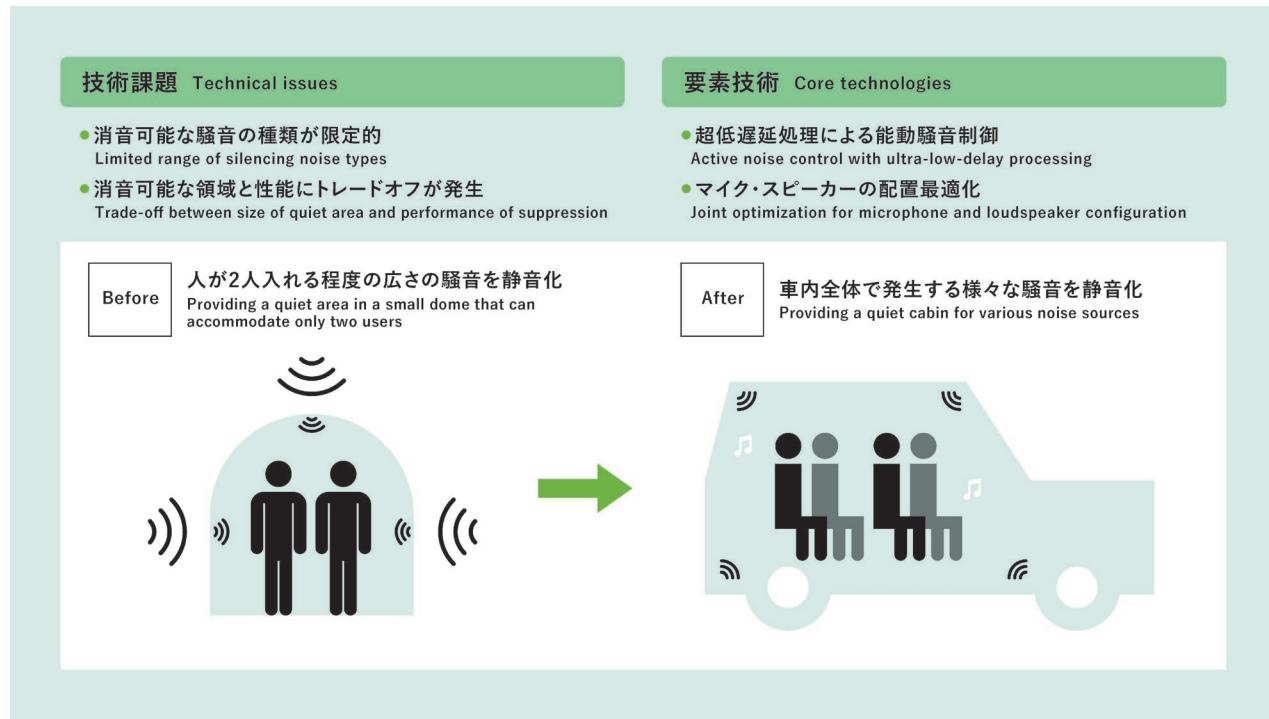


Spatial active noise control (ANC) technology allows multiple users to escape a noisy environment by feeling they are surrounded by a quiet zone

Spatial active noise control technology

Background and Technical Challenges

Providing large quiet and safe zones under various noise conditions has been difficult since the traditional method could control only limited environments.



R&D Goals and Outcomes

The current work-life balance system, which offers a wide range of options, is plagued by social problems such as stress and noise that can impair concentration. Spatial ANC provides a comfortable and natural quiet space and reduces the risk of hearing loss.

Key Technologies

01 Core Technologies

- Sound field estimation to simulate time-varying noise with wall/ceiling reflections.
- Sound synthesizer to generate inverse-phase waveform from the prediction.
- Combine the above two methods with ultra-low latency to cut noise in real time.

02 Key Differentiators

- Optimized loudspeaker-microphone placement better handles high-intensity noise than conventional systems.
- World's first real-time active noise control technology that keeps working even with multiple people present.

Use Cases Mobility & Transportation

R&D phase Research

Technology Schedule FY2027

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