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Last mile delivery: a greener Santa Claus is coming to town

With the COVID-19 crisis and a booming e-commerce, parcel delivery services have become a challenge in terms of increased traffic and pollution in urban areas. Electric vehicles, drones and even four-legged robots are being tested on the so-called “last-mile” in cities.



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What if Santa rode a four-legged robot? What looks like a sci-fi fairy tale might soon come true. Nowadays it is not reindeers that bring holiday gifts to our homes, it is most often a cumbersome, noisy and polluting van. But things have already started to change, and the pandemic is helping speed up the transition.

With the health crisis and total or partial lockdowns imposed all over Europe, e-commerce has played a crucial role in keeping economic activity alive. Retailers of all sizes

are going digital even faster, developing new multiplatform commerce solutions. According to the OECD, “In the EU retail sales via mail order houses or the internet in April 2020 increased by 30% compared to the same period in 2019, while the total sales in the sector fell by 17.9%.”

This has led home shipping to skyrocket: parcel delivery activities have boomed everywhere, in some countries such as France and Italy postal services had to hire more staff. In this context the means of transportation are key to reducing traffic and CO2.

Some solutions are quite creative, like the above mentioned four-legged robots. The German company Continental is testing a technology that combines a driverless

electric vehicle and a small fleet of robot “dogs”, which cover the “last mile” of delivery. Developers claim the most promising markets are Asian: Taiwan, Singapore, or Japan, countries that are very open to robotics solutions.

Drones are another option. In 2013, Amazon’s announcement of the future launch of the Prime Air service was met with enthusiasm by some and with incredulity by others. The service was meant to deliver parcels weighing up to five kilos in 30 minutes or less using unmanned drones guided by GPS technology. Numerous tests have been made since, but the project has not yet seen the light of day. The Financial Times reported in November that the e-commerce giant was firing staff involved in the drone programme, just months after receiving in the USA the green light from the FAA (Federal Aviation Administration) to fly its drones. However, they still claim to be more committed than ever to launching the project.

Even if many drone delivery projects have taken off in the last years, they are still far from becoming a daily reality, says Luca Masali, editor in chief of the Italian magazine DronEzine. He explains: “Aviation rules around the world, which are elaborated by ICAO, the United Nations aeronautics agency, currently do not allow automatic flight inside the cities; drones are highly limited in payload and autonomy; the technology for automatic flight is not ripe yet.”

He adds that there are indeed some interesting experimentations, especially in the military and medical fields: “The company ZipLine carries blood, vaccines, and samples for analysis between hospitals in Africa. Swiss Post connects two hospitals by flying over the Lake Zurich, but they have already had two serious accidents. In the US, a drone was used to transport a kidney for a transplant but it was really experimental, much too slow. In Italy, a hemodron [drone for the transport of human blood, Ed. Note] in the Romagna region fell on the roof of a hotel... But luckily it was carrying no blood, it was an exercise. Google has also done delivery tests in rural areas of Australia but never went further than that. More advanced are DHL's tests, and there are also interesting local services: one very advanced in Iceland, across a fjord in Reykjavik.”

Read the full article on: <http://stardustproject.eu/news/last-mile-delivery-a-greener-santa-claus-is-coming-to-town/> 

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