Amazon Seeks to Ease Ties With UPS

Rising costs have Amazon seeking alternative delivery routes, straining relations with its longtime shipping ally

By
LAURA STEVENS and **GREG BENSINGER** **WSJ** Dec. 22, 2015

As the clock counts down to Christmas, workers at United Parcel Service Inc. are busy hustling packages along loading docks and conveyor belts at its Louisville, Ky., hub—part of a costly, intricate system built in part to cater to Amazon.com Inc., its biggest customer.

But the symbiotic relationship between the two giants has come under increasing strain, according to interviews with more than a dozen current and former UPS and Amazon executives.

Rising package volumes and costs have Amazon seeking alternative delivery routes—shifting the online retailer's role from key ally to a potentially disruptive competitor.

Amazon has held talks with air-cargo companies to lease airplanes and build its own freight operation. The company is already using its own trucks, drivers and a fleet of couriers for the final and most-expensive leg of an order's trip.

It has been making its own deliveries in certain high-density regions and relying more heavily on the U.S. Postal Service. Eventually, it hopes to get drones to drop packages into backyards.

Such steps are part of a much broader plan at Amazon, which counts shipping costs as one of its fastest-growing expenses, totaling 11.7% of revenue in the third quarter, up from 10.4% a year ago. The goal is to reduce its reliance on carriers like UPS, according to people familiar with the matter.

"Amazon's interest is not in doing what may be good for UPS," said Satish Jindel, a parcel-industry analyst with SJ Consulting Inc. "Their interest is in getting control over logistics."

Amazon declined to comment. A spokesman for UPS said "we will continue to work closely with Amazon and all our customers to help them solve their growth and customer service challenges."

There is more than loyalty at stake for Atlanta-based UPS. This year, its Amazon account exceeds $1 billion, say former Amazon and UPS executives. That is roughly a fivefold increase
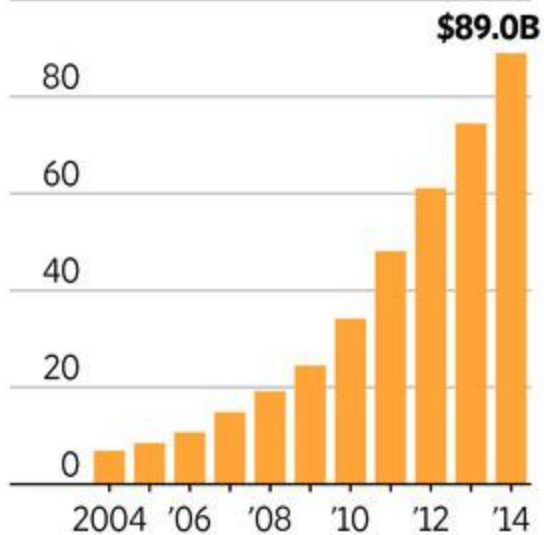
since 2005, according to an estimate by a former executive with direct knowledge of the company's spending.

Shipping News

As sales have grown at Amazon, so too have package delivery costs.
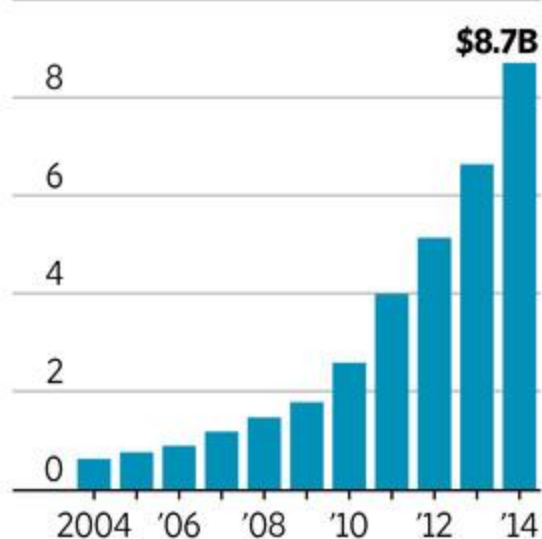
Net sales
$100 billion

Shipping cost
$10 billion

Source: the company

THE WALL STREET JOURNAL.

While UPS investors generally view growing volumes as a sign of health, the company's cost-per-package has actually risen since more than a decade ago, putting margins under pressure.

The average cost to handle a parcel was about $8 last year, up from roughly $6.50 in 2000, according to the company. Much of the increase was attributed to a growth in e-commerce, as UPS has invested more than $11 billion over the past five years to upgrade and expand its network.

It hasn't helped relations that Amazon was a factor in UPS's last two back-to-back Christmas snafus—each of which cost UPS an unexpected $200 million. Two years ago, Amazon overwhelmed UPS with hundreds of trailers of last-minute Christmas orders. It later got UPS to help underwrite millions in customer refunds.

Last year, UPS increased capital spending by 10% to be ready for a prolonged holiday surge that never came.

This year, the company is expecting record volumes and has already seen parts of its network strained from a surge of online holiday spending over the days before and after Thanksgiving.

On UPS's earnings call in October, an analyst pushed management to address possible tension in the companies' relationship.

"How do you make sure that you're guarding against the potential outcome where your customers might increasingly become competitors?" asked Alexander Vecchio with Morgan Stanley.

Alan Gershenhorn, UPS's chief commercial officer, said it would be "very difficult to match."

The customer-as-competitor dynamic is upending various business models. Pay-TV providers like Comcast Corp. and Dish Network Corp., for example, could feel the pain as HBO bypasses them to reach consumers. Ditto for retailers like Macy's Inc. as Estée Lauder sells direct to online shoppers.

At Amazon, plans to handle more of its own parcels have accelerated over the past two years, according to current and former executives. Amazon also fears that UPS's hub-and-spoke system—moving a package from shipper to sorting hub to brown van to your home—is growing obsolete, according to the executives. So the retailer is building regional distribution and package sorting centers, while adding thousands of truck trailers. It is even trying delivery by newspaper carriers.

For a long time, UPS and Amazon were a harmonious pair. The two had worked together for years, even as FedEx Corp. also shipped for Amazon. In 2013, FedEx refused to lower prices enough to meet Amazon's demands on a big chunk of its business with the retailer, according to people familiar with the negotiations. Amazon asked UPS to take on much of it instead. The company agreed, although some UPS executives questioned whether to assume the low-margin business.

When Amazon launched Prime unlimited two-day shipping in 2005, UPS went all in, giving the retailer discounts of as much as 70% for the new business.

Lately, though, the companies' relationship has been strained. A few years ago, UPS shared some of its routing data with Amazon, according to an executive. When Amazon requested additional data, UPS—by then wary of the retailer's intentions—refused, that executive added.

Amazon has poached more than 40 UPS supervisors, managers and executives in the last three years, according to an analysis of LinkedIn data. In September, Kniffen Kelly, a 16-year veteran working on engineering UPS's transportation networks, left to become Amazon's director of sort center engineering.

UPS and Amazon have also been engaged in a rare public debate over low postal rates. In government filings, UPS has argued that the U.S. Postal Service calculates some pricing incorrectly; Amazon defends the model.

For all its efforts, it is still unclear whether Amazon can outrun its delivery partner—or if it might ever be able to break away from UPS. Building a logistics network is costly, and the retailer may never have the necessary infrastructure, industry analysts say.

Some customers have already complained about missed or late deliveries from Amazon's in-house service, known as Amazon Logistics.

David Konigsberg said a camera he ordered this month seemed to vanish. "Amazon said the package I ordered had left the carrier facility, but it never came to me," said Mr. Konigsberg, a 27-year-old software developer in Alexandria, Va. "It's a good thing I didn't need it right away."

Amazon Seeks Cargo Planes for Air Freight Operation

Online retailer aims to lease as many as 25 aircraft
By

GREG BENSINGER and **DOUG CAMERON WSJ** Dec. 18, 2015

Amazon.com Inc. has held discussions with air-cargo companies to lease airplanes and establish its own freight operation, with the goal of reducing its reliance on traditional carriers, according to people familiar with the matter.

The Seattle-based online retailer has said it is seeking as many as 25 aircraft from companies including Atlas Air Worldwide Holdings Inc. and Air Transport Services Group Inc., these people said. Amazon could begin building out the service early next year, they said.

Amazon has already teamed up with Air Transport Services Group in Wilmington, Ohio, as part of a test using cargo aircraft, these people said. The Seattle Times reported earlier on the discussions with air-cargo companies.

Air Transport Services Group didn't immediately respond to a request for comment. Representatives for Amazon and Atlas declined to comment.

The effort stems from a broad desire at Amazon to take greater control of its shipping and package delivery operations. In some cases, the company is using its own trucks, drivers and a fleet of couriers for so-called last mile delivery, the final and most-expensive leg of an order's trip.

Amazon also dreams of taking packages to the air through a network of drones that can make deliveries in as little as 30 minutes.

As well as helping to restrain costs, developing its own air-cargo fleet and ground transportation could allow Amazon to avoid delays caused by its partners, including the U.S. Postal Service, United Parcel Service Inc. and FedEx Corp.

It could take months for Amazon to establish such a fleet, since it typically requires the cargo companies to convert older passenger planes, such as Boeing Co.'s 767-300 for use as freighters. Amazon has told the air-cargo firms, which typically provide flying crews and maintenance services, that it hopes to phase the planes into operation over the next three years, the people familiar with the matter said.

Amazon Lays Out Plan for Drones to Navigate Skies

Retail giant's proposal includes dividing airspace to allow for planned delivery drones, avoid manned aircraft

Amazon plan would include a 'high-speed transit zone' for advanced unmanned aircraft like the delivery drones it is developing. *PHOTO:AFP/GETTY IMAGES*

Some of the biggest players in the world of commercial drones are drawing up plans for how to safely manage the growing flock of unmanned vehicles in what are quickly becoming crowded skies.

On Tuesday, Amazon.com Inc. laid out a proposal centered on slicing U.S. airspace into segments for different categories of unmanned aircraft, while keeping them all away from airplanes. The plan, described by Amazon's top drone executive at a conference hosted by the National Aeronautics and Space Administration, would include one slice—a "high-speed transit zone" from 200 feet to 400 feet above the ground—for advanced unmanned aircraft like the delivery drones Amazon is developing.

The Amazon proposal is part of a broader push to develop automated systems to maintain order among the growing number of drones zipping around U.S. skies. The Amazon vision

incorporates much of a NASA plan for an automated drone-traffic management system, a project that has more than 100 other collaborators, including Google Inc. and Verizon Communications Inc.

While implementation of any new system is still years away, consensus is emerging among regulators and drone users that one is necessary. Hobbyists and professionals such as real-estate agents are increasingly using the devices, and big companies including Amazon and Google have ambitious plans to use them routinely. Already, airline pilots are increasingly spotting the devices near airports, and drones recently forced the grounding of planes that were trying to fight wildfires in California. Strict U.S. rules currently limit drones' commercial potential, but don't solve some of the biggest safety threats.

Parimal Kopardekar, head of NASA's drone-management project, said he hopes the U.S. can adopt a system to manage drone traffic before a tragedy occurs. "It's crucial," he said. Without a system, "everyone flies anywhere they want to and they end up going into no-fly zones and into firefighting efforts and near airports."

There are no statistics on the number of drones in the U.S. but industry executives estimate the figure is in the hundreds of thousands. The two largest consumer drone makers, SZ DJI Technology Co. and Parrot SA, have together sold more than 3 million devices world-wide, and the U.S. is their largest market. The Federal Aviation Administration has approved 900 operators to use drones commercially in the U.S. and that number is expected to soar once the agency finalizes proposed rules next year.

Separated Skies

Amazon is proposing slicing U.S. skies into sections for different vehicles.

500 ft. and above
Manned aircraft

400 ft. to 500 ft.
No-fly zone

200 ft. to 400 ft.
A 'high-speed transit zone' for sophisticated drones like Amazon's

0 to 200 ft.
A 'low-speed localized traffic' zone for consumer drones and devices on low-altitude missions, such as for video or home inspections

Note: Amazon proposed permanently banning drone flights near airports.
Source: Amazon.com
THE WALL STREET JOURNAL.

Under the NASA plan, drones would maintain distance from other drones by communicating with one another and use onboard sensors to avoid obstacles like birds. Central computers would act as regional traffic managers, running drones' flight plans against other data—weather, flight restrictions, other drones' plans—to determine if a route is safe. All of this would happen in seconds automatically.

NASA plans to demonstrate a version designed for rural areas next month, and it aims to enable autonomous drone flights in cities within five years. Implementation of such a system would likely require support from Congress or the FAA.

Amazon's plan proposes a no-fly zone between 400 feet and 500 feet to create a buffer between unmanned and manned aviation. Airplanes would be restricted to above 500 feet, while the area below 400 feet would be split into two sections. Drones equipped with collision-avoidance technology and reliable links to the traffic-management system would be able to fly in the high-speed zone between 200 feet and 400 feet. Other drones, including $500 consumer drones and devices being used for surveying or video, would be restricted to the "low-speed localized traffic" zone below 200 feet. The proposal permanently bans drone flights around airports.

The system is designed to allow one person to oversee many automated drones well beyond the person's sight—a scenario that is currently banned by the FAA but is necessary for drone deliveries.

Gur Kimchi, head of Amazon's drone effort, said the company's proposal would create a safe environment that enables new drone uses. "We want a model that's open-ended for innovation, and a big part of that is how you change what exists today."

The existing proposals leave many questions largely unanswered, including how to verify drones are equipped for certain airspaces and how to keep devices away from no-fly zones, such as airports. So-called geofencing software, which uses satellite data to restrict drones from certain areas, is already used in some consumer drones, but many in the industry consider the technology unreliable. There is also the question of whether the general public would accept a bevy of drones overhead that is almost entirely choreographed by computers.

Amazon's proposal would enable drones to choose their own routes, with the central management systems ensuring devices aren't on a collision path. NASA proposes letting drones pick their own routes in less congested areas, but it wants the central computers to assign routes above cities. "We want flexibility where it's possible and structure where it's necessary," said Dr. Kopardekar.

Another idea being discussed for managing drone traffic is to set them on common routes, somewhat like manned aviation. The design of cities and the current airspace will trigger computers to naturally create low-risk routes for drones, such as above rivers, said Jonathan Evans, a former helicopter pilot who now heads Skyward IO Inc., a company that aims to become one of the central managers envisioned in NASA's plan. "We see a dynamic system, but there will be a path of intelligence that is the most risk-mitigated path," he said. "It will become a common trunk line of sorts, with aerial robots flowing in an out."

Amazon, in Threat to UPS, Tries Its Own Deliveries

An Alternative to Shippers Like FedEx and UPS, New Service Could Deliver Goods the Same Day as Purchased

Amazon.com reported another quarter of skimpy profits, despite better-than-expected revenue growth, as the Web-commerce giant spent heavily on shipping, cloud computing and other initiatives.

By
GREG BENSINGER And **LAURA STEVENS**   WSJ April 24, 2014

The future of Amazon.com Inc. is hiding in plain sight in a San Francisco parking lot. Adjacent to recently closed Candlestick Park, Amazon is testing its own delivery network for the "last mile," the final leg of a package's journey to consumers' doorsteps. Trucks loaded with Amazon packages and driven by Amazon-supervised contractors leave for addresses around San Francisco. Similar efforts are under way in Los Angeles and New York.

Delivering its own packages will give Amazon, stung by Christmas shipping delays, more control over the shopping experience. It can also help contain shipping expenses, which have grown as a percentage of sales each year since 2009, according to securities filings.

On Thursday, Amazon reported another quarter of skimpy profit even as sales increased 23% to $19.74 billion. Shipping costs rose 31%, and it also spent on cloud computing and new

initiatives. The company reported a first-quarter profit of $108 million, compared with $82 million a year earlier.

The new delivery efforts will get Amazon closer to a holy grail of e-commerce: Delivering goods the same day they are purchased, offering shoppers one less reason to go to physical stores. With its own trucks, Amazon could offer deliveries late at night, or at more specific times.

The move is a shot across the bow of United Parcel Service Inc., FedEx Corp. and the U.S. Postal Service, which now deliver the majority of Amazon packages. It is also a challenge to Wal-Mart Stores Inc., eBay Inc. and Google Inc., each of which is testing deliveries. Ultimately, a delivery network could transform Amazon from an online retailer into a full-service logistics company that delivers packages for others, according to former Amazon executives. They caution that any such effort likely is years away.

Delivery is a big step in Amazon's ambitions. The largest U.S. Internet retailer has branched into original video programming, set-top boxes for streaming video, and soon, smartphones, among other things.

It is unclear that Amazon will achieve its goals. UPS, founded in 1907, has a head start of more than a century. Industry observers say it will be difficult for Amazon to match the efficiency of UPS or FedEx in more than a handful of U.S. markets, simply because it will be delivering fewer packages over a wider area.

Amazon quietly began rolling out the delivery network in the U.S. late last year, in packages labeled "AMZL" and "AMZN_US." Customer-service representatives and former employees say those codes designate Amazon's in-house delivery network. Customers who have received the packages said they appear to use a different tracking process, with no links to an outside shipper.

Heavy Load

Amazon wants to tame delivery expenses. Fulfillment costs as a percentage of sales:

Source: the company
The Wall Street Journal

Next up for Amazon is Treasure Island, a man-made spit of land in San Francisco Bay. Amazon is reviewing a lease for a site on the island to house trailers and delivery trucks, according to a person familiar with the matter. From there, Amazon would dispatch trucks into San Francisco, likely late at night and early in the morning when traffic is lighter and fewer island residents would be disturbed, this person said.

Amazon offered a peek at the delivery network in a recent job posting on its website. "Amazon is growing at a faster speed than UPS and FedEx, who are responsible for shipping the majority of our packages," the posting reads. "At this rate Amazon cannot continue to rely solely on the solutions provided through traditional logistics providers. To do so will limit our growth, increase costs and impede innovation in delivery capabilities." "Last Mile is the solution to this. It is a program which is going to revolutionize how shipments are delivered to millions of customers."

As a prelude to the U.S. moves, Amazon has been testing a delivery network in the U.K. "We've created our own fast, last-mile delivery networks in the U.K., where commercial carriers couldn't support our peak volumes," Chief Executive Jeff Bezos said in his annual letter to shareholders earlier this month. "There is more invention to come."

Typically using small couriers, Amazon delivers packages under the "Amazon Logistics" moniker and recently acquired an option to invest in Yodel, a U.K.-based parcel-delivery service. Dave Clark, Amazon's vice president for world-wide operations, said in November that Amazon would use its own trucks to make Sunday deliveries in London.

Amazon declined to comment for this article.

At San Francisco's Candlestick Park, formerly home to the NFL's 49ers, Ryder trucks are scattered around the parking lot, amid rows of bright green AmazonFresh trucks for Amazon's same-day grocery-delivery service. Trailers arrive each morning, and their contents are transferred to vans or trucks for deliveries in and around San Francisco, said one person familiar with the operation.

The precise logistics between Amazon's "last mile" hubs couldn't be learned. Even if Amazon takes over home deliveries, it will be difficult for the company to cut the major shipping carriers out of the process entirely. Amazon still relies on them to move goods around elsewhere in its supply chain.

Planning for the delivery network began several years ago, but the project took on added urgency last winter after UPS and FedEx failed to deliver Amazon packages to some customers by Christmas, according to two people familiar with the matter. Amazon blamed the carriers, but offered $20 credits to many affected customers.

"What happened during Christmas cost a huge amount of money" for Amazon, UPS and FedEx, said Marc Wulfraat, president of logistics consulting firm MWPVL International, which tracks Amazon closely but isn't working with the retailer.

If Amazon expands its delivery network, it would likely rely initially on cheaper, more flexible regional carriers—such as the East Coast's LaserShip Inc. and the West Coast's OnTrac— as well as the Postal Service for deliveries, according to supply-chain experts and logistics consultants. That would affect package volumes at UPS and FedEx, potentially hurting their efficiency. LaserShip and OnTrac declined to comment.

Sanford C. Bernstein & Co. analysts estimate that Amazon shipped about 608 million U.S. packages in 2013. The Postal Service handled 35%, UPS 30%, regional shippers 18% and FedEx about 17%. The distribution hasn't changed much in recent years.

UPS and FedEx ground rates on average have increased 3% to 5% annually in the past five years, an incentive for Amazon to develop its own delivery service, industry observers say. Amazon cited rising shipping costs in boosting the price of its Prime unlimited two-day shipping membership in the U.S. by $20, or 25%, earlier this year.

Amazon typically pays between about $2 and $8 to ship each package, according to shipping-industry analysts, with the cheapest option through the Postal Service and the most expensive via UPS or FedEx.

Amazon shipments should account for less than 1% of revenue for both FedEx and UPS, said Jack Atkins, an airfreight and logistics analyst at Stephens Inc. That suggests Amazon's delivery network would have a limited effect on the shippers' profits, at least initially.

FedEx Chief Executive Fred Smith in December said that Amazon "can unquestionably do local deliveries should they choose to do so." But he said the vast majority of packages would continue to be moved by FedEx, UPS and the Postal Service. A FedEx spokesman declined to comment further.

A UPS spokesman declined to comment.

Amazon's in-house delivery efforts have experienced hiccups. Online forums in the U.K. are rife with customers reporting missed, late or inaccurate deliveries. Several packages shipped to The Wall Street Journal's San Francisco office assigned to "Amazon Logistics" arrived several days after their guaranteed delivery dates. Customer-service representatives said that because the division is new, it is more difficult to track packages.

David Steigman, a customer in San Francisco, said two recent orders of DVDs like "The Hobbit" with tracking information for "AMZN_US" repeatedly missed Amazon's own delivery deadlines. "After the first time, I asked them not to ship me anything using that service, but they did it again

anyway" said Mr. Steigman. "I don't want to be Amazon's test market for their new shipping idea—that's not what I am paying for."