Ford Employees’ Self-Driving ‘Autolivery’ Concept Demonstrate Ideas for More Sustainable ‘City of Tomorrow’

• “City of Tomorrow” envisages overcoming mobility challenges in urban environments, including gridlock and air pollution to help people move more easily today and in the future

• Ford employees develop innovative ideas that could assist with mobility challenge of the “last mile” – including concept that autonomous vehicles and drones could work hand-in-hand to transform city deliveries

• “Autolivery” service idea and innovations including robotic riding platform, Carr-E, and innovative tricycle for getting around cities, TriCiti, are demonstrated at Mobile World Congress

• Ford intends to have a fully autonomous, SAE level 4-capable vehicle for commercial application in mobility services such as ride sharing, ride hailing or package delivery fleets in 2021

BARCELONA, Spain, Feb. 27, 2017 – For more than half a century, vans have played a key role in deliveries. Drones are a modern phenomenon. But the two could work hand in hand to improve mobility in urban areas in one example of Ford’s vision for the “City of Tomorrow”.

Self-driving vans could quickly and efficiently transport everything from groceries to urgently needed medical supplies on the ground, with drones potentially able to take to the air for the final leg of the journey to reach destinations inaccessible by car, such as high up in a tower block – or where parking would be difficult, impractical, or unsafe.

The innovative “Autolivery” concept, developed by a team of Ford employees for the company’s Last Mile Mobility Challenge, imagines electric self-driving vans used together with drones to pick up and drop off goods and packages in urban areas. The concept can be experienced through virtual reality headsets at Mobile World Congress, the world's largest gathering for the mobile industry, in Barcelona, as part of Ford’s vision of the “City of Tomorrow”.

The experience showed dinner party preparations, with a missing ingredient quickly ordered and delivered in time to add to the recipe. As new data reveals that motorists in Europe’s cities spent up to 91 hours sitting in congested traffic during 2016, the “Autolivery” service illustrates how new technologies could improve the lives of consumers with smart connected homes, and help to pave the way to a more sustainable future. *

“Ford has at its heart a culture of disruption and innovation designed to come up with solutions that put people first, to save them time, money and aggravation, and also to make our cities easier to navigate and better to live in,” said Ken Washington, vice president, Research and Advanced Engineering, Ford Motor Company.

The Autolivery idea, one of many submitted by Ford employees to tackle the last mile challenge, paid particular attention to the challenge of the “last 15 metres” in goods delivery. Widely considered the most challenging part of the goods delivery process to automate, many companies are working on how to solve the complexity of delivering packages the last 15 metres, or from kerb to door. The pressure to solve this challenge is expected to increase globally in coming years with GDP growth and a rise in local deliveries due to online sales.

“While the scene shown today is not yet possible, ‘Autolivery’ suggests how our ongoing mobility research could enrich our lives in a more sustainable ‘City of Tomorrow’,” said Washington.
“The City of Tomorrow” envisages overcoming mobility challenges in urban environments, including gridlock and air pollution to help people move more easily today and in the future. Roads could be converted into green space and parks, allowing for higher quality of life and healthier communities. The company regularly invites employees, entrepreneurs and start-ups to develop innovations through hackathons and challenges. “Autolivery” was developed by Shanghai-based Ford designers Euishik Bang, James Kuo and Chelsia Lau who responded to Ford’s Last Mile Mobility Challenge – to come up with mobility solutions for urban areas.

“It’s all about making life in the city easier. The possibility of harnessing autonomous and electric vehicle technology with drones to quickly and easily send and deliver parcels could help to make life better for everyone,” said Bang. Also developed for Last Mile Mobility Challenge, and shown at Mobile World Congress, were the electric rideable platform Carr#E and the folding electric tricycle TriCiti.

Ford intends to have a fully autonomous, SAE level 4-capable vehicle for commercial application in mobility services such as ride sharing, ride hailing or package delivery fleets in 2021. It also expects continued growth in electrified vehicles offerings, to the point where they outnumber their petrol-powered counterparts in the next 15 years. Shared modes of transportation will continue to gain popularity and connected communications between vehicles and infrastructure will grow.

“We are challenging ourselves to understand how people live, work and move in urban areas, to inform our research in mobility technologies and solutions,” Washington said.

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