Figure 3: Deloitte's perspective on SDVs: Solution space

Autonomous driving

ADAS, as the most demanding application, will increase vehicle and road safety, supporting the path to autonomous driving based on deep business, regulatory, and technology expertise. Alliances are beneficial to share development costs and gain speed.

Power train and vehicle motion

Proper strategies and operations ranging from the electric drivetrain with new cloud-based communication needs, AI-based battery health state prediction models to the energy and infrastructure network are required for becoming viable and competitive.

User-centric experience

As control is shifting away from the manufacturer, giving the consumer a greater say in what, when, and how they receive their services, infotainment and interior solutions become the key points of contact with services ranging from location-based to remote feature unlock and upgrade requiring frequent software updates over the air.

Architecture core blueprint

Facing increased complexity, well-designed concepts of the new SDV architecture at the logical and physical level and implementing their elements and interfaces are key to successful scaling operations.

Software-based R&D and operations

Designing and developing cars has long passed the hardware era. New structures, powerful software platforms, more efficient methodology, continuous operating models, and governance of R&D are required to keep pace with the shortened time-to-market.

Data-driven and connected services

Automotive players increasingly value sources of data direct from the consumers as a way of gaining competitive advantage. The shift to data-driven business models enables the monetization of data in the future mobility ecosystem around the connected vehicle as the central hardware pillar.

Customer experience | Software quality | Cybersecurity | Software talent

Cloud | Software-defined vehicle

ADAS: advanced driver-assistance systems