

FedEx Office's new bots can deliver pizza, groceries or even bring chicken noodle soup to the sick

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FedEx Office is adding a new kind of worker in North Texas: A robot that can deliver a hot pepperoni pizza, a bag of groceries or a prescription to a customer's home. The bot could bring a swab for a strep test to a sick person's door and return hours later with medication, cough drops and a cup of chicken noodle soup.

Starting in July, the robots, dubbed same-day bots, will be put to the test in the real world. FedEx Office will run the bots through routes in Plano and Frisco. They will join pedestrians on sidewalks and roll beside cars on the roadside.

The bots also will be tested in Memphis, near parent company FedEx's headquarters, and in Manchester, N.H., near the headquarters of DEKA, the engineering firm that designed them.

For Plano-based FedEx Office, the bots represent a large untapped business opportunity. FedEx Office, which was formerly Kinko's, has more than 1,500 employees in Plano. It has about 1,900 stores and locations and 15,000 employees in the U.S.

With the on-demand economy, companies from startups to Fortune 500s are looking for creative and cost-effective ways to make speedy deliveries. They've enlisted the help of gig economy workers and experimented with tech-driven approaches, such as drones and robots.



The bots are FedEx's answer.

The six-wheeled bots look like a white cargo box that's attached to the base of a high-tech wheelchair. They can carry up to 100 pounds, but can fit through a standard doorway. They're powered by a rechargeable electric battery and use software, sensors and a 360-degree camera to navigate. They can climb steps, wade through puddles and roll through granite, sand or snow.

When they arrive to their destination, customers can unlock the bot's sliding door with an app or a punched-in code.

FedEx Office chief executive Brian Philips imagines a fleet of the bots lined up outside a neighborhood Walmart, Target or restaurant, waiting to be filled when a customer presses the "buy" button online. Several companies have already signed on, including Plano-based Pizza Hut, AutoZone, Lowe's, Target, Walgreens and Walmart.

FedEx Office will own and maintain the bots, but they'll be customized for a company and its needs, such as chilling groceries, keeping a pizza hot or holding items in compartments, he said.

LAST-MILE, SAME-DAY

FedEx Office has seen a surge in business as people receive more and more packages, Philips said. The fastest growing parts of its business are its pickup service and returns. For example, FedEx Office has a contract with some retailers that allows it to refund money to customers after inspecting the returned item.

The bots, he said, will solve a different challenge: Making last-mile, same-day deliveries that are difficult for a car or truck. They will focus on a 3-mile radius around a store location. On average, more than 60



percent of merchants' customers live within that area, according to research by FedEx.

Philips wouldn't say how much each bot costs, but said the company is confident it can get the price "down to the point where our customers can line up a dozen of them outside their wall and use them constantly around the clock to make deliveries."

Sidewalk robots have already debuted in some parts of the country. In Washington, D.C., San Francisco and other cities, they have delivered pizza and other takeout. In recent months, San Francisco-based robotics delivery company Marble mapped routes in Arlington. The city of Dallas was briefed in the fall about a pilot program that Marble planned to launch in Dallas.

But so far, no sidewalk robots have hit the streets or sidewalks of Dallas. Marble spokesman Craig Frucht said the company postponed expansion plans to focus on research and development and testing near its Bay Area headquarters.

FedEx's bots were designed by DEKA, a New Hampshire-based engineering firm that's behind numerous innovations, including hightech prosthetics, an insulin pump and a system used to purify water in the developing world. It was founded by Dean Kamen, inventor of the Segway. The bot is built using the base of an iBOT, the powered wheelchair developed by DEKA and Johnson & Johnson.

The bot made a guest appearance on The Tonight Show with Jimmy Fallon in February and showed its stuff by delivering him a New York pizza.

Plano Mayor Harry LaRosiliere recently watched a bot roll through the parking lot during a demonstration at FedEx Office's headquarters. He



said he's glad the city will host such an innovative project. But, he added, the bots have a practical purpose, too.

As Plano has grown from "bedroom community to suburb to city of our own," it's dealing with traffic and congestion. He said the bots will take some delivery trucks and cars off the road.

ROLLING INTO THE REAL WORLD

The same-day bots will start rolling this summer in Plano and Frisco, Philips said. During testing, they won't ferry any goods, but will help the company learn more about how they operate. FedEx Office will test its ability to intervene remotely, if the bot runs into an obstacle.

The bots will go up to 10 miles per hour. Initially, they'll be monitored by a worker.

In the next phase, he said, FedEx Office will start using bots to move its own inventory between different stores. Then, they'll test deliveries with their retail partners.

The bots will start making customer deliveries in 2020, he said.

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