warehouse execution systems that manage the flow of goods and resources and help companies optimize fulfillment and manage inventory.
- Warehouse control systems that direct and coordinate the activities of automated material handling equipment, such as conveyors, sorters and robots.
- Enterprise resource planning (ERP) systems that manage an organization's core business processes (e.g., finance, production, and human resources).





Ideally, these and other core business systems — robots included — should share data with one another without the need for manual intervention, spreadsheets and data entry (and re-entry). Few organizations meet this goal in today's modern fulfillment environment, where multiple vendors, application customizations, different systems/user interfaces and separate data sources converge to create a very fragmented and inefficient landscape.

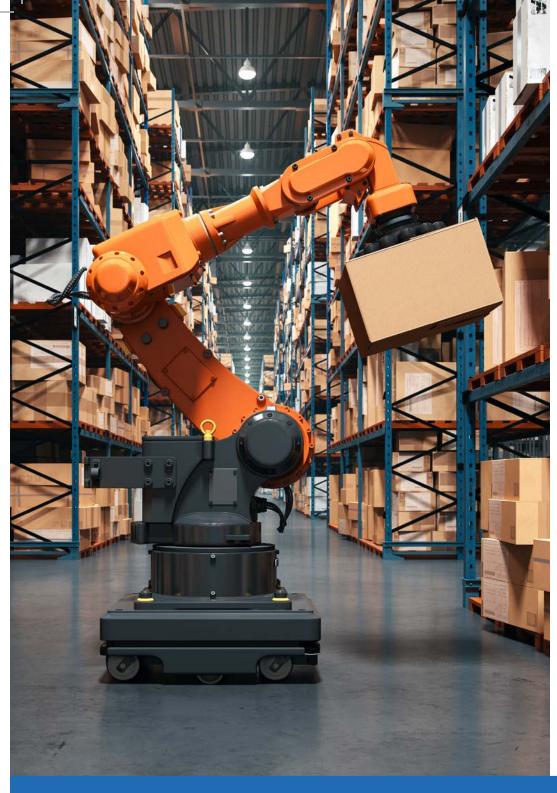
"Everyone is ordering online, where the 'Amazon effect' comes into play; everyone expects same-day and next-day delivery," says Kyle McNerney, VP of software solutions at Hy-Tek Intralogistics. The company's IntraOne solution optimizes all aspects of warehouse operations — from receiving and put-away to picking, packing and shipping — and seamlessly integrates with other warehouse technologies.

Without a centralized way to manage their labor, inventory, orders and shipping activities, organizations must patch their data together to create a holistic view of what's happening in their warehouses and supply chains. This approach creates massive inefficiencies in busy warehouses, where two-day-old data tracked in spreadsheets and shared with decision-makers is basically useless.

Companies need real-time data to work with and the only way to get that is by integrating your software, hardware and automation on a single platform.

#### **KYLE MCNERNEY**

VP of software solutions, Hy-Tek Intralogistics

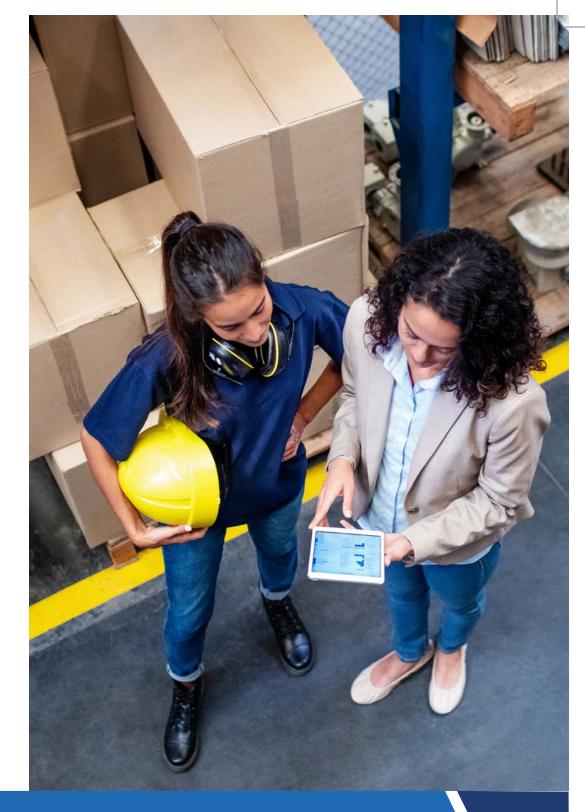


# The need for robust supply chain solutions

Organizations' interoperability challenges rarely begin and end within the warehouse's four walls. In most cases, the problems extend to the broader supply chain, where end-to-end visibility helps organizations quickly identify and address issues before minor hiccups become significant. When a company's WMS, WCS, WES, ERP and other technologies can't collaborate and share data, achieving this proactive state is nearly impossible.

Organizations with fragmented systems also face the following

- Lower operational efficiency levels
- Reduced fulfillment throughput
- Errors due to manual data entry and re-entry
- Lost information and data
- Delayed and disconnected reporting processes
- Time wasted trying to solve problems and put out fires
- Lost inventory and costly stock-out situations
- Missed service level agreements (SLAs)
- Unhappy customers
- Expensive and time-consuming internal IT intervention





The trend toward increased warehouse automation and robotics sets additional roadblocks for companies attempting to knit together old and new technologies into one cohesive stack. To address these problems, more companies are shifting away from point solutions and taking a unified platform approach in their fulfillment operations.

"More automation and robotics are being installed in DCs and warehouses right now, and new robotics vendors are popping up all the time," says Naomi Marti, senior IntraOne channel director at Hy-Tek Intralogistics.

Companies want to reduce their reliance on labor, speed up fulfillment and increase efficiency, but none of that's possible when their systems can't work together.

#### NAOMI MARTI

senior IntraOne channel director at Hy-Tek Intralogistics.

### A central nervous system for all warehouse activity

Organizations across all industry sectors use the integrated platform approach to revolutionize their warehouse operations. By knitting together disparate software systems like ERP, WMS, WES and WCS, platforms help eliminate data silos that can throttle a warehouse operation.

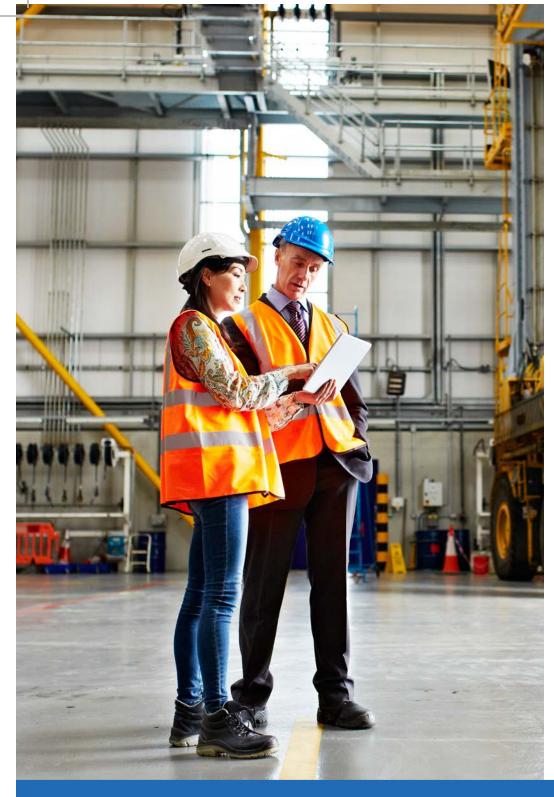
Hy-Tek's <u>IntraOne</u> software platform functions as a central nervous system that seamlessly integrates with various systems, such as ERP, manufacturing execution systems (MES) and e-commerce platforms. It eliminates the need for manual data entry, reduces the risk of errors associated with disparate systems and provides a real-time, holistic view of warehouse operations.

A unified platform helps companies optimize workflows, improve decision-making and gain valuable insights into their operations.

It also helps them:

- Improve operational efficiency
- Increase throughput levels
- Decrease costs
- Improve inventory management
- Leverage automation, robotics and other innovations without having to worry about whether they have the right connective tissue across these systems
- Minimize costly operational downtime
- Free up their internal IT teams to focus on more strategic projects
- Improve the customer experience

Marti says IntraOne allows organizations to use all of their current solutions while also gaining all of the benefits of a platform approach.



### CASE STUDY

# One global distributor's integrated warehouse management journey

As a global distributor of specialty business-to-business (B2B) electronic devices, BlueStar takes its customer service commitments very seriously. The company sells exclusively to value-added resellers (VAR) that support the retail, hospitality, supply chain, healthcare, education and other large industries. It also provides value-added services like custom product configuration, packaging, creative financing, marketing and technical support.

With 49 locations worldwide, BlueStar relies heavily on its WMS to orchestrate its busy fulfillment operations. This long-time Oracle ERP user has been implementing the Hy-Tek Intralogistics' IntraOne software platform in its warehouses. "Our WMS is paramount, and so is the connection between our ERP and that WMS," says Gabriel Sanchez, director of operations. "We always want to be cutting-edge and have all of the bells and whistles."

BlueStar requires good connectivity across its systems to help meet its delivery commitments, which is why it began implementing IntraOne five years ago. "If we have a certain quantity of a high-demand product, and if there's a delay or other issue related to that product," Sanchez says, "our WMS has to be able to communicate that back to our ERP."





Sanchez says the software platform continues to surprise him. For example, the lines of communication between Oracle and IntraOne are continually improving, and the software platform has been able to support increased adoption of warehouse automation in BlueStar's facilities. Sanchez says the company has also replaced its Excel spreadsheets and pivot tables with real-time dashboards that support better decision-making.

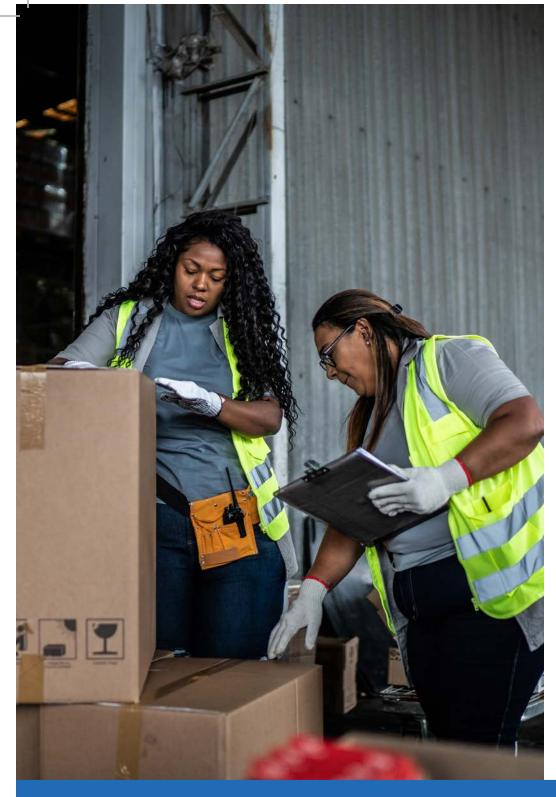
BlueStar manages a relatively high volume of products but operates on lower profit margins, so savings are crucial, especially amid ongoing labor shortages. When the distributor implemented IntraOne, roughly 33% of its workforce was temporary, translating into a lot of time spent training individuals who didn't stick around for long.

BlueStar has whittled that number down to 13%-16%. "That's tremendous for us," says Sanchez. "We're about 7% busier than when we started this project, but we have about 15 fewer full-time employees (FTEs) in the warehouse." The company's cost-per-order has decreased by about 9% year-over-year during that time frame, and it's been training a portion of its existing workforce on the fine points of managing automated equipment and applications.

We're handling more orders at a lower cost, but no one has lost their jobs as a result, which is important to point out. In fact, it's just the opposite. We stopped that revolving door of our reliance on casual labor and now have more full-time/skilled positions in the operation than ever.

**GABRIEL SANCHEZ** 

Director of Operations, BlueStar



# From chaos to cohesion: The future of fulfillment is here

As growing organizations like BlueStar have discovered, fragmented technology approaches can throttle productivity and run up costs. By embracing a unified platform approach, companies can unlock their warehouse operation's full potential, optimize workflows, improve resource utilization and respond quickly to changing market demands.

Ultimately, connected and integrated fulfillment ecosystems aren't just technological advancements but strategic imperatives for any company that wants to thrive in today's dynamic and competitive business environment.

<u>Schedule a demo</u> to learn more about the IntraOne Software Platform.

