

## Executive Summary

Self-driving vehicle or Autonomous vehicles (AV) is regarded as the ultimate solution to the future of automotive engineering. However, safety and trust still remain the key challenge for the development and adoption of AVs. This report explores various aspects, that are challenging the AV players, such as adoption strategies of new companies, customer adoption, adoption, competition, and market exploration strategies with the focus being the North American market. Through the research on the above-mentioned aspects, the report concludes that the large-scale commercialization of AVs without safety drivers will take decades to adopt and will happen in a region-by-region manner.

The report also identifies key factors that are influencing the challenges of the AV industry and provides respective recommendations. The recommendations are countering safety dilemma by working on ethical questions and iterative adoption of customers while working closely with the government, working on partnership and joint ventures while focussing on product uniqueness, and exploring market opportunities that include working on data sharing, investing on 5G technology, standardizing security platforms and establishing a connected infrastructure.

The report ends by providing action items that AV players can focus on right now for staying ahead in the market and gaining more customer confidence, which includes testing at busy locations for more data, getting early permissions from government bodies, focusing on non-passenger vehicle applications, working with the government to standardize policies and laws for self-driving technologies and thinking outside the box for utilizing AVs for other good purposes than just general transportation.