**Coronavirus Crisis Changes the World of Autonomous Vehicles**

**冠状病毒危机改变了无人驾驶汽车的世界**

The coronavirus crisis is changing the world of autonomous, or self-driving, cars. More companies are now thinking about using the vehicles to deliver goods instead of people.

冠状病毒危机正在改变无人驾驶或者叫自动驾驶汽车的世界。现在，越来越多的公司正在考虑使用无人驾驶车辆代替工作人员来运送货物。

John Krafcik is the head of Waymo, a self-driving technology company owned by Google’s parent, Alphabet.

约翰·克拉夫奇克是Waymo的负责人。Waymo是谷歌（Google）母公司Alphabet旗下的自动驾驶技术公司。

Earlier this month, Krafcik told the Reuters news agency, “The reality right now is that goods delivery is a bigger market than moving people.”

本月初克拉夫奇克告诉路透社：“目前的现实状况是，与载人相比运送货物拥有更大的市场。”

Waymo started out working on autonomous taxis, but has also been developing self-driving trucks and delivery vehicles. The company recently raised $750 million dollars from investors. It has signed deals with shipping company UPS and major retailer Walmart to test the delivery of goods.

Waymo开启了自动出租车业务，同时也一直在开发无人驾驶卡车和送货车辆。该公司最近通过投资者融资7.5亿美元。它已与货运公司联合包裹（UPS）和大型零售商沃尔玛签署了协议进行运送货物的测试。

But Waymo is not the only company raising new financing.

但是Waymo并不是唯一一家为新项目筹集资金的公司。

Over the past seven months, investors have put at least $6 billion into more than 20 companies working on autonomous delivery of goods and food. These include autonomous flying vehicles and heavy trucks, a recent Reuters study found.

在过去的七个月中，投资者已向至少20家从事无人配送货物和食品的公司投入了至少60亿美元。路透社近期的一项研究发现，这些投资中包括无人驾驶飞行器和重型卡车。

Most of that investment – at least $4 billion since January – went to big companies like Waymo and Didi Chuxing, China’s biggest ride-sharing company. Both companies are attempting to create separate autonomous vehicle services to carry goods and people.

这些投资大部分(自一月以来至少有40亿美元)都流向了Waymo和中国最大的拼车公司“滴滴出行”这种大公司。两家公司都试图建立单独的无人驾驶汽车服务来运送货物和载人。

While delivery robots built to operate on sidewalks have received much media attention, they have drawn little recent investment. Still, an increasing number of cities and companies are trying them out.

专门用于人行道的送货机器人虽受到了媒体的广泛关注，但它们最近获得的投资却很少。尽管如此，越来越多的城市和公司在尝试使用它们。

Christopher Bruno is head of the Fairfax, Virginia, economic development office. He worked to get Starship sidewalk robots on the streets as soon as the coronavirus crisis shut down the area. “I think without a crisis, there would have been some skepticism as to whether this would have been used or not,” Bruno said. Skepticism refers to a kind of doubt.

克里斯托弗·布鲁诺是弗吉尼亚州费尔法克斯市经济发展办公室的负责人。由于冠状病毒危机迫使当地封锁后，他便着手安排“星舰”人行道机器人上路。布鲁诺说：“我认为如果不来一场危机，一定会有一些怀疑论者去质疑这些机器到底有没有用武之地。”怀疑论特指一种怀疑的态度。

Bruno said even though the approval process for new businesses usually takes six to 10 months, “we did it in a week and a half.” Currently, 20 robots are delivering food and other products in Fairfax.

布鲁诺还表示，尽管新业务的审批过程通常需要6到10个月，但“我们在一周半的时间内完成了审批。”目前，有20个机器人在费尔法克斯运送食物和其他产品。

Some investors warn that recent media coverage has increased hopes too much about autonomous delivery services, which still face technical and legal difficulties.

一些投资者警告称，最近的媒体报道增加了人们对自动货物配送服务的期望，而自动货物配送服务仍然面临技术和法律问题。

Quin Garcia is the managing director of Autotech Ventures. He noted there is a certain amount of hype - talk that makes people excited - around autonomous delivery.

奎恩·加西亚是汽车技术风投公司Autotech Ventures的常务董事。他指出，媒体对自动货物配送存在一定程度的炒作，因为这是一个能引发读者兴趣的话题。

“While there’s increased hype around automated delivery right now due to coronavirus,” he said, “this health crisis will be mostly resolved in a few years from now before automated on-road delivery is ready for mass adoption.”

他说：“尽管现在冠状病毒引发了对自动货物配送的很多炒作，但是现在这场健康危机要好几年才能解决，而那时自动货物配送尚不能被大规模采用。”

Still, autonomous startups are seeking to take advantage of virus-driven publicity for human-free delivery services.

尽管如此，自主创业公司仍在企图利用以病毒为驱动力的广告宣传来渲染无人配送服务。

These include Michigan-based autonomous delivery startup Refraction AI, sidewalk robot maker Kiwibot in California and self-driving technology company Optimus Ride in Boston. Ireland-based Manna Drone is also seeking to enter the market.

这其中包括总部位于密歇根州的无人配送初创公司“Refraction AI”，加利福尼亚的人行道机器人制造商Kiwibot和波士顿的无人驾驶技术公司Optimus Ride。总部位于爱尔兰的公司Manna Drone也将借机进入该市场。

All the companies are involved in money raising as demand for their delivery services has increased.

随着对配送服务需求的增加，所有这些公司都进行了融资筹款活动。

Phantom Auto, which makes software to control delivery robots, has also seen rising demand and expects to raise more money this year.

Phantom Auto公司主要生产操控配送机器人的软件，该公司今年也出现了业务需求的增长，并有望在今年筹集更多资金。

James Peng is the founder and CEO of Pony.ai. The company recently carried out tests of its vehicles for food deliveries in California during the pandemic.

詹姆斯·彭是Pony.ai公司的创始人兼首席执行官。在最近的大流行期间该公司在加州测试了旗下的食物配送车辆。

Peng noted that the virus crisis has created a “need to provide some much needed food and package delivery services.”

彭先生指出，病毒危机创造了“亟需食品和包裹运送服务的需求”。

I'm John Russell.

约翰·罗素报道。

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