

| Press Release | |
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| Date | 7th of March 2018 |
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Mega trends of the auto industry by 2030. What should we expect by 2030?

- In 2030, more than one in three kilometres driven will be 'shared'
- 40% of the mileage driven could be done in autonomous vehicles in 2030
- Personal mileage could rise by 23% in Europe, 24% in the US and 183% in China. Vehicle stock in China expected to increase by almost 50%
- 55% of cars set to be electric in 2030

The automotive market will face radical change in 2030, according to "The five dimensions of automotive transformation" study developed by PwC. As a result of novel sharing concepts, the stock of cars could fall from 280 to 200 million in Europe and 270 to 212 million in the United States. China, in contrast, is expected to see its vehicle inventory rise to 280 million vehicles in 2030, up from 180 million today.

By 2030, one in three kilometres driven will be 'shared'

Of particular importance, here is the growth of low-cost sharing concepts predicted by PwC.

"In only a few years' time, today's norm where most people drive themselves in their own vehicle will be less and less popular, as we will witness the development of new concepts of urban mobility such as <<low-cost sharing>>. This new type of mobility will be stimulated by the expansion of urban areas and the incapacity of public transport networks to keep pace with the rhythm of this expansion", says Daniel Anghel, Leader of the Automotive Services Sector within PwC Romania.

The PwC study anticipates that as early as 2030, more than one in three kilometres driven will be under one of the many forms of 'sharing'.

Electric and self-driving cars will accelerate the change

This trend towards 'sharing' will be coupled with two megatrends in automotive technology – the electrification of drive systems and huge advances in the development of self-driving cars. Under PwC's scenario, by 2030, 55% of all new vehicles may be electric cars, while the conventional combustion engine will slowly die out.

Developments in Europe and the US are expected to happen at a roughly parallel pace. In China, by contrast, the penetration of shared and autonomous mobility will happen faster than in the Western world. This could make China the leading market for the transformation of the automotive industry.



"The various trends, development and innovations of the industry will help each other rise new usages of the future cars. For instance, electric vehicles are believed to be more robust compared to conventional internal combustion engine, thanks to the simpler power train. This could translate into a significant advantage for ride sharing cars. On the other hand, self driving cars, independent of power technology, could become <robatis> - when combined with sharing concepts. Moreover, if we look at the development of electric cars from the the power grid point of view, the latter could be able to accept the unused power of these cars, once they reach destination and will remain unused for a period of time", said Daniel Anghel, Leader of the Automotive Services Sector within PwC Romania.

Road traffic set to change radically

Taken in combination, the various megatrends will mean that road traffic as a whole will change radically. With more and more people turning to car-sharing models, there are likely to be far fewer car owners by 2030. However, at the same time individual traffic will increase massively. Personal mileage in Europe could rise by 23% by 2030 to 5.88 billion kilometres. Forecasts predict an increase of 24% in the US and 183% in China.

Aside from population growth, one of the reasons for this is that self-driving vehicles will also be used by people who cannot drive today themselves. Another reason is that the development of fullyautonomous cars means that there are likely to be empty trips, because clearly the 'robotaxis' will have to travel from A to B to collect new passengers.

"The roads will definitely become more crowded, but roads being crowded will increase the need for them to be more efficiently guide marked, facilitating the autonomous driving that is a far more efficient use of road space. On a different side, increased connectivity will help better organize the individual traffic", said Kenneth Spiteri, Assurance Services Leader, Pwc România.

Consequently, the PwC study describes the fourth megatrend as 'connected', in addition to the other 'electrified', 'autonomous' and 'shared' megatrends.

One-third more new registrations by 2024 - but who will benefit?

What does this trend mean for manufacturers and suppliers? The PwC scenario assumes that the number of annual new registrations in Europe may increase by one third to more than 24 million cars by 2030; this would be the only way to compensate for the higher wear and tear on cars due to carsharing concepts.

For the US, PwC Autofacts study assumes that there could be growth of 20% and new car sales of almost 22 million in the year 2030. For China, a rise of over 30% to 35 million units sold is expected.

This large volume will require car manufacturers and suppliers to make additional investment in new production and development capacity – for new, highly specialised vehicle concepts at much lower prices.

On the one hand, while they will have to contend with falling margins – mainly due to pressure from the major fleet operators – at the same time they will have to significantly increase their investment in new factories, electro-mobility and the other megatrends.

Simultaneously, new competitors from the technology industry will see the opportunity to push into the market. A parallel study from PwC strategy consulting firm Strategy& has estimated that



conventional players' share of global industry profits may fall from the current figure of 85% to less than 50% by 2030.

Notes to editors:

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