

HYPER-LOCAL DISTRIBUTION: HOW REPURPOSED RETAIL SPACE CAN ENABLE A HYBRID APPROACH TO E-COMMERCE FULFILLMENT



TABLE OF CONTENTS

The Changing Face of Retail.....2

Consumer Expectations on the Rise.....2-3

The Case for Hyper-local.....3-4

Technologies for Hyper-local Distribution.....5

Making the Move to Hyper-local.....6

THE CHANGING FACE OF RETAIL

Something big is happening in retail and it hasn't gone unnoticed. The *New York Times* and *Wall Street Journal*, among others, have written recently about the shift from traditional retail to e-commerce and its effect on retailers, consumer expectations and the labor force.

From widespread store closings to malls seeking to reposition themselves as entertainment destinations to the transformation of abandoned industrial properties into distribution centers, e-commerce is not so subtly changing the retail landscape.

In some ways, this is a new world for retailers and, in other ways, a continuation of a cycle that began more than one hundred years ago with the advent of home delivery via catalog sales. Eventually malls and big box stores took over and dominated the retail landscape.

Now, technology has brought in-home delivery back to the forefront in a big way through the web and mobile. E-commerce companies are experiencing double-digit growth while traditional retailers are closing stores in record numbers.

Yet, this is not, as it is sometimes portrayed, an either-or proposition.

With Amazon opening brick-and-mortar outlets and Wal-Mart now offering free two-day delivery on e-commerce orders, it's becoming clear that the future belongs to organizations that have the flexibility to adapt to how consumers prioritize choice, speed and convenience on a purchase-by-purchase basis through a true omni-channel experience.

The future belongs to organizations that have the flexibility to adapt to how consumers prioritize choice, speed and convenience on a purchase-by-purchase basis through a true omni-channel experience.

That flexibility can be achieved through a hyper-local distribution strategy and a network of retail stores lowers the cost and increases the speed at which such a strategy can be implemented.

Repurposing existing or closed retail space as hybrid retail/distribution hubs not only supports faster delivery of orders. These outlets can also support a hybrid delivery model in which consumers have the option of home delivery or in-store pickup.

CONSUMER EXPECTATIONS ON THE RISE

In its early days, e-commerce offered consumers greater selection at the expense of delayed gratification. Since that time, e-tailers have worked aggressively to compress fulfillment and delivery times and have succeeded to the point where two-day delivery is now the expectation, trending toward next day and same day being the norm.

But it won't remain that way for long. The one big difference between this evolution and the ones that preceded it is the speed at which things are changing, particularly consumer expectations.

The more retailers enhance the customer experience, the more consumers expect—and supply chains are struggling to keep up.

Consumers will soon be demanding greater selection, faster delivery and an omni-channel experience that allows them to shop products online, evaluate them in person and choose and take delivery the same day they make their decision.

Delivering this seamless, frictionless buying experience is not only a retail challenge; it is also a fulfillment challenge.

Networks that were optimized for store replenishment are not structurally designed for the two-hour delivery that may soon be the norm. Some retailers have attempted to create separate fulfillment centers to support e-commerce, but this approach can increase supply chain costs, exacerbate current labor challenges and make it difficult to capitalize on the synergies that exist between the e-commerce and in-store experience.

What will ultimately be required is a hybrid distribution network that can support one-hour fulfillment and one-hour delivery, enable multiple buying experiences based on the shopper's situation, and minimize freight and handling costs. In many cases, retailers have the foundation in place for such a network in the form of brick-and-mortar retail outlets.



The retail outlet of the future will support omni-channel sales by providing a variety of fulfillment options to customers.

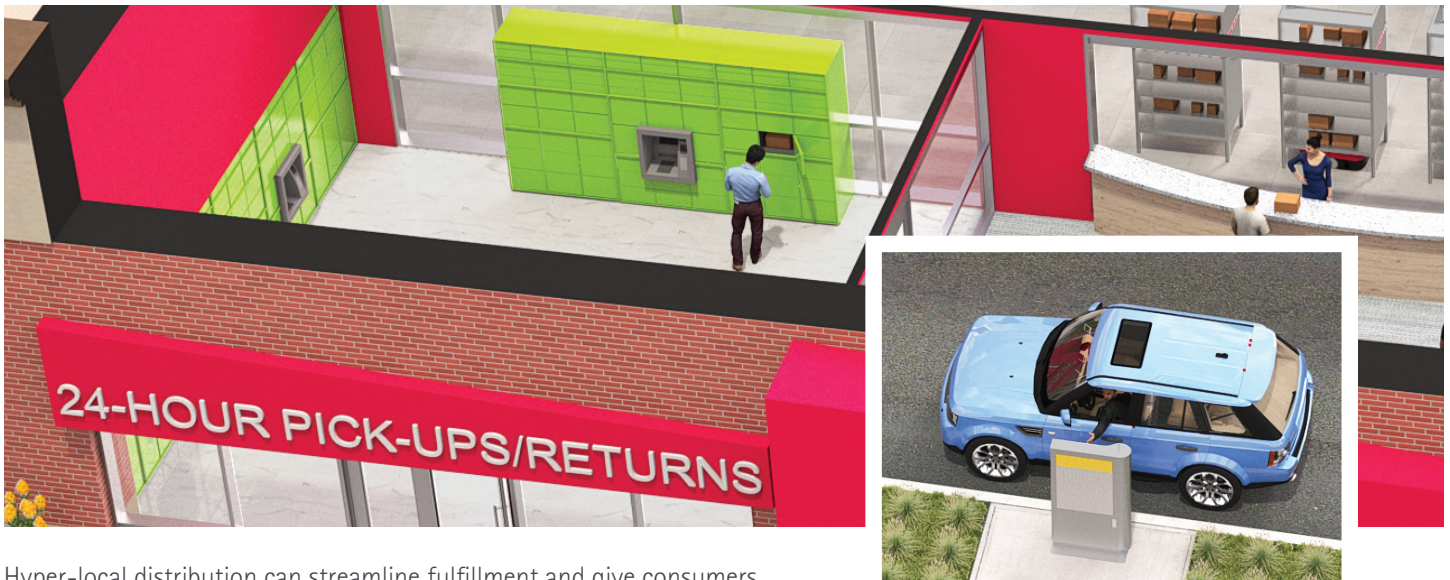
THE CASE FOR HYPER-LOCAL

The existing retail infrastructure is the key to accomplishing these objectives. However, it will require significant modifications.

Those modifications can't be undertaken based strictly on a study of past supply chain data. Making sound investments today requires an understanding of the buying experience

that must be supported as two-day delivery becomes two-hour delivery and consumers have more choices in how they select and evaluate products and take delivery.

THE CASE FOR HYPER-LOCAL



Hyper-local distribution can streamline fulfillment and give consumers more control over the delivery or pickup of their orders, enabling two-hour delivery of online purchases. Hybrid retail/distribution outlets can provide 24-hour pickups and returns via lockers along with in-store or drive-through ordering on kiosks with rapid delivery.

Here are some of the issues that can be anticipated:

- **Eliminating the hassle of signed deliveries**
On one hand, having to sign for a delivery can delay receipt if consumers aren't home at the time of the delivery and cause the consumer to have to go to the shipper to pick up a package. On the other hand, leaving high-value items on the door stoop when the consumer isn't home can expose them to damage from the elements or theft. Giving consumers more control over the final delivery, by allowing them to opt into in-store pickup or trigger a final delivery within a narrow time window provides the optimum balance between convenience and security. An even better experience could be achieved by adding text-initiated curbside pickup.
- **Minimize returns**
Returns account for a disproportionate percentage of supply chain costs compared to their volume and can frustrate customers even when handled well. Existing retail locations create the potential to support immediate returns of items purchased online when coupled with in-store pickup. Imagine being able, for example, to buy clothes online, and try them on at the store in a dressing room conveniently located just off the in-store pickup area before taking them home? Returns, or even exchanges, could be handled instantaneously without freight or burdening customers with the hassle of having to repackage and ship the item.

- **Provide same-day delivery**
Two-day delivery will soon become two-hour delivery. To accomplish this, you need to fulfill products in one hour—an aggressive goal that is possible by combining today's technology with in-store pickup. Alternately, what if you can offer next-day delivery using daily deliveries to retail stores coupled with one of these buying experiences? With hyper-local distribution and fast fulfillment, the potential also exists to offer next-day delivery via ground transportation.

These are the experiences that will differentiate retailers in the coming years and that require relatively small, hyper-local fulfillment centers with flexible, simple automation that facilitates greater choice and convenience in how consumers shop for products and take delivery.

Putting inventory close to the customer instead of in huge centralized centers allows retailers to support multiple fulfillment models, including:

- Stand-alone fulfillment center pushing product to both stores and direct to consumers.
- Stand-alone fulfillment center with convenient customer pickup
- In-store fulfillment center

TECHNOLOGIES FOR HYPER-LOCAL DISTRIBUTION

Hyper-local distribution allows retailers to repurpose existing retail outlets to provide better customer experiences and reduce freight packaging and fulfillment costs.

One of the attractions of this strategy is that it uses existing infrastructure; however, these facilities do need to be equipped to handle fulfillment. The guiding principle for making decisions about the investments required to transform these facilities is flexibility.

Bolted-down infrastructure, such as sorters, which were the backbone of the large distribution centers of the past, create risks in that they can't easily be adapted to future requirements, which are almost impossible to predict. Manual systems offer the flexibility required, but can present the challenge of recruiting and retaining talent, which even the largest, most aggressive e-commerce companies are struggling with. Rely too heavily on manual systems and you risk not being able to achieve the fulfillment speeds customers are demanding.

The guiding principle for making decisions about the investments required to transform these facilities is flexibility.

Automation provides a solution in the form of flexible good-to-person systems that turn the traditional warehouse model on its head. Instead of workers traveling up and down aisles of inventory to pick products, goods-to-person systems bring the inventory to the picker, eliminating travel times and enabling faster fulfillment. Equally important, these systems don't require the bolted rack and sorter systems common in traditional warehouses. They use compact mobile robots and modular designs that allow them to be deployed in a variety of environments, adapt to change, and be easily moved to a new location if required.

For example, the Swisslog CarryPick system is an automated storage and goods-to-person order picking system designed for applications where product variability, delivery time and cost efficiency are critical. It fits into existing buildings with low ceiling heights, and can be extended and relocated on very short notice.

CarryPick consists of mobile racks, automated guided robotic vehicles, workstations and software. The multifunctional workstations are supplied with mobile racks by the automated guided vehicles. The software-controlled system combines storage with replenishment and picking functionality, and handles returns in a very efficient way.



Another automated goods-to-person solution to consider for hyper-local distribution is Swisslog's AutoStore system. It consists of a three-dimensional grid of self-supporting bins that are moved to pick stations by independently operating robots.

AutoStore is ideal for handling high volumes of both fast- and slow-moving small-order and small-case-pick SKUs, delivering outstanding storage density and a high degree of flexibility for dimensional configuration. It can be retrofitted into existing buildings and can be configured to fit different building heights, span multiple levels and even surround obstacles, such as pillars or walls.



MAKING THE MOVE TO HYPER-LOCAL

E-commerce companies have had the advantage of not being burdened by history. They were able to develop fulfillment centers based exclusively on the requirements of e-commerce. Now, there is an opportunity for traditional retailers to leapfrog the current state of technology by reconfiguring the existing retail network to support hyper-local distribution.

The companies that succeed with hyper-local distribution will be those that develop fulfillment centers that ship to stores rather than enable their retail network to support fulfillment. The technology is available today to cost-effectively support local fulfillment in the form of goods-to-person fulfillment systems.