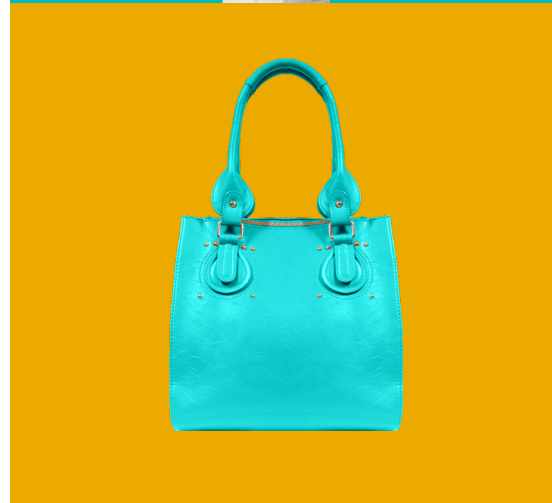




**Roadie's guide to using
batched and routed
delivery to optimize,
simplify and improve
last-mile logistics**





Last-mile logistics involves the movement of orders from a distribution hub or retail store to their final delivery destinations — which in many cases is the end customers’ doorsteps. Speed, accuracy and precision are critical in the last mile, but increasing headwinds pose a challenge: The shift to e-commerce, high demand for same-day delivery and the fact that virtual shopping carts are often abandoned when fast shipping options aren’t available are just some of the trends driving companies to explore ways to make the last mile more efficient.

Batching and routing orders for delivery in the final mile isn’t a new idea. Combining orders headed in the same direction helps ensure fast fulfillment and can save retailers time and money. But increased order volumes have made traditional approaches to speedy delivery, like point-to-point shipping, burdensome and inefficient. Now, businesses are combining the strategy of batching and routing orders with on-demand, crowdsourced delivery as a way to meet customers’ expectations for faster fulfillment.

HOW DO YOU KNOW IF BATCHED AND ROUTED DELIVERY IS RIGHT FOR YOUR BUSINESS? SOME OF THE clearest signs include:

- ▶ Your organization is dealing with new or increasing last-mile and same-day delivery challenges like missed shipment deadlines, unhappy customers or too many internal logistics resources being allocated to fulfillment.
- ▶ Your customers expect ultrafast fulfillment, but your operation lacks the infrastructure to meet that demand.
- ▶ Your facility sends out multiple orders same day to the same geographic area, but those orders are handled by different carriers, drivers or vehicles.
- ▶ Your point-to-point approach eats up time and resources as you work to coordinate the high volume of drivers and vehicles at pickup locations.

If you’re experiencing any or all of these challenges, then it’s time to consider how batched and routed delivery can ease the burden. In this white paper, you’ll learn how batched and routed delivery works, hear how companies are using it and get insider tips on how to make the most of this last-mile logistics option.

What is **crowdsourced batched and routed delivery**?

Retail e-commerce sales in the U.S. are expected to exceed \$1 trillion in 2022,¹ and demand for ultrafast delivery is growing right along with the sector. To best leverage this growth, B2C and B2B companies alike need fast, simple and efficient last-mile logistics. A recent Roadie and studioID survey found that

retailers can generate an immediate, positive impact on sales by offering same-day delivery.² The option also stands to increase customer lifetime value, which is the total financial value that a company earns from a customer over time.

THE SURVEY ALSO FOUND THAT:



50% of retail and supply chain leaders surveyed already offer or would offer same-day delivery because customers expect and demand it.



64% believe that more than two in five shoppers would be willing to pay a higher price for products with a same-day delivery option.



30% of respondents said more than six in 10 shoppers would spend more to cover the cost of same-day shipping.



With more customers asking for same-day deliveries, retailers must go beyond the single-order delivery approaches they've traditionally relied on. By sending multiple orders with a single crowdsourced delivery driver, retailers can effectively meet demand for a faster last-mile, while saving time and avoiding strain on logistics resources.

BATCHED AND ROUTED LAST-MILE DELIVERY IS IDEAL FOR:

- ▶ Companies that have high order volumes or the majority of their orders coming from the same location.
- ▶ Retailers that primarily send out smaller-size orders. (That way, many packages can fit in a single passenger vehicle.)
- ▶ Organizations that send many orders to customers located in the same densely populated area.

The return on investment that comes from using batched and routed deliveries can be significant in a world where last-mile delivery costs can make up more than half of the total cost of sending orders to end customers.³ "The costs and inefficiencies of the last mile problem have only been further compounded by the continuous rise of e-commerce in US retail sales," Insider Intelligence points out, "which has dramatically increased the number of parcels delivered each day, as well as raised customer expectations to include not just fast, but also free, delivery."⁴



Sending **multiple orders with a single crowdsourced delivery driver** helps retailers meet demand for a faster last-mile, save time and avoid strain on logistics resources.

How it works: The mechanics of batched and routed delivery

Batched and routed delivery groups deliveries heading in the same direction. These orders usually have delivery deadlines within a few hours of each other and are handled by a single delivery driver. This logistics strategy reduces foot traffic in your facility, shortens fulfillment and delivery times, and keeps customers happy and coming back for more.

Pairing batched and routed delivery with crowdsourcing saves senders time, as they don't have to wait around all day for deliveries to be picked up by several individual drivers. For example, one crowdsourced driver can pick up multiple orders at a predetermined time and deliver them in an efficient and logical manner.

HERE'S A SNAPSHOT OF BATCHED AND ROUTED DELIVERY IN ACTION USING ROADIE:

1

The sender submits orders via a CSV file or uses Roadie's application programming interface (API).

2

Once the orders are in, Roadie's platform can **combine multiple orders into a single pickup** based on parameters such as direction and deadline.

3

The sender's employees group the orders. They can use the Roadie app installed on scanners or mobile devices to facilitate the process.

4

Each driver is assigned a unique batch ID that **identifies which orders they are expected to take.**

5

When a driver shows up and requests batch ID "XYZ," the sender employee **gives them all the pre-sorted orders.**

6

The orders go out in bulk, with senders **able to track them individually.**

7

Roadie's platform **provides status updates for individual orders within the batch.** That way, senders and their customers can view delivery progress in real-time, be alerted to any issues (such as a canceled order) and know when the order has been delivered.



Getting set up to use batched and routed delivery

Retailers that want to get the most out of batched and routed deliveries should know their order volumes and deadlines across fulfillment locations. This will help them determine whether they have enough orders going out to benefit from batching and routing deliveries. This and other order data, such as timing needs for subscription-based products, should be shared with your crowdsourced delivery platform.

You'll also want to establish your pickup times, knowing that Roadie generally requires a 90-minute window for its algorithm to route deliveries. You can minimize the total number of pickups by sorting and clustering orders. For instance, cluster 20 orders for a noon pickup instead of staggering those pickups at 12, 12:15 and 12:30 p.m.

If it works with your business model, you can group all of your deliveries on one day and then route them

as a batch for next-day delivery. Consolidating works especially well for warehouses that receive a high volume of orders overnight. Senders can upload the data to Roadie's algorithm at 1 a.m. daily, for example, and know their same-day orders will be logically grouped and delivered the following day.

"If a company needs to know what the routes are five or six hours in advance, we can provide that as long as we have the data to run the routing algorithm ahead of time," said Greyson Daugherty, Roadie's lead data scientist. Companies should also decide whether they want to fully integrate with Roadie's platform or would rather use its bulk upload feature. Both approaches work. Even if you drag-and-drop a file populated with 400 deliveries, Roadie's algorithm can effectively and efficiently route the orders for same-day batched delivery.

"The more volume a company has, the **more efficiencies it will gain** by using this approach."

RACHEL ZARACH

Business development manager at Roadie

Using barcodes on orders can further streamline the batched and routed delivery process. That way, drivers can scan items on the Roadie Driver App to ensure they're always picking up the right item for their assigned delivery. This approach works particularly well when crowdsourced drivers are picking up several dozen items for a single route.

One big user of Roadie's batching and routing option is ScriptDrop, a healthcare technology company that connects pharmacies to a network of qualified delivery partners to enable prescription delivery across the U.S. By using routed and batched deliveries, the company was able to triple its same-day order volume and reduce how much it was paying for last-mile logistics. And because drivers using the Roadie app can see in advance when offering to perform a delivery that they are going to manage multiple deliveries on a single route, they were more eager to accept those deliveries.

The result is a win-win-win: Drivers earn more for their time, ScriptDrop customers get their orders quickly and the company enjoys greater ROI by batching orders and delivering them with crowdsourcing.

"The ideal scenario for batched and routed delivery involves a high volume of same-day orders being delivered within a tight radius, whether that's in a city center or small town," said Rachel Zarach, a Roadie business development manager who works with companies that are rolling out batched and routed delivery. "The more volume a company has, the more efficiencies it will gain by using this approach."

Let Roadie's algorithm work its magic

Once the orders are in, Roadie's algorithm gets to work combining multiple orders into a single pickup. For example, the deliveries may be headed in the same direction or share similar deadlines. This saves warehouse employees valuable time figuring out which delivery goes where — and how many are going to similar destinations.

WITH ROADIE'S ALGORITHM HELPING SORT ORDERS, YOUR TEAM CAN:

- ▶ Eliminate the need for case-by-case, same-day delivery assignments.
- ▶ Provide status updates for individual orders within the batch.
- ▶ Let staff view delivery progress, be alerted to any issues and see exactly when the order has been delivered.

- ▶ Allow a single crowdsourced driver to pick up multiple orders and deliver them in a logical and efficient manner.
- ▶ Improve customer service with faster delivery.

Dynamic by nature, Roadie's algorithm receives data from a sender, builds up a series of routes, and then assesses those options and realigns them as needed. For example, if a driver is assigned to a specific batch that will only take two hours to complete, the algorithm will offer that person a second batch if they are driving a larger vehicle that would have room for additional orders.

"This is not only beneficial for on-time delivery, but it also ensures drivers using the Roadie app can make the most of their time," Daugherty said. The algorithm takes each driver's deliveries and dynamically optimizes them to maximize on-time delivery. "The goal is to minimize the total time it takes to get everything delivered," he added, "and to stay mindful of delivery deadlines throughout the entire process."





Tips for batched and routed delivery success

For retailers that send multiple deliveries each day, the cost and time spent scheduling and managing each of those orders can add up quickly. That's why Roadie enables crowdsourced batched and routed delivery. By combining multiple deliveries into a single streamlined batch, you can spend less time coordinating pickups and more time handling important projects.

When getting set up to send out your first batched and routed order, make sure employees are staging the packages in a way that makes it easy for drivers to find their orders and get back on the road. "You don't want our drivers showing up to find 100 orders sitting out and no one knows where they're going or who is going to deliver them," Zarach said.

Roadie's new sortation app helps avoid this issue. For example, if a company uploads 100 deliveries to be sent out the same day, the app helps staff sort those into bins based on where they're being routed to. When drivers show up to pick up the orders, staff will know that "Bin A" includes all orders for the driver's specific batch. This cuts down on confusion and delays, and it keeps the routed and batched supply chain running smoothly.



By combining multiple deliveries into a single streamlined batch, you can **spend less time coordinating pickups and more time handling important projects.**



Take the next step with batched and routed delivery. Routed and batched delivery is a win-win-win for senders, their customers and the drivers carrying orders over the final mile. Retailers and their end customers get lower-cost, faster deliveries, and drivers earn more.

Ready to get these benefits by optimizing your last-mile fulfillment with batched and routed delivery? **Get in touch with Roadie today by visiting [Roadie.com](https://www.roadie.com).**

SOURCES

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