

# Foraying into Sensors and Software

As the world moves to E.P.I.C. mobility, the importance of sensors and software in a vehicle is increasingly evident, especially in the area of ADAS and autonomous driving.



According to a McKinsey report, ADAS sensors are a fast-growing category in the automotive industry, with a potential market size of USD 43 billion in 2030. In line with its strategic roadmap, Sona Comstar is foraying into the ADAS sensor market by acquiring NOVELIC\*.

NOVELIC is one of the few profitable, high-tech, and fast-growing companies in the ADAS Sensor space, having mmWave radar technology-based solutions. It is vertically integrated across the value chain from machine learning and perception software to hardware and chip design; its partners include global automotive OEMs, autonomous vehicle makers, Tier-1s and chip manufacturers.

One of the key applications of mmWave radar is in in-cabin sensing, that is an essential safety requirement in cars globally. Children and pets left behind in locked vehicles have resulted in fatalities worldwide due to heatstroke. Government regulations and car safety assessment guidelines mandate Child Presence Detection (CPD) in newer car models.

**mmWave radar technology** is one of the most effective solutions for in-cabin sensing due to its i) high accuracy, ii) lower cost and iii) privacy protection for occupants. Through its sophisticated radar design and signal processing algorithm, NOVELIC's in-cabin monitoring solution detects Life Presence (LPD), Child Presence (CPD), and Seat Occupancy (SOD), amongst others. This in-cabin solution is highly accurate as it works under all light conditions, detects vital signs (heart rate and respiration) and locates objects anywhere in the cabin.



It also removes the need for weight sensors and associated wiring harnesses, resulting in significant cost savings for carmakers. Unlike cameras, mmWave radar-based in-cabin sensing protects occupants' privacy.

NOVELIC has over ten years of market presence and more than 130 engineers in multidisciplinary teams and holds multiple global patents in mmWave radar sensing and systems. With its expertise in in-cabin and exterior short-range radar sensing and perception solutions, Sona Comstar intends to build its third business vertical of Sensors and Software to address the megatrends of increasing vehicle autonomy and automation.

**~53%**

CAGR of NOVELIC since its inception  
(Without external equity capital)

**USD 43 billion**

Projected value of the ADAS sensors market by 2030



"I am looking forward to welcome NOVELIC to Sona Comstar family. On closing of this acquisition, we would add market-leading in-cabin radar-sensing technology to our technology offering. Increasing vehicle autonomy and automation is an emerging technology revolution in our industry. As we had done with EVs in 2016, we are taking a meaningful early step in the direction of the electrified autonomous vehicle or e-AV"

**Vivek Vikram Singh**  
Managing Director and Group CEO

\*Acquisition of NOVELIC by Sona Comstar is in process and is subject to Regulatory Approvals.