

Self driving cars - will comfort zone design create faster adaption?

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I'm always curious about how things have changed and how they will change in the future. When it comes to the automotive future of electric self-driving cars one thing puzzled me. Why do the future cars look like today's cars?

Tesla model 3 – design looks like a modern fossil fuel car



In 2011 I started to dive deeper into information about assisted- and autonomous driving. Since then, and led by the stellar stock-market performance of Tesla since 2013, the investment world has embraced the concept into a consensus view that self-driving cars are a fact in 2025 and they will dominate roads in 2040.

Investor focus and positioning has gone beyond Tesla to impact views and valuation of companies like Autoliv, Continental AG, Infineon, Mobileye, ST Microelectronics and many more. The search of companies impacted by the theme has moved on to cobalt and lithium miners –and other stuff that's used in batteries and ecosystems for electric cars.

The end of fossil fuel cars and the nirvana of self-driving cars is can be seen 10-20 years out .

Media and business forecasts highlight the benefits of no traffic accidents, shorter commute time

due to no congestion in a constant flow traffic system, more transport sharing so parking lot areas will be freed up for other purposes etc.

Inspired by the interest I looked back in history to find other innovations that changed how we humans do things. The early automobiles looked like motorized horse carts, but I believe the electric self-drive vehicles should be seen as a service hence I looked at the early days of the commercial airline industry.

Pictures tell a lot of the story themselves; the airline industry started out within a comfort zone that travelers (or at least the wealthy ones) were used to from long distance travels since mid-1850's from trains and ships. The airline cabin looked like a luxury train interior and consequently was appealing to the key customers of the airline transportation service. Also, a flight from London to India was scheduled to take six days as nights were spent in hotel rooms along the route and the competition was trains and ships.

The first airlines had curtains and lounge chairs just like travelers were used to in ships and railways



I guess only very few people at that point in time saw the commercial airline developing into the mass transportation industry we know today and how it changed the competitive landscape for travel services. Today, as we all know, commercial airlines optimize cabin space utilization and

airport turnaround schedules, so the comfort is quite far from the airline experience first movers had in the 1920'ies.

But the airline industry takes a lot of people on longer distances more effectively and less expensive than I guess most optimistic forecaster in 1920'ies dreamed of. And it forever changed the competition for passenger ships going cross-Atlantic or from Europe to Asia.

Standing at the edge of the age of the electric self-driving car I find it interesting that the designs of the vehicles are pretty close to the current fossil fuel vehicles. You don't need an engine hood for an electric car as the batteries are placed in the bottom of the chassis and the power engines are placed close to the wheels and do not take up much space. You might need the longer front to reduce collision damage, but as self-driving cars avoid accidents, then its less of an argument

But the design is well inside the comfort zone of how a car should look and that might make the adaption of electric self-driving cars faster and easier.

It tells me we are in for bigger changes in vehicle designs, comfort features, daily usage habits, driving features, road design and repairs, manufacturing practice, new materials and many other things than most of us can imagine today.



BBC vision of cars by 2050

And to get adaption moving as fast as possible its probably best making the early versions closer to customers comfort zone perception and recognition. That's leaves a lot of opportunities for long term investors.