THE RISE OF
CROSS-DOCKING
IN THE GLOBAL SUPPLY CHAIN

TABLE OF CONTENTS

THE RISE OF CROSS-DOCKING

Whether it's car parts on their way to the dealer, perishable foodstuffs being delivered to a restaurant, or supplies en route to a pharmacy, getting products to consumers on time and in great condition is the single most important task of suppliers and the customers they serve.

While pursuit of the "perfect order" will always be a daily challenge, today's global marketplace means that companies are under increasing pressure to quickly fulfill product orders across complex networks – and to do so without making costly errors that might drive business away. This has led to a rise in the use of cross-docking, and the need for an automated system that ensures the supply chain is not sacrificing accuracy for speed.

Cross-docking is commonly defined as the process of unloading products or materials directly from one transport vehicle (truck, train, etc.) to another without the intermediary step of being placed in a warehouse or storage facility between transit stops. First seen in practice in the 1930s, cross-docking has become increasingly common across industry supply chains as a way to cut costs and increase speed of delivery.

To successfully implement and manage cross-docking, it is important to recognize some of the key challenges and associated solutions that go hand in hand with it.

FASTER DELIVERY EXPECTATIONS ELIMINATE THE "LUXURY" OF WAREHOUSING AND INCREASE EMPHASIS ON THE "PERFECT ORDER"

Suppliers now are expected to deliver the perfect order in less time than ever before; in fact, in many instances, they are even expected to do so in 24 hours or less. Suppliers no longer have the luxury of housing all their products in a central or regional warehouse and shipping from there. The efficiency of today's supply chain depends on the ability (and agility) of companies to move items directly from one truck to another at a centralized location – without losing momentum or breaking stride.

As an example, think of your local hardware store. To support in-store order fulfillment of everything from light fixtures to 2x4s on a 24-hour basis, the store must be able to not only locate items at other store locations or suppliers, it must be able to ensure that items get on the right loading dock and to the store in plenty of time to ensure complete order readiness when customers arrive. Even a single item misplaced along the way can be the difference between a repeat customer and one who takes his or her business elsewhere – in turn impacting the retailer-to-supplier relationship and associated profitability.

THE INCREASING COMPLEXITY OF LOGISTICS NETWORKS MEANS 3PLS ARE PLAYING A GREATER ROLE THAN EVER BEFORE

We call this the "Amazon Effect." With Amazon.com's hundreds of warehouses and seemingly unlimited SKU availability, small and mid-sized businesses (and even many larger organizations) are forced to expand their product offerings and networks in order to remain competitive. As these companies, particularly retailers, strive to compete, connected logistics networks by nature become more complex and harder to manage. Ensuring that a wider range of product offerings arrive at their destinations where and when they are supposed to demands an increasing reliance on third-party logistics providers (3PLs).

The addition of 3PLs to the delivery process, however, means companies no longer can rely exclusively on their own internal fleets. As a result, many find themselves struggling to maintain the end-to-end fleet control and visibility they once had – control that enabled them to ensure their standards of service were carried out and that customers were completely satisfied 100 percent of the time.

Put more frankly, with so many cooks being added to the kitchen for each delivery, maintaining chain of custody across the supply chain can become a nightmarish experience for even the most efficient organization.

PAPER-BASED INVENTORY AND ORDER TRACKING LEAVES TOO MUCH ROOM FOR ERROR

There are four standard steps that define the journey of an individual item or order through the supply chain. In the case of internal fleets, the associated paperwork changes hands at set points in the process. However, with the rise of 3PLs, the number of "owners" increases – leaving greater room for errors and muddying companies' ability to identify, backtrack and rectify those errors.

The initial customer order: Comprised of countless SKUs and potentially hundreds or thousands of individual items by size, weight or number, the initial order must be made, logged and scheduled for delivery.

The initial order fulfillment: Once scheduled, each order and its corresponding invoice must be loaded onto the appropriate truck or train at precisely the right time to make it to the next stop on schedule.

The transit process: This can be multiple steps, and it's where cross-docking comes into play. While every product originates from a specific company, in today's world of complex, cross-network supply and demand, the chain of custody can pass through multiple vendors, delivery modes and personnel before arriving at its final destination.

Using our previous hardware store example, if a lamp, oversized plywood sheet and jigsaw all were ordered to the same store, they likely would originate from disparate locations, meaning each would have its own inventory/tracking slip that needed to remain with the product throughout its journey. It is easy to see, even at this early stage of the order, the potential for tardiness or damage that could impact the quality and timeliness of the final delivery.

Cross-docking, while eliminating the necessity and costly hassle of storing items in a warehouse between modes of transit, increases the speed at which items are unloaded, scanned and loaded onto their next mode of transit. This is an excellent sign of forward momentum in the supply chain until you consider that with hundreds, even thousands of orders moving through the cross-dock daily, it is all too easy for an item to be left behind, dropped, crushed, or simply mislabeled and loaded onto the wrong vehicle. No matter how carefully each item's paperwork is filled out, the room for human error is vast. Each day, millions of dollars in merchandise is mishandled, failing to make it from point of origin to point of delivery in optimal condition.

The delivery: Let us assume that, in the case of our example order, each product made it to the hardware store on time and in good condition. Once at its final destination, the associated paperwork for each product in the order must accurately reflect delivery time and condition, then be returned to the appropriate office to be logged and duplicated as called for. All items in the order then need to be brought together and given to the end consumer on schedule. At the same time, every part of the transaction must be well-documented in case of customer complaint or return.

With so many reams of paper to account for and so much room for human error along the way – invoices can be lost, orders incorrectly or incompletely logged, etc. – paper-based, manual tracking does not make cross-docking easy. Paper processes are a common source of problems that can ultimately degrade the customer experience. While cross docking may speed the delivery process, it also increases the potential for such errors in the inventory and tracking side of the equation.

AUTOMATION IS KEY TO OPTIMIZING CROSS-DOCKING AND ENSURING BEST-IN-CLASS SUPPLY CHAIN AND LOGISTICS PRACTICES

Regardless of business size, location or product, every organization can benefit from an electronic proof of delivery system (ePOD) that connects companies and 3PLs, eliminates paper tracking and waste and streamlines the overall delivery process.

Think, for example, of that same hardware store order. With multiple items coming from multiple locations, it would be easy for part of the order to be misplaced or damaged. In a paper-based system, the damage would have to be manually recorded and that recording sent back to be processed.

In the case of a disagreement over the misplaced item, without a physical receipt marking proof of delivery, it would be the word of the recipient store against the delivery person that the item had arrived. ePOD, used via what are now essentially modern mobile PDAs, makes it possible for each shipment or order to be individually tracked throughout the chain of custody, with each stop noted and logged, recipient sign-off and any issues or comments captured electronically, and then submitted back through a common system. During cross-docking, automation ensures that each item can be quickly scanned and moved to its next transport vehicle swiftly and accurately, logging any issues and noting special care instructions in each instance.

Beyond the cross-dock, the use of ePOD for end-to-end chain of custody tracking results in greater employee accountability, increased transparency for the originating supplier and, in Airclic's case, provides end customers with an easy-to-navigate tracking site to check the status of an order and receive timely delivery and ETA notifications.

Organizations need a solution that bridges the technology gap and provides visibility, control and assured delivery confidence – protecting their brand by ensuring that the ever-elusive perfect order is not only within reach – but can be achieved with greater regularity than ever before.