ADAS Adoption Rate and Features

Transcript:

Many individuals are well acquainted with the ubiquitous, features of anti-lock brakes, ADS and traction control. Often considering them standard components when procuring a new vehicle. However, the extent of consideration given to features such as cruise control may vary. In the past five years, the inclusion of conventional cruise control as a standard feature in new cars

has become increasingly prevalent. Yet the adoption of more advanced technologies like adaptive cruise control, lane keep assist systems and Cross-traffic alerts remains less widespread. While these Advanced Driver Assistance Systems (ADAS) are gaining recognition among consumers who have recently acquired new vehicles, they have yet to achieve commonplace status. In fact, within the range of ADAS, numerous innovative technologies are emerging, contributing to an evolving landscape of automotive safety features that are not yet widely integrated into mainstream automotive offerings, as evident from the timeline. Adaptive cruise control emerged as a pioneering technology around 2002 and has now reached a stage where it is become increasingly prevalent. Marking the conclusion of its 15 to 20-year cycle.

Conversely, Lane Keep assistant systems Cross-traffic alert and automatic emergency braking made the initial appearance between 2010 and 2016. Positioning them at earlier stages in their respective adoption cycles. The adoption of these technologies is influenced by various factors, including consideration of safety benefits, cost effectiveness, maturity of required sensors and enhancements to the overall driving experience. Anticipation surrounds the accelerated adoption of safety technologies driven by encouragement and mandates from safety regulatory bodies. This is exemplified by the more rapid integration of automatic emergency braking compared to Cross-traffic alerts and Lane Keep Assist substantiating the varied adoption trajectories within the five-year window. 15 to 20 years owing to distinct safety and comfort advantages offered by each technology. At present, Automatic Emergency Braking or AEB stand as an emerging technology with approximately 40% of vehicles equipped with AEB as a standard feature and an additional 50% offering it as an option. The ENCAP Safety Certification body is mandated AEB in 2022 to raise the prospect of AEB following a trajectory similar to ABS becoming a feature taking for granted in the foreseeable future.