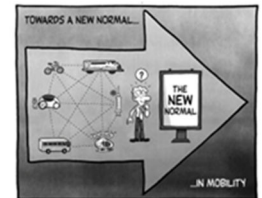
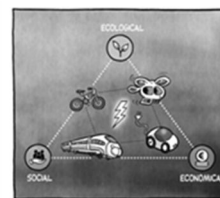


FUTURE OF THE AUTOMOTIVE INDUSTRY



Theses on the development of the CASE revolution in the automotive industry

In light of global megatrends such as urbanization, decarbonization, digitalization, and demographic change, the automotive industry is undergoing a multifaceted transformation toward connected, autonomous, shared, and electric mobility (CASE). This development, also known as the CASE “revolution” (group.mercedes-benz.com), is affecting all automotive markets around the world, albeit at different speeds and to varying degrees. However, it is currently being slowed down considerably in many countries. The question now is whether and how the CASE revolution will continue. Here are two theories on this important issue for the automotive industry¹.

These 1: The CASE revolution in the automotive industry is being slowed down by various developments.

The automotive industry has long failed to embrace the shift towards connected, autonomous, shared, and electric mobility (CASE). It was only with the Paris Climate Agreement's commitment to limit global warming, its implementation in the European Green Deal, among other things, and the commitments of many countries and regions to become climate neutral by 2050 or 2060 at the latest (net-zero target) that traditional automotive companies increasingly saw electric mobility as “the new normal in mobility.” , are striving to develop sharing concepts, and are accepting the trend toward connectivity and highly automated driving in software-defined vehicles with new vehicle architecture.

However, the CASE transformation is currently being slowed down in many countries, partly because people's mobility behavior is highly habitual (they hold on to their own combustion engine vehicles), technology (especially autonomous driving outside fixed routes, e.g., in heavy goods transport) is progressing only slowly, and sharing concepts have rarely been profitable to date. At the same time, the

¹ The theses are based on discussions held by the Chair of Business Administration and International Automotive Management at the University of Duisburg-Essen, including at the 16th Science Forum on Mobility on June 13, 2024, in Duisburg and at the 32nd Gerpi-sa Colloquium on June 26, 2026, in Bordeaux, France. They are also based on discussions in companies, at scientific and trade conferences, and at trade fairs in Germany and the most important automotive markets worldwide. A more detailed argumentation appears in the conference proceedings of the 16th Science Forum Mobility (Proff, H. (2025): *Neue Anbieter in der Mobilität*. Wiesbaden: SpringerGabler.

CASE transformation is developing in increasingly different ways around the world. Since the war in Ukraine, at the latest, many countries have been pursuing national goals more intensively. Hybrid and hydrogen drive as well as e-fuels are seen as alternatives to electric mobility.

Thesis 2: The CASE revolution in the automotive industry continues

Even though CASE is being questioned as the “new normal”[1], the CASE transformation will not only continue, it will become faster and stronger. The technical and economic problems on the road to connected, autonomous, shared, and electric driving cannot stop the CASE revolution because the global megatrends of urbanization, decarbonization, digitalization, and demographic change are continuing and require solutions. In addition, this revolution is being driven by competitive dynamics in the automotive industry. New competitors such as Tesla from the US, BYD, Nio, and Geely from China, tech players such as Google and Huawei, but also ridesharing providers such as Uber and Didi are driving change. In China, the largest automobile manufacturing country, electric, connected, autonomous, and—at least in large cities—shared driving will be promoted, and claims to dominance on the world markets will be made. Therefore, a disruption of the CASE transformation of traditional automotive companies would play into the hands of the Chinese. They would expand their technological lead (e.g., in batteries) and marginalize traditional competitors due to their cost advantages. In China, some traditional manufacturers have already left the market. [1] e.g., in the run-up to the 32nd Gerpisa Colloquium of international automotive researchers in July 2024 in Bordeaux, France: “There is no CASE.”

This thesis can be explained by economic theory, which posits that there is a long-term trend around which economic cycles revolve. These cycles can accelerate the trend (e.g., breakthroughs in battery technology or software development for autonomous driving), but they can also slow it down (e.g., the shift from civilian to military spending).

However, embracing the CASE revolution does not mean that traditional companies should not seize global market opportunities for vehicles with combustion engines and hybrid vehicles. Since the transformation is extremely expensive, all (global) profit potential must be tapped—as long as the transition to purely battery-electric vehicles (BEVs) is not slowed down.

Literature

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