

# ***LAST MILE AND FULFILLMENT:*** REINING IN COSTS WITHOUT SACRIFICING SPEED AND SERVICE



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## INTRODUCTION

The “last mile” has always been one of the toughest — and on a per-item basis, the most expensive — parts of the supply chain. Today, many of the same forces buffeting global supply chains, such as higher fuel prices and labor shortages in key industries like trucking, are adding to last mile pressures, creating uncertainty and complicating planning processes.

Additionally, the last mile has become more fragmented as delivery choices have multiplied, now encompassing BOPIS and curbside pickup as well as the full range of ship-from-store options. These can include delivery partners operating on an Uber-style “gig” model, which can lower shipping costs and increase agility but also can create greater complexity on both the backend and customer-facing sides of the last mile.

There’s also something of a hangover from the worst days of COVID: retailers over-ordering items that had been unavailable are now stuck with too much inventory, raising the specter of steep discounts to sell through to the end consumer. “The ‘bullwhip effect’ from over-ordering is very very real, and it affects the whole supply chain,” said Inna Kuznetsova, CEO of [ToolsGroup](#) in an interview with *Retail TouchPoints*, adding that **“any kind of fragmentation of the supply chain hurts the last mile the most.”**

Fortunately, there are solutions available that can address some of the toughest fulfillment challenges retailers face. But for these solutions to have the greatest impact, retailers, suppliers and their fulfillment partners will need to relinquish many traditional assumptions and practices, choosing tools capable of dealing with demand patterns, inventory levels and customer delivery preferences that can change literally on a daily basis.

This *Last Mile and Fulfillment Tech Guide* will explore:

- How retailers can use **data transparency, proactive customer** communications and greater certainty about delivery times to escape from the “speed trap” of trying to keep up with **Amazon**;
- AI-powered tools that can improve last mile profitability by more accurately **sensing where consumer demand is heading**, as well as a more holistic view of both costs and the revenue each item produces; and
- **Mitigating the negative impact of returns** by strategically adding fees, along with viewing the return process as an opportunity for greater customer engagement.





## ESCAPING THE LAST MILE 'SPEED TRAP' WITH VISIBILITY AND CUSTOMER TRANSPARENCY

Retailers are understandably eager to lower the costs involved in last mile fulfillment — and equally cautious about anything that will diminish the customer experience or tarnish their brand promise. “There’s enormous tension in ecommerce home delivery between satisfying consumers and making the profitability of that model work,” said Kirthi Kalyanam, Executive Director of the Retail Management Institute at Santa Clara University’s [Leavey School of Business](#) in an interview with *Retail TouchPoints*. “There are many retailers that, even without offering ‘fast and free’ shipping, **say that the more ecommerce they do, the more challenging their [balance sheet] becomes.**”

Unfortunately, keeping a tight rein on last mile costs is tougher when macro supply chains are still being disrupted on an unprecedented scale. The demand planning and last mile solutions currently in use simply aren’t designed to deal with conditions that can change on a daily basis.

Additionally, the kinds of supply chain volume gaps that occur when an entire factory shuts down in China or container ships are stranded outside ports “will make your last mile inefficient, because it’s the last stop of your supply chain,” said Tyler Higgins, Retail Practice Lead and Managing Director at [AArete](#) in an interview with *Retail TouchPoints*. “The macro impact on cost per delivery of filling those gaps can be **two, three, four** or even **five** times what they were.”



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These last mile challenges boil down to three areas for shippers to focus on, he added: “The first is to optimize the vehicle load of the actual truck making the delivery. Then it becomes about optimizing your routing, with the ability to re-route deliveries while the trucks are already on the road.”

The third solution is to provide **greater transparency to the end consumer about the progress of their package**. Providing up-to-the-minute information adds to customers’ certainty, which can help mitigate negative consumer perceptions about delivery. “**Amazon** is probably the best at providing real-time notifications and updates to customers; they can say ‘It’s eight stops away and will be there in two hours,’ and push that to their customers,” said Higgins. “With AI and machine learning-powered solutions, that kind of data sharing can happen almost automatically.”

Of course, providing this level of certainty requires a high degree of data visibility for the last mile, including factoring in variables such as weather and road conditions. “Visibility becomes important and it should be tied to other external factors, like the driver’s history,” said Balika Sonthalia, a Partner at **Kearney** and author of the firm’s annual **State of Logistics** report. This requires “being more predictive in terms of managing how you plan and deploy your labor, for example with predictive maintenance tools for your vehicle assets,” she added.

Another complication occurs when the deliveries are made by a third party rather than the retailers themselves. Retailers that pride themselves on clear, consistent customer communications will need to gain access to their delivery partners’ data, or mandate that the partners provide the required service levels to the end consumer.

“**Clearer communication around what happens to your package and when it’s coming is still truly a work in progress**,” said Kalyanam. “But we believe that consumers are increasingly looking for that clarity, and as retailers start providing more and more of that messaging, they’ll be favored by consumers.”





## MOVING FROM DEMAND PLANNING TO DEMAND SENSING

While planning is, by nature, a forward-looking activity, in retail plans are made based on what's happened in the past. But as many have pointed out, the value of historical data falls off a cliff with the level of disruption that retail (and society at large) has experienced over the past two-plus years. Nowhere is this more apparent than in the supply chain and the last mile.

"The ability to sense what's going to happen — **demand sensing as opposed to demand forecasting** — is critical for retailers," said Kearney's Sonthalia. "Those sensing capabilities, to know what kind of offering the customer will want to tap into, are important not just for the last mile but for the first mile and middle mile as well."

Sonthalia and other experts also stressed the importance of viewing the supply chain holistically. **"The pandemic taught all of us that if the pain is felt at one part of the supply chain, the root cause and the fix are at another part of the supply chain,"** she noted. "It's typically stemmed from a lack of visibility, a poor sense of demand patterns or a non-synchronized supply chain."

She recommends "end-to-end thinking about all elements [of the supply chain], from planning to sourcing to distribution, in order to make decisions in a connected way." It's also vital to bring all parties into the discussion: retailers need "integrated conversations with their merchants and their vendors; they should go to the table together."

A more holistic approach, combined with sophisticated order management tools that take into account factors beyond shipping costs and times, also can help retailers boost the profitability of their last mile. For example, retailers seeking to fulfill an online order may have the item in a store located close to the customer, but the same item may also be in a warehouse — and that item may be scheduled to be steeply discounted in a few days' time.

"If you factor in the residual value, there's more profit in fulfilling the order in a non-obvious way," explained ToolsGroup's Kuznetsova. "The warehouse shipping cost might be **\$3** more, but the residual value [of selling the item at full price] gives you **\$10**. The time of delivery would be the same, but your profit as a retailer will differ dramatically."

Kuznetsova added that "no human being can make those decisions; you have to have the appropriate software systems that use AI and machine learning."



## WRESTLING WITH RETURNS

Much has been written about the negative impacts — on the planet and on retailers' bottom lines — of escalating returns, another ripple effect of the ecommerce surge. But there are a few glimmers of good news in this area.

A recent [report](#) conducted by the Santa Clara University Retail Management Institute and X Delivery revealed that “consumers care much more about faster shipping than returns,” said Kalyanam, the study's author. “Today, every retailer offers free returns and ‘bakes’ that into their cost structure, but for many consumers, that’s not important. **Retailers can increase their shipment speeds in a cost-neutral way by cutting back on returns.**”

Retailers also can cut costs by making a range of shipping options available and charging more for faster options. “Data shows that consumers are less likely to abandon [a cart] when faster shipping options are available,” said Kalyanam. “The availability of a fast option is psychologically attractive, because you get included in the consideration set.” When choices are too limited, “people are losing baskets because of this,” he added. “The availability of a reasonable option is part of the story — even if consumers don’t choose it.”

Retailers can test different customer groups’ tolerance for paying a return fee as a way of keeping these costs under control. In fact, it’s becoming a business necessity. “With the dramatic rise in ecommerce, returns can very quickly flip your financials and profitability,” said AArete’s Higgins. “We’re seeing retailers like [Pilot](#) charging for returns in the UK and [Abercrombie](#) charging restocking fees. I think the trend of charging for returns is one that will continue, but it will be very specific to segments like fashion, and also to retailers that feel like they already have pretty strong customer loyalty.”

The “solution” for returns may start by thinking of them as an opportunity rather than a problem. “The whole topic should be thought about more strategically and in terms of circularity,” said Kearney’s Sonthalia. “In tech retail in particular, people have been thinking about how to drive more circularity by recycling and reusing products.

**“It shouldn’t be about how you discourage returns, but how you leverage the return vehicle to increase customer interactions, whether that’s digitally or at a physical store,”** she added. “You want a customer to stay with you and think about you through multiple stages of the shopper journey and potentially expand your scope of influence. Retailers are thinking about returns as a way to drive more traffic into the store, for example by offering a store coupon. I think returns will continue to increase, but that means the question becomes, how do you set up the entire ecosystem so it’s a positive gain?”

The benefits of thinking holistically apply to the last mile and to supply chains as a whole. Kuznetsova described the shape of the most advanced supply chains: “They have standardization of processes across all their venues, from sourcing to the last mile, as well as underlying data supplies and demand planning tools that make predictions and feed them back daily,” she noted. “The companies that will win will have a multi-echelon supply chain where you can optimize the whole system.”

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