MOBILITY

Mobility of Tomorrow: Connected, Autonomous, Disruptive

Brief for APP

For a long time, it seemed like the future of urban transportation would look pretty much like the present. Yet autonomy, connectivity, electrification and shared mobility are definitely changing the way we get around cities. This is especially evident in cities where investment in supporting infrastructure can accommodate this shift. It's time to buckle up again.

The potential benefits of these disruptive forces are numerous: a reduction in accidents, a significant reduction in transport cost and in time taken for deliveries, as well as a huge improvement in mobility for the disabled and elderly.

Technology is evolving rapidly and even if, for now, automakers and tech firms are choosing to highlight driver assistance technology, rather than focusing on lofty goals around full autonomy, cities need to be prepared for different scenarios: private ownership with driver-assist technologies, shared access to vehicles (ridesharing and carsharing), customized autonomous vehicles and even shared autonomous vehicles.

Looking at the future of mobility in an integrated way may help cities better understand the impact of change, analyze trade-offs, and lay out helpful policy prescriptions. Yet, before switching to networked and electrified mobility solutions, there are challenging issues to be solved. And it's not just the fact that humans don't give up ritualized habits easily.

To make autonomously driving cars almost 100% secure, all devices involved in steering the car must be secured against any unwanted tampering attempts from the outside. Also, batteries need to evolve to be more sustainable as they have significant consequences for natural resources.

If the advent of electric cars follows the predictions announced by automakers, we will have a lot of Lithium Ion batteries to recycle in a few years. In this sense, hydrogen may be an alternative solution, but producing hydrogen is costly, and at present fuel-cell vehicles are less commercially viable than EVs in most use cases.

In the meantime, urban mobility solutions are increasingly going micro. E-scooters and bicycles have appeared in cities' bike lanes creating challenges for both providers and government agencies. Drones and air taxi services will follow. This exciting future is before us and AI will be key to making sense of everything.

Expected outcomes

Participants will:

- Discuss the trends transforming mobility's future.
- Gain knowledge about new ways of micromobility.
- Learn about initiatives using some of the technologies that will completely transform the driving experience.
- Get insights on the impact that driverless cars and AI interfaces will have in other sectors, like the insurance industry.
- Learn about the benefits of an integrated mobility strategy in the city.

Guiding questions

- We're talking about autonomous driving, shared mobility, connected mobility and electrification. How are they impacting the citizen's driving experience now?
- Is it really possible to electrify the whole transport sector? What are the vehicle-to-grid opportunities?
- Is autonomous driving the solution to reduce congestion and car accidents?
- How to adapt mobility in the city to an increasingly aging population?
- How can we adapt today's legislation to tomorrow's mobility?

Keywords

Future mobility; self-driving; autonomous driving; EVs; electrification; connected vehicles; hybrid vehicles; shared mobility; micromobility: scooters