

FULFILLMENT IN A ONE-DAY SHIPPING WORLD



This sponsored special report will explore fulfillment and delivery strategies, as well as the technologies retailers are using to meet their objectives.

Fulfillment in a one-day shipping world



As Amazon continues to raise the bar, other online retailers are embracing technology, physical expansion and vendors to get packages to customers as quickly and cheaply as possible.

Amazon.com Inc. keeps moving the fulfillment and delivery goalposts.

Amazon in April pledged to make free one-day delivery the new standard for shipments to members of its Amazon Prime loyalty program. Prime, which costs \$119 per year, currently includes free two-day shipping, along with numerous other benefits.

“We’ve already started down this path,” Brian Olsavsky, Amazon’s chief financial officer, said in an April 25 conference call with analysts. “In the past months we’ve significantly expanded our one-day eligible selection and also expanded the number of ZIP codes eligible for one-day shipping,” he said, according to a Seeking Alpha transcript.

A few weeks later, Walmart Inc. announced plans to offer free next-day shipping on roughly 220,000 items for orders that total at least \$35.

But even before Amazon’s blockbuster announcement and Walmart’s response, retailers were engaged in a shipping and fulfillment arms race. To get packages that “last mile” from a retailer or fulfillment center to consumers’ homes, retailers are testing small, drone aircraft and self-driving vehicles. Other retailers are using sophisticated

robotics to prepare orders for delivery or using different kinds of technology to boost their fulfillment games.

Online order delivery by airborne drones and self-driving vehicles—each of which have been a long-time topic of speculation—is close to becoming a reality, albeit with certain limits.

In April, a unit of Google became the first drone operator to receive government approval as an airline, an important step that gives it the legal authority to begin dropping products to actual customers. Google’s Wing subsidiary—which now has the same certifications smaller airlines receive from the U.S. Federal Aviation Administration and the Department of Transportation—said it planned to begin routine deliveries of small consumer items in two rural communities in Virginia within months.

However, drone regulations still don’t permit most flights over crowds and urban areas, limiting where Wing can operate. That’s why it’s not surprising that most robotic fulfillment and delivery technologies stay close to the ground—and many of them ever leave stores or warehouses.

For example, Kroger Co. last summer joined with an

autonomous vehicle startup to test the delivery of groceries in a driverless road vehicle that can steer itself from the grocery store to a customer's home. In December, Kroger launched its driverless delivery service to the general public in Scottsdale, Arizona. Kroger says the service is the first of its kind.

In another autonomous vehicle experiment, Amazon started in January testing “Amazon Scout,” driverless delivery devices the size of coolers that roll along sidewalks at a walking pace. Amazon is using six robots designed to navigate around obstacles such as people and pets, to deliver packages in Snohomish County, Washington.

In addition to delivery, retailers are using robotics to pick and pack online orders. Albertsons Cos. Inc. and Ahold Delhaize USA, for example, are testing in-store robotic “microfulfillment centers.” The robotic devices help workers assemble orders that are later picked up by consumers or delivered (by humans) to consumers' homes.

Meanwhile, Walmart is testing a robotic ecommerce fulfillment system at a recently renovated store in Salem, New Hampshire.

Outside the grocery sector, Best Buy Co. Inc. also is embracing robotics. The electronics retailer worked with a logistics system integrator coupled with a bin storage system provider to overhaul its distribution centers.

At each of Best Buy's three metro ecommerce centers, the retailer now has 30,000 bins and 73 robots. Best Buy delivers up to 40% of a store's inventory from its metro ecommerce centers and segregates store delivery by aisle. At Best Buy's regional distribution centers—located in San Francisco, Atlanta and Findlay, Ohio—the retailer has 150,000 bins and 195 robots.

Driven by the need for flexible and efficient ecommerce fulfillment, more than 50,000 warehouses worldwide will include commercial robotics by 2025, up more than 12-fold from the 4,000 in existence in 2018, according to ABI Research, a market research firm. In the United States alone, the number of robot-powered warehouses will increase to 23,000 by 2025, up from 2,500 in 2018, says Nick Finill, senior analyst at ABI.

Getting better at fulfillment and delivery does not mean just adding technology. It also can mean adding space. For example, women's apparel retailer Lulu's Fashion Lounge LLC recently opened a 250,000-square-foot fulfillment center in Palmer Township, Pennsylvania. The new facility is part of the retailer's push to speed up its delivery times.

The retailer aims to have a two- to four-day shipping window in place by the end of 2019, as the first step toward

its goal of offering two-day free shipping all the time. CEO Colleen Winter says competitive pressure demands it.

“The shipping and delivery bar is set very high. People want product as fast as possible,” she says.

Lulus, which also operates a 90,000-square-foot fulfillment center in Chico, California, has grown roughly 50% every year the last few years with net revenue in the hundreds of millions. That growth left the retailer “busting at the seams” at its Chico facility. The situation drove it to expand its capacity. It chose the Pennsylvania location so it could quickly reach East Coast and Midwest customers.

Lulus was able to add the new fulfillment center thanks to last year's \$120 million capital infusion from venture capital firm IVP and Canada Pension Plan Investment Board. For retailers without that kind of cash, third-party logistics firms (3PLs) offer another alternative. Companies use 3PLs to outsource pieces of distribution, warehousing and fulfillment functions.

For smaller retailers, 3PLs offer capabilities they would be hard-pressed to build on their own. That can be important if sales grow faster than a company's ability to pack and ship products to customers. That was the case for online sunglasses retailer Sunski last year when it hired a 3PL after experiencing growing pains following sales growth of 20% to 30% each year since its launch six years ago.

Sunski had already been using an order management vendor that works in conjunction with its 3PL. Under the current arrangement, all orders flow through the order management system and the vendor then routes direct consumer orders to one of its 3PL's fulfillment centers and wholesale orders to Sunski's center in San Francisco. Sunski pays its 3PL a monthly fee based on the amount of space its products take up in the warehouse and a few cents per order picking and packing fee.

Retailers using 3PLs include Koio, a direct-to-consumer luxury sneaker brand that sells online and in five retail stores and men's apparel retailer Bombfell Inc.

The arms race for better, faster, cheaper fulfillment and delivery shows no signs of letting up. Chances are no technology—drones, robotics, autonomous vehicles or something else—will become the one-and-only solution for all retailers. But advancing technology will likely continue to give retailers better tools to meet growing consumer expectations.

As usual, Amazon is taking the lead in setting those consumer expectations. An environment where one-day delivery is the new standard will require retailers to be nimbler and more creative than ever. Effective fulfillment and delivery have always been hard. It's a safe bet to assume they will keep getting harder. ●

The challenges of managing inventory and orders across omnichannel networks



MATT SNYDER

vice president of operations, Radial,
a global omnichannel technology and operations provider

With customer and delivery demands growing every day, retailers are feeling pressure to fulfill and ship orders faster than ever. But doing this efficiently and managing orders and inventory across multiple channels can be difficult. To discuss how retailers can use technology to meet customers' delivery demands, Internet Retailer spoke with Matt Snyder, vice president of operations at Radial, a global omnichannel technology and operations provider.

IR: What challenges do companies face in building an omnichannel supply chain?

MS: We see retailers and brands looking to leverage a single inventory to support their B2B and direct-to-consumer channels. And as their ecommerce demand grows, they need to have a bigger footprint of inventory available for their ecommerce channel.

But they don't want to raise their overall inventory spend. Instead, they want to leverage their total inventory spend and balance that inventory across their multiple channels to ensure they can handle store replenishment, wholesale channels and ecommerce together.

IR: What common mistakes do retailers make with their fulfillment and delivery strategies?

MS: Retailers struggle with how to best position their inventory throughout their network of distribution centers, fulfillment centers and stores. With more consumers wanting to be able to request and receive their products where and when they want, retailers face inventory planning challenges. They need to plan ahead where inventory needs to be so that when consumers order that inventory, it is positioned in the optimal place. When the inventory is not properly placed, order fulfillment costs increase with split shipments and expedited transportation.

IR: How can they avoid these mistakes?

MS: First, they need to develop a network strategy to leverage all available inventory across their multiple channels. Orders can be fulfilled from distribution centers, shipped from stores or drop-shipped from vendors.

Next, they need technology that enables them to optimize inventory planning and placement, as well as to execute intelligent order

management to connect inventory placement to meet customer demand. Inventory optimization tools use analytics to predict where that demand will be based on historical data. They consider factors like regionalization that allow retailers to forecast whether certain product lines and categories will sell better in certain regions.

It's also critical to have an order management system (OMS) that has full visibility into cross-chain inventory and the intelligence to determine the most efficient fulfillment option.

IR: How can technology help retailers address these challenges?

MS: There are several omnichannel tools and technologies that can help retailers address these challenges. Radial's order management system, for example, provides both the inventory optimization to plan and place inventory throughout the network and intelligent order routing capabilities to most efficiently and effectively fulfill orders. Omnichannel technologies need to integrate with the warehouse systems, customer service tools and store fulfillment technologies to really provide a seamless consumer experience. ■

SIMPLIFYING ECOMMERCE

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Expose more inventory



Scale on demand



Mitigate fraud



Inspire customer loyalty

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WHAT DO CONSUMERS EXPECT WHEN IT COMES TO DELIVERY?

PACKAGES DELIVERED WHERE THEY WANT THEM, WHEN THEY WANT THEM AND HOW THEY WANT THEM.



Lauren Freedman is senior consumer insights analyst at Internet Retailer.

CONVENIENCE HAS EMERGED as a key factor that helps shoppers determine where they shop. When they order an item online they want to decide where they want to receive it, when they want to receive it and how they want to receive it. And retailers have little choice but to push to bolster their logistics capabilities.

How consumers think about delivery has changed substantially, particularly over the past few years. Consumers want the ability to track where products might be at any given time.

They've come to expect to have the option to pick up an online order at store-based chains like Target and Walmart, as well as consumer brands such as The North Face and Nike. And they also want to have online orders delivered to alternative delivery locations beyond the store. That's increasingly a choice for them as alternative delivery locations are cropping up in an array of locations from malls to branch banks.

LOGISTICS ARE AN IMPORTANT FACTOR IN WHERE CONSUMERS SHOP

When Internet Retailer last August asked shoppers to rank the six factors that would determine where they would shop over the 2018 holiday season, free shipping ranked at the top of the list, followed by time savings. 95% of online shoppers indicated that they have taken advantage of free

shipping from a retailer. As consumers' expectations grow, retailers increasingly feel compelled to meet these expectations and ship for free to the customer either by absorbing those costs or factoring them into the price of the products being sold.

However, the most surprising finding was that logistics, defined as the ability to get a product quickly through delivery or in-store pickup, tied for third with convenience. Certainly this would not have been the case a few years back. That suggests that because of the expediency of online deliveries, convenience has a broader meaning as retailers are better able to meet shoppers' needs. Whatever the destination, choice and timing remain paramount.

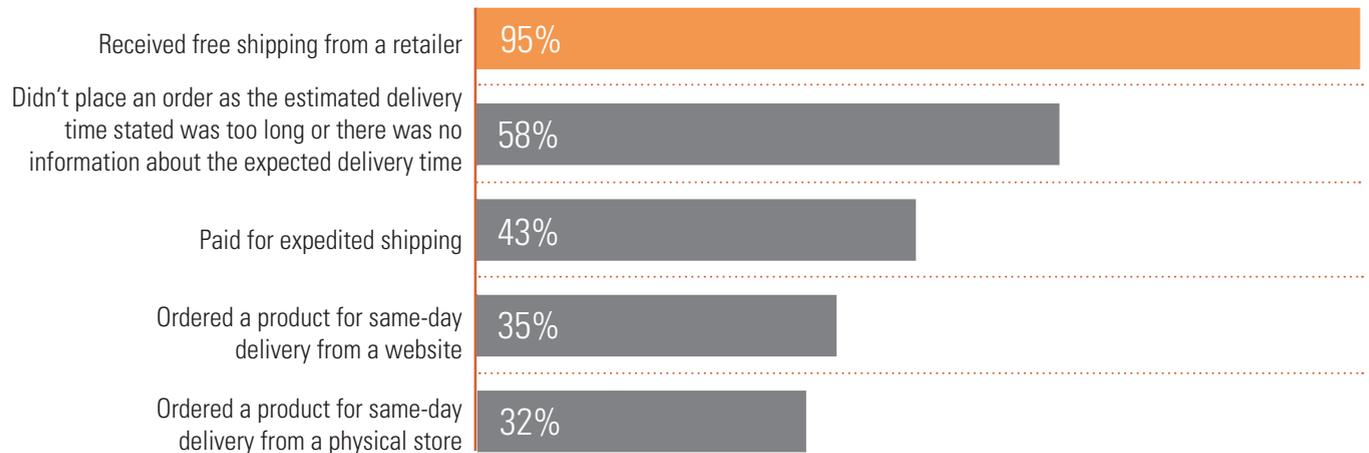
Logistics have grown in importance as retailers elevate their capabilities. As is the case with most ecommerce developments, Amazon brought this to the forefront in solidifying consumer expectations. Having pushed the envelope, not only is fast shipping a competitive necessity in today's digital climate, it is a reality.

TRANSPARENCY IS A SHOPPER IMPERATIVE

Shipping and delivery transparency is essential among "need-to-know" online shoppers. Delivery starts with transparency as 58% of shoppers in our August survey noted that they had decided against placing an order when delivery information

Shoppers embrace faster delivery options

The fulfillment options online shoppers have selected in the previous six months.



Source: Internet Retailer/Bizrate Insights Click, Ship, Returns Survey of 1,105 shoppers, August 2018

was not forthcoming or the time to receive the item was too long.

Speaking of timing, when asked about the logistics factor when deciding to make a purchase from Amazon, consumers have grown accustomed to receiving packages every day of the week. 49% of shoppers said that weekend delivery options are important while 41% noted same-day delivery options also are important.

Shoppers love the flexibility and ability to order closer to need, especially when it doesn't cost them anything more. Our research suggests that shoppers will sometimes pay to expedite orders based on circumstances, as was the case for 43% of those surveyed.

BOPIS GAINS TRACTION

While residential delivery remains the standard, buy online pickup in store, or BOPIS, continues to gain ground. Shoppers enjoy the efficiency and confidence that comes with this type of transaction. Here are just a few results from a consumer survey we conducted in January:

- 78% of shoppers have checked for store product availability
- 58% have bought an item online and picked it up in a store
- 17% have placed an online order for same-day delivery from a store

Omnichannel services also offer benefits to retailers. For example, a January consumer survey that we conducted with Bizrate Insights found that 22% of omnichannel shoppers have

made an additional purchase when they picked up an online order in a store.

That's why it is surprising that 54% of retailers that operate a store don't offer BOPIS. Interestingly, 10% of omnichannel shoppers have used a drive-up service to pick up online orders. Though limited options exist today, one can conclude that drive-up services may be the next frontier. With time, more stores will need to look at options for parking and curbside locations to accommodate on-the-go buyers.

Beyond present adoption, omnichannel prospects loom large:

- 68% of omnichannel shoppers expect to do more product lookup
- 53% of omnichannel shoppers plan to increase their use of retailers' BOPIS options
- 23% of omnichannel shoppers expect to place more orders for same-day delivery

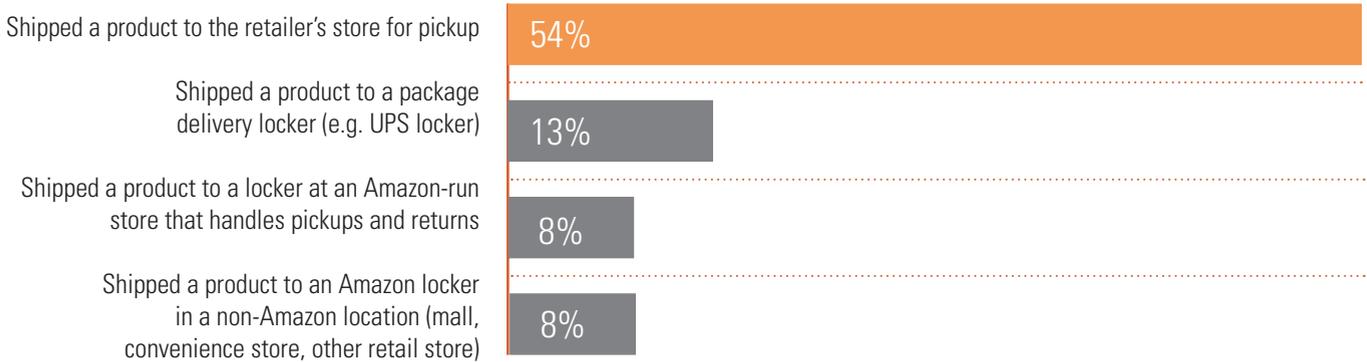
SHOPPERS MOVE BEYOND STANDARD RESIDENTIAL DELIVERY

Shoppers looking for convenient delivery options are also increasingly seeking alternative delivery locations. 13% of consumers last August reported having used delivery lockers such as those operated by UPS and Amazon. And that number will likely grow as the locations proliferate, particularly among urban dwellers.

Amazon's expansion of their lockers in highly convenient locations is attracting shopper

Alternative delivery locations grow increasingly common

The delivery options online shoppers have used in the previous six months.



Source: Internet Retailer/Bizrate Insights Click, Ship, Returns Survey of 1,105 shoppers, August 2018

attention, moving beyond their own stores and return center locations. 8% of shoppers have chosen alternative locations beyond residential and office locations for package delivery and expectations for exponential gains are forecasted.

TRACKING A SHOPPER RITUAL

There is a sense of urgency among many consumers who shop online. And those shoppers often have the desire to see the status of orders placed. 97% of shoppers used tracking to see when their orders might be delivered. Mobile

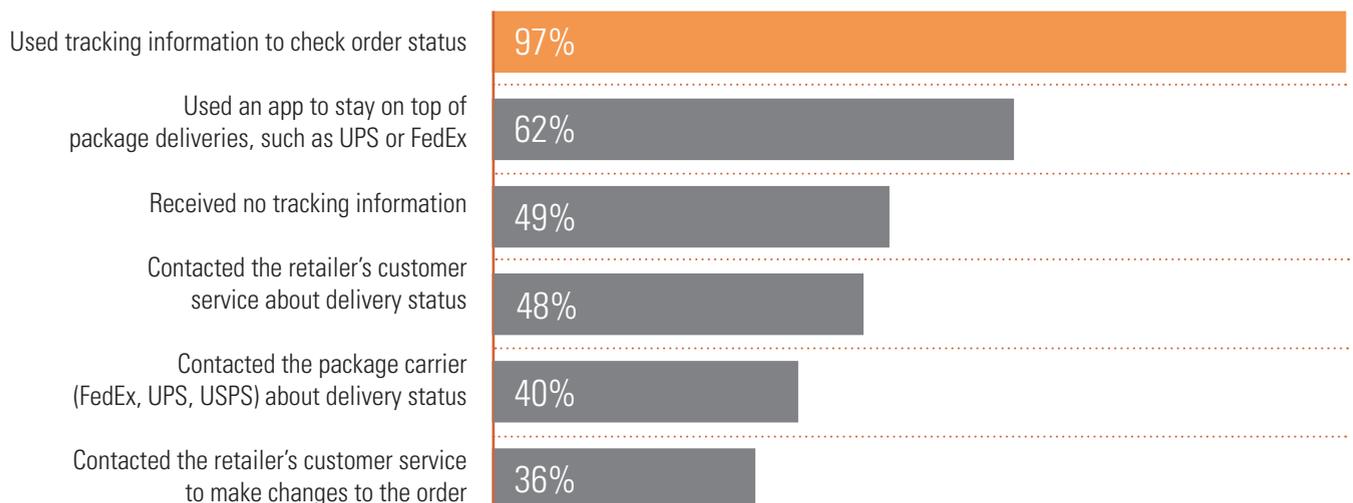
devices have likely fueled this behavior and 62% indicated using apps to accomplish this goal. They take a two-pronged approach as 48% of shoppers reached out to the retailer prior to delivery while 40% contacted the carrier to get delivery status. This need-to-know mentality certainly dovetails with heightened expectations.

DELIVERY IS PRIMED TO PERFORM

Delivery has become an important factor that helps consumers decide where to shop. And that's forcing retailers to invest in an infrastructure that meets shopper expectations.

Online shoppers keep their eye on their online orders

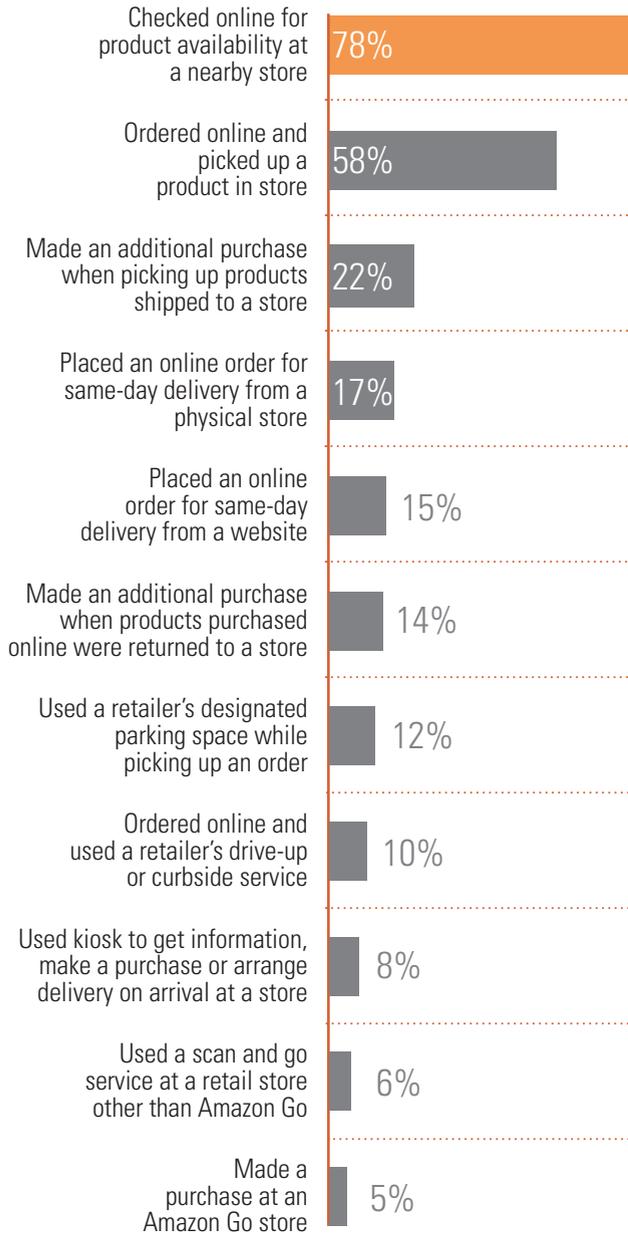
Online shoppers had a variety of experiences with package tracking in the previous six months.



Source: Internet Retailer/Bizrate Insights Click, Ship, Returns Survey of 1,105 shoppers, August 2018

Online shopping triggers new delivery and pickup behaviors

Many shoppers are aggressive in checking product availability and picking up online orders in local stores.



Source: Internet Retailer/Bizrate Insights survey based on 1,110 consumers, January 2019

For omnichannel retail, being able to find products by location and then pick them up at the store are now best practices among the top retailers. The meaning of fast will accelerate even further as shoppers want it now. Choice will also be in play as convenience will compel buyers to make shopping decisions on a moment's notice. ●

CAN RETAILERS COMPETE WITH AMAZON'S ONE-DAY SHIPPING OFFER?

WHILE MUCH OF THE RETAIL industry was still working to match Amazon.com Inc.'s Prime two-day free shipping program, the retail giant in late-April announced plans to evolve Prime into a one-day shipping program. Amazon says it's investing \$800 million in the second quarter in the effort, and that in recent months it had "significantly" expanded its one-day eligible product selection, as well as the number of ZIP codes eligible for one-day shipping. That's why we want to know: How can other retailers compete with Amazon's one-day shipping offer for Prime members?

"If anyone thinks the Amazon one-day story is about urgency, they're missing the real headline. It's more than urgency, it's about 'optionality' where retailers need to give consumers a menu of delivery options that range from two-day to a specific day to right now. Bricks-and-mortar retailers know that shoppers can have different delivery expectations every time they hit checkout, but if the retailer can't give them that choice, they know Amazon will. That's why many are leveraging their physical footprints to bring products closer to homes, launch delivery from store and give customers more choices."

MARC GORLIN

founder and CEO at local delivery service Roadie



"We provide our customers with outstanding customer service through live chat, email and telephone. Our customers know that they are taken care of every step of their online journey, from the ordering process to the delivery. They can reach a real customer care person who has a long work history with the company, and who sincerely cares about them. Do retailers really need to combat one-day shipping? I don't believe so."

CHERRI NEWBURY

president at business and consumer coffee merchant DiscountCoffee.com



"With the exception of other large players like Walmart and Target, one-day free shipping is completely unattainable without putting most retailers out of business. Instead of trying to compete with Amazon, Target and Walmart, others should explore alternatives to one-day free shipping that might be equally as appealing to customers. For essential household items, this could mean offering auto-replenishment, or for apparel retailers, monthly subscription services."

JON BECK

CEO at the retail consultancy Columbus Consulting



"Every retailer competing with Amazon needs to look at its own strengths, what customers are looking for and, based on this, assess how to compete with Amazon. Can you compete on quality? Service? Price? Do most customers really care if they get their item tomorrow as opposed to three days from now? There is no doubt that fast delivery is attractive to customers, but we have reached the point of diminishing returns and, as such, competing with this directly is simply a mistake. There are plenty more important attributes for customers to focus on rather than simply getting the item one day sooner."

DAVID SASSON

CEO at online art retailer OverstockArt.com

