



The New Fulfilment Models in Logistics and how these will change the last-mile game for brands



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Overview:



Do you know the top three complaints of online shoppers today?

- Late delivery
- Damaged Products
- Missing Orders

Order fulfillment is crucial for all logistics or logistics-based businesses. The right fulfillment model ensures that orders are made on time.

Fulfillment today is more than just delivering products to the customer's doorstep. It can improve or derail customer experience. Hence, it is necessary for brands to follow the right fulfillment model that ensures positive customer experience and triggers repeat purchases. This e-book shows how new fulfillment models have helped brands during the COVID-19 pandemic.

What is a fulfillment model?

E-commerce fulfillment or order fulfillment is the process of fulfilling E-commerce orders. Fulfillment involves the business of handling and executing customer orders. It also involves returns management.

Fulfillment model is a well-organized strategy or method to enable seamless delivery of products within the time span promised. It is a structured plan for a business to get through this process and achieve expected results.

A number of new fulfillment models have come to light in the recent decade. These models have totally transformed the approach of both big brand and small-scale retailers. These new fulfillment models are gaining more adoption globally, and have especially come to the forefront since the [outbreak of COVID-19](#).

Fullment process involves the following six activities:



Order Management



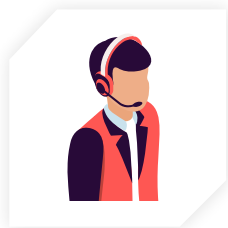
Warehouse Management



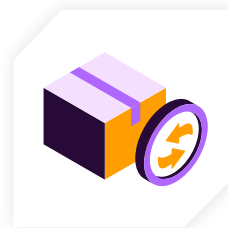
Packaging



Shipping



Customer Communication



Returns

The new fulfillment models are changing the last-mile delivery game.

- Crowdsourcing fulfillment model
- Curbside Pickups
- Dark Stores
- Hub and Spoke
- BOPIS

Crowdsourcing Fulfillment Model



Crowdsourced fulfillment model uses networks of non-professional and local couriers to deliver packages to customers' doors. Traditional retailers who want to maximize supply chain efficiency and cut costs are using this method. Beyond meal and grocery delivery, this method of fulfillment has already entered other industries.

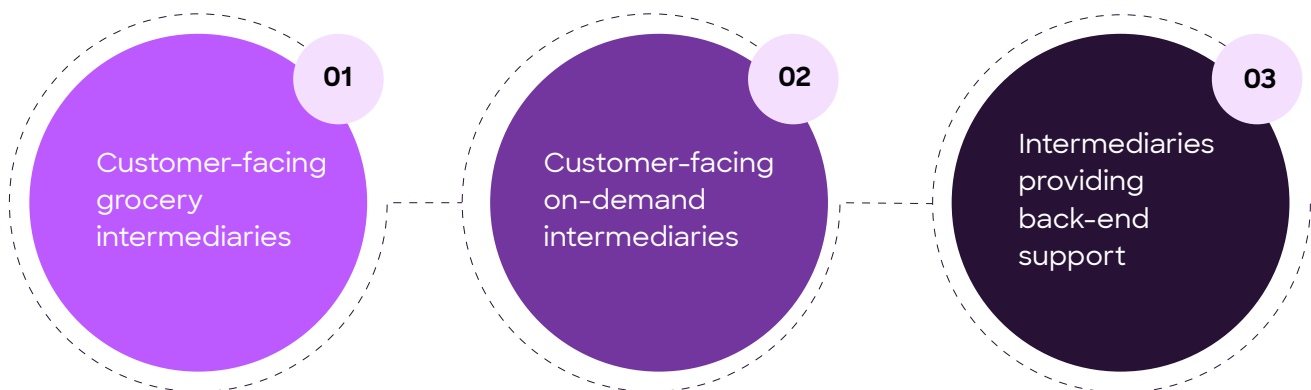
How does it work?

In the crowdsourced fulfillment model, the retailer partners with crowdsourced delivery intermediaries (delivery provider) to meet customer needs. Retailers who want quicker fulfillment without huge investments in their infrastructure and delivery fleet prefer this fulfillment model.

Crowdsourcing fulfillment model connects businesses to non-professional courier service providers who can deliver goods instantly. It can speed up deliveries in densely populated urban areas which naturally have a higher volume of deliveries.

Types of Crowdsourcing Fulfillment Model

There are three main types of crowdsourcing fulfillment models based on how retailers and brands execute it. They are:



Why is it of major importance during the COVID-19 pandemic?

Of more than 300 U.S. consumers polled, 78.7% reported shopping online for groceries after the COVID-19 outbreak, up 39% from before the pandemic. - Inmar Intelligence.

Fifty-one percent of consumers surveyed said they preferred a grocery retailer that had the item(s) they wanted in stock, and 39% chose a retailer based on whether it had a grocery pickup or delivery time slot available in the desired window. - Inmar Intelligence

- Companies can get their online orders to customers in less than an hour or two.
- It facilitates on-demand and scheduled delivery, eliminating the additional time and costs involved with multiple delivery attempts.
- As contracted couriers take care of complex logistics operations, companies need not worry much about delivery costs.
- Customers feel that this fulfillment model provides greater control in their shopping experience.
- This fulfillment model enables a company to assign a parcel to a local delivery agent who can easily reach the customers' doorstep.
- Enhances agility to meet sudden demand surges with gig economy.

Crowdsourcing fulfillment model has become a necessity for brick-and mortar stores and online retailers. It enables delivery stakeholders to scale driver operations without choking margins. It enables a high level of operational visibility, with real-time updates and hence helps with quick decision-making.

Some of the top Crowdsourced Delivery Network Companies in the USA



Postmates



instacart



WorkFusion



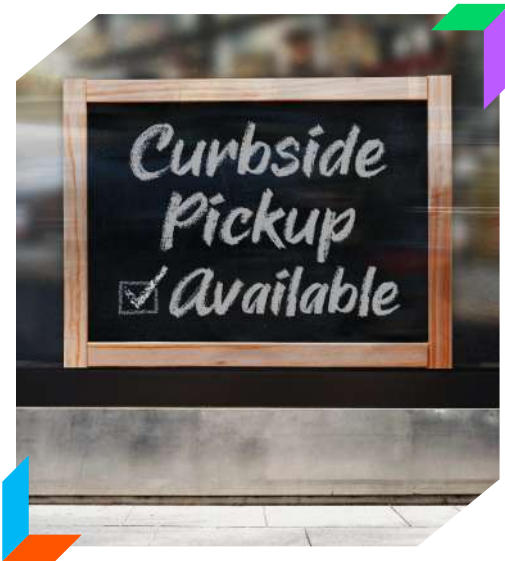
DOORDASH



deliveroo



Curbside pickups



More than three-quarters of consumers said they were interested in BOPIS; over 90 percent of those who have tried it said curbside was convenient, according to NRF's Spring 2020 Consumer View survey.

Curbside pickup enables customers to collect their orders from a convenient location instead of getting it delivered to homes. It is picking up a delivery from the curb outside a store or a warehouse. This model has been highly effective during the COVID-19 pandemic due to the social distancing necessity.

How did curbside pickup start?

Drive-in restaurants were the first curbside pickup service businesses. They first appeared around 1921, where staff brought food to the comfort of customers' cars. Initially Walmart started this service in 2013 at Denver allowing customers to order online and pick them from a local store without leaving their cars.

Most large brand retailers use curbside fulfillment models. The adoption of this fulfillment model among the smaller and mid-sized retailers is gradually increasing.

How does curbside pickup function?

Curbside pickup works in a similar way like Buy Online and Pickup In Store (BOPIS) or click and collect. Here are the steps for the functioning of a curbside fulfillment model.

- Customers place their order in an online store. They mention when and where they will pick up the order. They are provided the option of paying online in advance with their preferred payment method.
- The order details of customers are sent to a merchant. Merchants prepare it and let them know when the order is ready for collection. They can even send extra information like a number to call when they arrive.

Some Businesses that benefit from curbside pickup

- Restaurants
- Groceries
- Clothing Boutique
- Pharmacies
- Hardware stores

Why is curbside pickup gaining importance during the COVID-19 pandemic

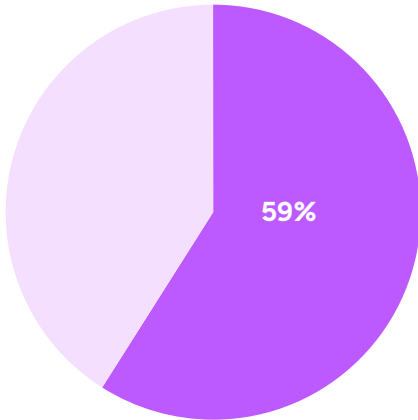
The popularity of curbside pickup has been increasing during the pandemic. Here are the reasons why:

- Curbside fulfillment enables contactless deliveries by protecting both customers and employees
- It makes it easier for consumers to pick up orders during these uncertain times
- Minimizes store foot traffic
- Enhances customer loyalty with user-friendly, safe, and unified shopping experience
- Makes inventory information accurate and transparent
- Eliminates customer wait-time and improves efficiency

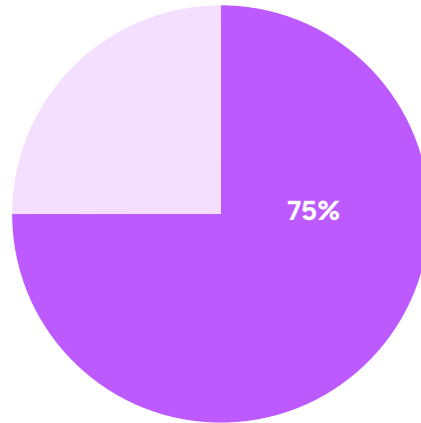
Some of the brands following curbside fulfillment method



What is the future of curbside pickup?



59% of consumer use curbside pickup



75% of consumer subscribed to multiple delivery services

59% of consumers are more likely to use curbside pickup following the coronavirus outbreak. And even when the pandemic subsides, 75% of consumers that subscribed to multiple delivery services, like Amazon Prime, said they would likely continue to opt for curbside delivery. - CommerceHub Report, 2020.

Most shoppers started using curbside pickup due to convenience. Lately, it is turning into a necessity as customers are avoiding stores. In the future, the in-store automated processes and robots can help retailers manage their operations successfully.

Retailers will be planning to optimize their image search and contextual recommendations to influence shopping behaviours. They will focus on making website shopping experience intuitive and personalized, enhancing online sales. Many retail outlets will be working towards creating a separate space or area for pickup.

Dark stores



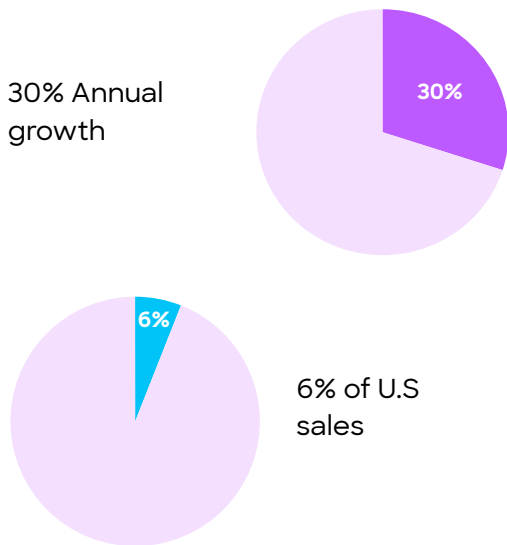
U.S. online grocery sales hit \$7.2 billion in June, up 9% month-over-month but less than the big double-digit gains seen in April and May.
 - Brick Meets Click/Mercatus Grocery Survey, 2020.

Traditional retail stores that are converted into E-commerce warehouses or local fulfillment centers are called dark stores. Though dark stores are not a new concept, it is gaining more attention during these COVID-19 times. The social distancing norms have made retailers adopt this mode of fulfillment. Dark store method of fulfillment has allowed for better stocking. It has acted as one of the smartest methods of replacing in-store shopping for customers. Earlier, dark stores were initiated to cater to customers who avoided in-store shopping during holidays. But today it has become a crucial tool for retailers to steer their businesses towards profitability.

Brands that have announced functioning of dark stores



Why are dark stores gaining popularity during the COVID-19 crisis?



“Retailers who had been basing their e-grocery roadmaps on 30% annual growth, representing about 6% of U.S. sales, have suddenly been hit with massive demand that has swamped resources. This has caused them to make a number of immediate shifts in strategy like opening dark stores.” - Neil Stern, an analyst following grocery for consultancy McMillonDoolittle

Retailers have started to see the value of dark stores due to the following reasons:

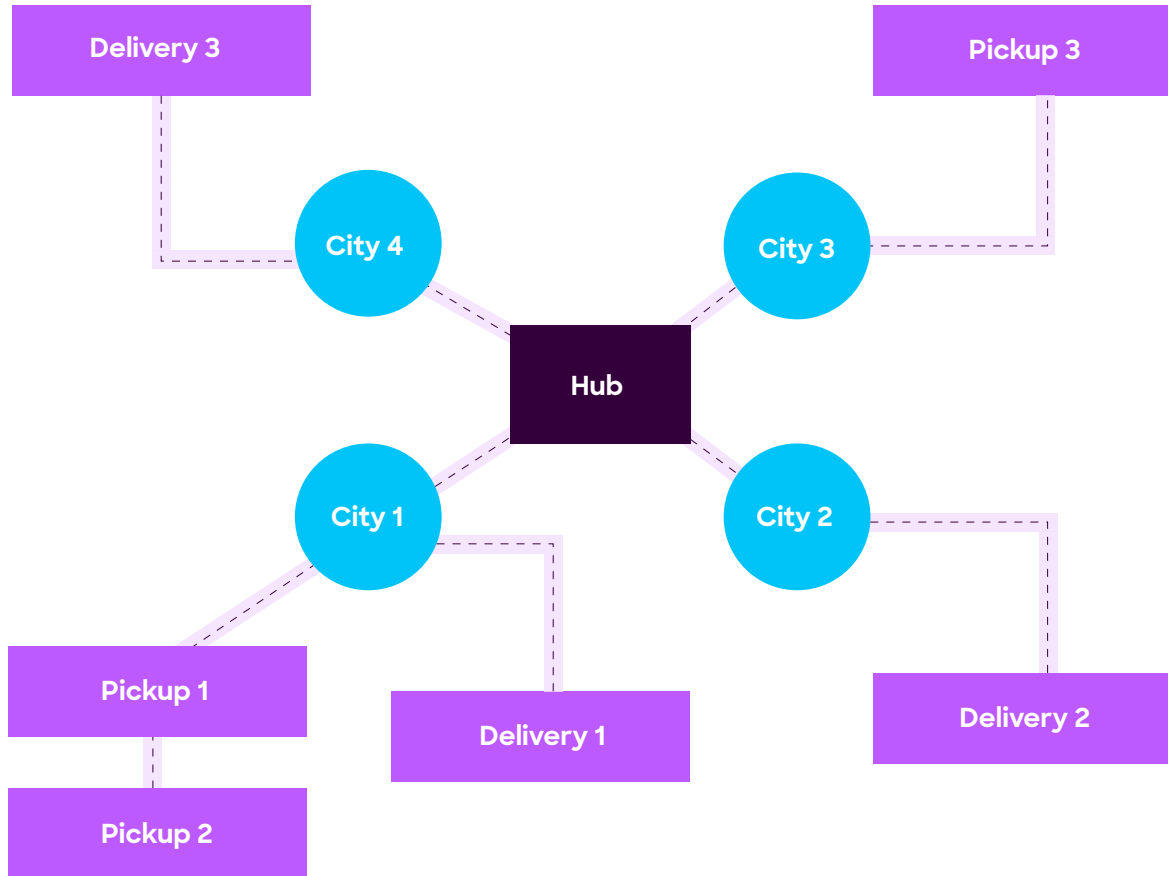
- Eases the foot fall burden on the store by dispersing shoppers to alternate locations
- Helps retailers reduce the strain on central fulfillment center
- Improves the ability to pack and deliver goods in areas with high order density
- Ensures maximum deliveries per vehicle and thus delivering goods in the shortest possible time
- Increases chances to sell new products that could not find space in store outlets
- Easier to deliver orders at convenient times for customers
- Enhances quality and freshness of short shelf life food products
- Reduces transportation costs and shortens the delivery time
- Minimizes carbon emissions in the last-mile delivery

What is the future of dark stores?

The sudden rise in online demand for groceries pushed retailers to find solutions to the increasing demands of the customers. The Covid-19 has made the dark stores model all the more important. Going forward, brands might come up with permanent dark stores. These will require more infrastructure and adopting it without proper planning can disrupt the supply chain. Hence, brands will focus on streamlining processes and automating order fulfillment.

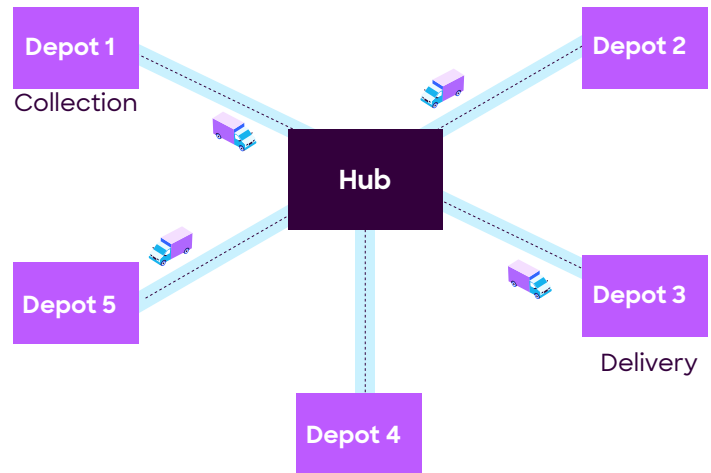
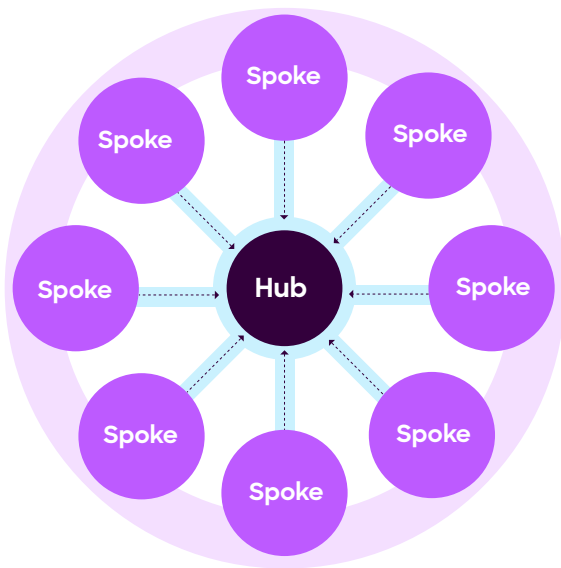
There are also chances for the initiation of a semi-dark store model. These will be stores with a public-facing side along with a localized fulfillment option.

Hub and Spoke Fulfilment Model



Hub and spoke fulfillment model totally changed the perspective of logistics companies. Until the advent of hub and spoke models, the logistics industry was guided by the principles of point-to-point or direct route operations.

Hub and spoke fulfillment model is based on the design of a bicycle wheel. The hub is the strategic center of the network and spokes radiate out to connect with remote directions. Each spoke shows the direction of the delivery. This fulfillment model is used in various industries like grocery, E-commerce, FMCG, retail, 3PL, pharma, and so on.



Why is the hub and spoke model preferred over the traditional distribution model?

The traditional distribution model moves from one point to another point of destination based on need and availability.

With the traditional fulfillment model, one shipment may take days to reach the destination. Also, the partially filled trucks will keep moving back to the same destination. These activities would result in additional time and expenses. Hub and spoke model helps overcome these issues.

How does the hub and spoke model function?

As seen earlier, in the hub and spoke model, the hub is the center. The shipments to destinations around the hub are executed from this hub. If products are supposed to be shipped to a different zone, country, or state, then they will be shipped to the closest hub.

If there are multiple deliveries to the same destination from different hubs, they are clubbed together and sent through the same shipment. This method of fulfillment ensures that the driver speeds up the delivery process and reduces empty miles.

Why is the hub and spoke model gaining traction during 23 the COVID-19 scenario?

- Hub and spoke model enables logistics managers to focus on only the spokes while planning the delivery schedule. This reduces their stress in allocating delivery schedules.
- Makes it easier to plan an optimized route based on dispatch deadlines, current orders, and availability of supplies.
- Allows all the hubs to be working at their optimum capacity at all times.
- Eliminates overlapping of routes.
- Minimizes the need to have multiple distribution centers within the city.
- Reduces carbon footprint of vehicles thereby making deliveries eco-friendly.
- Improves route consistency and safety of drivers. It also reduces their stress.
- Helps for effective data management of crucial delivery metrics like regular routes, driver performance.
- Mitigates the price fluctuations of third-party carriers with consistent pricing

What is the future of the hub and spoke model?

Though new decentralized network models are emerging, the necessity of a hub and spoke model still hasn't diminished. As urban areas become more densely populated we may see adaptations of decentralized hub and spoke models. The hub and spoke model around micro-fulfillment centers will be the next big bet.

Companies that use the Hub and Spoke fulfillment model



Buy Online Pickup In Store (BOPIS)

What is a BOPIS model?

Buy Online Pickup in Store is a fulfillment model that is an extension of online shopping. It provides freedom for customers to shop online and also save on delivery wait times. It is the best model when it comes to investing in omnichannel fulfillment.

BOPIS fuses physical storefronts and online shopping and creates a frictionless shopping experience that reduces the boundaries between in-store shopping and online shopping.

How does the BOPIS model function?

In a BOPIS model, a store has both online and physical presence. It does not work for stores that have only an online storefront.

In many retail outlets, BOPIS is an additional shipping option that appears during online checkout. Consumers can shop online and choose a shipping option to pick up their parcel in a store.

BOPIS works through different ways in the real-world scenario.

Scenario 1: Item in stock at the store and customer wants to pickup

The store associate receives the order, collects it from the shelf, and prepares it for customer pickup. Many stores offer this kind of BOPIS service within an hour.

Scenario 2: Items not in stock in local retail outlet

During this situation, a customer can prefer to either wait and pick up an item in the store or try out somewhere else.

Some retail businesses may use designated parking spots near the store for curbside deliveries. Some of them use BOPIS retail lockers.

Some retailer brands that use BOPIS



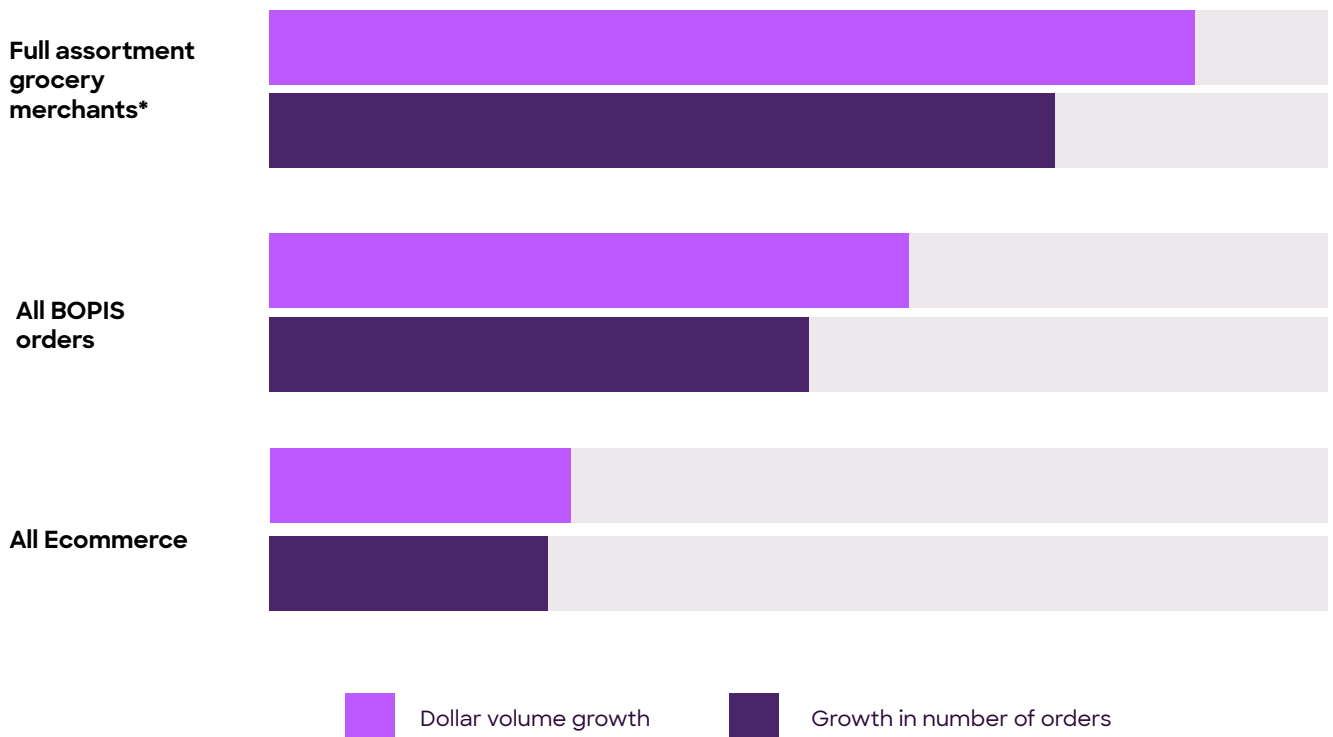
NORDSTROM



Why is the BOPIS model gaining popularity during the COVID-19 pandemic?

GROCERY ORDERS AND BOPIS SURGE

Increase in ecommerce sales on March 12 through March 15



Some retailer brands that use BOPIS

BOPIS has really become one of the best options for customers to conveniently shop products and get them quickly delivered. Here are the reasons for the BOPIS fulfillment model gaining popularity during the COVID-19 scenario.

- Easy for retail outlets to offer free-delivery options

Customers can purchase additional products while at the store

Enables customers to make choices from a wider inventory selection. In-store selection is limited by space, thus the inventory selection is limited to space availability.

Helps retailers conveniently generate customer purchase data.

Allows retailers to send personalized offers, product recommendations, emails, and text messages based on cart orders.

A Summary of all new fulfillment models

Fulfillment Model	Delivery quality and reliability	Ability to reduce traffic congestion costs & carbon emissions	Relying on Delivery outsourcing	Amount of in-store traffic	Involvement of delivery costs	Availability of wider inventory choices	Time taken for return management
Crowdsourcing	Less	High	Yes	Zero	Yes	High	Takes time
Curbside pickup	High	High	No	Less/ more (depending on scenario)	No	High	Lesser time
Dark Stores	High	High	No	Less	Yes	High	Time dependent on proximity
Hub and Spoke	High	High	Yes	Less	Yes	High	Takes some time
BOPIS	High	High	No	More	No	High	Least time to return

Sources

<https://blog.wiser.com/picking-the-right-fulfillment-model-for-your-business/#:~:text=It's%20a%20fulfillment%20model%20where,the%20big%20word%20is%20'supplier.&text=The%20merchant's%20job%20is%20simple,product's%20supplier%20to%20be%20fulfilled>

<https://www.oberlo.in/ecommerce-wiki/fulfillment>

<https://sufio.com/blog/curbside-pick-up-coronavirus-shopify/>

<https://www.usatoday.com/story/money/2020/03/31/coronavirus-curbside-pickup-social-distancing/2901743001/>

<https://www.retaildive.com/news/after-covid-19-is-curbside-delivery-here-to-stay/577937/>

<https://nrf.com/blog/how-retailers-are-adapting-curbside-pickup>

https://www.mckinsey.com/~media/mckinsey/industries/travel%20transport%20and%20logistics/our%20insights/how%20customer%20demands%20are%20reshaping%20last%20mile%20delivery/parcel_delivery_the_future_of_last_mile.ashx

<https://www.usatoday.com/story/money/retail/2020/11/08/dark-stores-trend-in-retail/42995085/>

<https://www.supermarketnews.com/retail-financial/us-online-grocery-sales-growth-tails-june>

<https://www.forbes.com/sites/blakemorgan/2020/04/25/dark-stores-are-the-future-of-post-pandemic-retail/?sh=3277a0ac7826>

<https://www.parcelpending.com/blog/what-is-bopis-in-retail/>

<https://www.digitalcommerce360.com/2020/03/19/coronavirus-is-changing-shoppers-relationship-with-grocery-retailers/>

https://www.radial.com/sites/default/files/TR-BOPIS_Infographic_Radial.pdf

<https://risnews.com/10-retailers-riding-bopis-wave>



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